

**BANKS' PROFITABILITY, ULTIMATE LENDING
BEHAVIOR, DIVIDEND PAYOUT RATIOS, AND SHARE
PRICE MOVEMENT: DOES BASEL II MATTER?
EMPIRICAL EVIDENCE FROM SELECTED BANKS IN NIGERIA**

Eniola Sam Agbi

Department of Accounting, Faculty of Management Sciences

Federal University, Dutsin-Ma, Nigeria

samagbi@yahoo.com

Oyindamola Olusegun Ekundayo 

Department of Accounting, Faculty of Management Sciences

Federal University, Dutsin-Ma, Nigeria

damola.ekundayo@gmail.com

Abstract

The Basel Accords are some of the most influential and misinterpreted covenants in modern global finance. The debates on whether Basel capital regulations influence various banks' behaviors continue to attract research interest among academics and policymakers. In assessing the influence of Basel II on banks' profitability in Nigeria, empirical results indicated that Basel II requirements did not impact banks' profitability negatively; however, some banks' net incomes did become more sensitive to capitalization requirements during the period. Exploring influence of Basel II on ultimate lending and dividend payout behaviors, results revealed that while loans to customers increased significantly, the introduction of the Basel Accord was followed by decrease in dividend payout ratios for some banks. Nigerian Banks' reactions to hitting regulatory constraints on their capital ratios are likely to vary according to the bank's financial situation and stage of business cycle; finally, empirical analysis shows that Basel II capital requirements did influence banks' share price behavior negatively for relatively less well-capitalized banks. Overall, the research finds that the determinants of various banks' behaviors, and its implication, depend on the sustainability metric employed. The results are

significant because it lends support to the view that Basel capital regulation in different countries is modified to meet other prudential objectives relative to its intended objective to reduce excessive risk-taking in banks.

Keywords: Basel Accords, Capital Accords Requirements, Committee on Banking Supervision (BCBS), Basel II, Nigeria's financial system, and Capital Adequacy Accord

INTRODUCTION

Universally, the banking and financial system has witnessed extraordinary changes over the last three decades. Globalization has necessitated drastic changes in the banking sector across countries (Angelini et al., 2010; Bianchi & Mendoza, 2010). Hence, the regulation of banking in the developed industrial countries, transitional, Organisation for Economic Co-operation and Development (OECD) and developing countries have increasingly focused on attaining financial stability, at the expense of regulation, in order to attain growth and equity objectives. In 1988, Basel Committee on Banking Supervision completed the Basel Accord after six years of deliberations (Hasan, 2002). The Basel Committee on Banking Supervision provides a platform for regular cooperation on banking supervisory matters. Basel I and II, drafted in 1988 and 2004 respectively, have paved way for renewed international banking cooperation. The Basel Accords are some of the most influential agreements in modern international finance (BCBS, 2009); BCBS, 2009a; Borio, 2008; BCBS, 2009b).

The Central Bank of Nigeria (CBN) on 10th December, 2013, to conform to Basel II framework, announced the implementation of the Basel II recommendations of the Basel Committee on Banking Supervision (BCBS) with effect from January 2014, that all commercial banks operating in Nigeria and licensed by CBN will be required from the said date to comply with Basel II Accord (CBN, 2014).

Basel II is the second phase of the Basel I accord establishing standards to assist in regulating banks' capital adequacy supervision and disclosures, refer to International Convergence of Capital measurement and Capital standards (ICCMCS) June 2004 (Caruana, 2006; Balin, 2008). Basel II Accord published in 2004 with an amendment in November 2005, is centered on banking laws supervision and regulatory framework issued by the Basel committee on Banking supervision as an international banking standards and improvement to the existing Basel I for the purpose of creating capital adequacy and correlating its sensitivity to bank's activity; regulating and mitigating banking risks more prudently and rigorously, supervising and effectively regulating international banks to avoid re-occurrence of persistent bank failures due

to the increasing level of sophistication in the banking sector in this new economic era (Akhtar, 2006; Balin, 2008; Griffith-Jones, 2006).

The failure of Basel I Accord to address other imminent risks (other than credit risk) associated with banking operations led to the emergence of Basel II Accord which is commonly referred to as the 'measurement of capital and standards framework (MCSF) of 2004'. The Basel II framework expanded its focus to include internal assessment procedures to determine capital adequacy compliance and external disclosure requirements to encourage continued improvement in risk measurement and control. The framework introduced a systemic agenda for assessing credit, market and operational risks (Griffith-Jones, 2006; Jovic, 2004).

CBN believes that Basel II will help protect the Nigeria's financial system from problems that might arise should a major or a series of banks collapse, globally. Consequently, the CBN started to implement the Basel II Accord beginning from January 2014 as part of measures to ensure that better risk management is adopted and maintained in the Nigeria's banking system (CBN, 2014). The Nigeria's financial sector has performed well in Basel I implementation, but there are needs to embrace the challenges of Basel II and live up to the expectations (CBN, 2014; Vento, 2012). Accordingly, a thorough understanding of rules, intentions, and limitations of the Basel II Accord is necessary before assessing its impacts on the Nigeria's financial system (Onaolapo & Olufemi, 2012).

The Global financial crisis of 2008-09 left an indelible mark on economic and financial structures worldwide, and left an entire generation of investors wondering how things could have become so severe (Admati et al., 2010; Atkinson, 2010; Alain Angora, 2011). There were questions asked about whether appropriate regulations stood in place, especially in the US, to permit the appropriate monitoring and encouragement of excessive risk taking. The specific drive to address the major shortcomings of the Basel I framework for capital requirements and to introduce more sophisticated approaches for calculating credit risk capital requirements, in line with best practices among banks brought Basel II framework. Now banks worldwide are aligning their internal practices and behavior to new capital requirements in line with the Accord, therefore, the implications of the implementation of the Basel II for the Nigerian banking system worthy studying (Atik, 2011; Balin, 2008; Beau, Clerc, & Mojon, 2011; Cannata & Quagliariello, 2009; Cosma, 2010).

Additionally, the aim of this study is to review the original and new risk-based capital standards, the likely implications of the rule for the Nigerian banking system and the criticism that characterized rules. Furthermore, Basel ii aims to reduce the scope for "capital arbitrage" and to make more accurate provision for the effect of risk mitigation measures ensure safety, and banks soundness are accomplished. In addition, Basel II framework prerequisite for a

capital charges for operational risk as well as comprehensive requirements for market disclosure as well as the scope for supervisory action, as supervisors to evaluate how well banks are assessing their capital needs relative to their risks and to intervene as needed motivated the research. In conclusion, the subsequent part the paper is structured as follows: section two review relevant literatures on Basel accords i, ii, and iii; section three highlights the methodology; section four discusses the pragmatic findings; and finally, section five is summary, recommendations, and conclusions.

The Basel Accords: An Overview

The Basel Accords (BAs) are a series of recommendations for the regulation of the international banking industry. BA prescribe globally accepted standards for improving banks' ability to absorb economic and financial shocks, improving risk management practices in banks, strengthening transparency, and disclosure requirements for banks and have been adopted by more than 140 countries of the world. The BCBS was formed in 1974 by the committee of Central Banks and Banking Supervisory Authorities of the G10 nations, in response to the repeated disruptions in the international Financial Markets (Ahmad, 2008; Anam et al., 2012; BCBS, 2010c; Borio, 2008).

First of which was the Bankhaus Herstatt crisis of 1974 which saw the German Banking Authorities withdrawing Herstatt's banking license because of the Financial Institution enormous foreign exchange exposures which tripled the value of Herstatt's capital. The crisis led to severe losses to other banks outside of Germany who had transacted foreign exchange counterparty businesses with Herstatt. Bankhaus Herstatt crisis was followed closely in October 1974, by the collapse of the Franklin National Bank of New York which had incurred huge foreign exchange losses as a result of ill discretion in its banking practices. The BCBS was determined to standardize the capital adequacy requirement for international banks, maintain healthy leverage ratios that will ensure their ability to meet up with their financial obligations as and when they arise (Elliott, 2010; Folpmers, 2010; Hannoun, 2010; Parreñas, 2002; Lamoot, 2011).

Road To Basel II

Basel I and II, drafted in 1988 and 2004 respectively, have paved way for renewed international banking cooperation. The Basel Accords are some of the most influential agreements in modern international finance (Mehta, 2012; Mohanty, 2008). Basel I Accord, (the first of the three banking regulation guidelines) came into effect in 1988. It is commonly known as the Capital Adequacy Accord (CAC) because its main focus was to ensure the stability of international banking systems by addressing the inequalities resulting from the variations in capital adequacy

requirements for banks in different jurisdictions. The Accord provides for a minimum capital ratio of capital to risk weighted assets of 8% (Ahmad, 2008; Walden, 2010) (See appendix 1: figure 1).

When the Basel I Accord was concluded in 1988, no capital requirements were defined for market risk (Parreñas, 2002). However, regulators soon recognized the risks to a banking system when insufficient capital was held to absorb the large sudden losses from huge exposures in capital markets. In the mid 90's, proposals were tabled for an amendment to the 1988 Accord, requiring additional capital over and above the minimum required for credit risk. Subsequently, a market risk capital adequacy framework was adopted in 1995 for implementation in 1998 (Roger Vlcek, 2011; Schantz, 2010; Seema, 2007). The 1995 Accord amendment provided a menu of approaches for determining market risk capital requirements, ranging from a simple, to intermediate and advanced approaches. Under the advanced approach the internal model approach (IMA), allowed banks to calculate the capital requirement for market risk using their internal models (IM). The use of IM was only introduced in 1998 in the European Union (Mathuva, 2009; Teply, 2010; Van Den, 2008).

In 2004, M-CSF framework came on board as a result of failure of Basel I Accord to address other imminent risks associated with banking operations led to the emergence of Basel II Accord after its drafting in 1999, Basel II underwent seven years of deliberation and two revisions one in September and another in November of 2005 before a final agreement was agreed upon by all G-10 nations and representatives from Spain in July 2006. After its drafting in 1999, Basel II underwent seven years of deliberation and two revisions one in September and another in November of 2005 before a final agreement was agreed upon by all G-10 nations and representatives from Spain in July 2006 (Angelini, 2010; Balin, 2008; Gorton & Metrick, 2012).

Over the course of the Accord's deliberation, the size of the agreement swollen to 347 pages a far cry from the 37 pages of the original Basel accord. This was due to the addition at the behest of the United States, Japan, and Britain of internal risk evaluation and self-surveillance standards for banks. Another major spiking point in the negotiations over the Basel II accord was the scope of the agreement: most European Union countries wanted the Accord to apply to all banks, while the U.S., Canada, and Great Britain wanted it to apply only to large international banks. In the end, this second league won out (Balin, 2008; Hanson, 2010; Lall, 2010; Teply, 2010). Outside the G-10, 95 countries including Nigeria, accounting for 36% of world GDP have announced their intention to adopt Basel II by 2015 (Hossain, 2012). Including the G-10, Basel II is on target to cover approximately 77% of the world's GDP and 70% of its

population (Balin, 2008; Gorton & Metrick, 2012; Hanson, 2010); the timeline for adoption of Basel II among non G-10 members is shown below in table 1.

Table 1: The Timeline for Adoption of Basel II

Year	2008	2010	2013	2015
% Adoption Rate (World GDP)	46%	58%	69%	77%
Selected Countries Adopting Basel 11	G-10, Chile, Bahrain, Singapore	Russia, South Africa, Indonesia Brazil	Indian and Argentina	Egypt, Pakistan, and Nigeria

Source: Data for all countries compiled from Balin (2008), Gorton & Metrick (2012), Hanson (2010)

The Basel II Accord still retained the minimum capital ratio of 8% of risk-weighted assets as provided in Basel I Accord but required banks to rely on standardized assessment methodologies of external rating agencies in the calculation of their risk weighted assets (Kahf, 2005; King, 2010). Additionally, Basel II Accord centered on banking laws supervision and regulatory framework issued by the Basel committee on Banking supervision (BCBS) as an international banking standards and improvement (IBSI) to the Basel I for the purpose of creating capital adequacy and correlating its sensitivity to bank's activity; regulating and mitigating banking risks more prudently and rigorously, supervising and effectively regulating international banks to avoid re-occurrence of persistent bank failures due to the increasing level of sophistication in the banking sector in this new economic era (Altman, Sabato & Wilson, 2010; Caporin & McAleer, 2010; Cúrdia & Woodford, 2009; Gambacorta, 2010).

CBN believes that Basel II will help protect the nation's financial system from problems of banks collapse. The regulatory Bank is set to fully implement the Basel II Accord in conjunction with Basel III as part of measures to ensure that better risk management is adopted and maintained in Nigeria's banking system (CBN, 2014). The Nigeria's financial sector has performed well in Basel I implementation, but needs to embrace the challenges of Basel II and live up to the expectations. Consequently, a thorough understanding of rules, intentions and limitations of the Basel II Accord is necessary before assessing its impact on the Nigeria's financial system (Lannoo, 2005; Obaidullah, 1998).

Owing to the limitations of the 1988 Accord as amendments, there had been broad-based pressure to radically review the Accord. The Basel Committee for Banking Supervision (BCBS) presented the final document for Basel II, establishing minimum capital requirement for banking organizations in June 2004, with some amendments in November 2005. Basel II highlights three mutually reinforcing pillars: Basically, it rests on three pillars, which complement one another (Milne, 2003; NUCU, 2011) (see, appendix 2, figure 2)

The first pillar represents significant strengthening of the minimum requirement set out in the 1988 Accord, in order to ensure that capital allocation is more risk sensitive. The risks to be considered here include credit risk, market risk and operational risk. The procedures and approaches for measuring risks are specified for each of the three risk classes. The banks must also adhere to the specified qualitative minimum requirements. Additionally, Banks will therefore, be required to achieve minimum capital adequacy ratio of 8% when Basel II is fully implemented in Nigeria (Lall, 2010; Lannoo, 2005; MAG, 2010b). The formula for computing capital adequacy ratio under Basel II is stated below:

$$\text{Capital Ratio} = \frac{\text{Total Capital (Tier I + Tier II + Tier III)}}{\text{Risk Weighted Assets = Credit Risk + Market Risk + Operational risk}}$$

Where,

Tier I = Ordering Capital + Retained Earnings and share premiums - Intangible Assets.

Tier II = Undisclosed Reserves + General bad debt provision + Revaluation Reserve + Subordinate Debt + Redeemable Preference Shares.

Tier III = Subordinates debt with a maturity of least 2 years.

Credit Risk = It is an Investors Risk of loss arising from a borrower who does not make payment as promised.

Market Risk = It is the risk that the value of a portfolio, either an investment or a trading portfolio will decrease due to the change in value of the market risk factors.

Operational Risk = It is the risk of loss resulting from inadequate or failed internal process, people and system or from External events.

The second and the third pillars represent innovative additions to capital supervision and market discipline. The second pillar seeks to separate the operational risk from credit risk; it gives the bank responsibility to exercise the best ways to manage the risk specific to that bank. It also casts the responsibility on the supervisor to review and validate banks risk measurement models. The second pillar seeks to ensure that internal risk management process in banks is robust enough. It emphasizes the regulatory response to the first pillar (Jeanne & Korinek, 2010). Whilst the first pillar focuses on three basic risks: credit risk, market risk, and operational risk; the second pillar involves a framework for dealing with the other risks a bank may face. This includes systemic risk, strategic risk, reputation risk, liquidity risk, and legal risk. Systemic risk explains the chance of a collapse of the financial system, such as general stock market crash or a joint breakdown of the banking system. Strategic risk includes seven classes of strategic risk including industry, technology, brand, competitor, customer, project, and stagnation (Obaidullah, 1998; Ozili, 2014; Philipp, 2010).

Additionally, Reputation risk concerns the risk of negative publicity about an institution's business practices which may result to losses of revenue or legal action. Liquidity risk relates to the ability of a financial firm to meet its debt obligations without incurring unacceptable large losses. Legal risk entails potential for incurring financial loss due to legal actions or uncertainty in the applicability or interpretation of contracts, laws or regulations (Lall, 2010; Lannoo, 2005; MAG. 2010b).

Meanwhile, Basel II supervisory review process is based on the four major principles: One, ensure banks have adequate capitals to support risks in their business; and to encourage banks to develop and use better risk management techniques for effective monitoring and managing of their risks. Two, banks' management develop an internal assessment process and set capital targets that are commensurate with the bank's risk profile and control environment. Three, ensure supervisors to evaluate how well banks are assessing their capital needs relative to their risks and to intervene where appropriate. Four, supervisors are to ensure that banks have sound internal control and effective risk management process (Lall, 2010; Lannoo, 2005; MAG. 2010b).

Lastly, the third pillar aligns economic and regulatory capital more closely to reduce the scope for regulatory arbitrage; it promotes market discipline through greater public disclosure. The main aim of the new accord is to establish a market discipline with triple sources: customers, regulatory bodies and the Banks (Jeanne & Korinek, 2010)). Pillar III encourages market discipline by developing a set of disclosure requirements which allow market participants to access key pieces of information on the scope of application, capital, risk exposures, risk assessment processes so as to facilitate capital adequacy of institutions. Monitoring of risk is shared among the official authorities, as well as independent audit firms. Basically, market discipline is used to leverage the influence that other market players can bring (Christiano, Motto & Rostagno, 2010; Gambacorta & King, 2010).

It is therefore important that structure must be in place for supporting data collection and generating management information system in order to improve transparency in banks and improve reporting for such regulations. It means that when calculating risks, banks can no longer limit themselves to routinely checking external risk factors. With the implementation of Basel II it is no longer sufficient to only check the risk that a customer will not fulfill their contractual obligations (credit risk). After Basel II implementation it will no longer be sufficient to forecast the probability of interest rate fluctuations on financial markets. The fact is, Basel II requires strategic risk control (Lall, 2010; Lannoo, 2005; MAG. 2010b). One reason for this is, Basel II makes banks take note that they must also critically check their own performance, say,

operational risks (business processes), where the required equity capitalization (EC) of bank can be calculated using the following basic formula (Gambacorta & King, 2010):

$$EC = \frac{\text{Regulatory equity}}{\text{Credit risk} + (\text{Market risk} + \text{Operational risk}) * 12.5} \geq 8\%$$

Basel II and Banks Behaviors

Various research findings show that the implementation of Basel I stimulated banks to switch from priced credit risk exposure to un-priced interest rate risk exposure. Consequently, it is uncertain whether Basel I amplified or diminished the overall risk of the banking sector since, although credit risk waned over the pre to post-Basel I period, interest rate risk increased during the period prior to the introduction of the market risk amendment to Basel I that added a capital charge for interest rate risk exposure (Gambacorta & King, 2010; Lall, 2010; Teply, 2010; Lannoo, 2005). Additionally, it was noted by researchers Basel I has been successful in raising bank capital levels, but not essentially in controlling bank insolvency risk. This is because Basel I regulations are not tied to any chosen insolvency probability standard (IPS). Furthermore, except for trading account actions, Basel I does not adjust capital standards to reflect hedging, diversification, and risk management techniques (Lall, 2010; Lannoo, 2005).

Research links the risk-based capital requirements of Basel I to the resolution of an agency conflict between risk averse depositors and less risk averse bank shareholders. Therefore, if the bank increases its risk exposure, the resultant increase in capital requirements prevents the shifting of wealth to shareholders from depositors and other bank creditors. However, there are arguments that Basel I remain insufficient to accomplish this goal because of the regulation's unpolished assessment of risk, which is easily subverted through capital regulation arbitrage. If Basel II is more sensitive to the bank's risk exposure, it may act as a more effective instrument to maintain the balance between stockholders and risk averse depositors (Christiano et al., 2010, Gambacorta & King, 2010; Kahf, 2005, Lall, 2010).

There are evidences of strategic accounting behavior with regard to loan loss provisions and write-offs around the implementation of Basel I. Consequently, undercapitalized banks reduce their loan loss provisions and increase their write-offs in order to meet the new capital requirements. Well-capitalized banks exhibited no such behavior with regard to loan loss provisions, although they exploit the new capital requirements to increase their loan write-offs. Moreover, research work by Jeanne and Korinek finds that banks under-reported real estate loan losses during the 1988-1989 recessions in New England and that loan loss provisions-charge-offs during the period are correlated across banks. This suggests that banks

strategically manage their loss reserves over time (Jeanne & Korinek, 2010; Teply, 2010; Mathuva, 2009; Ozili, 2014; Van Den, 2008).

Basel II and Pro-Cyclicality

One of the primary reasons for the delay in adoption and implementation of the Basel II proposals has been the universal argument regarding their possibly pro-cyclical impact. Banking business is pro-cyclical. Banks tend to contract their lending activity during economic downturns because of banks concern about loan quality and repayment probability (RP). This situation aggravates the economic downturn as credit inhibited businesses and individuals cut back on real investment activities (Angelini, 2010; Drehmann et al., 2010; Grigore, 2011). In contrast, during economic boom banks expand lending activities, thereby contributing to possible overheating of the economy that may transform an economic expansion into an inflationary spiral. Nevertheless, increased risk sensitivity in bank capital requirements may aggravate these pro-cyclical propensities. If banks are constrained by risk sensitive as measured by internal models, capital allocations, and regulatory requirements, they may be unable to lend during low points in the business cycle and overly encouraged to lend during boom periods. The reason is that, risk sensitive capital requirements increase (decrease) when estimates of default risk increase (decrease). Consequently, if credit risk models overstate (understate) default risk in bad (good) times, then internal bank capital requirements will be too high (low) in bad (good) times, thereby forcing capital-constrained banks to reduce on lending during recessions and expand lending during booms (Christensen, 2010; Dellas et al., 2010; Gorton & Metrick, 2012; Wellink, 2010).

There is rarely agreement on whether risk-based capital requirements are pro-cyclical in nature. In fact, banks pro-cyclical questions have been posed with ambiguities. It is almost self-evident that defaults and credit problems would multiply in times of distressed macroeconomic conditions. Additionally, good economic periods provide the rising tide that lifts even the wobbliest financial boats (Angelini, 2010; Drehmann et al., 2010; Grigore, 2011). Therefore, ex post grasps of credit problems display clear pro-cyclical patterns, thereby increasing during downturns and decreasing during growths. However, these patterns may be consistent with fixed portfolio loss distributions that have no systematic ex ante risk factors affecting expected credit risk exposure. That is, distinguish between ex post realizations of credit losses that may increase during recessions, but do not reflect increased risk in the future and ex ante shifts in the entire loss distribution that reflect future expected changes in risk exposure (Gorton & Metrick, 2012; McAleer et al., 2012b; Osborne, 2010).

There are strong evidences of pro-cyclicality in bank profitability and provisions for loan losses for international sample of banks in 26 countries over the period 1979-1999. These evidences of pro-cyclicality were pronounced during the post-Basel I period than during the pre-Basel I period (Hanson (2010; McAleer et al., 2012a). Accordingly, introduction of risk-based capital requirements appears to have worsened pro-cyclical tendencies in banking. Moreover, studies find strong evidence of pro-cyclicality in credit ratings for 20 emerging market economies. Simulations show that capital requirements under the Basel II standardized approach would increase dramatically during times of economic or financial crisis, thereby possibly impairing the unfavorable real economic effects (Gerali, 2010; Roeger, 2010; Vento, 2012).

Further studies evidence of pro-cyclicality in Basel II capital requirements, follow-on in an undermining impact on the banking system. The researchers concerned are with wrong measurement of risk due to short time horizons that are unduly affected by correlations across firms and cyclical macroeconomic factors (Angelini, 2010; Hanson, 2010; McAleer et al., 2012a; McAleer et al., 2012b; McAleer et al., 2010). The researchers recommended the use of forward-looking provision that can stabilize the system by requiring more capital during “good times” and reducing capital requirements during economic downturns. The researchers claimed that this approach would both track risk better and act as automatic stabilizer, so that banks are required to raise capital when the cost is relatively low during economic booms and bull markets, but can economize on their capital when the cost of capital is excessively high during recession and financial market crises (Angelini, 2010; Hanson, 2010; McAleer et al., 2012a; McAleer et al., 2012b; McAleer et al., 2010).

Using international data, studies evidences that there is considerable pro-cyclicality in the Internal Ratings-Based (Credit Risk) (IRB) foundation approach of Basel II. The studies find considerable cyclical effect across the regional of US, EU, Asia-Pacific and Latin America’s portfolios (Angelini, 2010; Drehmann et al., 2010; Grigore, 2011). In particular, during the Russian debt crises in the summer of 1998, the US banking system would have needed either significant infusions of capital or would have had to significantly reduce lending and sell assets, thereby worsening the cyclical downturn. Comparable pro-cyclical patterns were found for the EU and Latin American portfolios during the summer of 1998. In contrast, the Asian portfolio experienced considerable increases in credit risk exposure in late 1996, then again during the second half of 1998, and again during 2001. Therefore, the increased capital requirements implied by the pro-cyclical IRB approach could have aggravated the Japanese economic crisis (Akhtar, 2006; Drehmann et al., 2010; Grigore, 2011; McAleer et al., 2012b).

Some researchers were concerned that the use of agency ratings under the standardized approach of Basel II could produce cyclically lagging rather than leading capital

requirements. Other studies found that the pro-cyclicality of Basel II will depend on the type of credit ratings that are adopted by the banking system (Cosma, 2010; Cúrdia & Woodford, 2009; Dellas et al., 2010; Elliott, 2010). If stable, “through-the-cycle” credit ratings such as those published by Moody’s and Standard & Poor’s are utilized, then the pro-cyclical effect will be much less than if banks use “point-in-time” ratings that analyze the credit risk using real time structural models. In their model, banks maximize profits by choosing a counter-cyclical credit rating policy; that is, banks reduce risk weights during recession thereby encouraging more borrowing than would result if the banks used a cyclically neutral credit policy and increase risk weights during expansions thereby discouraging borrowing. However, since this runs counter to the aim of Basel II to make capital requirements more sensitive to credit risk exposure, then the second best solution is for banks to pursue a pro-cyclical policy that aggravates macroeconomic fluctuations system (Cosma, 2010; Cúrdia & Woodford, 2009; Dellas et al., 2010; Elliott, 2010).

Worries about excessive pro-cyclicality in Basel II are misplaced according to studies by Elliott (2009); Jovic (2004); & Kahf (2005). They find evidence of pro-cyclical changes in capital requirements even in the Basel 1 regulatory regimes. That is, in Basel I’s less risk sensitive environment, banks often experience declines (increases) in regulatory capital requirements during economic growths (downturns), thereby aggravating cyclical swings as capital constrained banks cut down on lending during recessions and capital-rich banks increase lending during expansions (Borio, Furfine & Lowe, 2001). The Basel 1 regulatory mechanism for these fluctuations is through mandated changes in provisioning for loan loss reserves. Rather than the automatic and continuous credit risk capital adjustment envisioned in Basel II, currently credit risk adjustments to loan loss reserves often occur at discrete intervals, most often after a bank examination takes place. Losses of bank capital during recessions that occur around the time of bank examinations, for example, during the 1990 recession, banks experienced declines in their capital ratios of over 4% within a year period. Thus, greater credit risk sensitivity in the proposed in Basel 11 capital requirements may not change the inherent pro-cyclicality in bank capital regulations, but merely the timing of the realization of the pro-cyclical effects (Angelini, 2010; McAleer et al., 2012a; McAleer et al., 2012b).

Weaknesses of Basel II/ Evolution Of Basel III

The financial crisis that began in 2007 has been a vivid reminder of the significance of moral hazard and reasonableness in bank regulation. Many banks failed, and many others, including some of the major banks in the world, only survived because of massive government bailout. As a result, the prudential regulation of banks has come under renewed examination, leading to the new Basel III Accord with substantially severer capital requirements and new rules compared to

its predecessors (Lamoot, 2011). Basel III Accord was introduced by the BCBS in October 2010 in an attempt to enhance the Basel II Accord framework to meet up with the demands of a more sophisticated financial market which saw the banks creating various forms of off balance sheet vehicles and undertaking complex securitization deals sometimes utilizing subprime assets. Even prior to the financial crisis, numerous weaknesses of the Basel II Accord became apparent, for example, because the scope and complexity of bank assets and liabilities are much larger than only a decade ago and because banks often engage in “regulatory arbitrage” to reduce capital requirements. In recent documents announcing and detailing the new Basel III framework, the Basel Committee and the G-20 recognize the need for a systematic overhaul; other international bodies such as the European Union debated the introduction of additional rules and regulations (King, 2010). In particular, the problem of systemically important financial institutions (SIFIs) and the idea of targeting these banks specifically with higher equity demands and lower tolerance for risk-taking play a prominent role in this discussion. In addition, the Basel III Accord establishes more stringent capital requirements, tripling the amount of capital banks must keep on hand to absorb losses during financial crisis. It also requires banks to maintain higher common equity than before, including a capital conservation buffer of 2.5% of their assets.

There are differing opinions on the impact that the new Basel III requirements has on the financial markets and the financial industry. The reforms within the banking sector that are currently being implemented in the international banking industry are articulated within the Basel III proposal (Basel, 2013). However, the articulated requirements are not written as clearly as they could be which could lead to inconsistent applications. The application of the new requirements imposes a greater amount of high quality capital assets and increased cost associated with higher quality assets (Basel, 2013). The Basel III liquidity coverage ratio usage mandate increases the requirement for tier I assets by 150% by 2015. This increase is a 4% to 6% capital increase when using the liquidity coverage ratio (Perspectives, 2010). The theoretical capital and asset management objective of the ratio requirement is to create a financial absorber of market shock for international banks. It should be noted that Lehman Brothers two weeks before their collapse in 2008 had an 11% liquidity coverage ratio, double the 2015 requirement (Lamoot, 2011; Perspectives, 2010). The increase in cash by inference does not guarantee absorption of market fluctuation. Therefore, Basel III should not be considered by its individual parts such as the liquidity coverage ratio, but as a whole (Perspectives, 2010). As a whole, the modifications were made to the original Basel Committee requirements, specifically, the definition of high quality liquid assets (HQLA) when calculating the liquidity coverage ratio (LCR) (Basel, 2013). The theoretical capital and asset management objective of the LCR is to

promote the short-term resilience, the LCR improves the banking sector's ability to absorb shock that arising from financial stress on the economy (Basel, 2013).

Sways to increased liquidity requirements are already being analyzed even though the 2015 capital and asset management increased liquidity requirement is not fully implemented. A renewed focus on theoretical capital and asset management application within retail banking has emerged; this is often associated with dramatic shifts in stability and profitability activities (Lin, Chnag, & Jou, 2011).

Several scholars are highly in support of the adoption of the BCBS theoretical capital and asset management modification proposal which includes the two new liquidity risk management standards which take the form of a 30-day minimum liquidity coverage ratio (LCR) and a one-year minimum net stable funding ratio (NSFR) (Bernanke, 2009). It is believed that this new theory of capital and asset management requires macro and micro-prudential supervision to understand a more precise liquidity risk. This change in supervision requires new and innovative corporate governance models and application of new capital and asset management theories for its success (Basel, 2013).

RESEARCH METHODOLOGY

The overall objective of this paper was to explore into the relationship between Basel II capital requirements and banks profitability, ultimate lending behavior, dividend payout ratios, and share price movement in Nigeria. To achieve this objective the study used a quantitative research design method. The main sources of data are website and publications of the Central Bank of Nigeria (CBN). Some information was also collected from journals and other academic publications to obtain acquaintance working procedure of the study. Additionally, data were collated from Nigeria money deposit banks' (MDBs) audited financial reports for the period 2009 – 2014. As at June 2015, there were 20 money deposit and two merchant banks operating in Nigeria (see appendix 3, table 2), out of this, seven MDBs namely: First Bank of Nigeria (FBN), Guaranty Trust Bank (GTB), Access Bank, Ecowas International Bank (EcoBank), Sterling Bank, and Zenith Bank were purposively selected for this research study. The seven banks represent about three-fourth (72%) of the total market capitalization of Nigeria banks as at December, 2014. Therefore, the seven banks provided sufficient data to generalize the results as related to Nigeria banks with a confidence level of 95% and a confidence interval of 10% (Sample size calculator, 2009).

Using a simple correlational analysis comparing liquidity measures as an independent variable against other independent variable such as profitability, Ultimate Lending Behavior, Dividend Payout Ratios, Share Price Movement, an accurate statistical analysis was created for

comparison for the seven banks within Nigeria economy. Even though modeling can produce some degree of predictively accurate data using liquidity and productivity as independent variables, and this data analysis can maximize profitability and efficiency there is no one modeling system that accurately predicts a correlation of profitability, ultimate lending behavior, dividend payout ratios, and share price movement using liquidity as an assessable independent variable. From the initial data collection for the period 2009 -2014, the following ratios for the seven banks for six years were calculated to conduct a statistical analysis: profitability ratios, ultimate lending behavior trends, dividend payout ratios, and share price movement trends. Additionally, a statistical analysis of the seven banks from 2009-2014 was used comparing corporate current liquidity measurements to future profitability measurements to assess the strength of the statistical relationship between current liquidity level and future profitability.

For this study, adoption of secondary data is suitable because there is limited data on Basel II implementation in Nigeria, as the Accord is yet to be fully operational in the Nigerian banking system. Consequently, the literature was explored to construe influence, implications, and challenges of implementing Basel II; thereby establishing the necessity for rigorous risk and capital management requirements to ensure that banks in Nigeria maintained capital reserves appropriate to their risk exposures. The consequence of the fact obtained from the literature is reckoned appropriate to establish the research motivation; and to highlight the significance and benefits of Basel II implementation in Nigeria.

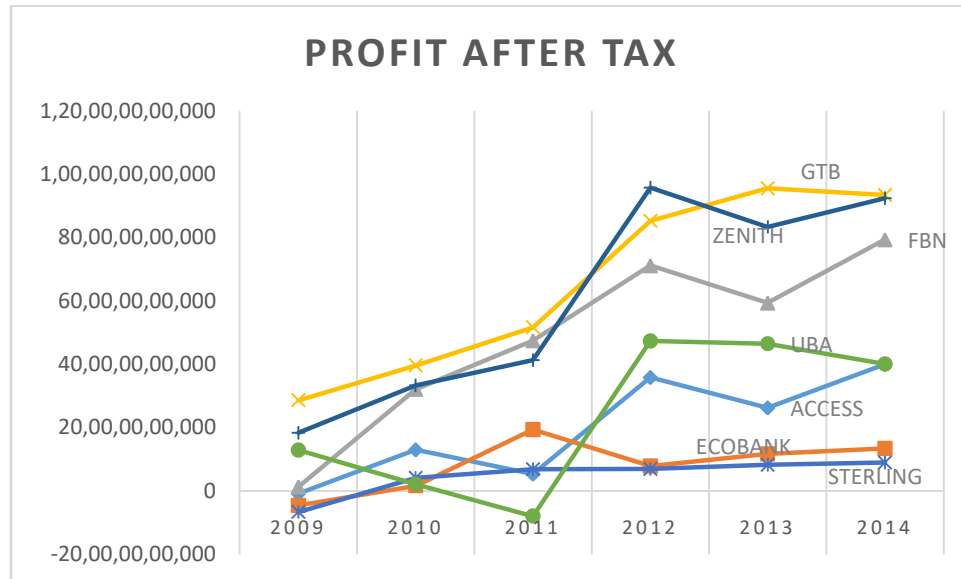
FINDINGS AND SUMMARY

Basel II Capital Requirements and the Banks Profitability

In trying to assess the influence of Basel II on banks' profitability in Nigeria, the researchers used Figure 3 below which was derived from the data collected from banks financial reports between 2009 and 2014 (see appendix 3, table 3). The empirical results over the entire sample period (2009-2014) indicate that the Basel II requirements did not impact banks' profitability negatively. Although the profitability behavior of some banks does not appear to have been affected, some banks (UBA and Sterling Bank) net income did become more sensitive to capitalization requirements during the period (see Appendix, figure 3).

Addressing these differences empirically is a challenge. In particular, it is difficult to devise comparisons of bank profit behavior with and without capital requirements, all other factors being held constant. Studies have attempted such comparisons in a time series dimension by looking at bank capital dynamics before and after a change in capital regulation.

Figure 3: Nigeria Banks' Profit Behavior from 2009 to 2014



Other studies exploiting time series variation, changes in profitability behavior may often be credibly ascribed to causes other than a change in regulation (Angelini, 2010; Jovic, 2004; Kahf, 2005; McAleer et al., 2012a; McAleer et al., 2012b).

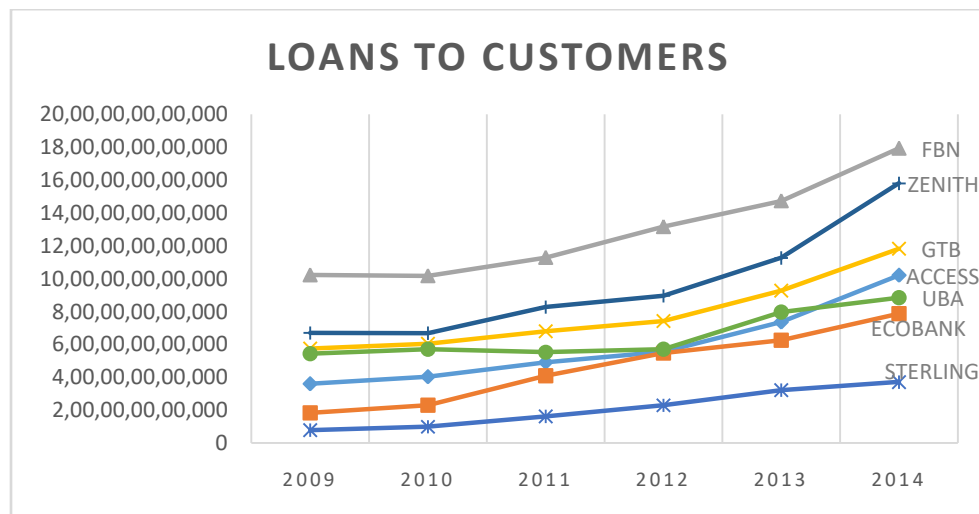
To interpret the literature correctly however, it is important to bear in mind several points. First, one may place more confidence in studies which seriously address the basic problem that desired bank capital targets with and without regulation are hard to observe. Second, studies covering periods in which capital requirements are rigorously imposed are likely to reach different conclusions from those which look at periods of comparatively informal capital regulation. Third, capital requirements are likely to affect banks differently at different stages of the business cycle, and therefore, their profitability. Fourthly, capital requirements may impact bank capital dynamics either in the short or the long run. Lastly, banks will achieve their desired capital targets in the most cost-effective manner, thus market conditions are important.

Basel II Capital Requirements and the Banks Ultimate Lending Behavior

In exploring the influence of Basel II on ultimate lending behavior in Nigeria, the question to ask is whether the Basel II implementation led banks to hold higher capital ratios and consequently impacted on ultimate their lending behavior. Figure 4 uses the data collected from banks financial reports between 2009 and 2014 (see appendix 3, table 4). It is clear that loans to customers increased significantly from roughly 6.3% to about 83.9% for the period 2012 to 2014 (Calculations from table 3, revealed loan increase of 83.9% for Access Bank, 6.3% for FBN, 59.3% for GTB, 61.8% for Sterling bank, 43.9% for Ecobank, 35.5% for UBA, and 76.5% for

Zenith Bank). This result closely resembles other studies findings (Ahmad, 2008; Atkinson, 2010; Balin, 2008; Bianchi & Mendoza, 2010; Borio, 2008; Folpmers, 2010; King, 2010). These studies, all reported increase in lending behavior of the banks that were studied during the periods under consideration. It is likely that in some periods, banks in a particular country may find it difficult to maintain the minimum capital requirements and therefore be forced to cut lending. It would be strange if minimum capital requirements did not impact on banks' lending behaviors, thereby constraining the banks, given that the purpose of bank capital requirements is to limit the amount of risk that can be taken relative to capital. However, for this to have an effect on lending volume, it would have to be true that any shortfall in bank lending was not fully made up through lending by other intermediaries or by access to securities markets.

Figure 4: Nigeria Banks' Lending Behavior from 2009 to 2014



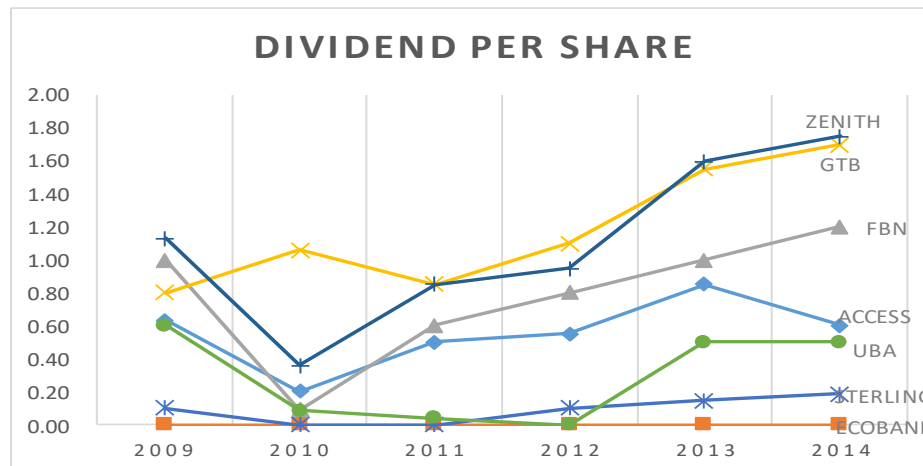
There is evidence that banks globally play a special role in financial markets, particularly in their lending to smaller companies, and that it may be difficult for such borrowers to find alternative sources of funding. For the US, there is some indication that particular sector such as real estate or small companies may have been affected by pressure on bank capital in the late 1990s. One difficulty in looking at Banks' ultimate lending behavior is that periods in which banks are severely capital constrained are likely to be those when they are making large write-offs or specific provisions (reducing capital), and in such periods it is also possible that loan demand will be weak. It is also possible that banks may cut back lending, not because of capital constraints, but because of concerns about lending to particular risky sectors. A further issue, which is not examined in this research, is the link between minimum capital requirements for banks and financial stability and thence lending behavior. Capital requirements for banks

attempt to limit excessive risk-taking relative to capital, thereby reducing the likelihood of failures. If they are successful in this, the requirements could, overall, have a positive effect on lending behavior.

Basel II Capital Requirements and the Banks Dividend Payout Ratios

On data analysis whether the Basel II implementation led Nigeria banks to change their dividend payout behavior, figure 6 below uses the data collected from banks financial reports between 2009 and 2014 (see appendix 3, table 6). The results indicated that the introduction of the Basel Accord was followed by a decrease in dividend payout ratios for some banks (Access Bank, FBN, and UBA) while banks like GTB and Zenith Bank had increase in dividend payout during the period of Basel II implementation.

Figure 5: Nigeria Banks Dividend Payout Behavior from 2009 to 2014



Nigeria Banks' reactions to hitting regulatory constraints on their capital ratios are likely to vary according to the stage of the business cycle and the bank's own financial situation. In general, the study is consistent with the view that banks respond to capital requirements pressures in manner they believe to be most cost effective (Angelini, 2010; Drehmann et al., 2010; Grigore, 2011). Raising new capital or boosting retained earnings may be easier in booms whereas cutting back dividend may be more cost effective in economic troughs. The most basic question to address in this section is whether regulatory capital requirements induce banks to hold higher capital ratios than would have otherwise been the case thereby inducing lower dividend payout to the shareholders. Addressing this question experimentally is a task; in particular, it is difficult to devise comparisons of bank dividend behavior with and without capital requirements, all other factors being held constant. Available research suggests that, in order to meet minimum capital

requirements, banks are likely to cut back dividend when it would be too costly to raise new capital (Angelini, 2010; Christensen, 2010; Dellas et al., 2010; Grigore, 2011; Drehmann et al., 2010).

These studies presented evidences from 1990 to 1992 which shown American banks reduced their dividend payout by approximately \$150 billion during the period. They also argued that the reductions were largely due to the introduction of the risk-based capital guidelines Basel1. These research findings went even far as to say that “to the extent that "credit crunch" weakened economic activities, and that Basel capital requirements induced declines in lending may have been a major cause of this credit crunch.” Hence, it was not an overstatement to say that Basel requirements did have an impact on bank dividend behavior as it forced them to hold higher capital ratios than it otherwise would have been the case (Christensen, 2010; Dellas et al., 2010; Gorton & Metrick, 2012; Wellink, 2010).

Basel II Capital Requirements and Banks Share Price Movement

Assessing the impact of capital requirements on Nigeria banks’ share price movement during Basel II implementation period (2012 -2014), empirical analysis from Figure uses the data collected from banks financial reports between 2009 and 2014 (see appendix 3, table 5) shown that Basel II capital requirements did influence banks’ share price behavior negatively for relatively less well-capitalized banks (FBN, UBA, Sterling Banks, and Access Bank) while the share price behavior of well capitalized banks (GTB, Zenith Bank, and EcoBank) does not appear to have been affected by pre-Basel requirements. The result further revealed that less well-capitalized banks portfolios did become more sensitive to capitalization in the pre-Basel period of 2012-2014.

Figure 6: Nigeria banks’ share price behavior from 2009 to 2014



Another way to look at the possible effect of Basel II on banks' share price behavior is to look at the market perception of the impact. Several studies have done by examining the effect of announcements on banks' share prices movement (Akhtar, 2006; Cosma, 2010; Cúrdia & Woodford, 2009; Dellas et al., 2010; Elliott, 2010). Results from the studies shown that, if the introduction of fixed minimum capital standards was expected by the market to harm bank profitability, the adverse effect should be reflected in banks' share prices movement. Additionally, if investors incorporate all relevant information at soon as it becomes available, the stock market effect should occur at almost exactly the time minimum capital standards were imposed or at the times of important announcements leading up to their imposition. By focusing on a very short interval around important announcements, the effects of minimum capital standards should show through and not be distorted by macroeconomic and financial conditions or long-run factors.

CONCLUSIONS AND RECOMMENDATIONS

Findings from the study do not provide substantial proof to support theoretical expectations that Basel II capital regulatory regime negatively affects bank profitability, Ultimate Lending Behavior, Dividend Payout Ratios, and Share Price Movement. Also, based on the findings, the researchers conclude that, the determinants of bank profitability, Ultimate Lending Behavior, Dividend Payout Ratios, and Share Price Movement depend on the measure of operation employed.

The Basel II is influential and a valuable banking regulatory framework that enhances banking stability. Basel sets a developed regulation and capital adequacy, bank supervision, and disclosure policy for the banking institutions. Basel II is a better improvement over the Basel I considering its wider risk sensitive and analytical strength. The decision of CBN to implement Basel II accords is very commendable, even more commendable is the inclusion of firm controls against synthetic transactions (such as securitizations) which can be used by banks to manipulate their capital adequacy requirements. This shows that the CBN is forward looking and has even infused some of the principles of the Basel III accords in its guidelines. That said, there may be a need to improve some capacity within banks and CBN to effectively implement the Basel II accord in Nigeria. The recommendations and conclusions of this study for effective implementation of the Basel II accord are catalogued below:

The CBN should base rules on capital adequacy requirement on risk sensitivity. Basically, customers' deposits, owners' capital and creditors finance banks assets. The CBN, should be concerned with the interest of depositors, advocate that owners' capital should be adequate enough to absorb the gradual depreciation in asset value resulting from risk exposure.

In addition, it is universally known that, Pillar 3 seeks to enforce market discipline through stricter disclosure requirement. Whilst admitting that such disclosure may be useful for CBN and rating agencies; the expertise and ability of the general public to comprehend and interpret disclosed information should be enriched to remove information overload which and may even damage banks financial position.

The Basel II capital accord allows regulatory bodies the freedom to adopt supplementary measure of capital adequacy for banks. Therefore, the absolute rules on minimum shareholder's funds and paid-up capital should serve as supplement to the risk based capital standards of Basel II in Nigeria. However, the rule must be realistic and banks should be given enough time to comply through adequate phased-in program.

Implementation of Basel II in Nigeria should focus on increased risks confronting Nigerian banks. Consequently, the CBN should recognize the relationship that exists between the amounts of capital held by a bank against its risk and the strength and effectiveness of the bank's risk management and internal control process. There are several means of addressing risks confronting banks. This includes: increased capital, strengthening the level of provision and reserves and improving internal controls.

To effectively adopt Basel II norms, both banks and CBN should enhance their IT systems, data models and business models. This will creates quite significant additional cost burden on the banks. Instead of traditional data models, the banks need to maintain comprehensive database of operational loss incidents, credit losses, financial instructions, and general ledger data. Additionally, adoption of Basel II may not be a first priority for Nigeria in terms of what is required to strengthen its supervision, as adequate preparation is necessary prior to full implementation date.

Additionally, prudential regulations should be directed at reducing pro-cyclicality in the financial system capital requirements and loss provisioning is closely related. In the design of Basel II, subject to certain restrictions, loss provisions must be included in regulatory capital requirements up to specified limits. Like capital, loss provisioning is capable of contributing to pro-cyclicality. Evidence for the United States indicates that loss provisions fall as a percentage of loan volume during periods of rapid economic growth and rise during downturns (FSF 2009a). The increases in provisions during downturns are capable of lowering retained earnings, capital and lending, while the decreases during expansions are capable of having converse effects (Brunnermeier et al., 2009; Carney, 2009).

According to FSF, recommendations concerning countercyclical buffers should be directed at capital, provisioning, and leveraging (FSF, 2009b). Countercyclical capital buffers and an overall leverage ratio as part of Basel II, was mentioned under the agenda of the Basel

Committee (in section V.1). Other closely related recommendations of the FSF for mitigating pro-cyclicality concern revision of the framework for market risk of Basel II to reduce reliance on cyclical Value-at-Risk (VaR)-based estimates of regulatory capital, stress testing and monitoring of Basel II's rules to ensure that they dampen rather than amplify pro-cyclicality.

WAY FORWARD

Going by the conclusions stated above, there is an important area of future study to be pursued. There are other measures of operating performance apart from those used in this study. Consequently, for example, future research could replicate this study using return on equity (ROE) profitability metric since ROE was not examined here. However, caution should be taken because return on equity is significantly influenced by capital market considerations not bank-specific factors unaccompanied.

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APPENDICES

Appendix 1

Figure 1: The Road to Basel II

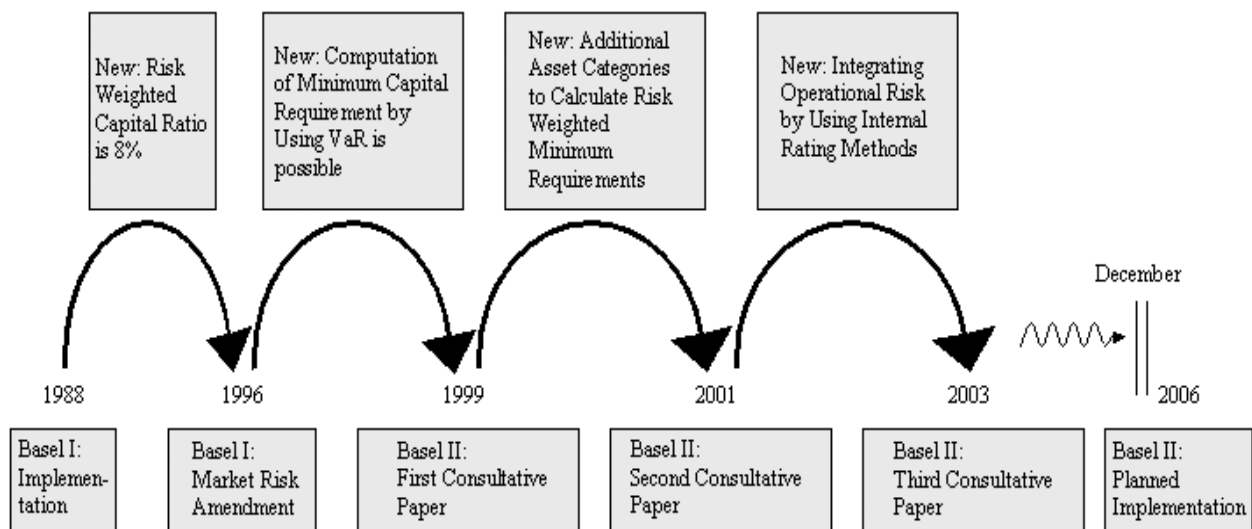
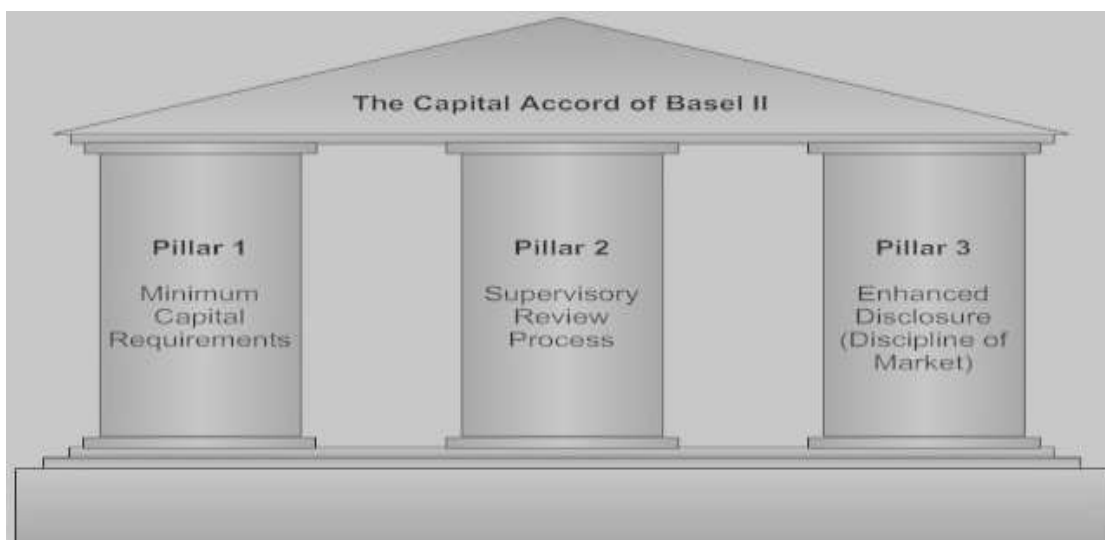


Figure 2: The Pillar Concept



Appendix 2

Table 2: List of Banks Operating in Nigeria as at June, 2015

S/N	Name	Nature of Operation	Ownership Standing
1	Access Bank	Commercial Banking	Acquired Intercontinental Bank (Domestically Owned)
2	Citibank	Commercial Banking	Foreign majority Ownership, U.S.A
3	Diamond Bank	Commercial Banking	Domestically Owned
4	Ecobank Nigeria	Commercial Banking	Acquired Oceanic Bank (West African Bank)
5	Fidelity Bank	Commercial Banking	Domestically Owned
6	First Bank	Commercial Banking	Domestically Owned
7	First City Monument Bank	Commercial Banking	Acquired Finbank, Domestically Owned
8	FSDH Merchant Bank	Merchant Banking	Domestically Owned
9	Guaranty Bank	Commercial Banking	Domestically Owned
10	Heritage Bank	Commercial Banking	Acquired Enterprise Bank (formerly Spring Bank) Domestically Owned
11	Keystone Bank	Commercial Banking	(Formerly Bank PHB) Domestically Owned
12	Rand Merchant Bank	Merchant Banking	Domestically Owned
13	Savannah Bank	Commercial Banking	Domestically Owned
14	Skye Bank	Commercial Banking	Domestically Owned
15	Stanbic-IBTC Bank	Commercial Banking	Majority Foreign Interest, South Africa
16	Standard Chartered Bank	Commercial Banking	Majority Foreign Ownership, South Africa
17	Sterling Bank	Commercial Banking	Acquired Equatorial Trust Bank, Domestically Owned
18	Union Bank	Commercial Banking	Owned by Union Global Partners Limited, Domestically Owned
19	United Bank for Africa	Commercial Banking	Domestically Owned
20	Unity Bank	Commercial Banking	Domestically Owned
21	Wema Bank	Commercial Banking	Domestically Owned
22	Zenith Bank	Commercial Bank	Domestically Owned

Appendix 3: (in Naira)

Table 3: Nigeria Banks' profit behavior from 2009 to 2014

	2009	2010	2011	2012	2013	2014
ACCESS	(880,752,000)	12,931,441,000	5,248,866,000	35,815,611,000	26,211,844,000	39,941,126,000
ECOBANK	(4,588,000,000)	1,619,000,000	19,344,000,000	7,805,000,000	11,658,000,000	13,401,924,567
FBN	1,275,000,000	32,123,000,000	47,462,000,000	71,143,000,000	59,365,000,000	79,351,000,000
GTB	28,603,078,000	39,604,024,000	51,653,251,000	85,263,826,000	95,545,510,000	93,431,604,000
STERLING	(6,660,406,000)	4,178,493,000	6,908,598,000	6,953,539,000	8,274,864,000	9,004,973,000
UBA	12,889,000,000	2,167,000,000	(7,966,000,000)	47,375,000,000	46,483,000,000	40,083,000,000
ZENITH	18,365,000,000	33,335,000,000	41,301,000,000	95,803,000,000	83,414,000,000	92,479,000,000

Table 4: Nigeria Banks' lending behavior from 2009 to 2014

	2009	2010	2011	2012	2013	2014
ACCESS	360,387,649,000	403,178,957,000	490,877,501,000	554,592,199,000	735,300,741,000	1,019,908,848,000
ECOBANK	183,719,000,000	231,108,000,000	410,150,000,000	546,873,000,000	625,907,000,000	787,226,751,563
FBN	1,022,486,000,000	1,017,411,000,000	1,128,851,000,000	1,316,407,000,000	1,473,839,000,000	1,794,037,000,000
GTB	574,586,579,000	603,906,669,000	679,358,919,000	742,436,944,000	926,967,093,000	1,182,393,874,000
STERLING	78,140,098,000	99,312,070,000	162,063,156,000	229,420,874,000	321,743,748,000	371,246,273,000
UBA	543,289,000,000	571,127,000,000	552,526,000,000	570,714,000,000	796,942,000,000	884,587,000,000
ZENITH	669,261,000,000	667,860,000,000	827,035,000,000	895,354,000,000	1,126,559,000,000	1,580,250,000,000

Table 5: Nigeria Banks dividend payout behavior from 2009 to 2014

BANKS	2009	2010	2011	2012	2013	2014
ACCESS	0.63	0.20	0.50	0.55	0.85	0.60
ECOBANK	0.00	0.00	0.00	0.00	0.00	0.00
FBN	1.00	0.09	0.60	0.80	1.00	1.20
GTB	0.80	1.06	0.85	1.10	1.55	1.70
STERLING	0.10	0.00	0.00	0.10	0.15	0.19
UBA	0.60	0.08	0.04	0.00	0.50	0.50
ZENITH	1.13	0.36	0.85	0.95	1.60	1.75

Table 6: Nigeria Banks' share price behavior from 2009 to 2014

BANKS	2009	2010	2011	2012	2013	2014
ACCESS	6.46	8.88	7.26	6.10	10.51	8.73
ECOBANK	24.72	5.24	3.18	1.98	13.82	16.26
FBN	16.44	13.86	12.22	10.35	18.35	12.05
GTB	12.70	17.19	15.74	14.67	25.66	27.30
STERLING	1.64	1.97	1.83	1.07	2.56	2.31
UBA	11.48	11.19	6.08	2.78	7.70	6.90
ZENITH	14.65	14.53	14.03	13.22	20.99	22.66