

Journal of
Accounting
(JACC)



CARI
Journals

ADOPTION OF THE BASEL II ACCORD BY COMMERCIAL BANKS IN KENYA

^{1*} Kinoti Julie Nkirote

¹ Post graduate student: Strathmore University

*Corresponding Author's Email:nkirotekj@yahoo.com

²Dr. J. McFie

Lecturer, Strathmore University

Abstract

Purpose: The focus of the study was on the possibility of adopting Basel II accord by Kenya commercial banks.

Methodology: The study adopted a descriptive survey design. A population of 45 commercial banks was identified from the central bank of Kenya website. A census was undertaken as the population was small enough. A self-report questionnaire was the data collecting instrument used in this study. Consequently, a questionnaire was handed out to each bank bringing the total number of questionnaires to 45. A nonrandom sampling/purposive sampling technique was used and managers in risk management, audit, operations and finance were highly preferred respondents.

Results: The study findings indicated that that the majority of banks had not complied with the prerequisites to Basel II. In addition, the study identified the challenges to implementation of Basel II prerequisites as lack of expertise, poor regulation and supervision and lack of credit information.

Unique contribution to theory, practice and policy: The study recommended that the challenges identified can be addressed if a collaborative effort between banks and the central bank of Kenya was used to impart knowledge on the implementation of Basel II and its prerequisites. A credit reference bureau would also be very effective in availing credit information for the various banks assets. The area of further study identified in the study relates to the empirical relationship between the costs of implementing Basel II and the financial performance of banks.

Keywords: Adoption, Basel II Accord, commercial banks

1.0 INTRODUCTION

1.1 Background of the Study

According to Wilson (2004), banks are often thought to be a source of universal risk because of their central role in the payments system and in the allocation of financial resources, combined with the vulnerability of their financial structure. In addition, this sector is placed in an unstable environment due to rapid changes in information and communication technology, and

globalization which may pose an excessive number of risk exposures as pointed out by Rowe, Jovic and Reeves (2004).

These risks if unchecked may destabilize the financial system and the duration of the effects will be determined by the flexibility of the macroeconomic variables. David and Stone (2004) evaluated the impact of a financial crisis and concluded that the impact is greater on investments, inventories and financial variables which are components of GDP that are most relevant for output reduction in a banking crisis.

In 1988, for instance, it was reported that about US \$ 20 billion worth of losses had been made by the banking industry and the insurance industry (Croft, 2003). Similarly complex strategies like portfolio insurance not only failed to work in the stock market crash of 1987, but they helped cause it. Market players who thought they had hedged themselves against huge losses found out that the models failed to behave as predicted; and the illusion that the safe net created by hedging lured risk averse investors to make reckless investments. Banks and other financial institutions claim that their instruments limit, rather than increase, risk. For example, a currency exchange supposedly lowers the risk of losses from changes in exchange rates.

These inadvertent occurrences and predictions prompted the Group of Ten Countries (G10) and Bank of International Settlements (BIS), as well as banking and insurance executives, to form a committee they called the Basel Committee on Banking Supervision (BCBS), to formulate The Basel Framework that sets out the details for adopting more risk-sensitive minimum capital requirements for banking organizations. This framework reinforces risk-sensitive requirements by laying out principles for banks to assess the adequacy of their capital and for supervisors to review such assessments to ensure banks have adequate capital to support their risks. The framework also seeks to strengthen market discipline by enhancing transparency in banks' financial reporting (BCBS, 2003c).

However, the technical challenge for both banks and supervisors has been to determine how much capital is necessary to serve as a sufficient buffer against unexpected losses. If capital levels are too low, banks may be unable to absorb high levels of losses. Excessively low levels of capital increase the risk of bank failures which, in turn, may put depositors' funds at risk. If capital levels are too high, banks may not be able to make the most efficient use of their resources, which may hinder their ability to make credit available.

This banking regulation, therefore, rouses a special interest especially with the focus on the financial crisis that began in 2007 in the American subprime market, then spreading to the broader credit and funding markets. There are other risks the banks are exposed to that include security, fraud, systems failure, risks associated with new technology adopted and those resulting from certain products of the bank such as derivatives, swaps and securitization. All these can be grouped as operational risk (Basel Committee on Banking Supervision, 2003).

The Basel Capital Accord is an agreed regulatory framework for capital adequacy that the Basel Committee for Banking Regulation and Supervision (BCBS) recommended for implementation in 1988. Its ultimate aim was to improve the soundness and stability of national banking systems and of the international financial system. This was to be achieved through the promotion of the international convergence in the rules for setting minimum capital requirements for internationally active banks (Basel Committee on Banking Supervision, 1988).

Basel II is the structure through which the set of amendments to Basel I was packaged. The main change in Basel II in relation to Basel I is the fact that internationally active banks will be able to adopt their own risk models for risk assessment. As a result, these banks will no longer need to follow the risk-weighted system established by the Basel Committee for determining capital requirements. The new rules for capital requirements are embodied in the Pillar I of the New Accord, which concerns minimum capital requirements for banks. In addition, Basel II has Pillar 2, on banking supervision, and Pillar 3, on transparency and market discipline. To the extent that the use of the internal models permits banks to determine their own risk-weight system, this will give them greater flexibility. But not all banks need to use internal models for capital requirements. For that purpose, three approaches have been proposed: the standardized approach; the foundation internal rating based (F-IRB) approach and the advanced IRB (A-IRB) approach.

According to Prof. Njuguna Ndung'u, governor of the Central Bank of Kenya, banking institutions in Kenya have been regulated under Basel I Capital Adequacy Accord issued by the Basel Committee in 1988. Amendments made in 1996 to the 1988 Accord to incorporate a capital charge for the market risk have not yet been adopted in Kenya and other banks in the region. Prof. Ndung'u pointed out that the Central Banks of Kenya, Uganda and Tanzania have agreed to implement the Basel II Accord upon implementation of key prerequisites which include: full implementation of the Basel I Accord; adoption of Risk Based Supervision; and adherence to the Basel Core Principles for Effective Banking Supervision.

Prof. Ndung'u felt the move to Basel II will ensure that solvency in the banking sector is determined in more precise terms, taking into account most of the critical risks that banks are exposed to. The Central Bank of Kenya, within its current 2006-2009 strategic plans is undertaking various initiatives to ensure full compliance with the prerequisites of Basel II implementation. Since 2004, the Central Bank had shifted to Risk Based Supervision (RBS), which focuses on assessing the adequacy of banks' risk management frameworks in identifying, measuring and mitigating inherent business risks. The Central bank has proposed comprehensive amendments to the Banking Act Chapter 488 with a view to bringing it in line with international best practice to meet the dynamic needs of the banking industry. The objectives of the review were to include: enhancing the independence of the Central Bank; expanding the permissible activities of the banking Institutions; introducing consolidated supervision and establishing provisions for prompt corrective action.

The Central Bank has been reviewing the Risk Management Frameworks of all institutions. Business linkages between banks and other non-bank financial associates, affiliates and subsidiaries necessitated the Central Bank of Kenya to push for the expansion of permissible activities of banking institutions. These linkages range from the new M-Pesa product by Safaricom Limited (a mobile telecommunications company) for facilitating mobile money transfer systems to mortgage and real estate support by banks, and bancassurance activities.

1.2 Problem Statement

According to the Governor of Central Bank of Kenya, Prof. Njuguna, in his speech on the opening of the "7th East African Banking School", held at the Grand Regency in 2007, the Basel II Accord took effect from the beginning of 2007 in G10 countries. However, the Basel committee recognized that developing countries such as Kenya would not be able to implement this accord in 2007 as they are yet to apply Basel I. Therefore, Prof Njuguna asserted that the

Central Banks of Kenya, Uganda and Tanzania had indeed agreed that they would only implement the Basel II accord upon implementation of three preconditions. These requirements include; full implementation of the Basel I Accord; adoption of Risk Based Supervision; and adherence to the Basel Core Principles for Effective Banking Supervision.

Further, Prof Njuguna argued that the move to Basel II would ensure that the solvency of the banking sector was determined in more precise terms, taking into account most of the critical risks that banks were exposed to. Through the revised approach, the sector would overcome the simplistic methods of measuring capital adequacy currently in use, which did not reflect the increasing sophistication of activities that many banks were beginning to engage in.

It was therefore important to carry out a study to determine the level of adoption of prerequisites which would guarantee the adoption of Basel II. In addition, the researcher found it important to analyze the perceived impact and benefits of Basel II on the performance and competitiveness of banks.

1.3 Research Objective

- i. To establish the extent to which commercial banks in Kenya have complied with prerequisites to Basel II adoption
- ii. To determine impediments to compliance with Basel II prerequisites.
- iii. To determine the expected rate of Basel II adoption
- iv. determine the expected benefits on the adoption of Basel II

2.0 LITERATURE REVIEW

The Basel Committee on Banking Supervision (“the Committee”) is a committee of banking supervisory authorities that was established by the central bank governors of the Group of Ten countries in 1975. It consists of senior representatives of bank, supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States (Basel Committee on Banking Supervision, 2001).

The 1988 Basel Capital Accord or Basel I (Basel Committee on Banking Supervision (1988)), which set minimum capital standards for internationally active banks, was actually the first international accord of its kind. Basel I set a capital ratio of 8% of risk-adjusted assets and was adopted by more than 100 countries (Insurance Advisory Board, 2002:1). It requires banks to divide their exposures up into broad “classes” reflecting similar types of borrowers. Exposures to the same category of borrower, such as all exposures to corporate borrowers are subject to the same capital requirement, regardless of potential differences in the creditworthiness and risk that each individual borrower might pose. Under Basel I each bank must maintain a total risk-weighted capital ratio defined as the ratio of bank capital to bank’s risk weighted assets, of at least 8%, with the weights depending on the institutional nature of the borrower.

Under Basel I, the same risk weight thus applies to all loans of a particular category; that is “one size-fits-all approach”. Consequently, this categorization does not reflect the risk that a particular borrower actually poses for the bank. The failure to distinguish between loans of different degrees of credit risk created the incentive for arbitrage activities thus undermining its

effectiveness (Jones, 2000). Basel I on which the world's regulatory capital has been based for more than ten years was a genuine step forward for most countries' capital rules and a turning point for international cooperation among the world's supervisors. However, advances in risk management practices, technology and innovation have accelerated considerably such that Basel I cannot provide the industrial world's largest and most complex organizations with a regulatory capital requirement that reflects their underlying risk exposures (Ferguson, 2003a:2).

According to Vice Chairman Roger Ferguson of the Federal Reserve Board, "Basel I ignores techniques that the largest banks have adopted to mitigate risk. Its overly simple risk weights induce large banks to game the rules by shifting to the market those exposures that the market judges require less capital than the regulations do and by retaining the exposures with a regulatory charge that is lower than the market perceives is necessary". Such capital arbitrage has greatly reduced the usefulness of regulatory capital ratios at the largest banks and provides little useful information to the public or supervisor. This lack of risk sensitivity under Basel I distorts economic decision-making. Banks are encouraged to structure transactions to minimize regulatory requirements or, in some cases, to undertake transactions whose main purpose is to reduce capital requirements with no commensurate reduction in actual risk taking (Citigroup, 2003).

A new framework for capital requirements, Basel II, also established by the Basel Committee on Banking Supervision (BCBS), has been brought forth to address some of the major shortcomings of Basel I and thus foster stability in the financial system. The fundamental objective of the framework is to further strengthen the soundness and stability of the international banking system while maintaining sufficient consistency that capital adequacy regulation will not be a significant source of competitive inequality among internationally active banks.

One of the Central changes proposed by Basel II is an increased sensitivity of a bank's capital requirement to the risk of its assets: the amount of capital that a bank has to hold against a given exposure becomes a function of the estimated credit risk of that exposure. Consequently, the constant risk weight of 100% for commercial and industrial (C&I) loans, thus is replaced by a variable weight, so that C&I loans with a low credit rating and a high probability of default are assigned a high risk weight. Hence, under Basel II the risks weights used to compute bank capital requirements are determined both by the category of borrower and the risk rating of each borrower. (Ernst & Young, 2006)

Basel II is founded on three complementary pillars:

- (i) Pillar 1: Minimum capital requirements - establishes the capital requirements for credit risk, market risk and operational risk
- (ii) Pillar 2: Supervisory review process - outlines the requirement on bank's management of risks and capital and defines the roles and powers of the supervisors. Supervisors should be more active in the review of bank's risk profiles, risk management practices and risk-bearing capacity.
- (iii) Pillar 3: Market discipline - sets out requirements on banks for public disclosures; namely the obligation to publish information on their business profile, risk exposure and risk management. Better information on banks helps to improve the functioning of market discipline.

“Basel II embraces a comprehensive approach to risk management and bank supervision,” explained Jean-Claude Trichet (Basel Committee on Banking Supervision, 2004a:1), Chairman of the G10 group of central bank governors and heads of supervisory authorities and President of the European Central Bank. “It will enhance banks’ safety and soundness, strengthen the stability of the financial system as a whole, and improve the financial sector’s ability to serve as a source for sustainable growth for the broader economy”.

The overall goal of Basel II is to promote adequate capitalization of banks and to promote improvement in risk management thus strengthening the stability of the financial system. Basel II uses three pillars that underline each other and create incentives for banks to enhance the quality of their internal control process. Pillar I enhance the Basel I Accord’s guideline by aligning the minimum capital requirements more closely to each bank’s actual risk of economic loss. It improves capital framework sensitivity to the risk of credit losses by requiring higher levels of capital requirements for those borrowers assessed to present high credit risks and vice versa. Thakor and Wilson (1995) argue that higher capital requirements may induce borrowers to shift to capital markets and in the process impair capital allocation, while Gorton and Winton (2000) show that raising capital requirements can increase the cost of capital.

Two approaches are available to banks and supervisors to evaluate the sophistication of banks’ activities and internal controls, and then determine the minimum capital requirements for credit risk.

The Standardization approach-Here the risk weight associated with each loan is based on an external rating institution’s assessment of the counterparty risk. This means that less risky loans of a given category will be assigned a smaller percentage of risk weight than those loans given to the riskiest firms in the same loan category. Notwithstanding, capital charges for loans to unrated companies essentially remain unchanged when compared to Basel I. Van Rixten, Alexopoulou, and Harada (2003) argue that the standardized approach may give similar results to those of Basel I regulation when there are no external ratings for a large fractions of corporate loans.

The Internal Ratings Based (IRB) Approach. In this approach, the estimated credit risk and the consequent risk weights are assumed to be a function of four parameters associated with each loan: the probability of default (PD), the loss of given default (LGD), the exposure at default (EAD) and the loans maturity (M). Banks adopting the ‘Foundation’ variant of the IRB approach provide only the PD parameter while the other three parameters are set externally by the regulatory authorities. Banks that adopt the ‘Advanced’ variant of the IRB approach provide the four parameters themselves from their own internal rating models. However, Vernon, (2004)observed that since Basel II contains a long list of requirements that a bank must fulfill to be eligible for IRB, the approach may entail incurring high fixed cost which may not be easily available for the smaller and less sophisticated banks. On the contrary, Lind (2005) points out that there is an incentive for banks to move to the IRB approach since the required capital is more closely aligned with each bank’s actual risk which may imply a lower capital requirement. While the Quantitative Impact Study 5(QIS 5) by the Committee of European Banking Supervisors (2006) concluded that for a sample of European banks, minimum capital required under Pillar I would decrease in comparison to Basel I especially if banks used more advanced approaches to compute their minimum capital requirements. Macroeconomic conditions as Zsomboki (2007) points out influence the results said above based on the period. The level of

sensitivity to changes of the risk parameters influence the results, whether low or high capital requirements.

A research done by the Financial Stability Institute (2006) asserted that in Asia, 100 per cent of respondents (banks) intended to implement Basel II at some point over 2007-2015. This finding was quite striking given that a fairly large numbers of low-income countries are located in Asia. But more detailed information from the FSI survey showed that intention of adopting Basel II does not necessarily mean doing it then. In Latin America, 86 per cent of respondents intended to implement Basel II between 2007 and 2015. The lowest adherence rate was observed in the Caribbean, where only 57 per cent of respondents expressed plans to implement Basel II until 2015. This considerably lower rate was probably due to the small size of Caribbean countries and therefore their lack of human resources to deal with Basel II, even though they are either middle- or high income countries (FSI, 2006).

FSI (2006) indicated that in Africa, 71 per cent of respondents intended to implement Basel II. This figure was lower than the other regions (except the Caribbean), but still fairly high. However, looking more carefully at the results from the FSI survey, the study concluded that implementation of Basel II in Africa will be very gradual. In 2007, only two countries had intended to move to Pillar 1, and both countries planned to do so through adopting the standardized approach. The two countries accounted for just 12 per cent of the total number of respondents in the continent. This implied that the 10 other countries that intended to adopt Basel II will either start later than 2007 or will start that year through implementing Pillars 2 and 3 first. The number of countries adopting the standardized approach then increased gradually to nine – or 53 per cent of the total – in the period 2010-2015.

The studies by FSI (2006) and KPMG (2004) indicated that the vast majority of countries are adopting the ‘better wait’ and the gradual approaches, in face of the huge challenges posed by Basel II. The main challenges causing the “wait and see” attitude were summed up by Ricardo (2006) as capacity to validate models and monitor their use, presence of foreign banks, collaboration between home and host supervisors, competitiveness, credit portfolio concentration, pro-cyclicality and technical support.

3.0 RESEARCH METHODOLOGY

This study adopted a descriptive survey design. The number of banks identified as the population was 45 and the study targeted the top management of the banks especially those departments that may be directly charged with risks and compliance, strategy formulation and change management. Since the population consisted of 45 banks, a census was taken. A self-report questionnaire was the data collecting instrument used in this study. Consequently, a questionnaire was handed out to each bank bringing the total number of questionnaires to 45. A nonrandom sampling/purposive sampling technique was used and managers in risk management, audit, operations and finance were highly preferred respondents. The data collected was analyzed by use of descriptive statistics. In particular, frequency tables and proportions or percentages were used. The data were then be presented using pie charts, histograms, bar graphs.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

The response rate in this study was 100%. Every questionnaire presented to each of the 45 banks was returned.

4.2 Extent of Compliance with Prerequisites to Basel II

One of the objectives of the study was to establish the extent of compliance with prerequisites to Basel II. Consequently, it is important to find out whether the banks had fully complied with Basel I, adoption of risk based supervision and adherence of the Basel core principles on supervision. Findings in this study indicated that the majority of banks, 56 percent, disagreed with the statement that the bank's assets had been classified into four categories of risk. The findings implied that the banks were yet to comply with Basel I which stipulated that the banks' assets should be classified according to four categories of risks namely: Interbank loans on OECD countries, loans fully secured by a mortgage on residential property, industrial and commercial loans, and government issued security in OECD countries.

Table 1: Classification of Assets into Four Categories of Risk

To what extent do you agree with the statement that the bank assets been classified into four categories of risk?	Response	% Response
Strongly agree	10	22%
Moderately agree	3	7%
Agree	7	16%
Disagree	25	56%
Strongly disagree	0	0%

On the question of whether the banks have complied with the 8% capital rule on the risk weighted assets, the majority response, 71 percent, indicated no compliance. This finding agrees with other findings in this study which indicated that the banks have not segregated their assets into four categories of risk. Consequently, it is impossible to assign weights to such assets and hence the challenge in complying with the 8% capital rule.

Table 2: Compliance with 8% Capital Rule

To what extent has the bank complied with Basel 1 accord on holding 8% capital on risk weighted assets?	Response	% Response
Large extent	5	11%
Small extent	8	18%
No compliance	32	71%
Total	45	100%

Findings in this study indicate that the majority of banks, 62 percent, 56 percent, 53 percent, 51 percent and 60 percent disagreed with the statement that they had set up risk management structures, adopted risk based internal audit, strengthened management information systems and IT, addressed HRD issues such as manpower planning, selection and training on risk, and setting

compliance units. The finding implies that the commercial banks in Kenya are yet to comply with the prerequisite on adopting risk based supervision as well as effective adherence to Basel core principles for effective banking supervision.

Table 3: Compliance with Requirement to Adopt and Adhere to Risk Based Supervision

	% strongly agree	% agree	% disagree	% strongly disagree
Extent of adoption of risk based supervision				
Setting up risk management architecture	22%	9%	62%	7%
Adoption of Risk Based Internal Audit	16%	18%	56%	11%
Strengthening of Management Information System and IT	27%	13%	53%	7%
Addressing HRD issues such as manpower planning, selection and training on risk	33%	7%	51%	9%
Setting Up Compliance Units	29%	9%	60%	2%

4.3 Challenges Facing the Implementation of Basel II Prerequisites

Study findings indicate that the majority of respondents, 67 percent, agreed with the statement that lack of expertise presented a challenge in the implementation of Basel II prerequisites. While 22 percent disagreed with the statement, 11 percent could not make up their mind on this issue. These findings are consistent to literature review which points out that lack of expertise in the field of setting up a risk management framework, adoption of risk based internal audit and the implementation of the 8% capital rule.

Table 4: Challenges of Implementing Basel II Accord

Has lack of expertise presented a challenge in the implementation of Basel II accord prerequisite?	Response	% Response
Yes	30	67%
No	10	22%
Can't tell	5	11%
Total	45	100%

The majority of respondents, in this study, 82 percent, agreed with the statement that lack of credit information on assets led has led to the non-implementation of the Basel II accord. Meanwhile, 7 percent disagreed while a further 11 percent could not make up their mind on the issue. The findings are consistent with those of Ricardo (2006) which asserted that the reason why less developed countries have not implemented the Basel II prerequisites is because they don't have credit bureaus and even if they had, the penetration was low. Consequently, it was

difficult if not impossible to gather information on the credit worthiness of clients and the risk of the various assets.

Table 5: Challenges of Implementing Basel II Accord Prerequisites

Has lack of credit information on assets led to non-implementation of the accord?	Response	% Response
Yes	37	82%
No	3	7%
Can't tell	5	11%
Total	45	100%

The majority of respondents in this study, 53 percent agreed with the statement that poor supervision from Central Bank had contributed to the lack of implementation of Basel II prerequisites. 27 percent disagreed with the statement, while 20 percent could not make up their mind on the issue. The finding agrees with literature review which points out that a poor regulatory framework is one of the challenges affecting the adoption of the Basel core principles. It can also be noted that in the near past, many banks such as Charter House bank, Dubai bank, Trade bank, National bank among others have fallen victim to mismanagement to appoint where some were put under receivership. The mismanagement occurred under the observed central bank regulatory vacuum.

Table 6: Challenges of Implementing Basel II Accord Prerequisites

Has poor supervision from the central bank contributed to the lack of implementation of Basel II prerequisites?	Response	% Response
Yes	24	53%
No	12	27%
Can't tell	9	20%
Total	45	100%

The majority of the respondents, 40 percent, strongly agreed with the statement that political unrest had led to lack of implementation of the Basel II prerequisites. 13 percent moderately agreed, 9 percent agreed, 33 percent disagreed while 4 percent strongly disagreed. The findings imply that the political unrest which has been experienced by the country since the 2007 general election has had its impact on the economy in general and the banking sector in particular.

Table 7: Challenges of Implementing Basel II Accord Prerequisites

To what extent do you agree with the statement that political unrest has led to lack of implementation of the accord?	Response	% Response
Strongly agree	18	40%
Moderately agree	6	13%
Agree	4	9%
Disagree	15	33%
Strongly disagree	2	4%
Total	45	100%

4.4 Expected Rate of Adoption of Basel II Accord and Perceived Benefits

The majority of the respondents, 93percent, intended to adopt/implement Basel II accord. Meanwhile, 4 percent did not intend to do so while 2 percent could not make up their mind on the issue. The findings imply that the commercial banks in Kenya are interested in adopting Basel II accord. The above findings are supported by those of FSI (2006) which asserted that 71 percent of banks in sub-Saharan Africa intend to adopt Basel II accord.

Table 8: Adoption of Basel II Accord

Do you intend to implement Basel II Accord?	Response	% Response
Yes	42	93%
No	2	4%
Can't tell	1	2%
	45	100%

Out of the 42 respondents who indicated that they have an intention to adopt Basel II, the majority, 64 percent, intended to do so in two years' time. 26 percent intended to adopt Basel II in three years' time while 5 percent intended to adopt the Basel II accord in five years. Only 5 percent of the banks intended to adopt Basel II in the course of the year. The findings are supported by those of FSI (2006) which asserted that the majority of banks in Africa intend to adopt Basel II not immediately but rather before the year 2015.

Table 9: Adoption of Basel II Accord

If your answer to question 14 was yes, how soon do you plan to do adopt Basel II accord?	Response	% Response
A year's time	2	5%
Two years' time	27	64%
Three years' time	11	26%
5 years' time	2	5%
	42	100%

The majority of the respondents, 86 percent, indicated that they would start with Pillar –I (minimum capital requirement). 10 percent indicated that they would start with Pillar II-supervisory Review process while the remainder, 5 percent, indicated that they would start with Pillar III(Market discipline). The findings agree with those of FSI (2006).

Table 10: Adoption of Basel II Accord

If your answer to question 14 was yes, which of the three Basel II pillars would you start with?	Response	% Response
Pillar I-Minimum Capital Requirement	36	86%
Pillar II-Supervisory review process	4	10%
Pillar III-Market discipline	2	5%
Total	42	100%

The majority of respondents, 83 percent, indicated that if they adopted Pillar I before other pillars, they would then implement the standardized approach. Meanwhile, 11 percent would implement the Foundations-Internal Ratings Based (F-IRB) approach while the remainder, 6 percent, would implement the Advanced Internal Ratings (A-IRB) approach. The findings agree with those of FSI (2006) which assert that the preference towards standardized approach as opposed to the other two approaches is because of simplicity in application. However, Harada (2003) argue that, notwithstanding the use of the standardization approach, capital charges for loans to unrated companies essentially remain unchanged when compared to Basel I. Consequently, this study asserts that the reason for preference of the standardization approach is because it is almost similar to Basel I especially in reference to capital charges for unrated companies.

Table 11: Adoption of Basel II Accord

If your answer to question 16 was Pillar I, Which of the three pillar I approaches would you start with	Response	% Response
Standardized approach	30	83%
F-IRB approach	4	11%
A-IRB approach	2	6%
Total	36	100%

The majority of respondents in this study, 76 percent, 82 percent, 71 percent and 84 percent strongly agreed that the potential benefits of moving from Basel I to II included improved financial performance, reduction of capital requirements, improved competitiveness and accurate risk measurement respectively. These findings agree with those of Zsamboki (2006), Ricardo (2006) and the Committee for European Bank supervisors (2006).

Table 12: Adoption of Basel II Accord

To what extent do you agree that the following are potential benefits of moving from Basel I to Basel II?	% strongly agree	% agree	% disagree	% strongly disagree
Improved financial performance	76%	4%	11%	9%
Reduction of capital requirements	82%	2%	7%	9%
Improved competitiveness	71%	7%	11%	11%
Accurate risk measurements	84%	9%	4%	2%

4.5 Supplementary information from Central Bank

In this section, supplementary information collected from the banks' supervisory department yielded the following results.

The Central Bank of Kenya (Bank Supervision Department) indicted the level of awareness of Basel II by banking institutions as low. The banking supervision department attributed this level of awareness to lack of prerequisite human resource competences, Basel II is not considered a competitive tool and it is not a regulatory requirement.

According to the Banking Supervision Department Manager, there was average compliance to the 8% capital rule by commercial banks in Kenya. In addition, there was average compliance to the risk based supervision prerequisite and the adherence to the Basel Core Principles for Effective Banking Supervision. The findings are consistent with those of a survey on the implementation of Basel II carried out by Central Bank in December 2008.

Findings from the Bank Supervision department of central bank indicate that the rate of Basel II adoption is dependent to a large extent on the ownership structure. Consequently, foreign owned banks were more likely to adopt Basel II in the near future as opposed to locally owned. The Bank supervision attributed this finding to the fact that foreign owned banks had already implemented Basel II in the home country. In addition, foreign owned banks were in a better position to guide their local operation in the implementation of Basel II coupled with the provision of an adequate implementation budget. These findings were consistent with those of a survey on the implementation of Basel II carried out by Central Bank in December 2008.

The rate of adoption of Basel II was to large extent dependent on the financial performance, the share capital and the asset base. According to the Bank Supervision Department, banks with good financial were more likely to adopt Basel II as opposed to banks with poor financial performance. The finding indicates that well performing banks were in a better position to allocate a budget for Basel II implementation.

It was also indicated by the Central Banking Supervision Department that the rate of Basel II adoption was largely dependent on whether the bank was listed on the Nairobi Stock Exchange or not. According to Central Bank, listed banks were much more prepared to adopt than unlisted banks.

On challenges facing banks in the implementation of Basel II, the Bank Supervision Department of Central bank indicated that the standardized approach to assessing the credit risk charge under Pillar I relies on ratings by External Credit Rating Agencies. However, banks in Kenya do not rely on External Ratings save for their international counterparties and large corporate counterparties. This finding is consistent with the limited credit rating penetration in the country. Unrated exposures under the standardized approach would attract higher risk weights and thus more capital would be required to be set aside for such exposures.

In addition, Basel II allows for the use of internal models by banks to determine their capital charges pursuant to supervisory approval. However, these models require the use of up to five years data. Kenyan banks are by and large yet to adopt model based approaches to assessing their capital adequacy needs. Some international banks are however using models developed at their international headquarters. A transition period will therefore be required for Kenyan banks to collect the requisite data for the models.

The Banking Supervision Department also cited human resources competences as a cross cutting challenge. Basel II will require banks to upscale their human resource base and a ‘talent war’ in the banking sector can be anticipated going forward.

Upgrades and overhauls of existing I.T. systems for most banks will be required. Robust, scalable systems will be required to ensure banks can meet the rigorous Basel II information requirements.

The challenges notwithstanding, it was noted by the Bank Supervision department that most Kenyans banks are ready to embrace the enhanced risk and capital management practices that come with Basel II. In this regard, the Central Bank of Kenya is in the process of formulating a policy position on Basel II implementation in Kenya. This position will be informed by implementation of the Basel II prerequisites, the survey results and input from market players. It is anticipated that the policy position will be shared with market players before its' adoption.

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Findings

One of the objectives of the study was to establish the extent of compliance with prerequisites to Basel II. Findings in this study indicated that the majority of banks disagreed with the statement that the banks' assets have been classified into four categories of risk. This finding implies that the banks are yet to comply with Basel I. In addition, findings in this study indicate that the majority of the banks had not complied with the 8% capital rule in addition to the failure to classify assets into the stipulated four categories. Findings in this study indicate that the majority of banks, had not set up risk management structures, adopted risk based internal audit , strengthened management information systems and IT, addressed HRD issues such as manpower planning, selection and training on risk, and setting compliance units. The finding implies that the commercial banks in Kenya are yet to comply with the prerequisite on adopting risk based supervision as well as effective adherence to Basel core principles for effective banking supervision. The above findings agree with the supplementary findings from the Banking Supervision Department of Central Bank.

Another objective of the study was to establish the challenges faced by banks in the implementation of Basel II prerequisites. Study findings indicate that the majority of banks agreed with the statement that lack of expertise presented a challenge in the implementation of Basel II prerequisites. Other challenges established in this study were lack of credit information on assets, poor supervision from Central Bank and political unrest. These findings are consistent with supplementary information gathered from the Central bank.

Findings in this study indicated that the majority of the commercial banks in Kenya intended to adopt Basel II. Out of the 42 respondents who indicated that they have an intention to adopt Basel II, the majority, intended to do so in two years' time. The study findings also indicated that the majority of those who intended to adopt Basel II would start with Pillar –I (minimum capital requirement). In addition, the majority of those adopting Pillar I before other pillars, would then implement the standardized approach as opposed to the F-IRB or A-IRB approaches. Study findings indicated that the perceived benefits of adopting Basel II include improved financial performance, reduction of capital requirements, improved competitiveness and accurate risk measurement

5.2 Conclusions

Study findings indicate that commercial banks have yet to comply with the 8% capital rule (Basel I), adoption of risk based supervision and adherence of the Basel core principles on supervision. The study thus concludes that commercial banks in Kenya are yet to adopt and implement Basel II prerequisites. The study also concludes that the most significant challenges

facing the commercial banks in the adoption and implementation of Basel II prerequisites included lack of expertise and lack of credit information on assets among others. From the study, it can be concluded that commercial banks in Kenya intend to adopt and implement Basel II in the near future. Finally, it can be concluded from this study that the perceived advantages of adopting Basel II include reduced minimum capital requirements, competitiveness, improved financial performance and accurate risk measurement

5.3 Recommendations

First and foremost, the Central Bank of Kenya in collaboration with the commercial banks should address the challenge of lack of expertise. As noted in the study, lack of address the challenge of lack of expertise. As noted in the study, lack of expertise is the biggest hindrance to the implementation of Basel II prerequisites as well as Basel II itself. The two stakeholders need to hold workshops to impart information on issues relating to Basel II and its prerequisites. In addition, commercial banks need to sponsor their members cross exposure programs to other banks in other countries.

It is also recommended in this study that the Central Bank should improve on its regulation by addressing the regulatory framework covering the business linkages such as banking and telephony products such as Mpesa and Zap, banking and bancassurance products.

The creation of a credit reference bureau would go a long way into solving the challenge of credit information availability. Consequently, banks would be in a position to evaluate the risk of the various assets and thereafter implement both Basel II and its prerequisites.

5.4 Suggestions for Further Studies

The study recommends an empirical study on the relationship between adoption of Basel II accord and the financial performance of commercial banks. The independent variable in such a study would be the costs/investment in measures leading to Basel II adoption while the dependent variable should be the net operating income of the commercial banks.

REFERENCES

- Basel Committee on Banking Supervision (1988). International convergence of capital measurement and capital standards.
- Basel Committee on Banking Supervision (1999, 2001, 2003). 'The New Basel Capital Accord,' consultative documents, available at <http://www.bis.org/bcbs>.
- Basel Committee on Banking Supervision (2003). Quantitative impact study 3: Overview of global results', [http:// www.bis.org/bcbs/qis/qis3results.pdf](http://www.bis.org/bcbs/qis/qis3results.pdf).
- Bernanke, B., Gertler (1990). Financial fragility and economic performance. *Quarterly Journal of Economy*, 105(1).

- Citigroup (2003) 'Response to the consultative document: The New Basel Capital Accord', 31st July, available at <http://www.bis.org/bcbs/cp3/citigroup.pdf>.
- Commission of the European Communities (2004). 'Review of capital requirements for banks and investment firms — Commission services. Third Consultation Paper, feedback on responses received.
- Croft, J. (2003). Capital rules to cost banks up to euros 200m. *Financial Times*, 5th June.
- Croft, J. (2004). FSA plans to charge banks for work on new rules. *Financial Times*, 26th February.
- Ernst & Young (2006). *Global Basel II Survey, Basel II: The business impact*, Ernst & Young, Adelaide, available at: www.ey.com.
- Financial Stability Institute, (2006). *Implementation of the New Capital Adequacy Framework in non-Basel Committee Member Countries. Summary of the Responses to the 2006 Follow-Up Questionnaire on Basel II Implementation*, Occasional Paper No. 6 (Basel: BIS. September 2006)
- Gorton G., & Winton, A. (2000). Liquidity provision, bank capital, and the macro-economy. working paper http://papers.ssrn.com/sol3/papers.cfm?abstract_id=253849 .
- Honohan, P., & Klingebiel, D. (2000). Controlling fiscal costs of banking crises. KPMG (2004), *Results of the Basel II Survey 2003 – Eight Questions on the New Basel Accord*, KPMG International Basel II Services, New York, NY.
- Lastra, B. M. (2004). Risk-based capital requirements and their impact upon the banking industry: Basel II and CAD III. *Journal of Financial Regulation and Compliance*, 12(3), 225-240.
- Lind, G. (2005). Basel II: The new framework for bank capital. *Riksbank, Economic Review*, 2/2005, 22-38. Policy Research Working Paper No.2441, World Bank.
- Ricardo G. (2006). *Basel II implementation in developing countries and effects on SME development* Issue Paper prepared for the ICRIER- InWent Conference on 'Financial Globalisation and Domestic Financial Sector Development', to be held in New Delhi, 22-23 November 2006.

- Rowe, D., Jovic, D., & Reeves, R. (2004). Bank capital management in the light of Basel II", *Journal of Performance Management*, 17(1), 15-25.
- Thakor, A. (1996). The design of financial systems: An overview", *Journal Banking and Finance*, 20, .917-48.
- Thakor, A. V., & Wilson, P. T. (1995). Capital requirements, loan renegotiation and the borrower's choice of financing source. *Journal of Banking and Finance*, 19, 693-771.
- Van Rixten, A., Alexopoulou, I., & Harada, K. (2003). *The New Basel Capital Accord and its impact on Japanese banking: A qualitative analysis*. Center for Economic Institutions Working Paper, Tokyo, p. 27.
- Vernon, M. (2004). Regulation aimed at curbing the excesses of the 1990s. *Financial Times*, 16th January.
- Wilson, I. (2004). Implementing Basel II: A case study based on the Barclays Basel II preparations. *Journal of Financial Regulation and Compliance*, 12(4), 297-306.
- Zsámboki, B. (2007). *Basel II and financial stability. An investigation of sensitivity and cyclicity of capital requirements based on QIS 5*, published under MNB Occasional Papers.