

Implications and Challenges of Basel II Implementation in the Nigerian Banking System

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Abstract: *Globalisation necessitates drastic changes in the banking sector across countries. The regulation of banking in the developed industrial countries has increasingly focused on attaining financial stability. The Basel Committee on Banking Supervision provides a platform for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. Basel I focus more on credit risks, not on operational risks, by establishing a direct link between capital of a bank and its credit risk. The risk identified by Basel I does not express the multiple risks banks can be faced. Basel II addresses the gap by establishing rigorous risk and capital management requirements designed to ensure that a bank maintains capital reserves appropriate to its risk exposures. The Nigerian financial sector has performed well in Basel I implementation. Nigeria is set to implement the Basel II to ensure that better risk management is adopted in the nation's banking system. The study examines Basel II Accord implementation in Nigeria, explores its implications for the Nigeria banking system and issues with the Accord, and highlights recommendations for implementation of the Accord in Nigeria.*

Keywords: *Risk management, Banks, Basel I, Basel II implementation, Operational risk, Credit risk, Nigeria*

I. Introduction

Globally, the banking and financial system has witnessed extraordinary changes over the last three decades. Globalisation has necessitated drastic changes in the banking sector across countries. Hence, the regulation of banking in the developed industrial countries has increasingly focused on attaining financial stability, at the expense of regulation, in order to attain growth and equity objectives. Following the Latin America sovereign defaults, in 1988 Basel Committee on Banking Supervision completed the Basel Accord after six years of deliberations. The Basel Committee on Banking Supervision provides a platform for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. 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. Both accords have been helpful in terms of harmonising banking supervision, regulation, and capital adequacy standards across international market economics, through qualitative and technical focus. However, the qualitative and technical focus which constitute strength of the accords, limits the understanding of these agreements within policy circle. Moreover, neither agreement has secured long-term stability within a country banking system; even when the best accords have been accurately and fully applied. Basel I focus mainly on credit risk, not on operational risks, by establishing a direct link between capital of a bank and its credit risk. This required a bank to maintain high level of capital equals to its high credit risks. However, the risk identified by Basel I does not express the multiple risks banks can be faced (Enrique and Sergio, 2006). In other words, the Basel I Accord has very limited risk sensitivity and lacks risk differentiation for measuring credit risk. This resulted to a significant gap between the regulatory measurement of the risk of a given transaction and its actual economic risk (Akhtaruzzaman, 2009). Consequently, Basel II Accord was signed in 2004 to create an international standard that banking regulators can use when creating regulations regarding how much capital banks need to set aside to guard against their financial and operational risks. Basel II fills the gap by establishing rigorous risk and capital management requirements designed to ensure that a bank maintains capital reserves appropriate to the risk the bank exposes itself through its investment and lending practices (BIS 2004).

The Central Bank of Nigeria (CBN) believes that Basel II will help protect the nation's financial system from problems that might arise should a major or a series of banks collapse. Hence, the CBN is set to implement the Basel II Accord beginning from December 2012 as part of measures to ensure that better risk management is adopted and maintained in the nation's banking system (CBN, 2011). 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 (Vento, 2012). Consequently, 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. The questions to be addressed in this paper are:

1. What is Basel II Accord, and how is it different from Basel I Accord?
2. What are the implications of Basel II implementation for the Nigerian banking system?
3. What are the issues with the Basel II Accord?
4. What are the necessary preparations for successful implementation of Basel II in Nigeria?

The subsequent part the paper is organised as follows: section two outlines scope and objectives of the study; section three highlights the methodology; section four reviews relevant literature; section five reviews Basel I and Basel I₁; section six identifies implications of Basel II Accord for the Nigerian banking system; section seven discusses issues with the Basel II Accord; and section eight outlines recommendations for the implementation of the Accord in Nigeria.

II. Scope And Objectives

The paper examines Basel II Accord, explores the implications of the Accord for the Nigerian banking system, identifies issues with Basel II, and highlights recommendations for the implementation of the Accord in Nigeria. It focuses on implementation of Basel II Accord in the Nigeria's banking sector. Specifically, objectives of the study to address the research questions include:

- a) To review Basel II Accord and identify the three basic pillars of the Accord;
- b) To examine the implication of Basel II Accord for the Nigeria's banking system;
- c) To highlight issues with Basel II Accord
- d) To put forward recommendations regarding implementation of Basel II Accord in Nigeria.

III. Methodology

The study is undertaken mainly by collecting and analysing secondary data. The main sources of data are website and publications of the Central Bank of Nigeria (CBN). In addition, some information is collected from magazines and other academic publications to obtain knowledge working procedure of the study. Adoption of secondary data for the study is suitable because there is limited data on Basel II implementation in Nigeria, as the Accord is yet to be operational in the Nigeria banking system. Consequently, the literature is explored to deduce implications and challenges of implementing Basel II; thereby establishing the necessity for rigorous risk and capital management requirements to ensure that banks in Nigeria maintain capital reserves appropriate to their risk exposures. The significance of the fact obtained from the literature is deemed sufficient to establish the research rationale; and to highlight the importance and benefits of Basel II implementation in Nigeria.

IV. Review of Literature

Customers' deposits, owners' capital and creditors' finance banks assets. Obviously, banking crisis negatively impact on depositors and shareholders financial interest. Basically, bank's regulation exercise aims at ensuring capital adequacy and solvency position of banks. The adoption of Basel II Accords can improve banks risk sensitivity, capital management allocation and portfolio management activities (Carratu, 2001; Ong, 2006). Basel II is different from Basel I in three respects. Firstly, the capital formula is substantially revised; secondly, it provides guideline on the supervisory review of bank capital adequacy; and thirdly, it introduces concept of market discipline through improved disclosure rules (Illing and Paulin, 2005). Valova (2007) argues that Basel II also offers banks incentives to adopt advanced approaches to manage credit and operational risks. The Accord aligns economic risk more closely with regulatory risk. Moreover, the Accord makes it easier for banks to lend to individuals and corporate firms, increase their retail lending and provide mortgage under loans with higher margins (Prakash, 2008). Thus, the key principle underlying Basel II, are the basis for the advancement from Basel I, is more risk-sensitive (Tanaka, 2003).

Basel II helps banks to avoid systemic crisis and its negative impact on the economy (Murinde and Yaseen, 2004). Oftentimes a bank statutory capital is considered as adequate if it is enough to cover the bank's operational expenses, satisfy customers' withdrawal needs and protect depositors against total or partial loss of deposits in the event of liquidation or losses sustained by the bank (Crosse and Hamsel, 1980; Onuh, 2002). This implies that capital adequacy is an important indicator of a bank's strength. Consequently, increase in capital is expected to enhance earnings by reducing the expected cost of financial distress and bankruptcy (Mathuva, 2009). Recent study on the effect of capital adequacy on the profitability of the Nigerian banking sector shows that the influence of strong capital base or weak capital base is likely to be subjected to several factors, such as: operational management, adequate corporate governance, economic and political environment, global financial situation and quality of staff (Onalapo and Olufemi, 2012). Basel II also provide banks with business benefits by improving corporate governance, allocation of capital, capital saving and better decision making (Oosthuizen, 2005).

Basel II encourages increased interaction between bank managers and supervisory bodies. Bank regulators desire higher capital standards which promote bank safety. The primary goal of bank management is long term profit maximisation achievable through high leverage; but bank regulators are more interested in the

risk of bank failures in general. The interaction between bank managers and supervisory bodies can enhance the level of transparency within the Nigeria banking industry. This will help to ensure higher level of security within the nation's banking system. This can, in turn, establishes greater level of standardisation and conformity across the nation's financial system, resulting to higher returns with lower risks (Santos, 2001). Although, banks have a higher degree of freedom in the way they operate or may operate; the Basel II Accord has some built-in restraints to ensure at least a basic level of capital, such as minimum capital requirements, is maintained by banks (Lind, 2005). The essence of market discipline is to enable suppliers of funds and equity owners influence the market by withholding or withdrawing funds, or demanding higher returns due to risks banks are engaging in (Heid, 2007). It is therefore necessary that accurate information should be made available to market participants beyond the mere issue of annual and periodical financial reports by both the banks and the supervisor (Majnoni and Powell, 2005). In this regard, the third pillar of the Basel II framework helps to increase transparency and awareness of risks in the banking sector through a process of detailed disclosure. Raffer (2006) asserts that the Central banks vested with extensive powers to supervise banking activity can in the long term improve the corporate governance of banking institutions, reduce corruption in bank lending activity and improve the financial activities of the banks. Notwithstanding, Basel II has some pitfalls. The risk sensitivity of Basel II may lead to higher capital charges on loans to the developing and emerging market economies due to their relatively higher credit and operational risks (IMF, 2005). The Accord may also constrain accessibility to credit for a number of developing countries (Hassan, 2008), thereby increasing costs of borrowing and reducing capital inflows to these so-called high-risk destinations (IMF, 2007).

V. Review of Basel I and II Accords

This section examines Basel I and II in order to develop a framework for the study. The first part reviews Basel I, while the second part reviews Basel II.

5.1 Basel I Accord

The Basel Committee on Banking Supervision, a group of central banks and bank supervisory authorities in 12 industrial countries, developed and presented the Basel I Accord in July 1988 (BCBS, 1988). The Accord was originally intended for internationally active banks in G10 countries, but more than 100 countries have adopted the Accord. The Accord relates bank capital adequacy requirement to credit risk exposure, thus reflecting the perception that credit risk poses the most serious threat to bank solvency. However, other types of risks were incorporated later. For instance, the committee amended the 1988 Accord to incorporate capital requirements for market risks in 1996 (BCBS, 1996). This amendment was also modified in September 1997 and November 2005. It adopted two alternative approaches to the measurement of market risk: standardised method and internal models approach. Meanwhile, the 1988 Accord has two main components, which include:

1. The measurement of qualifying capital (the numerator) and
2. The determination of risk-weighted assets (the denominator)

5.1.1 Qualifying capital

The Basel I Accord categorised qualifying capital into Tier 1 and Tier 2 capitals. The Tier 1 or core capital (the numerator) comprises common stock, retained earnings, surplus, non-cumulative preferred stock, minority interest in equity accounts of consolidated subsidiaries and selected identifiable intangible assets. Tier 2 or supplementary capital includes qualifying subordinated debt, cumulative preferred stocks, capital certificates, loan loss reserves in an amount not to exceed 25% of risk-weighted assets, non-withdrawal accounts and pledged deposits not included in core capital. Supplementary capital items are considered less stable protection against losses. According to Basel I Accord, the total capital of a bank could be derived from the sum of Tier 1 and Tier 2. Under the risk-based Basel I Accord, a bank should hold Tier 1 capital at least equal to 4% of risk-weighted assets. Tier 1 plus Tier 2 should be at least equal to 8% of risk-weighted assets.

5.1.2 Risk-Weighted Asset (RWA)

The denominator of the risk-based Basel I Accord measures banks' credit risk exposure. The risk-weighted asset (RWA) is computed by multiplying each asset item on a bank's balance sheet and any off-balance sheet commitment by risk weighting factor designed to reflect the credit risk exposure and summing the weighted categories to create risk weighted assets. The formula for computing capital adequacy ratio under Basel I is stated below:

$$\text{Capital Adequacy Ratio} = \frac{\text{Total Tier 1 + Tier 2 Capital}}{\text{Total Risk Weighted Assets}}$$

The Basel I Accord has been criticised as being inflexible due to its focus on primarily credit risk and treating all types of borrowers under one risk category regardless of credit worthiness. Consequently, Basel I was not successful in establishing a level playing field, as it dealt primarily with capital standards and not with other differentiating factors such as legal and accounting systems; and, more importantly the size of the explicit (or implicit) government safety net among banks.

5.2 Basel II Accord

Due to the limitations of the 1988 Accord, there had been broad-based pressure to radically review the Accord. The Basel Committee for Banking Supervision presented the final document establishing minimum capital requirement for banking organisations in June 2004, with some amendments in November 2005. The document is entitled “International Convergence of Capital Measurement and Capital Standards: A Revised framework” (BIS, 2004). Basel II highlights three mutually reinforcing pillars: capital requirements, supervisory review, and market discipline. 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 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; while, the third pillar aligns economic and regulatory capital more closely to reduce the scope for regulatory arbitrage.

5.2.1 Pillar I: Minimum Capital Requirements

It sets out minimum capital requirement. The first pillar is compatible with credit risk, market risk and operational risk. The regulatory capital focuses on these three risks. The Basel II framework maintains Basel I minimum capital requirement of 8% of risk assets. Banks will therefore be required to achieve minimum capital adequacy ratio of 8% when Basel II is implemented in Nigeria. 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.

5.2.2 Pillar II: Supervisory Review Process

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 emphasises the regulatory response to the first pillar. 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. Reputation risk concerns the risk of negative publicity about an institution’s business practices which may result to a loss 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. Meanwhile, Basel II supervisory review process is based on the four major principles: One, to ensure that 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 are expected to develop an internal assessment process and set capital targets that are commensurate with the bank's risk profile and control environment. Three, supervisors are expected 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 each bank has sound internal control and effective risk management process.

5.2.3 Pillar III: Market Discipline and Reporting

Pillar III 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. 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. 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.

5.3 Capital Requirements Measurement

The first pillar of Basel II defines the minimum regulatory capital for three different risk categories: credit risk, market risk and operational risk. The existing definition of capital and the minimum requirement of 8% of capital to risk weighted assets of Basel I Accord are still applicable to Basel II. To understand banks risk management and the ways risks are measured under Basel II first pillar, we briefly examine the main innovation regarding evaluation of the three risk categories as shown in Table 1.

Insert Table 1 here

5.3.1 Credit Risk

Credit risk comprises the uncertainty due to non payment by a debtor of a loan or other line of credit. Basel II approaches three alternatives to measure credit Risk - Standardised Approach, Foundational Internal Rating Based Approach and Advanced Internal Rating Based Approach.

i) Standardised Approach: In this approach, the bank allocates a risk weight to each of its assets and off-balance sheet positions. It then calculates a sum of risk-weighted asset values. A risk weight of 100% indicates that an exposure is included in calculation of risk weighted assets value which translates into a capital charge equal to 8% of that value. Banks may use external credit ratings by institutions recognised for the purpose by the CBN for determining the risk weight. Also, exposure on sovereigns and their central banks could vary from zero percent to 150 percent depending on credit assessment from 'AAA' to below B-. Exposure on public sector entities, multilateral development banks, other banks, securities firms and corporate may also have risk weights from 20 percent to 150 percent. Exposure on retail portfolio may carry risk weight of 75 percent.

ii) Internal Rating Based approach (IRBA): In this approach, the CBN will allow banks to use their internal evaluation systems to assess a borrower's credit risk. The results obtained are translated into estimates of a potential future loss, thus defining the basis of minimum capital requirements. Banks must categorise banking book exposure into broad classes of assets - Corporate, Sovereign, Banks, Retail and Equity exposures. The IRB approach supports the following methodologies for corporate, sovereign and bank exposures.

a) Foundation Internal Rating Based Approach (FIRBA): suitable for the financial institution regarding the evaluation of dimensions or grades, in order to measure the relative credit risk. With this method, the Probability of Default and Loss Given default are imposed by the CBN.

b) Advanced Internal Rating Based Approach (AIRBA): This is similar in methodology to that of FIRBA, except that the banks control all of its components.

5.3.2 Market Risk

Market risk is concerned with decreasing value of an investment due to changes in market factors i.e. equity risk, interest rate risk, currency risk, and commodity risk. The most common approach for measuring market risk is Value at Risk (VaR). Value at Risk is a measure of how the market value of an asset or of a portfolio of assets is likely to decrease over a certain time period in normal conditions. Although, Value at Risk provides insight into risk management and potential downside of complex derivatives; it does not give any information about the severity of loss and the level by which it is exceeded.

5.3.3 Operational Risk

Operational risk entails the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. The Basel II provides three basic approaches to calculate operational risk, and its basic objective is to measure and control risk on continuous basis. The approaches are: Basic Indicator Approach, Standardised Approach and Advanced Measurement Approach.

i) Basic Indicator Approach (BIA): A straightforward calculation is applied based on the firm's income to determine its capital requirements. BIA provides the simplest method of the three in order to evaluate operational risk.

ii) Standardised Approach (STA): It comprises systems use of grade provided by external organisations. Under this approach, banks activities are divided into eight business lines. Each business lines gross income is considered as a broad indicator for the likely scale of operational risk, in terms of beta factor. Beta factor is a measure of the volatility or systematic risk of a security or a portfolio in comparison to the market as a whole. The values of betas prescribed for each business line as shown in Table 2.

Insert Table 2 here

iii) Advanced Measurement Approach (AMA): Under this approach, the firm calculates own capital requirement by developing and applying its own internal risk measurement system. It is the most difficult method in regards to operational risk.

VI. Implications of Basel II for the Nigerian Banking System

Although the Basel II framework focuses mainly on international active banks, its underlying principles are intended suitable for application to banks of varying levels of complexity and sophistication. The Basel Committee for Banking Supervision has circulated the Accord to bank supervisory authorities worldwide with a view to encouraging them to consider its adoption when they believe is consistent with their broader supervisory priorities. Although all the twenty-one consolidated Deposit Money Banks (DMBs) in Nigeria as of November 2012 might not be internationally active, at least some of them would certainly possess those inherent characteristics that would qualify them as significant banks. Since the CBN is set to implement the Basel II beginning from December 2012; it is, therefore, beneficial to discuss likely implications of Basel II for the Nigerian banking system. The implications are highlighted below.

- Basel II framework grants greater flexibility to banks to determine their appropriate level of equity capital that can absorb expected losses. By implication, the Accord expects the CBN to specify risk weights different from the international recommended ones for retail exposures.
- The CBN must acquire and upgrade human and technical resources so as to effectively perform its supervisory function. This is necessary as most of the burden of controlling bank internal risk assessment is placed on expanded and active supervision, in accordance with Pillar II of the Accord. It is, therefore, imperative that the CBN must be substantially equipped in both qualitative and quantitative terms.
- Basel II requires banking institutions to store substantial quantity of data. For instance, the Accord requires banks to store a comprehensive database of operational loss incidents, credit losses, financial instructions, and general ledger data. Consequently, the costs associated with information technology are expected to be quite significant for both banks and CBN.
- The Basel II explores how banks can work on other area of risk. In this regard, Nigerian banks can exploit the fact that they have a large short-term portfolio in the form of cash credit, overdraft and working capital demand loan.
- The cost of setting up an appropriate Basel II complaint risk control system is likely to be a formidable challenge for both banks and regulators. It has been estimated that the implementation and compliance cost of Basel II, using a net present value (NPV) basis over five-years period with 5% reference rate, could possibly exceed US\$1000 billion (Gaberrette, 2003:69). This is equivalent to about one half of the value Tier I capital held by banks worldwide. The benefit of adopting the Accord has to be balanced with the cost.
- Basel II implementation could result in higher cost of credit for Nigerian public sector as direct consequences of capital requirement computation. This has implications considering the high-risk profile of the nation's sovereign (external) debt resulting from huge debt overhang and low ratings from external rating agencies.
- The need to align supervisory disclosures under pillar 3 with international and domicile accounting standards is another major challenge. Notwithstanding the incentives to migrate to advanced approaches inherent in the Basel II structure; one can surely state that the standardised approach will be used in most banks in Nigeria for some years before they could reach the level of sophistication in risk management envisaged by the Basel II Accord. The standardised approach, however, relies on ratings from external

credit rating agencies. In Nigeria, presently there are only 5 credit rating agencies approved by the Securities and Exchange Commission (SEC)¹. They are: Augusto and Co. Ltd., Brickfield Road Associates Limited, Datapro Limited, Global Credit Rating and Pharez Limited. Moreover, out of these five, only the first three are readily accessible and produce solicited and unsolicited credit assessment of businesses. This implies that more credit rating agencies have to be established to specialise in assessing local banks and companies.

- The CBN needs to develop and publish eligibility criteria for External Credit Assessment Institutions (ECAI) whose ratings can be used for capital purposes. This is necessary for two main reasons: first, the coverage of the existing five credit agencies is still low for meaningful implementation of the Basel II in Nigeria; and second, Basel II provides national supervisors the possibility of determining whether ECAI meet a number of eligibility criteria for their ratings to be used for capital purposes. The CBN, therefore, needs to identify ECAI that will pass eligibility criteria. These eligibility criteria include objectivity, independence, information disclosure, transparency, sufficient resources and credibility on the part of the ECAI.

VII. Issues with Basel II Accord

In Basel II there are some major issues that should not be ignored by the CBN when implementing the Accord in Nigeria. These issues are highlighted below.

- **Fewer loans for banks and companies with low rating:** Implementation of Basel II norms in Nigeria will reduce credit availability to small companies and banks, besides adding to their cost of fund. This matter should be tactfully address because Basel II norms discourages banks to lend to small firms that is not rated, as a loan to an unrated entity will attract 100 per cent risk-weight.
- **Credit rating in terms of capital adequacy requirements:** Basel II explicitly incorporates credit ratings in assigning capital adequacy requirements to the holding of particular assets. Counterparty risk assessment is essential to the risk weighting of banks' assets and capital requirement assessment. Responsibility for the assessment of counterparty risk is assigned to the ratings agencies, which proved to be vulnerable to potential conflicts of interest.
- **Pro-cyclical tendencies of the capital requirement:** In good times, when asset value increases, capital is generated to support asset growth (D'Hulster, 2009). In difficult times, as asset value declines, banks are constrained to raise additional capital to support the same asset portfolio they previously held by restraining lending (Atik, 2011). Two compounding effects may follow. First, banks are driven to raise regulatory capital at times when the cost of capital is likely to be rising. Hence, the prevailing cost of capital in the economy may rise in a downturn, thereby making capital costs higher than they would have been earlier. Second, banks can bring themselves into compliance with Basel II by shedding assets, thus resulting to a general shrinkage in bank activity and further undercutting those assets' values.
- **Basel II encourages the process of 'securitisation':** The Accord allows financial institutions to repackage their loans into asset-backed securities; hence they are able to move them off their balance sheets to reduce the assets' risk-weighting. The process of securitisation enabled banks to reduce their capital requirement, take on growing risks and increase their leverage.
- **Basel II Accord is very complex:** implementation of the Accord necessitates revamping the entire management information system and reallocation of substantial resources. This implies high costs regarding financial resources, intellectual capital, staff training, information technology and large scale commitment to build sophisticated systems for adequate banking regulations in Nigeria.

By implication, issues with Basel II norms may be classified into three. First, the illusion of safety that Basel II engendered, i.e. an illusion that compliance with Basel II meant that bank capital would be adequate to withstand a crisis. Second, the use of credit ratings (as a proxy for credit sensitivity) to determine the regulatory capital needed to support the holding of particular financial assets. Third, the negative consequential effect resulting from the interplay between asset value declines occasioned by market-to-market accounting and Basel II's rigid capital demands, generally (and perhaps incorrectly) described as pro-cyclicality (Atik, 2011).

¹ The Securities and Exchange Commission (SEC) is the apex regulatory authority for the capital market in Nigeria. The SEC maintains proper standards of conduct and professionalism in the securities business and surveillance over the market to enhance efficiency.

VIII. Recommendations And Conclusions

The Basel II is instrumental and a useful banking regulatory framework that enhances and sets a developed regulation and capital adequacy, bank supervision and disclosure policy for the banking institutions. It is a better improvement over the Basel I considering its wider risk sensitive and analytical strength. The recommendations and conclusions of the paper are enumerated below:

- It is proper and sensible to base rules on capital adequacy requirement on risk sensitivity. Basically, customers' deposits, owners' capital and creditors finance banks assets. The CBN, particularly 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.
- 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 is questionable. Similarly, too much disclosure may cause information overload and may even damage banks financial position.
- Basel II allows CBN the freedom to adopt supplementary measure of capital adequacy for banks. 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 recognise 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 adopt Basel II norms, both banks and CBN enhance their IT systems, data models and business models. This creates quite significant additional cost burden on the banks. Instead of traditional data models, they need to maintain comprehensive database of operational loss incidents, credit losses, financial instructions, and general ledger data.
- The 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. Moving towards adopting Basel II norms, the CBN should carefully consider the cost implications of the banking system before developing timetable for its implementation.

REFERENCES

- [1] Akhtaruzzaman, M., Potential impact of Basel II in developing economies: Experiment on Bangladesh, *International Research Journal of Finance and Economics*, 23, 2009, 46-61.
- [2] Atik, J., Basel II: A post-crisis post mortem, *Transnational Law & Contemporary Problems*, 19(731), 2011, 731-759.
- [3] Bank for International Settlements, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*, BIS Basel Committee on Banking Supervision, 2004, Basel.
- [4] Basle Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards*. BCBS, 1988, Basel.
- [5] Basle Committee on Banking Supervision, *Amendment to the Capital Accord to Incorporate Market Risks*. BCBS Basel Committee Publications, 1996, 24.
- [5] Carratu, D., Feedback on survey of banks preparations for the new Basel Capital Accord, *Adsatis Solutions of Financial Markets*, 2001, 1-44.
- [6] Central Bank of Nigeria, *CBN Annual Report, 2011*, CBN [Online]. Retrieved from: <http://www.cenbank.org/AR2011/DEFAULT.ASP>. Accessed 22 November 2012.
- [7] Crosse, H. D., and G. H. Hamsel, *Management policies for commercial banks*. (Boston: Bankers Publishing Company, 1980).
- [8] Hulster, K., The leverage ratio: A new binding limit on banks, *Crisis Response*, 11(3), 2009.
- [9] Enrique, N., and N. Sergio, Basel II and microfinance, *Microenterprise Development Review*, 9(1), 2006.
- [10] Gabarretta, K. J., The new capital accord and its possible impact on small jurisdictions, *Bank of Valletta Review*, 27, 2003, 50-75.
- [11] Hassan AL-Tamimi, H. A., Implementing Basel II: An investigation of the UAE banks - Basel II Preparations, *Journal of Financial Regulation and Compliance* 16(2), 2008, 173-187.
- [12] Heid, F., The cyclical effects of the Basel II capital requirements, *Journal of Banking and Finance* (31), 2007, 3885-3900.
- [13] International Monetary Fund, *Global Financial Stability Report - Financial Market Turbulence: Causes, Consequences, and Policies*, IMF World Economic and Financial Surveys, 2007.
- [14] Illing, M., and G. Paulin, Basel II and the cyclicity of bank capital, *Canadian Public Policy*, 31(2), 2005, 161-180.
- [15] International Monetary Fund, *Implementation of Basel II - Implications for the World Bank and the IMF*, 2005 IMF.
- [16] Lind, G., Basel II: The new framework for bank capital. *Sveriges Riksbank Economic Review*, 2, 2005, 22-38.
- [17] Manjoni, G., and A. Powell, Reforming bank capital requirements: Implications of Basel II for Latin American countries. *Journal of Banking and Finance*, 25(1), 2005, 115-148.
- [18] Mathuva, D. M., Capital adequacy, cost-income ratio and the performance of commercial banks: The Kenyan scenario, *The International Journal of Applied Economics and Finance*, 3(2), 2009, 35-47.
- [19] Murinde, V., and H. Yaseen, The Impact of Basel Accord Regulations on Bank Capital and Risk Behaviour: 3D Evidence from the Middle East and North Africa (MENA) Region. A paper presented, *Third International Conference of the Centre for Regulation and Competition (CRC)*, Cape Town, 2004, 1-33.
- [20] Onaolapo, A. A., and A. E. Olufemi, Effect of capital adequacy on the profitability of the Nigerian banking sector. *Journal of Money, Investment and Banking*, 24, 2012, 62-72.

- [21] Ong, M. K., *Introduction - The Basel II handbook: A Guide for Financial Practitioner* (2nd ed.) (UK: Risk Books, 2006).
- [22] Onoh, J. K., *Dynamics of money, banking and finance in Nigeria: An emerging market* (Lagos: Astra Meridian Publishers, 2002).
- [23] Oosthuizen, C., *Basel II: Introduction to Nuts and Bolts*. (South Africa: South African Reserve Bank, 2005).
- [24] Prakash, A., Evolution of the Basel framework on bank capital regulation, *Reserve Bank of India Occasional Papers*, 29(2), 2008, 181-122.
- [25] Raffer, K., Proposing built-in stabilisers for the international financial system, In: R. Grote, and T. Marauhn, (Eds.), *The Regulation of International Financial Markets: Perspectives for Reform*. (Cambridge, NY: Cambridge University Press, 2006).
- [26] Santos, J., Bank capital regulation in contemporary banking theory: A review of the literature, *Financial Markets, Institutions & Instruments*, 10(2), 2001, 41-84.
- [27] Tanaka, M., The macroeconomic implications of the new Basel Accord, *CESifo Economics Studies: IFO Institute for Economic*, 49, 2003, 217-232.
- [28] Valova, I., New capital rules according to Basel II, *Banks and Bank Systems* 2(2), 2007, 14-21.
- [29] Vento, G. A., The implementation of Basel II/III in the Nigerian financial services sector, A paper presented at *Risk Managers Association of Nigeria (RIMAN) Quarterly Risk Roundtable*, Lagos Nigeria, 2012.

APPENDIX

Table 1: Risk management methods within Pillar 1 of Basel II

Types of risk	Methods		
	Credit Risk	Standardised Risk Approach	Foundational Internal Rating Based Approach
Market risk	Standardised Risk Approach	Internal Models Approach	
Operational risk	Basic Indicator Approach	Standardised Risk Approach	Advanced Measurement Approach

Table 2: Lines of business gross income and value of betas

BUSINESS LINE	BETA FACTOR
Corporate finance	18%
Trading and sales	18%
Retail banking	12%
Commercial banking	15%
Payment settlement	18%
Agency services	15%
Assets management	12%
Retail brokerage	12%