Walden University

COLLEGE OF MANAGEMENT AND TECHNOLOGY

This is to certify that the doctoral study by

Enwelum Azu Mafiana

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2013

Abstract

Examining the Relationships between Internal Control Effectiveness and Financial Performance in the Nigerian Banking Industry

by

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

February 2013

Abstract

In recent years, many Nigerian banks have recorded negative financial performance. Guided by organizational theory, this quantitative correlational and comparative study examined the extent to which internal control effectiveness (ICE) is related to financial performance in the Nigerian banking industry. ICE, the independent variable, was measured by market value, while financial performance, the dependent variable, was measured by economic value added. The changes in these variables based on a 2009 liquidity-injection intervention by the Central Bank of Nigeria (CBN) were also examined. The research questions addressed whether a relationship existed between ICE and financial performance in the year before and after the CBN intervention and whether the intervention yielded any change in each variable. Participants in the study included 24 commercial banks in Nigeria; secondary data relating to those banks were collected online from public as well as the banks' official websites. A Spearman Rho correlation was used to examine the relationships between the variables, and Wilcoxon Signed Ranks tests were computed to determine changes in the variables. The results showed a significant, positive relationship between ICE and financial performance before and after CBN intervention and a decline in the values of both variables after the intervention. The study results may help identify industry best practices for supporting banking operations to avoid failures. The implications for positive social change include improved employment opportunities, discharge of banks' corporate social responsibilities resulting in poverty reduction, and the provision of other social amenities for surrounding communities.

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Dedication

From the bottom of my heart, I dedicate this study to my wife, my best friend in this world, Lady (Mrs.) Uche Nkiru Mafiana for her unflinching support towards our achieving good and laudable success as a family. Your love for me, and the love of God, which indwells in you have been evident in your words and actions during the most difficult moments of my life. Thank you for always standing by me and never doubting that I will successfully complete this journey. I also dedicate this study to my wonderful children, Ifunanyachukwu, Onyebuchi, Kobimdi, and Ebubechukwu. The sacrifices I made to earn this doctorate degree were all for you, knowing that this effort teaches you that education is a life-long affair, and that in life, you should always strive to be the best you can be. Finally, I dedicate this study to the memory of my beloved father and hero, Pa Josiah Ifechukwude Mafiana, for his instructions on discipline as a vital tool for the achievement of good success. Without the strict training and direction that I received at his hands, I would not have had the courage to go this extra mile following many tough and unexpected challenges that have dotted my path. Papa, I know that you are smiling in heaven and thanking God for all that he has done for me. Adieu! And to God Almighty who is able to do exceedingly above all that we ask or think, according to his power that is at work within me, I give all the glory, for it is by his grace that I have attained this height in my professional and academic pursuits.

Acknowledgments

My very special thanks go to my Chair and mentor, Dr. Lawrence R. Ness who principally guided me through the rigorous process of my doctoral study completion. My second doctoral study committee member, Dr. Michael Ewald and the awesome University Research Reviewer, Dr. Gail Ferreira also deserve my special thanks. I am immensely grateful to them for giving me the opportunity to tap into their research expertise through their timely and valuable feedback and suggestions.

My thanks also go to the other professors who took me through the various mandatory doctoral study courses that I had to take and pass as prerequisite for conducting this doctoral study research. The Doctor of Business Administration (DBA) Leadership Team led by the enigmatic professor, Dr. Freda Turner also deserves huge accolades for the wonderful work they are doing. I urge them to keep it up. To my Form and Style editor at the Walden Writing Center, Dr. Melanie Brown, I thank you.

I thank all my siblings, Mrs. Chinwe Gogor, Ezinne (Mrs.) Ngozi Odega, Ezinne (Mrs.) Chidi Ugeh, Prof. Chiedu Mafiana, and Engr. Ikechukwu Mafiana, and my aged mother, Ezinne (Mama) Faith Mafiana for their support in various ways. In a very special way, I appreciate Mr. Paul Nwabiankem, Engr. Emma Ifechi Mafiana, Mrs. Ibiene Oweredaba, and Mrs. Georgina Abaraoha for their encouragement.

Finally and most remarkable, to my wife, Lady (Mrs.) Uche Nkiru Mafiana, without whom this life ambition would never have been achieved, I owe a debt of gratitude far too deep to adequately express in words. I pray the Almighty God to reward her richly.

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Section 1: Foundation of the Study

Internal control effectiveness (ICE) of an organization defines the extent to which the organizational system promotes the achievement of its corporate goals and objectives. In the case of profit-based organizations, these goals and objectives are related to financial performance. Many studies concern the relationship between ICE and the financial performance of firms, but in all of them, this relationship was investigated using participants from multiple industries (Boritz & Lim, 2008; Lai, Lin, Li, & Hwang, 2011; Stoel & Muhanna, 2011; Tseng, 2007).

Background of the Problem

Over the past 3 decades, corruption has plagued the Nigerian banking industry leading to the collapse of many banks particularly in the 1990s (Idolor, 2010). This corruption has resulted in enormous losses to customers, investors, and other stakeholders. In 1991, the number of total banks in the country grew to 120, and in 1998, the licenses of 26 banks were revoked. These failures, which were largely attributed to frauds perpetrated by the bank management and staff, arose through the granting of unsecured loans. The nonsettlement of the unsecured loans resulted in huge bad debts and consequent loss of liquidity, failure to maintain the prescribed capital base, and outright embezzlement of funds (Transparency International, 2009). Idolor (2010) described this fraudulent practice in Nigerian banks as industry-wide. This corruption in the banks during that period caused the military government to set up the Failed Banks Tribunal in 1994, before it was scrapped in 1999 at the advent of civilian rule. Transparency International (2009) further stated that during the period, 2332 civil and 132 criminal cases were brought before the tribunal. Of them, 672 civil and 44 criminal cases were disposed off, resulting in the recovery of 4.3 billion naira from the banks' debtors. The Transparency International report added that 82.5% of the total recovered debts were in respect of the banks in liquidation, and that, by the time the tribunals were scrapped, the Nigerian Deposit Insurance Corporation had refunded 5.8 billion naira to the depositors of 35 banks that had closed.

According to Soludo (2004), by 2004, many banks in Nigeria were undercapitalized, notwithstanding that they had previously met the minimum capital requirements that ranged from 1 billion naira for existing banks and 2 billion naira for new banks. He stated further that one-third of the banks were unhealthy and operating losses were enormous, leading to negative shareholders' funds and so promoting insolvency; and 28% of the bank loans were nonperforming (Central Bank of Nigeria [CBN], 2005-2006). Cook (2011) stated, "Weak corporate governance and substantial insider-lending that resulted in large portfolios of non-performing loans" (p. 6) were among other conditions that posed an imminent threat to bank development, efficiency, and corporate governance. In a reaction to this unhealthy situation, CBN announced a reform agenda for the Nigerian banking industry on July 6, 2004. At the top of this agenda was the requirement that each bank increase its share capital from 2 billion naira to 25 billion naira by December 31, 2005 through mergers and acquisitions (CBN, 2004). The recapitalization effort was aimed at improving the financial capacity of the banks for the execution of big projects; improving public confidence in the banks; creating a level-playing field, hence promoting healthy competition among the banks; enhancing transparency in the banks' operations; and making them global players (CBN, 2004). The reform process, which was largely completed by the end of 2005, resulted in the emergence of 25 banks that became invigorated by the new minimum share capital and a code of corporate governance enacted for them (CBN, 2006).

In studies related to bank reforms, based on bank-level data from 2000–2005, the World Bank predicted increased efficiency of intermediation among banks in Nigeria, thus giving support for reforms (Cook, 2011). Similarly, Somoye (2008) found that bank recapitalization would cause a change in total assets, and this change would boost bank performance. Onaolapo (2008) reported a positive relationship among bank capitalization, distress management, and asset quality all of which increase expectation for improved financial performance of the recapitalized banks.

From 2006 to 2008, CBN did not report any bank distress. This situation indicated that the 2005 banking sector reforms were on the right course. However, the results of two stress tests conducted by the CBN in 2009 on the 24 banks showed significant distress and poor management in the banking system (Agbonkpolor, 2010; Cook, 2011; Olayiwola, 2010). The report disclosed that eight banks failed the tests, the system required a capital and liquidity injection of 620 billion naira, and that the distressed banks altogether held 2 trillion naira in nonperforming loans. In addition, it was reported that the absence of effective internal controls, hence, regulatory failures and weak corporate governance among other factors could have caused the crisis in the banking system (Agbonkpolor, 2010; Cook, 2011; Olayiwola, 2010). In their initial reaction, the CBN replaced and arrested the executives at eight of the 24 banks, accusing them of mismanagement (Sanusi, 2010). Among the reasons adduced by the CBN were “major failures in corporate governance, inadequate disclosure and transparency about the financial position of banks, critical gaps in the regulatory framework and regulations, and uneven supervision and enforcement” (Sanusi, 2010, p. 5). Against the backdrop of this reign of ineffective internal controls, regulatory failures, and weak corporate governance, Agbonkpolor (2010), Cook (2011) and Olayiwola (2010) recommended additional banking reforms that would emphasize more effective internal controls and bank monitoring.

Prolonged bank distress and mismanagement would result in total bank failure and resultant adverse economic consequences. Empirical results of a study on local economic effects of bank failures indicated that such failures cause a reduction in the volume of sales in local markets, and in many cases, the liquidation of failed banks aggravate unemployment (Gilbert & Kochin, 1989). Generally, bank distress deters economic growth (Ochejele, 2007; Rose & Hudgins, 2010).

However, it is theorized that a strong system of internal control will enhance the attainment of organizational objectives; it will keep a firm on the path of growth and continuity, and hence, profitability (Jamshidi-Navad & Arad, 2010). According to Jamshidi-Navad and Arad (2010), internal control is an organizational system designed to secure an efficient implementation of a policy, safeguard assets, and prevent fraud and error. It is an integral aspect of the management of an organization that assists managers to achieve set goals and objectives by effectively utilizing and accounting for resources. Absence of effective internal control would result in weak financial performance (Lu, Richardson, & Salterio, 2010). There is, therefore, a nexus between internal control and firm performance in all its ramifications.

As the CBN did not report any signs of bank distress between 2006 and 2008, it became necessary to ascertain the financial performance for the immediate period before the reported significant distress in eight of the 24 commercial banks in 2009. It was also necessary to examine the postintervention financial performance. Additionally, because a major cause of the distress was attributed to the absence of or the ineffectiveness of internal controls, it was also necessary to ascertain the ICE of the banks for the corresponding periods. Finally, against the backdrop of theory, it would have to be seen how the ICE in the banking industry related to its financial performance before and after CBN liquidity injection intervention and the extent to which ICE and financial performance respectively differed based on CBN intervention.

Problem Statement

Despite the 2005 Nigerian banking sector reforms, a breakdown has occurred in the banks' systems of internal control, resulting in regulatory failures and poor corporate governance (Agbonkpolor, 2010; Cook, 2011; Olayiwola, 2010). In addition, the results of the stress tests conducted by the CBN in 2009 on the commercial banks revealed that eight of the 24 commercial banks in the country were unhealthy, necessitating the intervention of the CBN through the injection of 620 billion naira of liquidity into the banking sector (Sanusi, 2010).

The general business problem at issue in this doctoral study is that noncompliance with the code of corporate governance in banks could adversely affect their financial performance resulting in weak and inefficient banks (Bank for International Settlements, 2011; The Basel Framework, 1998). This situation may threaten the financial stability of the banking system (Reynaud, 2010; Slovik & Cournède, 2011). The specific business problem was the negative financial performance of Nigerian commercial banks (Sanusi, 2010).

Purpose Statement

The purpose of this quantitative correlational and comparative study was to assess whether a relationship existed between ICE and financial performance in the banking industry in Nigeria. The extent to which ICE and financial performance differed based on the CBN intervention was also examined. From the examination, it was seen whether more effective internal control leads to more positive financial performance and the extent of change brought about by the CBN intervention. Two correlations, one for the period before the CBN intervention (2008) and one for the period after the intervention (2010), were computed to assess the relationship between ICE (independent variable) and financial performance (dependent variable). The specific population addressed was the 24 commercial banks that were recapitalized in 2005. The choice of this population group was based on the public availability of the banks' annual financial statements and that all participants were from the same industry (Berete, 2011). The geographical location of the study was Nigeria. Based on 100% purposeful and convenience sampling, the research data were collected from the publicly available audited financial statements of all the 24 Nigerian commercial banks for 2008 and 2010, and the PASW (formerly known as SPSS) software package was used to perform the data analysis.

This study will contribute to the field of business practice by enabling business leaders to understand the critical role internal control plays in the profitable financial performance of business organizations. In turn, the organizations will impact positive social change as they become empowered to discharge their corporate social responsibilities.

Nature of the Study

The nature of this study was guided by a clearly defined problem statement, properly framed purpose statement, and unambiguous research questions. Creswell (2009) stated that research could be conducted by using a qualitative, quantitative, or mixed-methods methodology. In a qualitative method, the researcher gains in-depth knowledge of a phenomenon for which only a small amount of empirical or theoretical knowledge might exist, whereas the quantitative approach tests objective theories by investigating the relationship among measurable variables (Creswell, 2009).

Based on the nature and direction of this study, the research methodology found to be the most appropriate was quantitative. According to Creswell (2009), the quantitative approach could involve a correlation, an experiment, or a quasi-experiment. To some extent, the three types permit the researcher to determine the relationships among various factors and to specify the causes of these relationships. Primarily, I was concerned with the general design that would enable me to test the research hypothesis with a thorough understanding (Creswell, 2009). The research design that was most appropriate for this study was nonexperimental or correlational. Simon (2006) explained that correlation is an ex post facto study, which is an appropriate type of inquiry if the primary purpose is to determine relationships between variables. Ultimately, I wanted to determine whether a change in one variable (ICE) coincided with a change in a second variable (financial performance) without implying causation. As noted by Belli (2008), in this nonexperimental, correlational, and comparative study, there was no variable manipulation.

Research Questions and Hypotheses

The aim of this study was to assess if a relationship existed between ICE and financial performance of Nigerian banks prior to and subsequent to the 2009 CBN intervention through liquidity injection and regulatory pronouncements. Using market value (MV) as the measure of ICE and economic value added as the measurement of financial performance, and because the main purpose of a research is to find answers to important questions (Burns, 2008), this study sought to answer these five research questions:

1. To what extent is ICE related to financial performance before CBN intervention?

2. To what extent is ICE related to financial performance after CBN intervention?

3. To what extent does financial performance differ, based on CBN intervention?

4. To what extent does ICE differ, based on CBN intervention?

5. To what extent do the correlations between ICE and financial performance before and after CBN intervention differ?

In past similar studies, some of the common metrics used to measure financial performance included profitability and growth (Boritz & Lim, 2007). Other metrics were market capitalization (Stanley, 2011) and economic value added (Berete, 2011). In this study, economic value added was used as the measure of financial performance because it is widely accepted by researchers and analysts as the best metric for firm performance assessment (Yao, Sutton, & Chan, 2009).

Creswell (2009) stated that, in a quantitative research, hypotheses are stated as *null* and *alternative*. In finding answers to the research questions, this study shall test the following hypotheses:

*H*1o: There is no significant relationship between a bank's ICE and its financial performance before CBN intervention.

*H*1a: There is a significant relationship between a bank's ICE and its financial performance before CBN intervention.

*H*2o: There is no significant relationship between a bank's ICE and its financial performance after CBN intervention. .

*H*2a: There is a significant relationship between a bank's ICE and its financial performance after CBN intervention.

*H*3o: There is no significant difference between a bank's financial performance before and after CBN intervention.

*H*3a: There is a significant difference between a bank's financial performance before and after CBN intervention.

*H*4o: There is no significant difference between a bank's ICE before and after CBN intervention.

*H*4a: There is a significant difference between a bank's ICE before and after CBN intervention.

*H*5o: There is no significant difference in the correlations between ICE and financial performances before and after CBN intervention.

*H*5a: There is a significant difference in the correlations between ICE and financial performances before and after CBN intervention.

Theoretical Framework

Maijoor (2000) identified two theoretical frameworks for the study of internal control in relation to organizational performance: agency theory and organization theory. Agency theory, which originated in the 1970s, depicts top-level managers as agents whose interests may be divergent to those of their principals who are the shareholders, with both parties seeking to maximize utility (Katzman, Verhoeven, & Baker, 2009). Therefore, control structures are imposed on the agent with a view to curbing losses to the principal resulting from the interest divergence. The main focus of control in agency theory is on top-level management with emphasis on "the effects of uncertainty, the cost of the monitoring mechanism, and rewards for the control system" (Jokipii, 2006, p. 38). Critics of the theory, however, have argued that the assumptions made about the individualistic utility motivations that result in principal-agent divergence may not apply to all managers. Hence, it is undesirable to rely exclusively on the agency theory as it ignores the complexities of organizational life (Fong & Tosi, 2007). In the alternative, the organization (or management control) theory, which is based on a broader concept of internal control than the agency theory, was used in this study.

Organization theory explains the dynamics of business organizations, including the ways they exercise control for the attainment of set objectives. Modern organization theory, which has its roots in sociology, is grounded on concepts that were developed during the Industrial Revolution in the late 1800s and early 1900s. The origin of the theory was the idealized organizational structure research of German sociologist and engineer, Max Weber (1864-1920), who theorized that work should be guided by rules, policies, and procedures (Houghton, 2010). Weber based his model theory on legal and absolute authority, logic, and order. Among other important contributors to organization theory was Henri Fayol (1845-1925), who identified strategic planning and employee guidance through policies and procedures as key functions of management in creating and nourishing a successful organization (Pryor & Taneja, 2010). According to Laszlo, Laszlo, and Dunsky (2010), organization theory provides an interdisciplinary focus on such issues as performance, success, and survival of business organizations, among others, noting that the ultimate goal of the theory is to maximize the achievement of corporate objectives through the active involvement of all levels of the organization. Therefore, research in this area mainly examines internal control in the context of organizational effectiveness and performance.

Organization theory has been used in some past research studies relating to internal control. In their study involving senior executives at 50 companies in the United States, Mautz et al. (1980) used this perspective and found that internal control was seen as an important responsibility of management. Similarly, Feng, Li, and McVay (2009) examined the relationship between internal control quality and the accuracy of management guidance, and found that internal control quality has an economically significant effect on internal management reports and decisions. Daft, Murphy, and Willmott (2011) stated that organization theory provided a mechanism by which resources are directed, monitored, and measured. Well managed, organization theory can leverage maximum productivity and revenue from the different capacities within the organization. Poorly managed, however, organization theory can result in the loss of proper systems of internal control.

In 1992, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) provided a model that has been adopted as the generally accepted framework for internal control and is widely recognized as the definitive standard to assess the effectiveness of an internal control system. With particular reference to banking, the Basel Committee on Banking Supervision (1998, 2011) also provided frameworks for internal control systems in banking organizations. This group specifies that the three main objectives of the internal control process can be categorized as performance, information, and compliance objectives.

Within the ambit of organization theory, internal control, which traditionally had been a mechanism for checking instances of fraud, misappropriation, and errors (Morehead, 2007), has become more extensive, addressing all the various risks faced by organizations (Tseng, 2007). As a result, a sound internal control process has come to be widely recognized to be critical to the ability of a firm to meet its established goals and to maintain its financial viability (Brown, Pott, & Wompener, 2010; Doyle, Ge, & McVay, 2007b; Jokipii, 2010; Tang & Xu, 2008). Based on the above evidence, the relationship between ICE and financial performance in the banking industry in Nigeria was assessed.

Definition of Terms

Some of the terms that were used in this study may be abstract and could convey different meanings to different readers. In this section, these terms are defined to explain what they mean in the context of the subject matter of this research study.

Bank failure: The inability of a bank to meet its corporate obligations to its depositors and other stakeholders (Brown & Dinc, 2009). This failure ultimately results in the bank's closure by the appropriate regulatory agency.

Banking industry: That sector of the national economy in which its members (the banks) act primarily as financial intermediaries that accept fund deposits and channel those deposits into lending activities, either directly or through capital markets (Idolor, 2010).

Economic value added (EVA): The most popular value-based measure of the economic profit of a company (Berete, 2011; Mamun & Mansor, 2012).

Internal control: An organizational system designed to secure an efficient implementation of a policy, safeguard assets, and prevent fraud and error. It is an integral aspect of the management of an organization which assists managers to achieve set goals and objectives by effectively utilizing and accounting for resources (Jamshidi-Navid & Arad, 2010).

Internal controls: Structures and processes that are used for everyday decision-making that minimize the risk of regulatory breach (Goh & Li, 2011).

Internal control effectiveness (ICE): The extent to which the organizational system promotes the achievement of corporate goals and objectives. ICE has a positive relationship with market value (Tseng, 2007).

Market value (MV): The accounting estimate of what a company or an organization is worth. It is what investors believe a firm is worth (Abuzayed, Molyneux, & Al-Fayoumi, 2009; Lind, 1998).

Assumptions, Limitations, and Delimitations

In this research study, some assumptions were made. These assumptions referred to some facts that were considered to be true despite not having been actually verified. In addition, there were limitations, as some aspects of the study appeared to be potentially weak. It was also necessary to identify and state the scope or boundary, hence, the delimitations of the study. These assumptions, limitations, and delimitations are discussed below.

Assumptions

In this study, it was assumed that all the banks' public financial data collected for analysis were true and correct. In addition, the MV and the EVA were assumed to be accurate measures of the internal control effectiveness and financial performance, respectively, of the banks. The 24 commercial banks whose annual financial statements were publicly available were assumed to provide a sufficient basis for generalizability for the Nigerian banking industry, as all the banks are equally exposed to the same industry factors and internal control regulation.

Limitations

The aim of this study was to examine the relationship between internal control effectiveness and financial performance in the banking industry in Nigeria, making use of the public data of the 24 commercial banks in the country. Thus, the financial performance reported by each of the banks was used but without considering any factors that could have affected the reported financial performances. MV as a measure of ICE could be seen as an estimate. As all the banks used in the study have the same minimum 25 billion naira capital base and belong to the same industry with the same internal control requirements, this limitation was addressed.

Delimitations

The geographical area of this study was Nigeria, and the primary focus was on the banking industry. The results are not intended for other regions or industries.

Significance of the Study

The importance of internal controls to the efficiency and operational integrity of banks has been well established (Harmon, 2008; Rubin & Nayda, 2008; Shefrin, 2009). As far back as 1905, the concept of internal control had gained some form of definition and attracted discussions (Heier, Dugan, & Sayer, 2005). However, over the past decade, internal control became a very important and topical issue in business, especially as a result of corporate scandals and failures of significant volumes and impacts (Deloitte & Touche, 2009; Rezaee, 2007). Such failures have over the years led to agitation for improved internal controls in the conduct of business. Consequently, pressure has come upon governments, legislators, regulators, and standard-setting groups to stem future losses to shareholder (International Federation of Accountants [IFAC], 2006). Accordingly, this study was intended to contribute to the development of literature in internal control, business theory, and business management.

Reduction of Gaps

Despite the importance of the banking industry to the continuing economic development of Nigeria, there remains a dearth of timely and relevant studies that examine the impact of internal controls on banking performance in Nigeria in particular, a gap this study was intended to fill. For instance, in recent years, the Nigerian Stock Exchange has created an unprecedented capitalization in stock and has managed to attain the listing of some Nigerian banks in the foreign stock exchange market (Okurame, 2008). By identifying opportunities for improving internal control, it may be possible to develop salient recommendations for improving the performance of the Nigerian commercial banks listed on the Nigerian Stock Exchange. According to Okafor and Ibadin (2008), the ultimate winners in their marketplaces and industries are those establishments that operate on strong systems of internal control.

Beyond business theory and literature, the findings of this study will provide a knowledge-based system that can serve as a decision aid for managers and auditors in identifying internal control weaknesses and then preventing their adverse consequences. Shareholders expect business managers to manage the significant risks the company is facing and to put controls in place to deal with such risks. A sound system of internal control contributes to protecting the investments of the shareholders and the assets of the company (Institute of Chartered Accountants of England and Wales, 1999). Generally, strong internal controls help push a company beyond its current limits, help it implement best practices, ensure it is not wasting valuable resources, and ensure it is serving its customers better than its competitors are (Okafor & Ibadin, 2009; Pereira & Santos, 2010).

Implications for Social Change

The importance of efficient banks to the economic development of countries has also been well explored and confirmed in relevant literatures (Mahesh & Rajeev, 2008; Rao & Tiwari, 2008; Shefrin, 2009). These needs have become especially pronounced in recent years as Nigeria continues to encounter significant constraints in the development of its infrastructure during such critical transition periods (Onaolapo, 2008). To bring the nation’s banking sector in line with internationally accepted standards of practice (Somoye, 2008), a great deal remains to be done.

At present, the Nigerian government is pursuing the privatization of the country’s state-operated electricity generation and distribution facilities and is seeking to forge improved public-private partnerships to develop the nation’s transportation infrastructure. Moreover, Nigeria's financial sector has not been immune to the lingering global economic downturn (Pomerantz, 2008), making the need for an efficient banking sector even more important to the progress of the country. As Nigeria pushes to join the international community in more meaningful ways, it is apparent that the Nigerian banking sector will play an increasingly important role in the nation’s economic development and progress.

If business leaders understand the critical role effective internal control plays in the profitable financial performance of their entities, they could use it as a veritable tool for the sustainability of their businesses. This tool would in turn impact positive social change resulting from the effective discharge of their corporate social responsibilities, which includes the provision of social benefits for the communities in which they operate (Berete, 2011). Organizations with good financial performance will become a viable source of tax revenue to the government with its attendant positive implications for the provision of employment and social amenities.

A Review of the Professional and Academic Literature

Owing to the increasing concern for the adverse consequences of business failures, internal control as a vital tool for efficient and profitable business operations has gained wider recognition and acceptance in the field of business management (Heier et al., 2005). The purpose of this literature review is to provide an overview of relevant, current, and previous studies that have addressed the effectiveness of internal control, its relationship with financial performance, and the measurements of internal control and financial performance, relating the same to the banking industry in Nigeria.

The review starts with an examination of the literature on the banking industry in Nigeria, and follows with the historical developments of internal control, which covers some relevant frameworks that define internal control, and provide the principles for the evaluation of its effectiveness in the banking industry. The review touches on some existing studies that have addressed the effectiveness of internal control, the measurement of ICE, an overview of financial performance, and the effects of internal control on companies' financial performance.

The Banking Industry

A bank is a financial intermediary that accepts fund deposits for the primary purpose of channeling those funds into lending activities (Idolor, 2010). The financial intermediary could be a central bank, a commercial bank, or some other form of bank. The central bank is the monetary authority of a country, implementing the monetary policy and circulating money on behalf of the government (Gabor, 2010; Goodfriend, 2011). From the deposits they accept, commercial banks are able to lend to the public either directly or through capital markets, and in some cases, they invest such funds in profitable ventures. The commercial banks thereby serve as intermediaries between customers who have free funds to save in the bank and others who are in need of funds. As business organizations, banks are expected to generate income, incur expenditures, and make a profit for their shareholders. Because they charge their borrowers higher rates of interest than they pay depositors, banks are able to create a net income that is the difference between the rates of interest. They facilitate economic growth in a variety of ways (Rose & Hudgins, 2010). In the course of their operations and development, banks are known to have owned major stakes in industrial companies such as in Germany.

Since the advent of modern banking, the banking industry has been subjected to one form of regulation or another by the governments of their respective countries or their agents (Ezeoha, 2007). Different countries regulate their banks differently (Jackson, 2010). This approach is understandable considering the important roles that depository institutions play in the financial system of every economy. In Nigeria, banking operations are regulated by the Banking and Other Financial Institutions Act (BOFIA) of 1991 (as amended).

Over the past 3 decades, corruption plagued the Nigerian banking industry leading to the collapse of many banks particularly in the 1990s. This situation resulted in huge losses to the customers, investors, and other stakeholders. These failures, largely attributed to frauds perpetrated by the bank management and staff, arose through the granting of unsecured loans that resulted in huge bad debts and, consequently, loss of liquidity; failure to maintain the prescribed capital base; and outright embezzlement of funds (Transparency International, 2009). Idolor (2010) described this fraudulent practice in Nigerian banks as industry-wide. According to Soludo (2004), by 2004, many banks in Nigeria were undercapitalized; one-third of them were unhealthy; operating losses were enormous, leading to negative shareholders' funds and so promoting insolvency; and 28% of the bank loans were nonperforming (CBN, 2005-2006).

These events led to the Nigerian banking industry reform of 2005, which entailed a recapitalization from 2 billion naira to 25 billion naira by December 31, 2005, through mergers and acquisitions (CBN, 2004). The recapitalization effort was aimed at improving the financial capacity of the banks for the execution of big projects; improving public confidence in the banks; creating a level-playing field, hence promoting healthy competition among the banks; enhancing transparency in the banks' operations; and making them global players (CBN, 2004). The reform process resulted in the emergence of 25 banks, each with new minimum share capital and a code of corporate governance (CBN, 2006).

In studies related to bank reforms, based on bank-level data from 2000 – 2005, World Bank (2007) predicted increased efficiency of intermediation among banks in Nigeria, thus giving support for reforms. Similarly, Somoye (2008) found that bank recapitalization would cause a change in total assets, and this change would boost bank performance. Onaolapo (2008) reported a positive relationship between bank capitalization, distress management, and asset quality, all of which increased expectations for improved financial performance of the recapitalized banks. Throughout 2006, 2007, and 2008--that is, after the 2005 reforms--the CBN did not report any bank distress, an indication that the 2005 banking sector reforms were on the right course.

In 2007, Nigerian banks occupied the first 19 positions among the Top_30 West African banks (African Business Report, 2007). However, among the African Top_10 banks, only one Nigerian bank, Intercontinental Bank Plc, made it to the list (in eighth position). No other Nigerian financial institution was rated among the Top_10 in Africa ("Stirred and Shaken," 2007). The deep-seated 2005 reforms to the Nigerian banking sector appeared to have created a more conducive economic environment that induced the South African Standard Bank (Stanbic) to acquire a majority interest in Nigeria's IBTC Chartered Bank. The new-look IBTC planned to increase the asset base of the bank, thus empowering it to offer improved services within and beyond Nigeria ("Stirred and Shaken," 2007).

In 2009, the editors of *Global Finance* selected Nigeria's Firstbank Plc as being among the world's best banks (World's Best Banks, 2009). In their report, they noted that the bank's earnings rose by 43% in 9 months ending in December 31, 2008. Furthermore, the report stated that Firstbank, with an asset base of 10 billion U.S. dollars, and a network of 489 branches in the country remained a leader in financing infrastructure investments, in Nigeria (World's Best Banks, 2009). Yet, Firstbank is ranked fourth among the Nigeria Stock Exchange-listed Top_5 in Nigeria. The overall picture is that Nigerian banks occupy distinctive positions in Africa and more distinctive in the West Africa subregion. They significantly affect the national economy, and in a variety of ways, they impact the global economy. However, the results of two stress tests conducted by the CBN in 2009 on the 24 commercial banks showed that there were significant distress and poor management in the banking system (Cook, 2011). It was further disclosed that eight banks failed the tests, the system required a capital and liquidity injection of 620 billion naira, the distressed banks altogether held 2 trillion naira in "toxic" loans, and the absence of effective internal controls among other factors could have caused the crisis in the banking system (Cook, 2011). Among the reasons adduced by the CBN were "major failures in corporate governance, inadequate disclosure and transparency about the financial position of banks, critical gaps in the regulatory framework and regulations, and uneven supervision and enforcement" (Sanusi, 2010, p. 5).

Based on the recent Nigerian banking sector reforms, which are predicated upon the economic importance of the banking industry, and the adverse consequences of bank failures (Ochejele, 2007; Reynaud, 2010), a study of the relationship between ICE and financial performance in the banking industry might prove beneficial to the sustainability of Nigerian banks. It will also fill a gap in the academic literature. As required by BOFIA of 1991 (as amended), all the 24 commercial banks that operate in the banking industry in Nigeria report their annual balance sheets and profit and loss accounts to the CBN. By implication, therefore, the accounts of all the banks were publicly available for use in this study.

Historical Developments of Internal Control

As a term, internal control was born out of the field of accounting and auditing, and was originally known to be some forms of accounting controls associated with the system tests performed by external auditors in assurance of the reliability of financial reporting (Fernald, 1943). The Securities Act of 1933, in an apparent reference to internal control and the processes involved in an audit, recommended that the scope of an audit be determined by an external auditor's assessment of the organization's internal check and internal control (Fernald, 1943).

According to Heier et al. (2005), as far back as 1905, there had been a book written by Lawrence Dicksee, in which he stated that an audit is essentially concerned with the detection of fraud and errors and that the totality of an auditor's duty is the ascertainment of the true state of affairs of his client at a specific date. Citing Brown (1962), Heier et al. (2005) contended that the author alluded to systems of internal control by stating that for an auditor to succeed in his task, it is extremely necessary for him, or her to study thoroughly and master the general system of operation upon which the books and records have been predicated. They disclosed that the author of the book enumerated three classical rudiments of internal control that are still applicable more than 100 years later. The first rudiment is that the responsibilities for managing cash and keeping the ledger should not be vested in one individual. The second is that the ledgers should be maintained in such manner that the balance of an account after each transaction is available at a glance. The third is that where an organization's activities occasion the maintenance of many individual ledgers, the system should provide for frequent movement of staff between job schedules so that any occurrence of fraud or errors can be detected and addressed in a timely manner (Heier et al., 2005).

Brown (1962) argued that a long history trails the audit objective of detection of fraud but that it was only until the 20th century that internal control as a subject was recognized. Sawyer et al. (2003) stated that prior to 1930, the term *internal control* had gained some form of recognition and attracted discussions. In all, it can be safely concluded that internal control has been associated with business and organizational management over the past century. Therefore, the organization theory upon which this research study is grounded is apt.

The 1929 crash in the stock market caused the U.S. Congress to react by enacting two acts with a view to stabilizing the market, as well as to ensuring that all reports intended for investors are proper in content. The first was the Securities Act of 1933, which made it compulsory for every public company to register its market securities and to ensure that it makes appropriate financial disclosures at all times. The second law, which gave birth to the Securities and Exchange Commission (SEC) is the Securities

Exchange Act of 1934. The SEC regulates exchanges and stockbrokers, and monitors the financial disclosures being made by the publicly held companies.

As a result of the 1933 and 1934 Securities Acts, the American Institute of Accountants issued a pamphlet which stated that the forms and dimensions of the internal check and control in any company that is being examined were important factors to be considered in formulating an independent accountant's program of work (AIA, 1936). This pamphlet described the ways that internal controls can influence an audit from the perspectives of bookkeeping, but did not consider the management's duties and responsibilities for possible discrepancies and their consequences (Heier et al., 2005). Subsequently, SEC decided to delegate the duty of improving the principles of accounting and auditing to the American Institute of Accountants (AIA). In executing its function, the Institute set up two committees, one for accounting principles, and the other for auditing principles.

In 1938, the management of a company called McKesson & Robbins was charged for misrepresenting its inventories and accounts receivables by overstating by $19 million their consolidated assets, which stood at $87 million in their 1937 year-end financial statements. Explaining the situation, a Price Waterhouse partner, the independent accountants, attributed the fraud to unethical practices made possible by the absence of internal controls and audit safeguards (Dennis, 2000). In a reaction to this case, in 1939, the Auditing Principles Committee introduced an extension to the existing auditing procedures. Thenceforth, auditors were required to attend at stock-taking, conduct physical tests, and obtain certifications for stocks in various locations and for the accounts receivables (Dennis, 2000). This was a major development that preceded the World-War II.

The post World-War II economic boom, the bribery revelations of many reputable firms like Exxon shortly after the Watergate scandals of the 1970s, and corporate failures of the 1980s were some of the reasons for the continued regulation and wider interpretation of internal control. Hence, according to Pfister (2009), nearly all issues of definition and developments in internal control were necessitated by reactions to economic changes in the country as a whole, or in individual firms in the economy. The consequence is that, in the last 3 decades, there has been a shift from the finance and accounting focus to a more corporate governance focus that is wider in perspective.

The other events can be seen in the question of administrative controls being, or not being part of an audit. To help resolve the issue, the American Institute of Certified Public Accountants in 1958 stated that the auditor should consider assessing administrative controls only if not doing so would impugn the integrity of the financial records (Pfister, 2009). In relation to the bribery revelations in the mid 1970s, more than 400 United States companies were involved in cases of bribery. The events led to the enactment of the Foreign Corrupt Practices Act (FCPA) in 1977 (and revised in 1988) to discourage corrupt practices among U.S. persons and organizations in the course of sourcing and executing businesses. Specifically, it required that all publicly traded companies in the U.S. must keep good books, and maintain adequate internal controls. The Act added a great deal of improvement in the management of business organizations (Cleveland, Favo, Frecka, & Owens, 2009).

Another example of a major legislative reaction to significant events is the introduction of the Sarbanes-Oxley Act of 2002. By the end of the 20th century, many investors and stakeholders suffered huge losses following many cases of high profile accounting scandals at Enron and WorldCom (Stewart, 2006). These scandals necessitated demands for greater legislative attention than in the past to be given to corporate governance. In the United States, the scandals motivated the enactment of the 2002 Sarbanes-Oxley Act (SOX) as an effort to address the incidence of corporate failures in the hope that both investor and public confidence in financial reporting would be restored (IFAC, 2006).

The Act provided new rules for the reporting of internal control evaluations of financial reporting, in addition to the assessment of the internal controls by management, the annual report should include an internal control report that acknowledges the responsibility of management for a proper structure of internal control and for the reporting of financial matters and its assessment of how effective the internal control is over financial reporting (Coates, 2007). In addition, the auditor is to report his or her opinion of management's assessment of the internal control system. Both the Foreign Corrupt Practices Act of 1977 and the SOX Act of 2002 are two examples of reactions to significant events that led to more regulation and in some cases, to the mandatory disclosures of internal control as well as to the widening of the interpretation of internal control.

In the United Kingdom, well-known failures such as the Bank of Credit and Commerce International and the Robert Maxwell Empire sparked concerns about the reliability of financial reporting. These events compelled the London Stock Exchange (LSE) and the accountancy profession to set up the Cadbury Committee in 1991. The Committee's report stated that the efficient management of a company required an effective internal control system; that it was necessary for Directors to provide a report that showed their own assessment of how effective their internal control system was; and for external auditors also, to report on those statements. Consequently, the LSE adopted these provisions as listing requirements for public companies. Pfister (2009) stated that these historical developments enable a distinction to be made between the focused view and the comprehensive view on internal control. He further stated that defining internal control in relation to financial reporting only exemplifies a focused view, whereas a definition that encompasses operations, financial reporting, and compliance objectives exemplifies the comprehensive view. These two views of internal control are further discussed below.

Focused and Comprehensive Views of Internal Control

According to Pfister (2009), a focused and traditional view of internal control is concerned with all measures "designed to safeguard tangible and intangible assets from misappropriation and that accounting records and information systems are reliable" (pp. 17-18). In their respective studies, Okafor & Ibadin (2009), Qianhong (2011), and Sani and Chaharmahalie (2012) alluded to Pfister (2009), who further stated that the safeguards are divided into three categories: structural safeguards, staff safeguards, and system safeguards. "Although the focused view of internal control emphasizes the technical aspects such as databases, record keeping, and segregation of duties, it is clear that these aspects of information handling rely significantly on the efforts of staff" (Pfister, 2009, p. 18). Therefore, where in considering internal control, emphasis is placed only on the finance objective, a focused view of internal control results.

A comprehensive or wider view of internal control covers every aspect of the organization and has a mechanism that pulls the various control concepts that form an integrated control framework together. According to Pfister (2009), the fact that internal control goes beyond finance and accounting, thus affecting organizational performance more holistically is a possible reason for their broad acceptance. Well-known frameworks are subsequently presented to elucidate on the ultimate internal control framework that is particularly applicable to this study.

Internal Control Frameworks

This section presents the notable and more widely applied internal control frameworks. Generally, internal control frameworks explain internal control in a broader form. These internal control frameworks offer definitions of internal control taking into account their respective components.

Internal control integrated framework (COSO). The Committee of Sponsoring Organizations of the Treadway Commission (COSO) was formed in 1985 by a coalition of the American accounting bodies. Its mandate was to study the reasons behind firms engaging in fraudulent reporting of their financial activities and to make appropriate recommendations to stem the tide, thereby enabling such firms to set up and improve their systems of internal control. As an effort to streamline the meaning of internal control, the committee issued a report that, once adopted, established an internal control integrated framework. This framework provides a common platform for managers and business leaders to evaluate and report on the effectiveness of their internal control system towards the achievement of their corporate objectives. The main ideas that emanate from the framework are:

1. The process of internal control is a necessary means of effectively attaining organizational objectives.
2. The internal working of a company should include understanding and setting up a system of internal control that is not just adequate but also effective.
3. Internal control aims for the attainment of goals in similar categories.

The COSO Report (1992) contained a holistic definition of internal control as a management process that involves the active participation of every strata of an organization with a view to achieving operational effectiveness and efficiency, accuracy and dependability of financial reporting, and adherence to relevant statutes and internal policies. Going beyond the objectives of accounting controls, COSO definition reveals three broad objectives that are classified as operational, financial reporting, and compliance (Jokipii, 2010). Following from the report, all positive steps taken by the board of directors, management and staff towards the attainment of organizational objectives are considered as internal control; the control environment, risk assessment, control activities, information and communication, and monitoring are the five interrelated components of internal control; and to achieve an effective internal control system, these five components, which are applicable to all sizes of entities must be present and functioning properly. The COSO Report has gained world-wide and industry-wide acceptance and application because of the general awareness that internal control transcends finance and accounting, extending to every area of an organization (Pfister, 2009). It has, therefore, been generally acknowledged as the definitive standard for the assessment of the effectiveness of an internal control system.

Systems Auditability and Control Report (SAC). In 1991, the Institute of Internal Auditors Research Foundation issued a report entitled "Systems Auditability and Control" to provide a framework for internal auditors on internal control as it relates to information systems and information technology (IT). In this report, which was revised in 1994, the Institute defined internal control as a collection of methods, activities, functions, subsystems, and people who are consciously grouped together or segregated with a view to effectively achieving set goals and objectives. The SAC report stated that internal control is concerned with providing some reasonable assurance that even with the acceptance of risks, organizational goals will be achieved.

However, the broad definition of internal control as offered by SAC notwithstanding, the specific objectives of the information systems of an organization are the focus of the SAC Report. These include securing the correctness, hence the reliability of the information used for the purpose of making decisions, ensuring that IT assets of the organization are secured and protected, and complying with procedures and rules whether internally or externally required (Masli et al., 2010).

The SAC recognizes three components of internal control (Noorvee, 2006). The first is control environment, which includes the structure, policies and procedures of the organization, control framework, and possible outside influences. The second component is the manual and automated systems which are concerned with the ways in which the business information is processed, reported or stored. The third component is the control procedures which entail the IT, applications, and compensating controls. The SAC Report extensively discussed risk monitoring and assessment but did not particularly offer definitions for them.

Guidance on control (CoCo). In 1995, The Canadian Institute of Chartered Accountants presented a control model called guidance on control (CoCo). According to Pfister (2009), CoCo defined internal control more broadly as "all the resources, processes, culture, structure, and tasks that, taken together, support people in the achieving organizational objectives" (p. 19). Deriving from the definition, assessing internal control is as good as assessing how the organization is managed. In their report, CoCo (1995) reckoned that effectiveness and efficiency of operations; reliability of internal and external reporting; and compliance with applicable laws, regulations, and internal policies are the three categories of objectives that will be achieved by an organization.

IFAC (2006) stated that CoCo articulated 20 criteria of control within four control areas that can be used to assess the effectiveness or otherwise of an internal control system. CoCo contended that to ascertain how effective an internal control system has been cannot be achieved using only one criterion, and that an assessment of ICE can only be made concerning one of the objectives, not all of them as a category as in COSO. Thus, the totality of the effectiveness of internal control in an organization includes the dynamic interaction in its various elements.

The four areas of control are "purpose, commitment, capability, and monitoring and learning" (IFAC, 2006, pp. 4-5). Purpose criteria are the factors that affect the direction of the entity. They address the organization's objectives, risks and opportunities, policies, planning and performance targets, and indicators (CoCo, 1995). Commitment criteria are such factors that give the entity a unique identification. They include the entity's ethical values, personnel management practices, authority and responsibility, accountability, and control activities. Capability as an area of control addresses those factors that determine the competence of the organization. According to CoCo (1995), these include knowledge, skills, tools, communication processes, information, coordination and control activities. Monitoring and learning are concerned with the perpetuation of the entity. This includes such things as scanning the environment, ensuring that performance conforms to set targets, reviewing premises upon which past decisions were based, re-examining the system in relation to the adequacy of information, establishing processes to ensure that corrections are indeed effected, and assessing the effectiveness of control.

As stated by Jokipii (2006), between CoCo and COSO frameworks, there are many similarities such that the four control areas of CoCo can be restructured into the five components of COSO. He stated further that only minor differences exist between the two frameworks: CoCo includes two criteria not expressly stated in COSO viz: mutual trust between persons and the reviewing of the premises upon which assumptions were made. Whereas CoCo included setting of objectives, strategic planning and management of risks, and corrective actions, these are excluded in COSO. On a general note, despite that the CoCo model was built on COSO Report, it is seen as being more concrete and adaptable, thus overcoming the difficulty associated with reading and understanding the COSO Report.

Control objectives for information and related technology (COBIT). COBIT is an information technology framework designed to assist organizations in their quest for regulatory compliance, risk management, and effecting an alignment of IT strategy with organizational objective. Issued in 1996 by the Information Systems Audit and Control Association, COBIT defined internal control as the policies, methods, practices, and organizational structures designed to provide reasonable assurance that the objectives of the business will be achieved and that the occurrence of any undesired events will be prevented or detected and corrected (Bernroider & Ivanoc, 2011; Tuttle & Vandervelde, 2007).

COBIT is primarily concerned with the need to monitor information systems efficiently and effectively, and managers can use it to develop clear policy and good practice for control of IT (Ridley, Young, & Carroll, 2008; Tuttle & Vandervelde, 2007). It can facilitate the administration of internal controls in banks being inevitably connected with the reporting of financial information, the storage, processing and management of financial data and documents.

Framework for internal control in banking organizations. A framework for the evaluation of the internal control systems in banking organizations was issued in 1998, and lately in 2011 by the Basel Committee on Banking Supervision. The main purpose of the frameworks was to address issues of concern that arise in the course of bank supervision with a view to enhancing supervision through measures that promote sound practice in the management of risks.

To establish a foundation for a safe and sound operation in the banking industry, a system of effective internal controls must be critically entrenched as a component of the bank management. The Basel Frameworks (1998, 2011) stated that the presence of such system will provide an assurance that banking organizations will meet their goals and objectives. It can help banks achieve their objectives in the three areas of performance, information, and compliance.

Specifically, the banks will be profitable, even into the long-term through being effective and efficient in the performance of their banking operations; the attainment of their information objectives entails that their financial and management reporting will be reliable, complete, and timely; and in all, such a system will ensure that the banks comply with laws and regulations including internal policies, plans, and procedures. The frameworks ensure that these objectives are achieved in a manner that is clear and straightforward.

As in COSO, the Basel Frameworks stated that internal control in banking organizations consists of five interrelated elements that will facilitate the achievement of the three aforementioned objectives. The five elements are “Management oversight and the control culture; Risk recognition and assessment; Control activities and segregation of duties; Information and communication; and Monitoring activities and correcting deficiencies” (Basel Framework, 1998, p. 10).

Derivable from these elements are 13 principles for use by supervisory authorities when evaluating banks' internal control systems. The frameworks, however, stated that the exact application of these principles in any specific areas or activities within the banks is dependent on the assessment of the risks to which the banks are exposed.

Internal control: Guidance for directors on the combined code. This report, otherwise called the "Turnbull Report" (1999), was issued with the London Stock Exchange for companies listed thereon. Nigel Turnbull was the Chair of the Committee that wrote the report; hence it is popularly called the Turnbull Report. The purpose of the report was to bring to the knowledge of directors the Combined Code and the resultant obligations of directors. These obligations are primarily concerned with ensuring that good "internal controls" are established and maintained in their companies, having audits with good checks and balances to ensure that the quality of their financial reporting is right and that the company's system is adequate as to prevent the occurrence of fraud. The revised edition was issued in 2005 by the Financial Reporting Council.

The Turnbull Report restates as follows the importance of internal control and risk management to the achievement of corporate objectives:

1. Internal Control helps in safeguarding the investments of shareholders, as well as the company's assets.
2. Strong internal controls enhance the company's operational effectiveness and efficiency, help in ensuring that reporting for internal and external purposes are reliable and that there is compliance to laws and regulations.

3. Financial control that incorporates good accounting records is very essential elements of internal control. It helps to reduce the company's exposure to financial risks while ensuring the reliability of the financial information for both its internal and external uses.
4. As an organization's environment continues to change, the risks attendant to its operations will also continue to change. Consequently, a continued evaluation of the nature and extent of such evolving risks should be undertaken so that the internal controls can appropriately manage and control risks with a view to maximizing profit, being the reward for successful risk-taking.

Furthermore, the Combined Code prescribes the following requirements for internal control:

1. The board of directors should institute internal controls with a view to safeguarding shareholders' investments and the company's assets.
2. The company directors should conduct periodic evaluation of the internal control system and report same to the shareholders.
3. All the UK listed companies should comply with the listing Rules that require them to report the extent of their compliance in relation to all aspects of the Turnbull Report.
4. Internal control from the perspective of the board of directors should include all forms of control be they operational, compliance, or financial.

The Turnbull Code places responsibility for the maintenance of internal control on the board of directors and requires that the board set the appropriate policies and seeks regular assurance that the system is functioning well, and managing those risks as intended. It further states that the responsibility for the implementation of the board's policies on risks and control is that of the company management and that management can best perform this function by identifying and evaluating the potential risks for the consideration of the board. In addition to the management, the Turnbull Code states that as part of his, or her accountability for attaining corporate objectives, every employee is expected to contribute towards the effective implementation of the internal control system. Thus to be effective, the internal control system requires the concerted efforts of the board of directors, the management, and all the staff of the organization.

Generally, the Turnbull Report (1999), revised in 2005, stated "risk assessment, control environment and control activities, information and communication, and monitoring" (pp. 13-15) are the four components of an internal control system. In assessing the effectiveness of the risks and internal control processes, the Code recommends some questions that the board and management should consider and discuss depending on the particular circumstances of the company. Answers to the questions, which are framed in relation to each component, suggest the effectiveness or otherwise of each of the components, hence taken together, the effectiveness or otherwise of an internal control system.

Reflections on the internal control frameworks. COSO (1992) is the most prominent framework covering the totality of the organization and identifies the key areas that require attention to ensure an effective control environment. In their comparison of internal control frameworks, Pfister (2009) reported that both SAC and COSO frameworks are similar in the areas of internal control objective and management's responsibility for the control system. SAC's primary focus, however, is on information with a view to earning for the organization the much needed competitive advantage. CoCo examines internal control from the perspective of the individual and considers what must have to be so that the individual can effectively perform control activities. The Basel Framework (1998) has everything as in COSO except that it is especially formulated for banking institutions, whereas COSO can be applied by any type of enterprise. According to Pfister (2009), both COSO and Basel frameworks described internal control as a process that recognizes operational, financial, and compliance risks, and as an integral part of the organization. On its part, IFAC (2006) stated that COBIT complements COSO and Basel only in the area of information technology, not business as a whole. The Turnbull Report, which builds on, COSO, and CoCo restated the importance of internal control and risk management to the achievement of corporate objectives.

Pfister (2009) emphasized that the primary purpose of these frameworks was to support practice by creating common-user principles for business practitioners. This will be achieved through the definitions that the frameworks have offered for the important elements of internal control, as well as their interrelationships, and quality evaluations (COSO, 1992). Thus, for other users including researchers, these frameworks not only constitute ready-made tools for their research, they provide the necessary overview of internal control and other basic details required for research studies related to this subject (Pfister, 2009). More critically important is that they explain the importance of internal control to firm performance, hence to the achievement of organizational objectives. On the whole, the appropriate framework to use depends on the characteristics of the firm or industry under consideration (Jokipii, 2010). In the present circumstance, the Basel Frameworks (1998, 2011), which also address the same three objectives as COSO, will be applied to this study with appropriate references to COBIT.

Internal Controls and Banking Operations

The relationship between internal controls and banking operations and performance has been described by various authorities in different ways, typically according to a specific area of focus (Luchsinger, 2009; Okafor & Ibadin, 2009). One of the most obvious areas of focus with respect to the banking industry is risk and how internal controls can help manage it (McCarthy & Flynn, 2008). For instance, according to Hayes (2009), “Speed and care are usually mutually exclusive. At least, speed and careful spending of money usually are. Speed is to internal controls like interstate highways are to speed bumps; Speed is a risk” (p. 46). This means that one of the risks of electronic processing of transactions is that someone who is dishonest can do a lot of damage in a very short amount of time. Other than auditors, few people view internal controls in a very positive light. In describing them as “necessary evils,” that could best be ignored, Hayes (2009) remarked and asked: “As I often point out in my classes on fraud and internal controls, what good is to have authority if you can't override some internal controls from time to time?” (p. 46). Hence, Amudo & Eno (2009) stated that a critical evaluation of existing internal control structures in organizations ensures that the organization's activities are carried out in accordance with established goals, policies and procedures.

Currently, internal control in Nigerian banks is mandated by Part 1 of the Banks and Other Financial Institutions Act (BOFIA) of 1991 (as amended) which provides that it is the responsibility of the board of directors of a bank to institute and implement proper policies and procedures, and an effective internal control system. This will help in monitoring and controlling all risks associated with every line of business and market served by the bank. To enhance this function, the board is also required to institute an effective audit process for the verification, among other duties that the board will specify, of how correctly and efficiently the internal control is implemented and how timely the bank's risks are identified and addressed.

These provisions can be compared to the guidance from the international community such as the Basel Committee on Banking Supervision (1998, 2011) that assert that an effective internal control system is a sine qua non to achieving set goals and objectives in a banking organization. Prior to the design and introduction of the Basel Framework (1998) for Internal Control Systems in Banking Organizations, precisely at the study stage, the Committee grouped into five, the types of control breakdown they found in the problem banks they studied. The groups included (a) inadequate oversight and accountability by management, (b) improper and insufficient recognition and assessment of the risks that are inherent in different activities of the bank, (c) the absence or failure of major controls, (d) inadequate information dissemination between the different levels of management, and (e) poor monitoring of programs and activities.

Thus, to evaluate how effective the internal control system of a bank is, the Basel Committee recommended the application of 13 principles that cover the five elements of internal control. These principles are summarized as follows:

1. The board of directors of the bank has the responsibility to establish an adequate and effective system of internal control, and to approve policies and strategies necessary for the attainment of the corporate objectives. This done, the responsibility for their implementation through the promotion of high standards of ethics and integrity requires the collaborative efforts of both the board and the senior management of the bank.
2. There is the need to identify and classify risks, and to subject them to continuous monitoring and assessment with a view to upgrading the internal controls from time to time to deal with such risks that could frustrate the bank's goals.
3. All forms of control activities that permeate the structure and activities of the bank should be regularly addressed. These include the segregation of duties and responsibilities, the security of internal financial, operational and compliance data, and the establishment of channels of effective communication. Akin to this, regular internal audit of the internal control system should be carried out.

To complement the Basel Framework principles, some best practices with respect to internal controls can also be discerned using the Sarbanes-Oxley Act of 2002 (hereinafter alternatively called "the Act" or "SOX") provisions that are used in the United States and around the world (Bhamornsiri, Guinn, & Schroeder, 2009; Ernult & Ashta, 2008). One of such provisions is Section 302 of the Act, which made it mandatory for Chief Executive Officers (CEOs) and Chief Finance Officers (CFOs) to file annual reports that will show the changes made to their internal control system, if any. This is in compliance with the Security Exchange Act of 1934. Section 404 of SOX also compels management to state in the internal control report, their assessment of the internal control system, and to subject the assessment to external auditing. SOX pushes up the responsibility of companies over the issue of internal control as it additionally places personal responsibility for their effectiveness on the shoulders of the CEOs and CFOs, requiring that they commit to internal control integrity by personally signing the financial statements. The Act caps it all by imposing a criminal penalty for its violation (Defond & Lennox, 2011).

Following the rapid environmental and operational changes that affect the business world, it has been further recommended that continuous monitoring of an internal control system is essential for its continued effectiveness; otherwise, there is a danger that it would become obsolete (Nigrini & Johnson, 2008; Owusu-Ansah & Ganguli, 2010). It is, however, to be noted that record keeping is key to monitoring activities in public companies like the banks involved in this study. Through the records, evidence emerges to substantiate issues that may be contained in the internal control assessment report. In the main, banks and companies alike should devise peculiar approaches that would enable them achieve simultaneous monitoring and reporting, although it is a daunting task (Orcutt, 2009).

The Basel Framework prescriptions are complemented by COBIT (1996), which is primarily concerned with the need to monitor information systems effectively and efficiently.

Innovations in information technology have represented a dual-edged sword for many banks as they seek to integrate these technologies with their traditional operations (Johnson, 2010; Bielski, 2008). Information technology can prove very useful in promoting the effective operation of the mechanisms of internal control (Li, Peters, Richardson, & Watson, 2012; Lui, 2009; Masli et al., 2010; Moorthy, Seetharaman, Mohamed, Gopalan, & San, 2011). For industries to remain relevant, competitive, and profitable, they must square up to the challenges of information technology. It is argued that the banking industry stands out among industries that are regularly faced with rapid technological change that comes with numerous associated developmental costs including those of satisfying internal control reporting as required by law (Ho & Mallick, 2010; Owusu-Ansah & Ganguli, 2010). However, information technology can facilitate the administration of internal controls by banks, irrespective of their unique situations (Cook, Probert, & Martin, 2010; Schaefer & Peluchette, 2010; Schneider & Bruton, 2007; Steinhoff, 2008). In evaluating the effectiveness of internal control in the banking industry, the first step is to do an assessment of the risk profiles inherent in the activities and operations of the banks. Through this process, the major risks that face the banks are identified and classified as either likelihood or impact. Assessing and classifying risks can be done in many ways but with one ultimate goal of visualizing and identifying those risks that pose a potential threat to the achievement of organizational goals (Pereira & Santos, 2010).

Because risk assessment is a time-sensitive exercise that varies with the type of risk (strategic, operational, reporting, or compliance), the type of information technology used for administering internal controls also varies (Leih, 2006). These are especially important points when designing and implementing internal controls because the nature of the threat changes over time with the introduction of new viruses and malware that can disrupt a bank's operations and compromise the integrity of its data (Johnson, 2010). Therefore, banks should ensure that virus and malware detection software is included as part of a layered security system in order to ensure that there are also human oversight controls and automated alerting mechanisms in place (Johnson, 2010).

Measurement of Internal Control Effectiveness

Some current research studies on internal control have revealed that beyond evaluating the effectiveness of internal controls by the traditional qualitative methods, they can also be evaluated using quantitative methods premised on empirical results (Grant, Miller, & Alali, 2008; Jokipii, 2010; Masli et al., 2010). Tseng (2007) used market value to assess the value-relevance of disclosures of internal control deficiencies, thus complementing the literature that uses market responses to announcements of material weaknesses (Beneish et al., 2008; Hammersley et al., 2008). He used the residual income model as the market valuation model to examine the relationship between market value and firms with weak internal controls. The empirical results based on a sample of 708 firm-years with the disclosure of material weaknesses show that firms with weak, hence ineffective internal controls have lower market value. This finding, which has implications for regulators, researchers and practitioners, shows that internal control is a fundamental driver for firm-value despite remaining largely untested.

Stoel and Muhanna (2011) using the SOX Act of 2002 to investigate empirically the relationship between IT internal control weaknesses and market value found that firms that report IT internal control weaknesses have lower market value. Hu, Qi, Liu, Zhen, and Tian (2011) found from their investigation of the value-relevance of accounting information that ineffective internal control is significantly and negatively associated with a firm's market value.

In keeping with previous research, the results derived by calculating the market values of banks over a selected time frame can be analyzed to determine the degree of effectiveness of their internal controls. In the proposed study, therefore, each bank's MV shall be applied as the measure of its ICE, which is the independent variable.

Financial Performance

The term *financial performance* features in the management of every business irrespective of the industry. According to Stanley (2011), a company's success is traditionally measured by its financial performance regardless of other factors that are associated with its operations. Jackson and Parsa (2009) noted that the financial performance measurements of a firm relate either to its accounting performance or to its market performance and that both measures are beneficial to managers and researcher alike. Some researchers have used accounting measures to evaluate financial performance (Cucculelli & Micucci, 2008; Short, Ketchen, Palmer, & Hult, 2007). Some others have also used market measures to evaluate financial performance (Luca & Atuahene-Gima, 2007; Luo & Bhattacharya, 2006). Yet, in some other studies, the researchers applied a combination of accounting and market measures in evaluating financial performance (Richard, Divenny, Yip, & Johnson, 2009; Fan, Wong, & Zang, 2007).

In calculating the financial performance of a firm, the metrics that are more commonly used could be classified as accounting-based or marketing-based. Some of the most commonly used metrics are return on equity (ROE), return on assets (ROA), and price/earnings ratio (P/E) (Venanzi, 2010). According to Park and Lee (2009), the ROE is an accounting measure of performance that shows the ratio of the firm's net income to shareholders' equity. In their study that investigated the relationship between the promotion, and growth of electronic payment products and services, and bank performance, Hasan, Schmiedel, and Song (2009) used ROE to measure bank performance. In several other studies that examined relationships between variables, ROE has been used as dependent variable (Gil-Estallo, Giner-De-La-Fuente, & Griful-Miquela, 2008; Huang & Liu, 2010; Makni et al., 2009). Denizci and Li (2009) stated that the ROA as an accounting measure shows the profitability of a firm relative to its total assets. Hasan et al. (2009) and Gil-Estallo, Giner-De-La-Fuente, and Griful-Miquela (2008) are examples of correlational studies that used ROA as dependent variable.

Accounting measures are theoretically known to evaluate a firm's performance from a historical perspective and suffer the inherent weakness of being subject to the competence of a firm's managerial team and the possible manipulation of accounting procedures (Stanley, 2011). Market-based measures as an alternative in evaluation of performance are less prone to accounting variations. They are futuristic and a reflection of the investor perceptions of the ability of a firm to generate future profits (Bjuggren & Palmberg, 2010; Morgan, Slotegraaf, & Vorhies, 2009).

There is yet another important metric used to calculate a firm's financial performance called *EVA* (De Klerk, 2012; Sharma & Kumar, 2010). This metric, which was created to address the quantification of value creation, is also a mixture of both the accounting and market information (Rodriguez et al., 2009; Venanzi, 2010). According to Chari (2009) and Mamun and Mansor (2012), because EVA captures the true economic profit of a company more than any other measure of financial performance, it is superior to all others. Misra and Anil (2007) and Yao et al. (2009) described EVA as the most significant measure of financial performance, whereas Shourvarzi and Sadeddin (2011) used EVA as dependent variable to predict the profitability power of companies and stated that EVA is a critical criterion in making financial decisions. In Berete (2011) and Mittal, Sinha, and Singh (2008), EVA was also used as dependent variable. There is a growing awareness of the measurement of financial performance and its importance in adding value to a firm especially in the face of globalization (Carr & Nanni, 2009; Venanzi, 2010). In view of its superiority to all other measures, EVA was used in this study as the dependent variable.

Internal Control Effectiveness and Financial Performance

As asserted by the Basel Committee on Banking Supervision (1998), effective internal control should lead to not only reliable, timely, and complete financial and management information but also to the efficiency and effectiveness of activities (performance objectives) in the value chain of a bank. Performance objectives are concerned with how effectively and efficiently the banks utilize their assets and other available resources to promote profitability and protect themselves from losses. First, to achieve performance objectives, a management control system anchored on an effective accounting system will be used to control costs in the banking operations through the process of planning, control, and feedback. Second, to achieve efficiency and effectiveness of banking activities, an accounting system based on effective internal controls must be integrated into the entire process. Third, efficiency and effectiveness will lead to profitability and protection from losses.

The definition of internal control by the Basel Framework implies that there are three types of risk to be controlled by a bank's internal control: information risk (unreliable, incomplete, and untimely financial and management reporting), performance risk (inefficient and ineffective activities), and compliance risk (violations of laws and regulations). Controlling performance risk will increase the probability of the efficiency and effectiveness in the value chain, thus leading to a positive performance.

According to Lai et al. (2011), many past and recent accounting scholars focused on the two objectives of reliability of financial reporting and compliance with government regulations (Doyle et al., 2007b; Klam & Watson, 2009; Masli et al., 2010). It is only recently that the efficiency and effectiveness objective of internal control in relation to firm performance is beginning to come under empirical research scrutiny (Jokipii, 2006; Lai et al., 2011; Tang & Xu, 2008). No study has been found to investigate the relationship between internal control effectiveness and financial performance in the banking industry. However, research findings related to nonbank companies will be applied to banks as they share the same internal control objectives (Basel and COSO).

Past research studies have largely found that weak internal controls have a negative impact on a firm's performance. Boritz and Lim (2008) and Yazawa (2010) found that companies reporting internal control weaknesses have weaker financial performance than those reporting otherwise. Doyle, Ge, & McVay (2007a) reported that firms disclosing material internal control weaknesses tend to be financially weaker, whereas companies that are weak in internal control tend to affect the quality of profit (Ashbaugh-Skaife, Collins, Kinney, & Lafond, 2008). Stoel and Muhanna (2011) found that firms reporting weak IT internal control have a lower earnings response coefficient. In reporting that companies with internal control weaknesses tend to be financially weaker, Yazawa (2010) also stated that a material weakness is related to quality of earnings. In a more direct reference to the consequence of a weak internal control, Lu et al., (2010) stated that the absence of effective internal control results in a weak financial performance. In Berete (2011) and Mittal et al. (2008), EVA was also used as dependent variable. Doyle et al. (2007b) and Tang and Xu (2008) on their part found and thereby confirmed that internal control affects corporate performance whether financial or operational. In these empirical studies, the independent variable was internal control effectiveness (ICE).

The internal control process which previously was a mechanism for checking instances of fraud, misappropriation, and errors (Morehead, 2007), has become more extensive, addressing the various risks organizations face (Tseng, 2007). Accordingly, an effective internal control has come to be widely recognized to be critical to the achievement of corporate goals and to maintain financial viability (Brown et al., 2010; Doyle et al., 2007b; Jokipii, 2010; Richard et al., 2009; Tang & Xu, 2008).

With a condensed reference to the Nigerian banking industry, if the observed distress and mismanagement continued, the situation would result in total bank failure with adverse economic consequences. Empirical results of a study on local economic effects of bank failures indicated that such failures cause a reduction in the volume of sales in local markets, and in many cases, the liquidation of failed banks aggravate unemployment (Gilbert & Kochin, 1989). Generally, bank distress deters economic growth (Ochejele, 2007; Rose & Hudgins, 2010). As the CBN did not report any signs of bank distress before 2009, it would be necessary to examine the financial performances of the banks during the period before the stress tests that revealed the significant distress in eight of the 24 banks in 2009. It would also be necessary to examine their post intervention financial performances.

General research studies on internal control have revealed that beyond evaluating the effectiveness of internal controls by traditional qualitative methods, they can also be evaluated using quantitative methods premised on empirical results (Boritz & Lim, 2008; Stoel & Muhanna, 2011; Tseng, 2007). Since a major cause of the distress is suggested to be the absence of effective internal controls (Cook, 2011), building on all of this evidence, the relationship between ICE and financial performance in the banking industry in Nigeria can be assessed empirically. This can be done regardless that there has been a dearth of academic research examining internal control systems in the banking industry or their consequences on banks' financial performance. This research study will fill that gap and provide some insight on the banks' internal control effectiveness and their financial performance.

Transition and Summary

Following from the organization (or management control) theory that was used in this study, and which explains the dynamics of business organizations, including the ways they exercise controls for the attainment of set goals and objectives, poor financial performances leading to bank failures have become a feature of the Nigerian banking industry. Internal control as an antidote to the increasing incidence of corporate failures over the past decades has attracted interests among academics and business leaders. However, only in a few research studies have the relationship between ICE and financial performance been examined. Moreover, none of these studies assessed the relationship in the banking industry despite the industry's importance to every national economy, and the adverse effects of bank failures.

Beyond examining the state of the banking industry in Nigeria, the literature review indicated that internal control is defined by generally accepted internal control frameworks and regulatory provisions, which address the effectiveness of internal control. This review of past research studies have also shown that firms lacking in ICE perform poorly, hence a further need to study the relationship between ICE and financial performance in the Nigerian banking industry. The resultant benefits of the study to business leaders and academia were also covered in this section. Section 2 will provide a detailed account of the methodology and strategies chosen to conduct the study.

Section 2: The Project

Over the past 3 decades, there have been many occurrences of bank failures in Nigeria (Agbonkpolor, 2010; Olayiwola, 2010), the consequences of which impact more adversely on the economy than do business failures. This section begins with the restatement of the business project purpose of the study. My role in the process of collecting research data and the participants included in the study are described. The research method and design that ground the study are described, stating why they were chosen over other methods and designs. In this section, the data collection instruments and techniques used in collecting, organizing, and analyzing the data are discussed. The section ends with a discussion on the reliability and validity of the instruments used.

Purpose Statement

The purpose of this quantitative correlational and comparative study was three-fold. First, the study entailed the assessment of the relationship between two variables, the independent variable of ICE and the dependent variable of financial performance. Two correlations were computed to assess this relationship, one for the period before the CBN intervention and one for the period after that intervention. Upon the analysis, it would be seen whether more effective internal control leads to better financial performance in the banking industry. Second, a comparison was made between the values of the previous and subsequent independent and dependent variables respectively based on the 2009 CBN intervention. Third, the study was intended to increase the understanding of business leaders concerning the importance of internal control to the achievement of profitable financial performance and business sustainability. Restricted to

Nigeria as its geographical location, this study involved the 24 commercial banks for its participants.

Beyond contributing to business management by increasing the understanding of business leaders on the relationship between ICE and financial performance, the study was intended to impact social change, as business organizations with improved financial performance become more empowered to discharge their corporate social responsibilities effectively. The Nigerian banking sector might in turn begin to affect the nation's economic development positively.

Role of the Researcher

An accountant with more than 25 years of industry experience, I am familiar with the topic on internal control and financial performance. I have experience in the design, installation, and implementation of management control systems, and in the preparation of corporate financial statements. Given this professional experience, comprehending the financial data and research variables used for the study was more easily achieved.

Basically, the role of the researcher in this quantitative study included collecting, organizing, analyzing, and interpreting the data. Because secondary data were used in this study, I had no control over the way and manner the primary data were collected. However, it was my duty and responsibility to ensure the reliability of the sources of data used in the study and that the data were analyzed and interpreted in an ethical manner. According to Creswell (2009), researchers should actively participate and address ethical dilemmas that may occur in the course of their research. Therefore, in this study, due care and attention to the protocol were followed to ensure that ethical standards were maintained throughout the process ("Office of Research Integrity," 2010). In the data collection process, the role of the researcher centered on the proper collection and presentation of the data in an organized form (Abareshi, Martin, & Molla, 2010; Burns & Schubotz, 2009). Thus, in adherence to the protocol, I organized the data and used them to produce relevant statistics that described and summarized the important characteristics of the data sets.

Participants

Considering the important and significant role that banks play to facilitate national commercial and economic development, the banking industry in Nigeria comprised the general population in this study. The participants were the 24 commercial banks operating in the country, as no random sampling was done (Belli, 2008). In addition to the majority of the banks being listed on the Nigerian Stock Exchange, the Banks and Other Financial Institutions Act (BOFIA) of 1991 (as amended) requires the banks to render their annual accounts to the CBN. The choice of the participants was based on the public availability of their annual financial statements, which in turn provided data for the measures of the research variables. Creswell (2009) described this condition as nonprobability of convenience sampling. Berete (2011), Guse and Eracleous (2011), Olsen and Nesbitt (2010), and Sikwibele and Mungoo (2009) used this approach in their respective studies.

The recent studies that have addressed the relationship between internal control and firm performance used large sample sizes drawn from different industries (Lai et al., 2011; Stoel & Muhanna, 2011; Tseng, 2007). This multi-industry approach, which availed large sample sizes enabled them to obtain statistically significant results, but was also accounted as one of the weaknesses of those studies. However, despite that the sample size in this study appeared to be small ($N = 24$), it was sufficient that all participants were from the same industry, a very important feature of this research study (Berete, 2011).

Research Method and Design

As explained by Creswell (2009), there are three methods used to conduct a research study. These are quantitative, qualitative, and mixed methods. According to Bryman (2006), Symonds and Gorard (2010), and Westerman and Yanchar (2011), numerical studies are classified as quantitative, nonnumerical as qualitative, and those that use both elements as mixed methods. A qualitative methodology was not a feasible approach because the quantitative research questions cannot be tested with the lived experiences and perceptions of interviewees. Moreover, the study did not involve human participants.

Method

The primary purpose of this research study was to examine the relationship between ICE and financial performance in the banking industry in Nigeria. This primary purpose aligns with the positivism world view, and according to Creswell (2009), the quantitative research method is the best method associated with the positivism world view as it enables researchers to predict relationships between variables and to pose these variables as research questions and hypotheses. According to Hopper (2008) and Schweitzer (2009), researchers collect and analyze numerical data in quantitative research, making it appropriate to address this study's second purpose of making comparisons between the values of its variables before and after the 2009 CBN intervention.

As distinct from predicting and testing the relationship between two variables, Simon (2006) stated, "The intent of quantitative research is to understand a particular social situation, event, role, group, or interaction" (p. 39). The further option of a mixed-methods methodology that would require the researcher to perform a more extensive data collection and analysis of text and numerical data would be time and cost intensive and, therefore, was not convenient for me. Consequently, the quantitative research method, which was deemed to be most appropriate, was used for this study.

Research Design

The two quantitative research designs among which a choice could be made for the conduct of this study were experimental and nonexperimental designs. An experimental design is characterized by the measuring of the impact of an intervention on an outcome (Creswell, 2009). In addition, variable manipulation also takes place in the experimental design (Herzinger & Campbell, 2007). On the contrary, a quantitative research design in which variables manipulation does not occur and which does not use random selection is nonexperimental (Belli, 2008). Because this study did not involve the manipulation of variables or modification of anything in the environment or the participants, and since the participants would not be randomly selected, this researcher rejected the experimental design and, therefore, made use of the nonexperimental design which aligned more with the objectives of the study.

Specifically, within the domain of nonexperimental research design, this study was correlational and comparative. Two correlations, one for the period before the CBN intervention (2008) and one for the period after the intervention (2010) were computed to assess the relationship between ICE (independent variable) and financial performance (dependent variable). Leedy and Ormrod (2010) described correlational design as a type of descriptive quantitative research in which possible relationships among variables are examined. According to Stanley (2011), "this type of approach aligns with the post positivist worldview, which supports the use of scientific methods in gaining an understanding of complex social phenomena through the use of numerically measuring constructs and testing hypotheses." (p. 60). Correlation does not imply causation as in causal-comparative research; however, both research methods are similar in that both are non-experimental.

Population and Sampling

The general population addressed in this study that will not involve human participants is the banking industry in Nigeria, made up of the 24 commercial banks that emerged following the 2005 Nigerian banking sector reforms, the highlight of which was the recapitalization of each of the banks from 2 billion naira to 25 billion naira. Availability of data that reflect the ICE and financial performance was instrumental to the successful conduct of this study. The Companies and Allied Matters Act (CAMA) of 1990 mandates public limited liability companies to publish their annual financial statements. On the other hand, BOFIA of 1991 (as amended) mandates all commercial banks in Nigeria to render their annual accounts to the CBN. Since all the 24 banks that are participants in this study are public limited liability companies, their financial and ICE data were publicly available thereby. The choice of this purposeful and convenience sampling was based on this expected availability of data, a condition that Creswell (2009) described as nonprobability of convenience sampling. Berete (2011), Guse and Eracleous (2011), Olsen and Nesbitt (2010), and Sikwibele and Mungoo (2009) used this approach in their respective studies.

The eligibility criteria for each study participant included being incorporated as a company under the Companies and Allied Matters Act (1990), satisfying the minimum paid-up share capital requirement for commercial banks, and possession of a valid banking license issued by the CBN. Consequently, all the participants were deemed to have met the minimum capital requirement of 25 billion naira set by the CBN in pursuit of the 2005 banking sector reforms despite that currently they have different financial data.

Ethical Research

As a requirement of Walden University, approval was sought and obtained from the University's Institutional Review Board (IRB). In considering the proposal for approval, the IRB ensured that it met such criteria as the applicable law and institutional regulations and standards for professional conducts and practices (Beskow, Grady, Iltis, Salder, & Wilfond, 2009).

Irrespective of the research methodology to be applied in a research study, researchers are required to anticipate constantly and actively address every ethical dilemma that occurs in the course of their research (Creswell, 2009). Researchers are able to fulfill the obligation of proving that their research processes are reliable and that the research methods they apply are credible by addressing such dilemmas (Bulpitt & Martin, 2010).

According to Creswell (2009), researchers are expected to respect vulnerable populations, avoiding putting participants at risk in the course of data collection. In this study, however, human participants were not included, as the data required were publicly available. Consequently, consent forms, confidentiality agreements, and letters of cooperation, documents intended for the protection of participants, were not required. The data will in turn be stored in a password-protected electronic folder that will be accessible only to me, and be deleted 5 years upon completion of this study.

Data Collection

According to Stanley (2011), "data collection process sets boundaries for the study by establishing the protocol for recording information." (p. 62). The data used for this study consisted of archival data from public information. Descriptions of the instruments and techniques, respectively, used for data collection and data organization, are stated below.

Instruments

Under the BOFIA of 1991 (as amended), Nigerian banks are required to report their Balance Sheet and Profit & Loss Accounts to the CBN and a subset of these data are published in statistical bulletins and Banking Supervision Annual Reports. These annual reports and accounts which the commercial banks are legally required to publish and submit to the CBN constitute the type of instruments required for this quantitative correlational and comparative study. The concepts measured were the year-end MV and the EVA of the participants for 2008 and 2010. The MV is the accounting estimate of what a company is worth (Abuzayed, 2009; Lind, 1998). The EVA is a mixed financial metric that computes the true economic profit of a company (Berete, 2011; Rodriguez, Cortez & Ramirez, 2009; Shourvarzi & Sadeddin, 2011).

Since the balance sheet and profit & loss Accounts contain data relating to the annual operational performances of the banks, the appropriate data required for the computation of MV and EVA were identified and applied to derive these values respectively. According to Stanley (2011), the following formula is used for the computation of MV: MV = Number of Outstanding Shares x Market Price per Share. Also, according to Shourvarzi and Sadeddin (2011), EVA would be computed using the following formula: EVA = NOPAT – (Cost of Capital x Capital Employed), where: NOPAT = Net Operating Profit after Tax.

The annual reports and accounts from which data was used for this study had been duly audited by the external auditors of the respective banks before submission to the regulatory and supervisory authority, the CBN. To this extent, the instruments were assessed to be reliable, and the research data to be valid. Moreover, the concurrence of the board of directors and management of each bank through subsequent presentation of the audited accounts to the shareholders lent further credence to the reliability and validity of the instruments.

All the raw data used in this study have been presented in tables for appropriate reference by readers. As previously stated, two variables were addressed in this quantitative study. The ICE, as the independent variable, was measured by the MV, whereas the financial performance, as the dependent variable, was measured by the EVA.

Data Collection Technique

The data required for this study were collected from the balance sheet and profit & loss accounts of the 24 participating commercial banks. The banks are legally required to publish and submit these data to the CBN, and the data are further publicly available by virtue of the banks' stocks and shares being listed on the Nigerian Stock Exchange. However, to protect participants' privacy, the identity of each participating bank was not disclosed.

Data Organization Techniques

Data for this study were organized into two stages. The first stage involved the use of an eight-column Excel spreadsheet for the computation of the MV and EVA of the participants before and after CBN intervention respectively. Principally, four sets of data were used in this study: the previous MV and the previous EVA respectively (for the year before the CBN intervention), and the subsequent MV and EVA respectively (for the year after the CBN intervention). In the second stage, a PASW (formerly SPSS) file was used, and the data were organized into the following five columns: serial number, the previous MV, the subsequent MV, the previous EVA, and the subsequent EVA. These data will be stored in an electronic folder that will be password-protected and to which only me will have access. With the aid of a freeware program, the data will be deleted 5 years after the completion of this study.

Data Analysis Technique

An assessment of the normality of data for the inferential statistical analysis in this study was done numerically using the PASW (formerly SPSS) Software Package, Version 18, to test the procedures within the Explore command. Numerical methods provide objective ways of examining normality (Park, 2008). As the study population was less than 50, the Shapiro-Wilk theory driven test of normality was conducted. Originally valid for sample size of between 3 and 50, it was later extended to between 7 and 2000 (Royston, 1982). The statistic is positive and less than or equal to one. In this circumstance, if the significance value was greater than 0.5, then, the data would be deemed normal. However, the resultant test conducted indicated the data were nonnormal.

In the study proposal, which had anticipated data normality, the Pearson correlation was proposed to assess the linear relationship between ICE and financial performance. According to Green and Salkind (2011), the Pearson correlation assesses the linear relationship between quantitative variables in a sample. The primary purpose of the study and the nature of the variables informed my earlier choice of the Pearson correlation. In addition, the extent to which the ICE and financial performance respectively differ based on the 2009 CBN intervention was to be examined using the paired-samples *t* test to assess the hypotheses involving differences between two means for comparative testing (Green & Salkind, 2011). In view of the resultant nonnormality of the four variables in the study, Spearman Rho correlation and Wilcoxon Signed Ranks test were conducted in lieu of Pearson correlation and paired-samples *t* test, respectively, using the PASW Software Package, version 18. The same software package was used to treat the descriptive and inferential questions (Shrier, 2007) associated with the study. Finally, it was deemed appropriate to present the results in tables and to interpret and explain them in relation to the theoretical framework of the study.

Reliability and Validity

Reliability

The issue of reliability in this study concerned the use of market value as a measure of internal control effectiveness. Not much literature exists on this, but impetus was given by the use of a residual income model to estimate the relationship between market value and internal control (Tseng, 2007). Having met internal and external validity criteria encouraged the use of the research findings in practice and policy (Duncan & Harrop, 2006).

Validity

Creswell (2009) indicated that there are internal and external validity threats to research studies. Because this study is not concerned with cause-effect of a causal relationship, attention was given to the external validity to ensure that the findings from the study can be generalized to the entire population (Weisberg, Hayden, & Pontes, 2009; Yu & Ohlund, 2010). The external validity of the study was further enhanced as all the participants in this study operated under the same banking industry characteristics; thus, the results of the study apply to all the commercial banks in Nigeria.

Transition and Summary

In Section 2, the purpose of this research study was restated and my role as the researcher described. The section further described the research methodology and strategies used in the study such that provided an objective data set for the analysis of the research questions and testing of hypotheses. This section also discussed the reasons for choosing the banking industry in Nigeria as the general population and the commercial banks as participants. The data collection processes and instrumentation, as well as their reliability and validity, were discussed. Finally, the section contained a logical and sequential discussion of the research questions and hypotheses answered and tested. Presentation of the findings of the data analysis, a discussion on the applications to professional practice, the implications for social change, recommendations for actions and further study, and reflections will be the subjects of the next section.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this quantitative correlational and comparative study (IRB 06-28-12-0140207) was to examine the relationship between ICE and financial performance in the Nigerian banking industry. In addition, the study was to examine the changes brought about in ICE and financial performance of banks by the 2009 CBN intervention through liquidity injection of 620 billion naira into the banking sector. The study was, therefore, an attempt to see if more effective internal control leads to increased financial performance, and to increase the understanding of corporate leaders thereby. In this section, a detailed account is given of how this study was conducted, and a presentation is made of the findings. The application of the findings to professional practice, their implications for social change, recommendations for action and further research studies, and a reflection of my experience on the research topic are further addressed in this section. The section ends with summary and study conclusions.

Overview of Study

In the past 3 decades, industry-wide corruption reminiscent of ineffective internal control systems and weak corporate governance have led to the collapse of many banks (Idolor, 2010). Increasing the efficiency and financial performance of banks will reduce failure within the financial system (Reynaud, 2010) and lead to a stable economy (Kupiec & Ramirez, 2009). Therefore, the primary purpose of this study was to examine the relationship between ICE and financial performance of Nigerian banks and, based on CBN's liquidity injection intervention in the Nigerian banking industry in 2009, to examine the changes, if any, occasioned in the two variables through comparative testing.

The study results might help identify industry best practices for maximizing organizational effectiveness and for supporting banking operations to avoid failures in times of financial crisis (Anayiotos, Toroyan, & Vamvakidis, 2010; Said, 2012). The study included two statistical approaches, the Spearman Rho correlation to assess the linear relationship between ICE and financial performance and the Wilcoxon Signed Ranks Test to assess the hypotheses involving differences between two means for comparative testing (Green & Salkind, 2011).

The research questions that guided this study were as follows:

1. To what extent is ICE related to financial performance before CBN intervention?

2. To what extent is ICE related to financial performance after CBN intervention?

3. To what extent does financial performance differ, based on CBN intervention?

4. To what extent does ICE differ, based on CBN intervention?

The fifth research question, hence hypothesis *H*5 proposed in Section 1, was not addressed as there is no statistical method for calculating a significant difference between two correlations.

In answering the research questions, the following hypotheses were tested in the study:

*H*1o: There is no significant relationship between a bank's ICE and its financial performance before CBN intervention.

*H*1a: There is a significant relationship between a bank's ICE and its financial performance before CBN intervention.

*H*2o: There is no significant relationship between a bank's ICE and its financial performance after CBN intervention. .

*H*2a: There is a significant relationship between a bank's ICE and its financial performance after CBN intervention.

*H*3o: There is no significant difference between a bank's financial performance before and after CBN intervention.

*H*3a: There is a significant difference between a bank's financial performance before and after CBN intervention.

*H*4o: There is no significant difference between a bank's ICE before and after CBN intervention.

*H*4a: There is a significant difference between a bank's ICE before and after CBN intervention.

Based on the public availability of the banks' annual reports and accounts--that is, their operating performance data--this study considered the 24 Nigerian commercial banks and their operations from 2008 to 2010. The banks' MV was used as the measure of their ICE, while the EVA was used as their financial performance. The MV and EVA of each bank were computed using financial data retrieved from their respective public websites. Table 1 shows the 24 banks anonymously represented by serial numbers. The table also shows their ICE before and after CBN intervention, and their financial performance before and after CBN intervention. All the data analyses in this section were done using the PASW (SPSS) Statistics Version 18.0. From the results of the study, I found that there is a significant, positive relationship between ICE and financial performance before and after CBN intervention and that both variables declined significantly after CBN intervention. A more detailed presentation of the findings of this study follows after Table 1.

Table 1

Bank Level Data: ICE and Financial Performance Before and After CBN Intervention

Participant Serial Number	ICE (Before CBN Intervention) ₦'million	Financial Performance (Before CBN Intervention) ₦'million	ICE (After CBN Intervention) ₦'million	Financial Performance (After CBN Intervention) ₦'million
1	919,714	19,224	448,037	6,322
2	856,532	25,247	40,738	-372,213
3	613,864	20,868	471,261	8,561
4	503,730	19,262	56,742	-164,630
5	453,437	5,553	35,184	-468,148
6	438,860	22,861	236,690	534
7	387,581	8,970	169,938	-903
8	295,398	7,011	77,909	-4,228
9	280,678	7,259	122,034	-756
10	267,768	-272,816	55,553	-21,479
11	242,131	4,826	108,564	-490
12	204,375	5,759	172,500	4,298
13	201,817	-1,239	49,968	-789
14	162,448	6,215	29,558	-15,177
15	151,049	-70,207	16,539	1,671
16	147,245	5,487	116,327	807
17	141,172	-7,639	414,113	18,415
18	106,575	859	12,206	-119,254
19	68,469	3,641	29,021	388
20	63,285	504	10,302	-4,599
21	46,551	18,574	39,945	-1,313
22	38,945	282	41,738	1
23	35,325	0	44,926	42
24	32,110	9	28,405	-776

Presentation of the Findings

The primary purpose of this quantitative correlational study was to examine the relationship between ICE and financial performance in the Nigerian banking industry. The secondary purpose was to examine the difference, if any, in the variables before and after the CBN intervention. The annual reports and audited financial statements of the 24 commercial banks that constituted the sample in this study were examined and the relevant data extracted. Table 1 shows the banks' ICE and financial performance before and after CBN intervention.

Descriptive Statistics

The results indicate that ICE was lower after CBN intervention (M = 117,842) than before CBN intervention (M = 277,461). Likewise, financial performance was lower after CBN intervention (M = -47238) than before CBN intervention (M = -7962). The descriptive results further indicate that the data are nonnormal, as the skewness for all four variables is more than twice the standard error of skew (see Table 2). Additional analysis was conducted to confirm the nonnormality.

Table 2

Descriptive Statistics: ICE and Financial Performance Before and After CBN Intervention

Statistic	ICE (Before CBN Intervention)	Financial Performance (Before CBN Intervention)	ICE (After CBN Intervention)	Financial Performance (After CBN Intervention)
M	277460.79	-7062.08	117841.58	-47238.17
Median	203096.00	5520.00	52760.50	-766.00
Mode	32110.00[a]	-272816.00[a]	10302.00[a]	-468148.00[a]
Skewness	1.35	-4.26	1.77	-2.79
*SE*of Skewness	.47	.47	.47	.47
Kurtosis	1.38	19.22	2.10	7.22
SE of Kurtosis	.92	.92	.92	.92

To further confirm that the data were nonnormal, a Shapiro-Wilk test was conducted on the variables in the study, to determine whether the data came from a normally distributed population. The results indicate that the Shapiro-Wilk test was significant for all variables, confirming the nonnormality of the variables (see Table 3).

Table 3

Shapiro-Wilk Test for Normality

	Shapiro-Wilk	*Df*	*P*
ICE (Before Intervention)	.85	24	.002
Financial Performance (Before Intervention)	.41	24	< .001
ICE (After Intervention)	.71	24	< .001
Financial Performance (After Intervention)	.50	24	< .001

Note: a. Lilliefors Significance Correction

Hypothesis Testing

Four research questions were addressed in the current study. Because the data were found to be outside the parameters of a normal distribution, nonparametric statistics were used to test the four hypotheses. In lieu of a Pearson correlation coefficient, which has an assumption of normality, Spearman Rho correlation coefficients were used. Similarly, rather than conduct a paired-samples *t* test for hypotheses involving differences, a Wilcoxon matched pairs test was conducted. Table 4 shows the Spearman Rho correlations among the variables before and after CBN intervention. Analysis of these data provided answers to the Research Questions 1 and 2 posed in the study.

RQ1. To what extent is ICE related to financial performance before CBN intervention? The following hypotheses relating to this research question were tested using the results of the Spearman Rho correlation computed in Table 4:

*H*1o: There is no significant relationship between a bank's ICE and its financial performance before CBN intervention.

*H*1a: There is a significant relationship between a bank's ICE and its financial performance before CBN intervention.

From the results, I found that there is a significant, positive relationship between a bank's ICE and its financial performance before CBN intervention, $r_s = .6$, $p < .001$. This finding provided a basis to reject the null hypothesis, *H*1o, in consideration for the alternate hypothesis, *H*1a, that a bank's ICE is a possible influencer of financial performance, prior to CBN intervention.

RQ2. To what extent is ICE related to financial performance after CBN intervention?

As in RQ1, the following hypotheses relating to this research question were tested using also, the results of the Spearman Rho correlation computed in Table 4:

*H*2o: There is no significant relationship between a bank's ICE and its financial performance after CBN intervention.

*H*2a: There is a significant relationship between a bank's ICE and its financial performance after CBN intervention.

From the results, I found that there is a significant relationship between a bank's ICE and its financial performance after CBN intervention, $r_s = .55$, $p = .005$. Again this finding provided a basis to reject the null hypothesis, *H*2o, in consideration for the alternate hypothesis, *H*2a, that a bank's ICE is a possible influencer of financial performance, after CBN intervention.

Table 4

Spearman Rho Correlation Among Variables

	N	r_s	*P*
ICE and Financial Performance (Before Intervention)	24	.6	< .001
ICE and Financial Performance (After Intervention)	24	.55	.005

Note: $*p < .05$

RQ3. To what extent does financial performance differ, based on CBN intervention?

The following hypotheses relating to this research question were tested using the results of the Wilcoxon signed ranks test computed in Tables 5 and 7:

*H*3o: There is no significant difference between a bank's financial performance before and after CBN intervention.

*H*3a: There is a significant difference between a bank's financial performance before and after CBN intervention.

From the results of the Wilcoxon signed ranks test, I found a significant difference between a bank's financial performance before and after CBN intervention, $Z = -2.49$, $p = .013$. This finding provided a basis to reject the null hypothesis, *H*3o, in consideration for the alternate hypothesis, *H*3a, that there is a significant difference between a bank's financial performance before and after CBN intervention. Financial performance was significantly lower after CBN intervention ($M = -47238$) than before CBN intervention ($M = -7962$). The ranks are reported in Table 5 and the test statistics in Table 7.

Table 5

Wilcoxon Signed Ranks Test: Ranks, Financial Performance Before and After CBN Intervention

Financial Performance (After Intervention)	Negative Ranks	19[a]	12.47	237.00
Financial Performance (Before Intervention)	Positive Ranks	5[b]	12.60	63.00
	Ties	0[c]		
	Total	24		

Notes:
a. Financial Performance (After CBN Intervention) < Financial Performance (Before CBN Intervention)
b. Financial Performance (After CBN Intervention) > Previous Financial Performance (Before CBN Intervention)
c. Financial Performance (After CBN Intervention) = Financial Performance (Before CBN Intervention)

RQ4. To what extent does ICE differ, based on CBN intervention?

The following hypotheses relating to this research question were tested using the results of the Wilcoxon signed ranks test computed in Tables 6 and 7:

*H*4o: There is no significant difference between a bank's ICE before and after CBN intervention.

*H*4a: There is a significant difference between a bank's ICE before and after CBN intervention.

From the results of the Wilcoxon signed ranks test, I found a significant difference between a bank's ICE before and after CBN intervention, $Z = -3.51$, $p < .001$. This finding provided a basis to reject the null hypothesis, *H*4o, in consideration for the alternate hypothesis, *H*4a, that there is a significant difference between a bank's ICE before and after CBN intervention. The participant banks' ICE was significantly lower after CBN intervention (*M* = 117,842) than before CBN intervention (*M* = 277,461). The ranks are reported in Table 6 and the test statistics in Table 7.

Table 6

Wilcoxon Signed Ranks Test: Ranks, ICE Before and After Intervention

ICE (After Intervention)	Negative Ranks	21[a]	13.10	275.00
ICE (Before Intervention)	Positive Ranks	3[b]	8.33	25.00
	Ties	0[c]		
	Total	24		

Table 7

Test Statistics: Wilcoxon Signed Ranks Test

	Financial Performance (After Intervention) minus Financial Performance (Before Intervention)	ICE (After Intervention) minus ICE (Before Intervention)
Z	-2.486[a]	-3.571[a]
Asymp. Sig. (2-tailed)	.013	.000

Note. a. Based on Positive Ranks

Generally, it is instructive to state that the findings in *H*1 and *H*2 in answer to RQ1 and RQ2 respectively are in conformity with previous findings on past research studies on the relationships between ICE and financial performance (Boritz & Lim, 2008; Lai et al., 2011; Stoel & Muhanna, 2011; Tseng, 2007). However, the current study could increase the relevance of previous findings to the banking industry in Nigeria and other developing economies.

Within the spheres of organization theory that grounds this study, the findings that a significant, positive relationship exists between ICE and financial performance both before and after CBN intervention, show that the two variables are inextricably rooted to the profitable growth and survival of every business entity. Consequently, and as found in H3 and H4, a decline in financial performance even after CBN intervention was inevitably tied to a decline in ICE. Hence it has been stated that a sound internal control process is a *sine qua non* for an effective business practice (Brown et al., 2010; Jokipii, 2010; Tang & Xu, 2008).

Applications to Professional Practice

In this quantitative research study, the relationship between ICE and financial performance was examined for the first time using a single industry, the Nigerian banking industry. The results from this study, which are consistent with those of previous studies on the topic using multiple industries (Boritz & Lim, 2008; Lai et al., 2011; Stoel & Muhanna, 2011; Tseng, 2007) have evidently extended the frontiers of their application to the banking industry, particularly in developing economies.

The underlying reason for this study was to improve the understanding of business leaders and the academia concerning the relationship between ICE and financial performance. In the aftermath of the global economic downturn, corporate leaders are increasingly faced with the challenges of pushing their companies beyond their current limits whilst implementing best practices. The results of this study provide unique evidence that a great deal of this significant and positive relationship between ICE and financial performance can be harnessed for the sustainability of business organizations.

Within the spheres of banking, it has been well stated that the ultimate consequence of weak and inefficient banks is the threat they pose to the financial stability of the national economy and a resultant financial crisis (Reynaud, 2010). Therefore, it has become inevitable through regular supervision to increase the efficiency of banks (Bank of International Settlements, Basel Committee on Banking Supervision, 2002). The results of this study, which also revealed that the 2009 CBN intervention was ineffective in the immediate period makes this research to be of interest to banking regulatory authorities and managers in their efforts to support banking operations to avoid failures in times of financial crisis.

Implications for Social Change

The ultimate good of this research study will reflect in a general improvement in the future financial performance of Nigerian banks through the promotion of best practices to enthrone good corporate governance. In turn, it will restore investor confidence in the banking industry as investors are known to be impacted positively only where their organization's internal control systems are sound, yielding desired profits (Schneider & Church, 2008). If profits grow, banks will be able to lend more to borrowers, thus contributing to the growth and survival of other industries with the resultant macro-economic benefits to the nation. There is also no gainsaying that organizations with good and consistent financial performance will become a viable source of tax revenue to government for the provision of basic amenities to the citizenry and for the provision of public infrastructures.

As the Nigerian financial sector is not immune to the lingering global economic downturn (Pomerantz, 2008), there is a dire need for an efficient banking sector that will drive her aspiration to be ranked among the top-20 developed nations of the world by 2020. Hence, Sanusi (2011) described Nigerian banks as the economic drivers of the nation, while Said (2012) in apparent concurrence, stated that efficient banks impact positively on society through the provision of employment, enhancing the growth of their financially dependent businesses, and the ultimate fostering of the world economy thereby.

Beyond the banking industry, if business leaders understand the critical role internal control plays in the profitable financial performance of their entities, they will cling to it as an enviable tool for the sustainability of their businesses. In turn, it will impact positive social change that will result from increased staff morale and the effective discharge of the entity's corporate social responsibilities.

Recommendations for Action

The purpose of this study was to examine the relationship between ICE and financial performance in the Nigerian banking industry and to also examine the changes, if any, in ICE and financial performance following the 2009 CBN liquidity injection intervention to save the banking industry from imminent collapse. Following from the results, whereas a strong, positive relationship exists between ICE and financial performance, both ICE and financial performance were lower after CBN intervention than before the intervention. The latter is, therefore, an indication that the intent of the

CBN intervention was not achieved in the immediate period, a situation which could put the Nigerian banking sector at a greater risk of collapse.

The results of this study will be of great importance to Nigerian banking regulators, business practitioners, and scholars, who are the three main groups that constitute the audience for this study. There is no doubt that CBN as the regulatory authority for banking in Nigeria will want to consider and apply additional or alternative measures to the liquidity bail-out intervention to put the banks on track and save the Nigerian nation another era of bank failures and their consequences. As stated previously, if business leaders/practitioners understand the import of this positive relationship between ICE and financial performance, they will strive for business sustainability. For scholars, this study could fill the gap hitherto created by the dearth of timely and relevant studies that examine the impact of internal control on banking performance. The results of this study will be disseminated through presentations to training workshops, academic and professional conferences. Some parts of the study will be published in scholarly journals while the entire study will be published in the ProQuest/UMI dissertation database.

Recommendations for Further Study

This study is the only one known to have addressed the relationship between ICE and financial performance in a single industry. From the results, it can be seen that there is a positive and significant relationship between ICE and financial performance and that the 2009 CBN intervention resulted in lower ICE and financial performance in 2010 than in 2008. Thus, it is recommended that future studies include investigation of the reasons why the 2009 CBN intervention did not yield positive results on the research variables. Given the small sample size (*N*=24) in this quantitative study predicated on the convenience of public availability of the research data, further investigations could be done using a mixed-methods methodology. Such studies would make valuable contributions to literature and increase the understanding of business leaders on the relationship between ICE and financial performance.

Reflections

Having been in contact with the subject of internal control for 20 years either through the design for organizations or the implementation as a responsibility in the workplace, I started this study with a preconceived notion that ICE is positively related to financial performance, as stated by some past studies on the subject. Therefore, this positive relationship as an outcome was expected, save that this study involved participants from one single and previously untested industry and within a geographical location that had, for decades, been tainted with industry-wide corruption (Idolor, 2010; Transparency International, 2009). However, it is instructive to state that my preconceived notion did not influence the results of the study because secondary data were used, and did not influence the participants, the data, or the situations.

As much as the principal result of the study, which indicated a strong, positive relationship between ICE and financial performance, was expected, the second result that indicated the banks' ICE and financial performance fell lower in 2010 than in 2008 was not expected. However, because the second result did not negate the principal finding of this study that there is a strong, positive relationship between ICE and financial performance in the Nigerian banking industry, building on this finding will help identify factors that may have affected the second outcome.

Summary and Study Conclusions

The relationship between ICE and financial performance using participants from multiple industries has been addressed in some previous studies, but until this study, it had never been addressed using participants from a single industry. Considering the prevalence of bank failures in developing economies during the past 3 decades, addressing the relationship between ICE and financial performance in the Nigerian banking industry made the study relevant. In this study, which was an attempt to increase the understanding of Nigerian business leaders, scholars, and regulatory authorities on this relationship, I examined the relationship between ICE and financial performance before and after the 2009 CBN liquidity injection intervention intended to stave off an imminent collapse of the Nigerian banking sector. I also examined the changes in ICE and financial performance occasioned by the CBN intervention.

The four research questions addressed in the study were as follows:

RQ1. To what extent is ICE related to financial performance before CBN intervention?

RQ2. To what extent is ICE related to financial performance after CBN intervention?

RQ3. To what extent does financial performance differ, based on CBN intervention?

RQ4. To what extent does ICE differ, based on CBN intervention?

The Spearman Rho correlation was used to test the two sets of hypotheses relating to RQ1 and RQ2. Based on the test results, I found that ICE was positively related to financial performance both before and after CBN intervention. The positive relationships were also statistically significant. Based on this result, which aligns with the results from previous studies on the relationship between ICE and financial performance (Boritz & Lim, 2008; Lai et al., 2011; Stoel & Muhanna, 2011; Tseng, 2007), it is sound to argue that an effective system of internal control would yield a good financial performance. Nevertheless, because some factors could affect this positive relationship, a call for further investigation is hereby made.

The Wilcoxon Signed Ranks test was used to test the two sets of hypotheses meant to answer RQ3 and RQ4. From the results, I found that financial performance was lower after CBN intervention than before the intervention. Similarly, ICE was lower after CBN intervention than before the intervention. The differences in financial performance and in ICE before and after CBN intervention were also statistically significant. Therefore, it is again sound to argue that the CBN intervention measure of liquidity-injection did not improve the fortunes of the banks in the immediate period. This finding also calls for further investigation into possible factors that could have affected these research outcomes.

From the results of this study, I conclude that more effective internal control translates to more effective financial performance and that the liquidity-injection intervention measure of the CBN did not affect both the ICE and financial performance of the Nigerian banks positively in the subsequent period. A call is therefore made for further investigations into other factors that may possibly affect the relationship between ICE and financial performance in the Nigerian banking industry, and those that may influence a positive change in the ICE and financial performance of unhealthy banks.

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Curriculum Vitae

Enwelum Azu Mafiana

Summary of Profile

A seasoned professional with vast experience in business and financial management, developing and implementing financial systems, strategies, processes and controls that significantly improve profit and loss scenarios. Expert in designing and establishing accounting functions, systems and best practices; cost-reduction, automation and tax strategies, and lasting business relationships to ensure goal-surpassing fiscal performance and regulatory compliance. Possess a well-rounded educational and career-oriented background to successfully complement the diverse responsibilities of a business, financial and administrative management professional. Supplementary personal attributes include broad-based computer skills, honesty, reliability, and dependability.

EDUCATION

Doctor of Business Administration (Finance), Walden University, Minneapolis, MN, (*Expected February 2013*)

Master of Business Administration (Accountancy), Rivers State University of Science & Technology, Port Harcourt, Nigeria, April 2004

Postgraduate Diploma (Financial Management), University of Ife, Ile-Ife, Nigeria, October 1984

Higher National Diploma (Accountancy), Institute of Management & Technology, Enugu, Nigeria, July 1978

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS

Chartered Institute of Taxation of Nigeria, November 2005 (Fellow)
Institute of Logistics & Transport of Nigeria, September 2000 (Fellow)
Institute of Shipping & Freight Management, February 1997 (Fellow)
Association of National Accountants of Nigeria (Chartered), February 1995 (Associate)
Chartered Institute of Personnel Management of Nigeria, May 1995 (Associate)
Institute of Internal Auditors of Nigeria, August 1982 (Fellow)
Nigeria Institute of Management (Chartered), April 1982 (Associate)

WORK EXPERIENCE

Organization: Hephzibah Consolidated Activities Limited, Port Harcourt, Nigeria
Managing Director (08/2009 to date)

Organization: Ports & Terminal Operators Limited, Port Harcourt, Nigeria
Position Held: Head of Finance & Administration (06/2006 to 08/2009)
As the pioneer Head of Finance & Administration, I designed, installed and nurtured a standard computerized accounting and administrative system that would continuously meet the demands of the Nigerian Seaports Industry and the technical requirements of the Lease Agreement entered into between the company as concessionaire and the Federal Government on Nigeria.

Delta Marine Shipping Company Limited, Port Harcourt, Nigeria
Position Held: Head of Finance & Accounts (12/2005 to 06/2006)

Organization: Nigerian Ports Authority, Lagos, Nigeria (04/1994 to 08/2004)
Last Position Held: Zonal Head of Audit, East (08/2002 to 08/2004)
Responsibility: To oversee all the internal audit functions of four of Nigeria's eight seaports situate in the South-South and South-East regions of Nigeria viz: Calabar Port Complex, Port Harcourt Port Complex, Onne Port Complex, and Warri Port Complex).

Previous Positions Held in NPA:
Principal Manager Audit, Lagos Port Complex, Apapa (05/2002 to 08/2002)
Chief Accountant, Port Harcourt Port (07/2000 to 05/2002)
Chief Accountant, Onne Port Complex, Onne (06/1995 to 02/2000)

Organization: Topcare Development Company Limited, Lagos
Position Held: Finance & Accounts Manager (09/1992 to 04/1994)
Gained valuable experience accounting and financial reporting for engineering projects and construction

Organization: Nibon Insurance Brokers & Pension Consultants, Benin-City, Nigeria
Last Position Held: Ag General Manager (01/1992 to 09/1992)
Other positions were: Deputy General Manager, Finance & Administration (01/1986 to 12/1991), Senior Accountant (01/1981 to 12/1985).
This company advised and managed the insurance portfolios and pension schemes of many big commercial, banking, and educational institutions. I developed and managed external financial relationships (e.g., banks, insurers, auditors) and constantly looked for ways to strengthen overall financial performance.

Organization: Epe Plywood Industries Limited, Epe, Nigeria
National Youth Service Corp (09/1978 to 08/1979)

Internal Auditor (09/1979 to 12/1980)

I did my compulsory one year national youth service in this company and due to my exemplary conduct and performance, I was offered a full time senior staff appointment at the end of the service. I contributed immensely to the use of internal audit to monitor and control the direct and indirect financial functions involved in the management of this second largest wood manufacturing company in Nigeria.