

**BASEL III: HIGHLIGHTS OF THE EXPERIENCES OF NIGERIA, KENYA, AND  
SOUTH AFRICA ON THE INTRODUCED LIQUIDITY (HQLA) REGULATIONS**

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

The works in Chapters 5 and 6 of the thesis have appeared respectively in publications as follows:

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## **Abstract**

The global Basel regulations that gave birth to Basel III liquidity (HQLA) standards come with benefits though masked with criticisms and challenges especially in developing economies. The experiences of Nigeria, Kenya, and South Africa are highlighted to bring to knowledge the inadequacy of a 'top-down' approach that brings about poor implementation and compliance of introduced regulations. Available literature and data using a mix of doctrinal, descriptive, and comparative research methods have proven that Nigeria, Kenya, and South Africa are applying Basel liquidity (HQLA) regulations though selectively and differently with the same end target. The three SSA countries maintain strong liquidity in their banking systems with less profit within the framework of existing regulations. Although South Africa is fully compliant with all the introduced Basel regulations, there is no known significant difference in liquidity (HQLA) maintenance between the country, and Nigeria and Kenya that are yet to implement Basel II and III, respectively.

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## Chapter One

### Introduction

#### 1.1 Introduction/Background

Generally, the business of banking at the basic level is mostly money deposits, borrowing from depositors, and lending such money to borrowers to make a profit.<sup>1</sup> However, in practice, a bank often lends out amounts that are significantly above its deposit base that usually results in a mismatch between its deposits and loan portfolios. The consequence of this practice can lead to bank failure or a financial crisis such as the 2007 global financial crisis.

The crisis exposed how liquidity can quickly disappear, and how illiquidity can last for so long in the banking system. Subsequently, the Basel Committee on Banking Supervision (BCBS) introduced internationally harmonised global liquidity standards under Basel III to create a more resilient banking sector.<sup>2</sup> Basel III liquidity regulatory standard is the first attempt by the Basel Committee to provide a quantitative framework for regulating liquidity in banks.<sup>3</sup>

These liquidity standards aim to establish minimum requirements and encourage international level playing field for banks.<sup>4</sup> In order to achieve sufficient liquidity, a bank must maintain a balance between its short-term assets and short-term liabilities.<sup>5</sup> Also, sufficient liquidity in the banking sector can be maintained and managed by monitoring and projecting the cash flow needs of banks.<sup>6</sup>

A further breakdown of the new liquidity framework shows the introduction of Liquidity Coverage Ratio (LCR) that provides for the short-term resilience of acute stress scenario lasting for one month, and the Net Stable Funding Ratio (NSFR) for the long-

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<sup>1</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' (2011) 30(5) Banking and Financial Services Policy Report. 1

<sup>2</sup> Basel Committee on Banking Supervision, 'Basel III: A Global Regulatory Framework for more Resilient Banks and Banking System' (2010) <https://www.bis.org/publ/bcbs189.pdf> Accessed on 10 November, 2017.

<sup>3</sup> Jan Frait and Vladimir Tomslk, 'Impact and Implication Challenges of the Basel Framework for Emerging Developing and Small Economies' (2014) 56(4) Comparative Economic Studies. 493

<sup>4</sup> Basel Committee on Banking Supervision, 'Basel III: A Global Regulatory Framework for more Resilient Banks and Banking System' Supra. n.2

<sup>5</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.5

<sup>6</sup> Obiageri. C. Ndukwe, 'Understanding Monetary Policy Series No 34: Banking System Liquidity' (2013) Central Bank of Nigeria, <https://www.cbn.gov.ng> Accessed 13<sup>th</sup> February, 2018.

term with a time horizon of one year.<sup>7</sup> In addition to the LCR requirements, a liquidity buffer known as high-quality liquid assets (HQLA) was introduced to guard against unexpected risks.

HQLA as stated in Larsen are assets sufficient to be held by banks covering estimated cash outflows within a 30-day stress period.<sup>8</sup> The Basel Committee outlined factors that can be considered in determining whether an asset will be included in the stock of HQLA. These factors are divided into fundamental characteristics and market-related characteristics.<sup>9</sup>

Additionally, HQLA comprises of level 1 Assets and level 2 Assets that are further divided into two (level 2A Assets and level 2B Assets). Basel III provides for the stock of HQLA to be well diversified within the asset classes so that they can easily be liquidated in a stress period to cover the outflow of liabilities. This is because of the impossibility of knowing with certainty which specific asset within each asset class that may be subject to shocks ex-post.<sup>10</sup>

Although Basel III liquidity regulatory requirements are likely to be retained to an extent in the regulation of developing economies, they are designed mainly for large internationally active banks in BCBS member states.<sup>11</sup> Also, Chatterjee referred to such 'internationally active banks' whereby he stated that asset market liquidity is a determinant of bank liquidity creation, and that is true for large banks with total assets of more than \$3 billion.<sup>12</sup>

However, different authors have argued against the liquidity framework for being exclusive for the developed nations at the detriment of the developing economies, especially those that are home countries to the so-called big banks. Lyngen pointed out that the possible exploitation of regulators in favour of their country establishments

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<sup>7</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' (2013) <https://www.bis.org/publ/bcbs238.pdf> Accessed on 13 November, 2017.

<sup>8</sup> Jan Larsen, 'High-Quality Liquid Assets: Not Just a Requirement but an Opportunity', (2015) 97(8) *The RMA Journal*, 12-21

<sup>9</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' *Supra.n.5*

<sup>10</sup> *Ibid*

<sup>11</sup> Jan Frait and Vladimir Tomslk, 'Impact and Implication Challenges of the Basel Framework for Emerging Developing and small Economies' *Supra.n.3*

<sup>12</sup> Chatterjee U. K. 'Bank Liquidity Creation and Asset Market Liquidity', (2015) 18 *Journal of Financial Stability*, 139-153

can jeopardise the need for discretion to 'accommodate differences in domestic regulated sectors and to encourage State adoption of Basel Accords'.<sup>13</sup>

Also, Cecchetti et al. are of the position that there is a great prospect in the future impact of global banking by implementing liquidity regulations locally, and in alliance with country-specific requirements.<sup>14</sup> Furthermore, Ramlall and Mamode stated that Basel III provided insight into the methodology of the challenges in the general implementation of Basel regulations without considering country specifics.<sup>15</sup>

Therefore, implementing this new liquidity framework by emerging economies such as Nigeria and Kenya that entails banks holding stocks of HQLA to withstand stressed periods can be challenging. These challenges include a lack of availability of diversified HQLA and a higher share of foreign currency-denominated banking assets and liabilities.<sup>16</sup>

One implication of such limited HQLA availability is low-profit yield by banks because of a large amount of cash being held in stock.<sup>17</sup> Also, the unique characteristics of depositors can pose a problem because of heavy reliance on deposits for funding in their (developing economies) banking systems.<sup>18</sup> These challenges are to be discussed by answering vital research questions in broader terms and using set objectives in arriving at detailed conclusions.

Also, this thesis will compare the experiences of Nigeria, Kenya, and South Africa in representation of the Sub-Saharan African (SSA) region and developing economies in general. These three countries are chosen for the purpose of this thesis because of their leading economic positions within their respective communities of the SSA region.

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<sup>13</sup> Narissa Lyngen, 'Basel III: Dynamics of State Implementation' (2012) (53)2 Harvard International Law Journal

<sup>14</sup> Stephen G. Cecchetti, Dietrich Domanski, Goetz von Peter 'New Regulation and the New World of Global Banking,' (2011) 216 (216) National Institute Economic Review 29-40

<sup>15</sup> Ramlall I. and Mamode F., 'A Critical Assessment of Basel III and Its Implications on the Mauritian Banking Sector' (2017) (18)1 Journal of African Business

<sup>16</sup> Jan Frait and Vladimir Tomsik, 'Impact and Implication Challenges of the Basel Framework for Emerging Developing and Small Economies' Supra.n.3

<sup>17</sup> Augustine Das Babu, 'Shortage of High Quality Liquid Assets Pose Challenges to Liquidity Coverage Ratios' (18 September, 2016) <https://0-search-proquest-com.wam.leeds.ac.uk/docview/1820704602?pq-origsite=summon&accountid=14664> Accessed on 8 January, 2018

<sup>18</sup> Jan Frait and Vladimir Tomsik, 'Impact and Implication Challenges of the Basel Framework for Emerging Developing and Small Economies' Supra.n.3

The SSA is made up of forty-six countries with regional blocs that include the Economic Community of West African States (ECOWAS), East African Community (EAC), and Southern African Development Community (SADC). Baumgartner established that about 56.5 percent of the entire subcontinent's GDP in 2014 is concentrated in Nigeria, South Africa, and Kenya.<sup>19</sup>

Subsequently, Toh stated that only South Africa in Sub-Saharan Africa has achieved the conditions of an all-sector 'financial market development' while Nigeria and Kenya are grouped into other sectors.<sup>20</sup> Additionally, Sands cited Nigeria, South Africa, and Kenya in his paper as countries with great interests and applications in financial operational risks within the African continent.<sup>21</sup>

Nigeria and Kenya are arguably seen as nations that have their formal financial markets advanced at appropriate levels. In 2012, Nigeria had a GDP per capita of \$1555 and was ranked as the biggest economy in Sub-Saharan Africa.<sup>22</sup> Also, Stevis highlighted in her paper that Kenya being East Africa's biggest and most mature economy recorded a slower growth rate for 2017 but expected to record a gradual increase for the years 2018 and 2019, accordingly.<sup>23</sup>

## **1.2 Rationale for Study**

Most regulations are introduced without a holistic consultation that takes country specifics into consideration, especially developing markets. This has often created challenges in the regulatory system that portray developing economies as struggling. The primary justification of this thesis is hinged on three cardinal points of flaws, implementation, and compliance in relation to the new liquidity (HQLA) banking regulations.

In one of the points, Blundell-Wignall and Atkinson pointed out some potential flaws of the new liquidity regulations that include bias towards government bonds, especially

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<sup>19</sup> Boris Baumgartner, 'The Position of Sub-Saharan Countries in the World Economy' (2016) 9(33) *Studia Commercialia Bratislavenia*. 5

<sup>20</sup> Kiertisak Toh, 'Emerging Growth Economies in Sub-Saharan Africa' (2016) 61(2) *American Economist*. 229

<sup>21</sup> Mark Sand, 'Risk Management Booms in Sub-Saharan Africa' (2011) 12(3) *Operational Risk and Regulation*. 9

<sup>22</sup> Franklin K. Ngwu, 'Promoting Financial Formal Inclusion in Africa: An Institutional Re-examination of the Policies with a Case Study of Nigeria' (2015) 16(4) *Journal of Banking Regulation*. 306

<sup>23</sup> Matina Stevis, 'World news: Severe Drought Dims Outlook for Kenyan Economy (2017) *Wall Street Journal*, Eastern Edition, New York, N.Y. 16

in private sector participation; risk of solvency issues within some jurisdictions because of the application of globally harmonised liquidity requirement; and the implication of less profit because of banks being required to hold more liquid assets.<sup>24</sup>

Another point is the partial implementation of previous Basel regulations in the African sub-region. According to Calice, Africa in comparison to other regions was resilient in the last financial crisis owing to some factors such as the non-exposure of 'subprime-related structured credit products', and low levels of non-performing loans.<sup>25</sup> He went further to explain the effects and challenges of implementing Basel I and Basel II with the former having a more positive impact on most African countries.<sup>26</sup>

The other point is the issue of compliance. Apatachioae stated that in as much as Basel III regulations can reduce banking risks, the degree of compliance varies according to the development level of each country.<sup>27</sup> In essence, emerging markets such as the SSA region may struggle in this regard.

Therefore, this thesis having taken these three points into consideration aim to compare the experiences of Nigeria, Kenya, and South Africa with a focus on liquidity (HQLA), and in relation to understanding the balance that exists between adhering to liquidity regulations on the one hand and making profit on the other hand. Also, answers to the chosen research questions and objectives will help create a better understanding to this aim.

### **1.3 Research Questions and Objectives**

According to Alvesson and Sandberg, research questions are developed on the back of existing gaps and theories that can lead to more significant theories.<sup>28</sup> Also, research objectives define specific measurable outcomes that answers specific research questions.<sup>29</sup> This thesis seeks to highlight the experiences of emerging economies such as Nigeria, Kenya, and South Africa on the objectives of maintaining

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<sup>24</sup> Adrian Blundell-Wignall and Paul Atkinson, 'Thinking Beyond Basel III: Necessary Solutions for Capital and Liquidity', 2010(1) OECD Journal: Financial Market Trends, 9-33

<sup>25</sup> Calice P., 'Preliminary Assessment of the Implications of Financial Regulatory Reform for African Countries' (2010) African Development Bank Group. 3

<sup>26</sup> Ibid

<sup>27</sup> Adina Apatachioae 'The New Basel III Regulations on Liquidity and its Possible Effects', (2013) 2(4) Journal of Public Administration, Finance and Law, 136-147

<sup>28</sup> Mats Alvesson and Jorgen Sandberg, 'Generating Research questions Through Problematization', (2011) 36(2) Academy of Management Review, 247-271

<sup>29</sup> Patricia Farrugia, Bradley A. Petrisor, Forough Farrokhyar and Mohit Bhandari, 'Research Questions, Hypotheses and Objectives', (2010) 53(4), 278-281



the new Basel III liquidity (HQLA) framework. The thesis in defining such value focuses on three research questions:

- What is the basis of banking regulations?
- What is the mechanism for enforcing banking regulations?
- What is the objective of maintaining liquidity (HQLA) standards in a banking system?

The answers to these questions will be achieved using four objectives:

- Reflect on the basics of introducing Basel III liquidity (HQLA) regulations.
- Demonstrate an understanding to the path of banking regulations in Nigeria, Kenya, and South Africa.
- Highlight the parallel workings of liquidity supervision and operational (HQLA) standards in the banking systems of Nigeria, Kenya, and South Africa.
- Ascertain the balance that exists between banks holding onto liquid assets (HQLA) and making profit in the banking systems of Nigeria, Kenya, and South Africa.

#### **1.4 Research Methodology**

The thesis adopts qualitative research design using a mix of doctrinal, descriptive, and comparative methods in answering the research questions and objectives as set out in the succeeding chapters. The choice of qualitative research as opposed to the quantitative type is based on the research objectives that rely on principles of vital contexts in contrast to numerical measurements.

In applying the doctrinal research, this thesis focuses on the banking regulatory Acts and laws as applicable in Nigeria, Kenya, and South Africa. This is because doctrinal research as outlined in Hutchinson and Duncan focuses on existing laws and examines the correlation among given regulations.<sup>30</sup>

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<sup>30</sup> Terry Hutchinson and Duncan Nigel 'Defining and Describing What We Do: Doctrinal Legal Research', (2012) 17(1) Deakin Law Review, 84-119.

Consequently, descriptive research as explained by Dulock entails an accurate and systematic description of facts and attributes of a selected field of interest.<sup>31</sup> In the context of this research, the features and evidences of Basel regulations in general, and specifically liquidity (HQLA) regulations are described to give a vivid understanding of the introduction of Basel III liquidity regulations.

Additionally, comparative research deals with comparison in the context of policies, theories, and circumstances in different countries.<sup>32</sup> The conditions in relation to the set objectives are compared in countries of Nigeria, Kenya, and South Africa. This targets the similarities or otherwise the differences that exist using selected factors in these countries and as opposed to developed economies.

### **1.5 Data Collection and Ethical Review**

Data collection for this thesis is by secondary means and drawn from different online sources, journals, textbooks, and other publications. The University of Leeds library serves as the primary base for these collections with hard copies sourced from the shelves and online sources from electronic systems. Also, the British Library and Society of College, National and University Libraries (a membership association for all academic and national libraries in the UK and Ireland) are used as well.

Data such as online sources is obtained from BCBS website, Central Bank of Nigeria, Central Bank of Kenya, and Reserve Bank of South Africa websites respectively, amongst others. This gives credence to the data usage as it comes directly from a body source. Secondary data collection is chosen for this study in preference to primary data collection because of time, cost, distance, nature, and associated ethical issues, especially as the study cuts across different sovereign jurisdictions.

According to Glesne, ethical concerns are part of everyday interactions with collated data and research participants.<sup>33</sup> Also, Palys suggested that confidence can be inspired in research respondents if trust can be established that information about

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<sup>31</sup> Helen L. Dulock, 'Research Design: Descriptive Research' (1993) 10(4) *Journal of Paediatric Oncology Nursing*, 154.

<sup>32</sup> Robinson Gwen and Svensson Kerstin 'Fish Out of Water? Introduction to Methods of Comparative Research on Offender Supervision Practice', (2015) 7(3) *European Journal of Probation*, 171-178

<sup>33</sup> Corrine Glesne, *Becoming Qualitative Researchers: An Introduction* (Pearson, 3<sup>rd</sup> Edition, 2006)

them is safe.<sup>34</sup> Therefore, every stakeholder involved in a research project has a duty to one another.

In view of this, the research ethics of Leeds University were carefully studied to understand the ethical viewpoints. It is worthy to note that ethical review will not be required for this thesis though ethics is maintained in the use of other available data. This is reflected in the entire research work.

## **1.6 Relevance to Knowledge**

Available literature has shown that extensive work has been done on Basel capital requirements in contrast to liquidity requirements. This can be because the liquidity requirements introduced alongside the new Basel III regulations in 2010 has yet to gain global recognition. Also, existing literature has it that developing markets such as the SSA region are still struggling with the implementation of both Basel II and Basel III, respectively.

Furthermore, these new liquidity requirements that can ensure resilience and stability in the banking industry is argued to be a 'one size fits all' and raises the question of a difficult implementation because of negligence of peculiarities that exist in different countries. Additionally, some authors have written about the high cost of implementing these Basel regulations to the detriment of developing nations.

This thesis seeks to portray the experiences of developing economies through the SSA countries of Nigeria, Kenya, and South Africa in relation to the Basel III liquidity (HQLA) regulations, especially in the wake of the last global banking crisis. The emphasis is on banks having the ability to be profitable and resilient through the retention of HQLA as a basic component of satisfying banking liquidity standards.

The outcome is expected to be a pointer to the anticipated Basel IV regulations and probably, open the gateway for an all-inclusive consultation prior to the introduction of new global requirements. Also, it will enhance speedy regulatory implementation and compliance that reflects local content, especially within the developing economies.

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<sup>34</sup> T. S. Palys, *Research Decisions: Quantitative and Qualitative Perspectives* (Scarborough, 15<sup>th</sup> Edition, 2003)

## 1.7 Study Outline

**Chapter Two:** Different nations had at one time or the other developed banking standards that helped keep their respective banking systems in order. These varying standards were either seen as a hindrance to international trades or too weak to enforce stability in the respective banking systems. These observations were some of the reasons that were projected for the development of the global Basel framework by the BCBS that ensures stability and resilience of banks globally.

The chapter further describes the creation of Basel I and Basel II respectively, though overtaken by unmitigated events that had consequences. These descriptions led to the journey towards the introduction of the Basel III liquidity regulations with a focus on the Liquidity Coverage Ratio, and High-Quality Liquid Assets.

**Chapter Three:** This chapter highlights the benefits and challenges of applying Basel regulations, especially by developing nations. Also, issues such as Basel requirements being a pre-requisite to accessing global facilities are emphasised. Furthermore, attention was drawn to the options available for increasing and diversifying the HQLA stock. The objective is to create an understanding of the reasons as to how these developing markets embrace such global regulations as the Basel Standards.

**Chapter Four:** In the present day, banks are known to be guided by regulations that help ensure best practices. These regulatory practices were developed because of the crisis that befell respective banking systems, especially the SSA region. The journey of these banking regulations beginning from the colonial era in the respective countries of Nigeria, Kenya and South Africa are highlighted in this chapter.

Furthermore, the chapter describes how different banking crises helped shape the respective banking regulations of these countries. The chapter concludes with an indication of a pathway towards harmonisation of the SSA banking systems such as the Euro zone countries to reduce cost of banking and increase cross-border trade.

**Chapter Five:** This chapter portrays the parallel relationship that ought to exist between supervision and monitoring, and Basel regulations (liquidity standards). The liquidity (HQLA) working standards are described and compared in relationship to their application by Nigeria, Kenya, and South Africa banking systems. Also, the chapter

highlights and compares the supervisory and monitoring processes as applied in the selected banking systems of Nigeria, Kenya, and South Africa.

**Chapter Six:** The introduction of HQLA by the BCBS was to ensure that banks are resilient, stable, and profitable. This chapter compares the regulatory management of the banking systems of Nigeria, Kenya, and South Africa in maintaining adequate liquidity (HQLA). Also, it describes and compares the liquidity and profitability indices that determine the liquidity-regulatory balance in the banking systems of Nigeria, Kenya, and South Africa.

**Chapter Seven:** The recent Covid-19 pandemic has taken its toll on local and global economies. This chapter outlines the response to the pandemic by the BCBS and SSA banking systems in managing and maintaining liquidity during the Covid-19 era. Also, issues such as lending and supervisors' challenges during the pandemic are considered in understanding the positivity of the existing liquidity regulatory measures.

**Chapter Eight:** Chapter eight draws on highlights of the preceding chapters reflecting answers to the research questions and objectives. A conclusion is drawn based on assessment of the entire thesis with recommendations made in line with the overall objective of the research work.

## **1.8 Conclusion**

The business of banking has become a focal point in most economies of the global village. This is because trades and businesses are linked by a common transaction factor that is money and this is processed through banks. Although the BCBS developed banking regulations that were seen to be fit for purpose at the time, they were not able to stop the 2007 global financial crisis.

The financial crisis brought to light the importance of maintaining liquidity and this became central to the new Basel III regulations. The new liquidity framework made provisions for LCR to cover short-term resilience of one month and NSFR to cover long-term lasting for one year. A further breakdown of the LCR shows the introduction a liquidity buffer, HQLA that guards against unexpected risks.

In as much as these new liquidity standards especially the HQLA, are made to address the shortfalls of the last global financial crisis, they are not without flaws. One of such

flaws includes the non-consideration of 'country-specific' requirements especially from emerging markets in crafting of the new regulations.

Therefore, this thesis aims to share the experiences of SSA region using Nigeria, Kenya, and South Africa in highlighting some of the anomalies of the new liquidity (HQLA) regulations that promote resilience and stability at the expense of developing economies. One of the reasons for sharing these experiences is because local banking jurisdictions such as the SSA banking systems may have had their respective methods of maintaining healthy banking that are not considered in application of the new liquidity framework.

The experiences of Nigeria, Kenya and South Africa will be described and compared using data from secondary sources. The outcome of the thesis will add to the arguments that oppose the 'one size fits all' template, especially regarding the application of the HQLA standards that some authors argue to be less accommodating of the needs of emerging economies.

The end target of the thesis will be achieved through succeeding chapters that aim to address the research questions and objectives. The next chapter portrays the need to understand the creation of Basel Accord and the intended purpose, especially with regards to the new liquidity regulations (LCR-HQLA) in the wake of the last global financial crisis.

## Chapter Two

### Basics on the Introduction of Basel III Liquidity (LCR-HQLA) Regulations

#### 2.1 Introduction

Regulations and requirements are essential measures that help in the control and monitoring of activities such as in the banking industry. Also, these regulations and requirements can be overtaken by unforeseen events or non-adherence that can lead to crisis. Such crisis often comes with consequence that brings about changes and new regulations.

Therefore, regulation in the context of banking can be viewed as laws and rules that are applicable to banking.<sup>35</sup> Consequently, banking activities are constantly put under scrutiny because of their relationship with the external environment (economy of a jurisdiction or country). These banking activities must adapt to changes in the environment through a dynamic process that is very essential in the operation and development of local and global economies.

The adaptation to these changes through mediums such as regulations is necessary for the maintenance of capital and liquidity in banks. In the past century, various nations and regions have tried to manage their respective banking issues locally by enacting different regulations. However, since the expansion of the banking system globally, issues related to a banking jurisdiction such as foreign investments and cross-border transactions can affect other jurisdictions.

Such banking related issues have put the banking system and sovereign nations at cross-roads and most times bring about a downward turn of an entire nation's economy. These issues and some more led to the justification and genesis of harmonised banking regulations otherwise called Basel Accord.

The introduction of Basel Accord system with the provisions of Basel I and Basel II served their respective purposes but were unable to meet with the increased changing needs of the time. The inability of these Basel Accords to prevent financial crises has brought to question the competence of introducing Basel III. Moreover, some

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<sup>35</sup> Shitnaan Emmanuel Wapmuk, 'Banking Regulation and Supervision in Nigeria: An Analysis of the Effects of Banking Reforms on Banking Performance and Financial Stability' (2016) <https://usir.salford.ac.uk/id/eprint/42628/3/Shitnaan%20Wapmuk%20PHD%20Thesis.pdf> Accessed 30 January 2019.

developing economies such as nations within the SSA region are yet to implement the Basel II though unscathed during the last global financial crisis.

The last global financial crisis of 2007 brought about the need for more enhanced regulations that gave birth to Basel III. The highlights of Basel III include the introduction of LCR-HQLA and NSFR components with the view of supervising and keeping banking liquidity within a safety net. How these components help developing markets such as the SSA region that was barely affected by the 2007 global financial crisis is yet to be seen.

## 2.2 Rationale for Banking Regulations

Banking regulation as specified in Schooner and Taylor primarily ensures that banks are financially sound and well managed both within and outside a country.<sup>36</sup> Also, it is stated in Campbell and Cartwright as “the different ways in which the activities of banks are monitored and controlled by governments and financial regulatory bodies”.<sup>37</sup> Additionally, banks are regulated to protect against disruption in the provision of services they render to the society and the economy at large.

Furthermore, banking regulation is put in place to reduce the risk of banks failing and to avoid systemic risk. Systemic risk occurs when the collapse of one financial institution leads to the failure of other parts of the financial system and can later have a greater effect on both local and global economies.<sup>38</sup> Consequently, the rationale for bank regulation especially at the international level, is to avoid a spillover of banking problems from one country to another.<sup>39</sup>

At this point, it is imperative to state that bank regulation does not entirely remove the likelihood of losses, failures, or fraud in the banking industry.<sup>40</sup> However, it gives investors the confidence that banks have the mandate to operate based on meeting and maintaining minimum standard requirements through regular monitoring and

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<sup>36</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies*

<sup>37</sup> Andrew Campbell and Peter Cartwright, *Banks in Crisis, The Legal Response* (Ashgate 2002)26

<sup>38</sup> Oluseun Paseda, 'Banking Regulation in Nigeria: A Review Article' (2012) [https://papers.ssrn.com/so13/papers.cfm?abstract\\_id=2900252](https://papers.ssrn.com/so13/papers.cfm?abstract_id=2900252) Accessed on 20<sup>th</sup> January 2019

<sup>39</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* (Academic Press,2010)xii.

<sup>40</sup> Dalvinder Singh, 'Basel Committee on Banking Supervision: Compliance and The Compliance Function in Banks' (2005) 6(4) *Journal of Banking Regulation*. 298.



supervision.<sup>41</sup> Also, such regulations are necessary to provide a safety net for depositors against the risk of bank failures.<sup>42</sup>

Relatively, it is important as highlighted by Campbell and Cartwright to note that regulation does not need to replace the role of management in taking prime responsibility for a bank's activities. In fact, sound regulation as contained in Wallison cannot be achieved without a cost.<sup>43</sup> In order to guarantee banks' financial stability, every country is required to impose policies intended to further strengthen the soundness and stability of their banking systems and improve such banks' ability to withstand both economic and financial crises.<sup>44</sup>

Although banks and regulators view and react differently to regulation and supervision, they (banks) are unlikely to be poorly capitalised or incompetently run with effective regulation in place. An example is where banks in relation to profit taking view and react to bank regulations from a perspective of increasing lending and investment portfolios, raising their market shares, maximising profit, market competition and attracting more deposits and investments.

The priority given to each of these perspectives can differ across banks and countries depending on the management of the bank. On the other hand, regulators are generally concerned with formulating regulations from the aspect of "macroeconomic and political climate as well as the impact on the general public to avoid panic and distrust in the system".<sup>45</sup>

However, this view of Ahmed is contradicted by Maxfield and De Sousa whereby they argued that strong regulation is not a guarantee for bank resilience to shock.<sup>46</sup> In fact, it had a negative impact on countries whose banking systems were weak even before

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<sup>41</sup> Andrew Campbell and Peter Cartwright, *Banks in Crisis, The Legal Response* (Ashgate 2002)26

<sup>42</sup> Rolf H. Weber and Aline Darbellay, 'The Regulatory Use of Credit Ratings in Bank Capital Requirement Regulations' (2008) 10(1) *Journal of Banking Regulation*, 1-16

<sup>43</sup> Peter J. Wallison, 'Why Do We Regulate Banks?' (2006) 28(4) *Regulation*, 14-19

<sup>44</sup> Gatzert Nadine and Wesker Hannah, 'A Comparative Assessment of Basel II/III and Solvency II' (2012) 37(3) *Geneva Papers on Risk and Insurance*  
[https://www.researchgate.net/publication/254440930\\_A\\_comparative\\_assessment\\_of\\_basel\\_IIIII\\_and\\_solvency\\_II](https://www.researchgate.net/publication/254440930_A_comparative_assessment_of_basel_IIIII_and_solvency_II) Accessed 12 October 2017.

<sup>45</sup> Jaffar Mohammed Ahmed, 'A Conceptual Framework for the Basel Accords-based Regulation' (2016) 24(1) *Journal of Financial Regulation and Compliance*. 90

<sup>46</sup> Sylvia Maxfield and Mariana Magaldi De Sousa, 'The Global Financial Crisis and Banking Sector Resilience' (2015) 16(4) *Journal of Banking Regulation*. 265.

a crisis. Also, it is essential to point out that ineffective regulation and supervision can also arise because of miscommunication between banks and regulators.

In principle, strong regulations must ensure stability in a banking system, reduce the possibility of any financial crisis and limit banks' risky activities though in practice it seems otherwise. The reason is that regulations are usually not implemented by banks as intended or most times, they portray unintended consequences that policymakers do not envisage or fail to cover different regulatory needs for different national banking systems.<sup>47</sup>

Therefore, according to Sir Mervyn King, the Basel Accord regulations especially Basel III that is regarded as "a one size fits all solution" cannot be able to stop another crisis from occurring. This is because the new regulation failed to take into consideration different regulatory needs that pertain to different jurisdictions.<sup>48</sup> In other words, countries have varied regulatory interests and capabilities that make it harder to find a common set of standards that will adequately represent the interest of both the advanced and developing economies.

### **2.3 Basel Capital Accord (Basel I)**

The streamlining of the regulatory structure in the banking system because of threats and vulnerability gave birth to the Basel regulations. According to Jebali and Hmedi, Basel Accords are a judicious assembly of agreed contracts as framed by the Basel Committee for the regulation of the banking industry.<sup>49</sup> The Basel Committee on Banking Supervision (BCBS) is mandated to provide guidelines for prudential regulation, adequate supervision and best practices that are expected of banks with the aim of achieving financial and monetary stability worldwide.

The BCBS is located inside the Bank for International Settlements (BIS) which is in Basel, Switzerland<sup>50</sup> and operates independently from its host organisation (the BIS).

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<sup>47</sup> Sylvia Maxfield and Mariana Magaldi De Sousa, 'The Global Financial Crisis and Banking Sector Resilience' (2015) 16(4) Journal of Banking Regulation. 265.

<sup>48</sup> Mervyn King, 'Banking – From Bagehot to Basel, and Back Again' At the Second Bagehot Lecture, Buttonwood Gathering, New York, 25 October 2010 at p.6and7 in Nigel Clayton, 'An Overview on the Inconsistencies of Approach In Regulating the Capital Position of Banks: Will the United Kingdom Step Out of Line with Europe?'(2013)14(2) Journal of Banking Regulation.107 at 111.

<sup>49</sup> Lassaad Jebali and Siwar Hmedi, 'Basel Accord and Banking Competivity' (2015) 5(12) Journal of Asian Business Strategy, 252-258

<sup>50</sup> Bank for International Settlement (BIS), 'About BIS-overview' <https://www.bis.org/about/index.htm> Accessed on 12 October 2017

The BIS is an international bank owned by a global body of sixty-member central banks drawn from different countries and occasionally referred to as the Bank of Central Bank.<sup>51</sup>

The BIS as explained in Alexander was created under The Hague Agreements of 1930 and the Constituent Charter of the Bank for International Settlements of 1930. Also, between 1950 and 1958, the BIS served as the payment agent for the European Payments Union that facilitated banks payments and currency convertibility among Western European countries.<sup>52</sup>

On the other hand, the BCBS was originally composed of members from Group-of-Ten countries (G-10). It was established in December 1974 by the central bank governors from the G-10 countries in response to the collapse of the German bank, Herstatt, and Franklin National Bank of New York that exposed the inability of central banks and national regulators to manage banking sector instability on a cross-border basis.<sup>53</sup>

Furthermore, the Basel Committee's Concordat that established principles of information exchange and cross-border coordination for supervision of international banking operations was adopted by February 1975 and was later revised in 1983 to become the Principles for the Supervision of Banks' Foreign Establishments as stated in Alexander.

This Basel Committee sets the standards as stated in Schooner and Taylor without a legal mandate for prudent regulation, adequate supervision, and best practices for implementation by respective national banks. According to Cooper et al, the Basel Committee was formed "to advise national financial regulators on common capital requirements for internationally active banks."<sup>54</sup> One of the initial policies introduced by the BCBS was the regulation of bank capital in 1988 and it was called the Basel Capital Accord (Basel I).<sup>55</sup>

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<sup>51</sup> Leonard Seabrooke, 'The Bank for International Settlements' (2006) 11(1) *New Political Economy* 141

<sup>52</sup> Kern Alexander, *Principles of Banking Regulation* (Cambridge University Press, 2019) 63

<sup>53</sup> Kern Alexander, *Principles of Banking Regulation* (Cambridge University Press, 2019) 64

<sup>54</sup> Thomas Cooper PHD, Alex Faseruk D.B.A and Johanna Smith M.B.A, 'A Review of BASEL III- Research Questions and Potential Impacts' (2012) 1(3) *GSTF Business Review (GBR)* 18.

<sup>55</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33 at p. 131

Basel I was introduced because of an apparent failure in deregulation that witnessed the existence of a gap between capital requirements and actual risk levels that were not always shown by national benchmarks.<sup>56</sup> Another reason for the introduction of Basel I as shown in Rendon was the increase in international competition and losses on loans that resulted in concerns about decreased capital levels in international banks.

Additionally, the capital levels of major international banks were also degenerating because of the Latin American debt crisis of the early 1980s.<sup>57</sup> The decrease in the capital levels in the international market that occurred during the early 1980s brought about consultations between the Basel Committees and the supervisory authorities with the aim of establishing adequate capital measurements and standards for banks.<sup>58</sup>

Capital adequacy as stated in Hitchins et al. is described as “the adequacy of a bank’s aggregate capital in relation to the risks that arise from its assets, off-balance sheet transactions, dealing operations and all other risks associated with its business”.<sup>59</sup> The essence of requiring banks to have adequate capital is for them to be able to build a buffer against any risk that may arise in any circumstance.<sup>60</sup>

Therefore, adequate capital ensures that banks can absorb the highest anticipated amount of loss and still be able to realise their assets, raise new capital or arrange for disposition of their businesses.<sup>61</sup> Basel I was implemented in 1992 by over one hundred and twenty countries because of its simplicity and provided for among other things, the requirement for international banks to hold 8 percent of their capital as a precautionary measure against any banking crisis.<sup>62</sup>

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<sup>56</sup> Thomas Cooper PHD, Alex Faseruk D.B.A and Johanna Smith M.B.A, ‘A Review of BASEL III- Research Questions and Potential Impacts’ (2012) 1(3) GSTF Business Review (GBR) 18.

<sup>57</sup>Bank for International Settlement (BIS), ‘History of the Basel Committee’ <https://www.bis.org/bcbs/history.htm> accessed on 20April, 2018.

<sup>58</sup> Quiroz D. Rendon, ‘The formal regulatory approach to banking regulation’ Badell & Grau Legal Consultants (2010) 18(4) Journal of Financial Regulation and Compliance. 305.

<sup>59</sup> J. Hitchins, M. Hogg and D. Mallet, ‘Banking: A Regulatory Accounting and Auditing Guide’ (2001) Institute of Chartered Accountants, England and Wales (2010) 18(4) Journal of Financial Regulation and Compliance. 305

<sup>60</sup> Li Yang, Yi-Kai Chen, Feng Sheng Chien, Wen Chih Lee and Yi Ching Hsu, ‘Study of Optimal Capital Adequacy Ratio’ (2016) 45(3) Journal of Productivity Analysis. 261.

<sup>61</sup> J. Hitchins, M. Hogg and D. Mallet, ‘Banking: A Regulatory Accounting and Auditing Guide’ (2001) Institute of Chartered Accountants, England and Wales (2010) 18(4) Journal of Financial Regulation and Compliance. 305

<sup>62</sup> Leonard Seabrooke, ‘The Bank for International Settlements’ Supra.n.52

In essence, 8 percent was the required minimum capital ratio that was believed to be realistically achievable within the four-year implementation period by the members of the Basel Committee. The introduction of the 8 percent minimum capital ratio by the 1988 Basel Accord was to prevent a fall in international capital ratios that was a product of aggressive competition for market share by the leading banks during the mid-1980s.<sup>63</sup>

Also, the use of this minimum capital adequacy standard ratio was intended to stop banks from increasing their exposure to credit risks by negligently incurring greater leverage.<sup>64</sup> Another reason for the introduction of the 8 percent minimum capital ratio was to protect depositors from consequences that may arise from reckless portfolio management by banks and to provide equal competition among banks.<sup>65</sup>

In principle, the intention of the Basel Committee was to provide an adequate capital cushion for credit risks. Also, it is worth to note that Capital under the Basel Accord was divided into Tier 1 Capital and Tier 2 Capital. Tier 1 Capital is regarded as the core capital that consists of the highest quality such as common equity, and some type of preferred stocks that was meant to be at least 50 percent of the total capital base of a bank.<sup>66</sup>

Correspondingly, Tier 2 Capital that represents a range of lower quality instruments often regarded as supplementary capital consists of subordinated term debt and hybrid instrument.<sup>67</sup> In terms of capital ratios, the Basel Accord used a risk-based structure (RBS) in calculating the capital ratios that assigned different capital weights to fewer asset classes belonging to both on- and -off -balance-sheet.<sup>68</sup>

One of the highlights of the RBS is that the same risk-weighting categories used for the on-balance-sheet assets are also used for the credit risk element of off-balance-

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<sup>63</sup> Kern Alexander, 'Editorial: Reforming the Basel Accord' (2003) 4(4) Journal of International Banking Regulation 298 <<http://O-search.proquest.com.wam.leeds.ac.uk/docview/196015527?accountid=14664>> Accessed on 13 October 2017.

<sup>64</sup> Ibid

<sup>65</sup> Ernst-Ludwig Von Thadden, 'Bank Capital Adequacy Regulation Under the New Basel Accord' (2004) 13(2) Journal of Financial Intermediation, 90

<sup>66</sup> Rosa Maria Lastra, 'Risk-based Capital Requirements and their Impact upon the Banking Industry: Basel II and CAD III' (2004) 12(3) Journal of Financial Regulation and Compliance. 225

<sup>67</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra. n 1

<sup>68</sup> Kern Alexander, 'Editorial: Reforming the Basel Supra.n.69

sheet items.<sup>69</sup> This method introduced by the Basel Accord in calculating capital ratios has been regarded as one of its major contributions.

Also, this contribution is attested in the major progress and shift by State supervisors from the earlier 'gearing ratio method' that also made off-balance sheet activities less attractive.<sup>70</sup> The gains of the Basel Capital Accord (Basel I) cannot be overlooked though it could not stand the test of that time.

The Basel Capital Accord became obsolete in the 1990s due to the growth and development of the international financial market that made leading international banks to move away from the usual traditional business of deposit taking and giving out loans. Therefore, the evolving nature of banking business made the Basel Capital Accord unattractive, especially to large international banks as they often became exposed to new risks that the Basel Accord neither conceived nor intended to capture.

Some examples of these new risks include Over the Counter (OTC) and increased use of securitisation techniques that made it possible for banks to sell loans they had originated to other financial institutions.<sup>71</sup> The Basel Accord failed to consider other forms of risk that banks were exposed to and focused more on credit risk (that is the risk that is associated with the main assets of banks).<sup>72</sup>

Also, there was the crude risk weightings or rather, inadequate differentiation of credit risks that led to the intrinsic difficulty in determining risk weightings that are applied to specific assets. Professor Benston argued that this was politically compromised, especially "where low-risk weightings are applied to assets that are favoured by politically powerful groups".<sup>73</sup>

According to Schooner and Taylor, the risk weighting categories were too broad in adequately assessing risks and these broad categories of risk were not able to effectively differentiate between assets with different risk characteristics.<sup>74</sup> Also, Lastra pointed out that the weights did not truly reflect the risk profile of an asset portfolio but

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<sup>69</sup>Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

<sup>70</sup>Quiroz D. Rendon, 'The Formal Regulatory Approach to Banking Regulation' Supra.n.60.

<sup>71</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

<sup>72</sup> Ibid, p.148.

<sup>73</sup> G. Benston, 'Regulating Financial Markets: A Critique and Some Proposals' (1998) Institute of Economic Affairs, London.

<sup>74</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies*

rather, they came about because of the bargaining based on past historical data available at that time on loan performance.

Assets were risk weighted according to the credit risk of the borrower. Corporate loan, for example, was assigned a 100 percent risk weighting. This meant that capital constituting the full 8 percent of the value of the loan was required to back them while Government bonds were assigned a zero percent risk weighting and required no capital to back them.<sup>75</sup>

Furthermore, Basel I was said to indirectly encouraged risky lending. This is because banks were expected to set aside the same amount of capital against loan to unstable borrowers as against borrowers with better credit rating.<sup>76</sup> Basel I was criticised for being too crude and indifferent to the developing standards for managing and evaluating bank performance.<sup>77</sup>

Another criticism was directed at its inability to adapt easily to new banking activities and risk management techniques.<sup>78</sup> The other criticism was aimed at non availability of information that has to do with bank regulators. Although those bank regulators had access to a greater amount of information than outsiders, they still had difficulty in evaluating the level of risks inherent in banks' assets.<sup>79</sup>

These regulators were expected not only to ensure that banks accurately assign proper risk weighting to their assets, but to determine risk weights that correctly measure the risks to which banks are exposed to.<sup>80</sup> Also, they (bank regulators) failed to prompt regulatory instruments such as supervisory monitoring and neglected to encourage corrective regulatory action.<sup>81</sup>

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<sup>75</sup> Ranjit Lall, 'From Failure to Failure: The Politics of International Banking Regulation' (2012) 19(4) Review of International Banking Regulation. 609

<sup>76</sup> The Economist, 'Basle Bust' (2000) in Marianne Ojo, 'Risk Management by the Basel Committee: Evaluating Progress Made from the 1988 Basel Accord to Recent Developments' (2010) 18(4) Journal of Financial Regulation and Compliance. 305.

<sup>77</sup> Ernst-Ludwig Von Thadden, 'Bank Capital Adequacy Regulation Under the New Basel Accord' Supra.n.71

<sup>78</sup> M. Saidenberg and T. Schuermann, 'The New Basel Capital Accord and Questions for Research' (2003) Wharton Financial Institutions Centre Working Paper, University of Pennsylvania, Philadelphia, PA.

<sup>79</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

<sup>80</sup> Ibid

<sup>81</sup> Ernst-Ludwig Von Thadden, 'Bank Capital Adequacy Regulation under the New Basel Accord' Regulation Supra.n.71

Therefore, banks were reluctant to invest in better risk management systems for such reasons as the difficulty in understanding how regulators were able to accurately gauge the degree of risk inherent in activities undertaken by such banks. On the other hand, outsiders were equally unable to assess the financial soundness of a bank because of limited information that led to their inability to correctly measure the risky nature of a bank's asset.<sup>82</sup>

All these issues contributed to the demise of Basel I and there was a need for a review to correct the irregularities that was derailing the good intentions of the Accord system. The review came with changes to address the gaps in Basel 1 and brought about the introduction of Basel II.

## **2.4 Basel II**

The BCBS announced in 1999 that it will introduce a new Accord to replace Basel I with key objectives of promoting safety and soundness in the financial sector, maintaining current overall level of capital in the system, enhancing competitive equality, and constituting a more comprehensive approach to addressing risks.<sup>83</sup> These key objectives were considered in relation to need of the time and a departure from the old system.

After five years of extensive negotiations with banking sector representatives, supervisory agencies, Central Banks and outside observers, the Basel Committee in June 2004 announced a new capital framework called the International Convergence of Capital Measurement and Capital Standards: A Revised Framework, commonly known as Basel II that sought to address the existing gaps in Basel I.<sup>84</sup>

Although BCBS allows outside observers such as non-members to make contributions in its standard setting process, their (BCBS) decisions are consensus based and are formulated with very limited influence from non-member countries.<sup>85</sup> Basel II represents a significant shift from the use of pre-set numerical capital standards

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<sup>82</sup> Ibid

<sup>83</sup> Basel Committee on Banking Supervision, 'A New Capital Adequacy Framework, A Consultative Paper' (1999) [www.bis.org/publ/bcbs50.pdf](http://www.bis.org/publ/bcbs50.pdf)

<sup>84</sup> Leonard Seabrooke, 'The Bank for International Settlements' Supra.n.52

<sup>85</sup> Elisa Bengtsson Stockholm, 'The Political Economy of Banking Regulation - Does the Basel 3 Accord Imply a Change' (2013) 46(3) Credit and Capital Markets. 303



established by regulators to the use of banks own internal risk estimates as inputs to regulator-supplied formulas.

Basel II became operational in 2007 and was divided into three parts that consisted of an overview, detailed proposals and supporting documents with background information.<sup>86</sup> Basel II introduced a three-pillar structure that was used for assessing capital adequacy. The three pillars are capital adequacy requirement, supervisory review of banks' capital adequacy and internal assessment process, and market discipline. This three-pillar structure became the core changes made in the Basel Accord.

According to the BIS document, the first pillar comprises of credit risk, operational risk, and market risk. Credit risk can be defined as the likelihood of a bank borrower or counterparty defaulting in an obligation and in line with the agreed terms.<sup>87</sup> Examples of credit risk for banks include loan, interbank transactions, trade financing, foreign exchange transactions, swaps, bonds, etc.

The next which is market risk deals with the risk associated with loss owing to changes in the level or variability of market rates or prices. Some examples are interest rates, foreign exchange rates, and commodity price. The third is called operational risk and is defined by the Basel Committee as the risk of loss that results from inadequate or failed internal processes, people, and systems or from external events.<sup>88</sup>

The first pillar made provision for the minimum capital requirement of 8 percent. In essence, banks were still required to hold at least 8 percent of their regulatory capital in relation to their risk-weighted asset.<sup>89</sup> However, changes were made with regards to the way risk weighting of assets are calculated and capital charges for market and operational risks were added too.<sup>90</sup>

Basel II was made to be more risk-sensitive in measuring credit risk and offers banks two distinct options of either adopting a revised standardised approach or internal

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<sup>86</sup> Rosa Maria Lastra, 'Risk-based capital requirements and their impact upon the banking industry: Basel II and CAD III' Supra.n.76

<sup>87</sup> Bank For International Settlements, 'Principles for the Management of Credit Risk-final Document September 2000' <https://www.bis.org/publ/bcbs75.htm> Accessed on 10 November, 2017.

<sup>88</sup> Banks For International Settlements, 'International Convergence of Capital Measurement and Capital Standards' June 2006 <https://www.bis.org/publ/bcbs128.pdf> Accessed on 10 November, 2017.

<sup>89</sup> Leonard Seabrooke, 'The Bank for International Settlements' Supra.n.52

<sup>90</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

ratings-based (IRB) approach in calculating capital requirements for credit risk.<sup>91</sup> The revised standardised approach relies on risk weightings that are tied to the ratings assigned by external credit rating agencies such as Moody's, Standard & Poor's, and Fitch IBCA.<sup>92</sup>

This approach is an improvement of the Basel Accord's risk categories and banks are expected to use external credit rating agencies in calculating the risk weights of their assets. These external agencies such as Standard & Poor's (S&P) that was one of the big three credit rating agencies uses terminology such as AAA (triple A) to rate financially strongest borrowers in the bond market.<sup>93</sup>

The risk weight attached to corporate borrowers with triple 'A' rating by an authorised rating agency is 20 percent.<sup>94</sup> The triple 'A' rating signifies that there is an extremely low likelihood that such borrowers will default on the bond while speculative or non-investment grade are junk bonds that are rated below BBB because they have a higher risk of default.<sup>95</sup> It is also important to note that borrowers that are rated below B receive a risk weighting of 150 percent.<sup>96</sup>

The essence of these credit rating agencies is to provide bond investors with the assessment of the likelihood that they will be fully repaid at maturity. Although the Basel II standardised approach happens to be more risk sensitive than the Basel Accord, it still brought about a few problems such as the degree of trustworthiness of credit ratings.

During the recent global financial crisis, it was discovered that triple 'A' rating was assigned to structured financial products that suffered much higher default rates than expected of such grade level. Majority of the sub-prime products were rated triple 'A' and double 'A' with low default rates.<sup>97</sup> This led to the assumption as portrayed in

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<sup>91</sup> Hendrik Hakenes and Isabel Schnabel, 'Bank Size and Risk-taking under Basel II' (2011) 35(6) *Journal of Banking and Finance*, 1436

<sup>92</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

<sup>93</sup> Ibid

<sup>94</sup> Ram Pratap Sinha, 'The New Basel Accord and Credit Risk Management' (2010) 35(3) *Management and Labour Studies*, 337

<sup>95</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

<sup>96</sup> Ram Pratap Sinha, 'The New Basel Accord and Credit Risk Management' Supra.n.104

<sup>97</sup> Peter Yeoh, 'Causes of the Global Financial Crisis: Learning from the Competing Insights' (2010) 7(1) *International Journal of Disclosure and Governance*. 42

Schooner and Taylor that the rating agencies may have compromised to stay in the competition.<sup>98</sup>

The rating agencies were also blamed for their failure to demonstrate enough transparency pertaining to their rating methodologies and independence.<sup>99</sup> Moosa further criticised these ratings for being misguided because of their inability to provide consistent estimates of creditworthiness. Additionally, there was a problem with the appropriate credit rating agencies to be recognised for regulatory purposes and another problem of unrated borrowers.<sup>100</sup>

On the other hand, the internal ratings-based (IRB) approach is completely different from the revised standardised approach. The IRB uses estimates from banks' internal assessment of their key risk elements to determine their capital requirement. Mohanty mentioned the three key elements of IRB as the risk components, risk weight functions, and minimum requirements.<sup>101</sup>

Mohanty went further to distinguish them - risk components comprise of measures of the probability of default (PD), loss given default (LGD), the exposure at default (EAD), and effective maturity (M); while the risk weight functions involve the means by which risk components are changed to risk-weighted asset and then into capital requirement; and the minimum requirement that is the last key element involves the standard that must be achieved by a bank in order to make use of the IRB approach.<sup>102</sup>

A bank can choose either a foundation or an advanced IRB approach within the IRB approach.<sup>103</sup> Under the foundation approach, a bank is required to provide its own estimate of PD while using supervisory estimate for other risk components whereas

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<sup>98</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation : Principles and Policies* Supra.n.33

<sup>99</sup> Imad A. Moosa, 'Basel II as a Casualty of the Global Financial Crisis' (2010) 11(2) *Journal of Banking Regulation*.95

<sup>100</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation : Principles and Policies* Supra.n.33

<sup>101</sup> Sunil K. Mohanty, 'Basel II: Challenges and Risks' (2008) 7(1/2) *Academy of Banking Studies Journal*. 109

<sup>102</sup> Sunil K. Mohanty, 'Basel II: Challenges and Risks' (2008) 7(1/2) *Academy of Banking Studies Journal*. 109

<sup>103</sup> Banks For International Settlements, 'International Convergence of Capital Measurement and Capital Standards' Supra.n.97

the advance approach requires a bank to provide more of their own estimates of risk components while relying less on supervisory value.<sup>104</sup>

Furthermore, in the IRB approach, banks are expected to calculate both their expected and unexpected losses likely to be sustained within a given period and make adequate provision by setting aside funds to cover for such losses. To effectively use the IRB approach in estimating the probability of default, banks need to have a comprehensive grading system and loss data.

Usually, the first step taken by banks in estimating the probability of default of a borrower is to carry out a credit assessment, after which an internal credit rating grade is assigned to such borrower.<sup>105</sup> This internal credit score can be used by a bank as a basis for calculating the required capital that is needed to be set aside against potential future losses. All these formed the body of the first pillar.

The second pillar focuses on the supervisory review process. It ensures that banks make provision for not only adequate capital to support all the risks in their businesses, but also encourage them to develop and use better risk management processes and controls in monitoring and managing their risks.<sup>106</sup> The aim is to move capital requirements for each bank to an optimal level.

The second pillar as stated by Mohanty is based on four core principles. The first principle requires banks to have a process to use in assessing their capital adequacy in relation to their risk profile and a strategy to maintain their capital level. The second principle gave supervisors the power to review banks' internal capital adequacy assessments and their capability to monitor and conform to the regulatory capital ratios.

In the third principle, banks are expected to operate above the minimum regulatory capital ratios and supervisors can mandate banks to hold capital above the required minimum. The fourth principle made a provision whereby supervisors are expected to act quickly to prevent capital from falling below the required minimum level. Banks are normally exposed to additional risks other than the credit, market, and operational risks because of the nature of their businesses and quality of management.

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<sup>104</sup> Sunil K. Mohanty, 'Basel II: Challenges and Risks' (2008) Supra.n.113

<sup>105</sup> Ibid

<sup>106</sup> Quiroz D. Rendon, 'The Formal Regulatory Approach to Banking Regulation' Supra.n.60

Furthermore, there are additional risks under the second pillar and are divided into three areas that represent risks not fully captured in the first pillar, risks not considered in the first pillar and external factors that affect a bank such as economic conditions.<sup>107</sup> Examples of additional risks include credit concentration risk that is not adequately covered under the first pillar and interest rate risk in relation to the banking book. It is noted that banks need to hold capital buffer against these risks.

Finally, the third pillar deals with market discipline. Market discipline can potentially reinforce capital regulation and other supervisory efforts with the aim of ensuring the soundness and safety of the banking system. Therefore, the Basel Committee encourages public disclosures by banks, especially in terms of risk and capital position. Although Basel II came on the backdrop of the limitations of Basel I, there exist some pitfalls as identified by some authors.

One of the authors Kryzanowski, identified three concerns in the implementation of the Basel II regime – neglect of the important role of qualitative elements by the exclusive reliance on quantitative methods and models; banks seek to have capital tailored to their individual risk profiles that places greater burden on the regulators; the tendency of the capital framework to possibly overstate stages of the economic cycle by requiring less regulatory capital in ‘good times’ and more in ‘bad times’.<sup>108</sup>

Another author, Alexander, opined that Basel II was criticised for being excessively risk sensitive and its capital formula regarded as too prescriptive and complex.<sup>109</sup> The capital requirement prescribed by Basel II was said to be too low to offset the huge losses incurred by banks and the quality of capital held was most doubtful (banks were not required to hold adequate levels of loss absorbent capital).

Also, banks and regulators did not always adequately assess their potential risks. Additionally, Alexander highlighted that Basel II was not well suited for most of the world’s banking population because of its complex nature as it favoured the banking systems of advanced economies (as they had access to large amounts of default data

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<sup>107</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

<sup>108</sup> Lawrence Kryzandowski ‘Organisational Design and Positioning of the Deposit Insurance Function in the Financial System Safety Net’ in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 92

<sup>109</sup> K. Alexander, ‘Corporate governance and Basel II’ (2004) Paper Presented at the Institute of Advanced Legal Studies, Russell Square, 7 October

on borrowers and in a better position to devise risk model based on these data) at the expense of emerging economies.

Furthermore, Basel II was not well suited for some countries' economies and their banking sectors and as such, it failed to produce effective regulation and supervisory practice because the BCBS that developed the standards did not consult non-member countries of the BCBS and neither did they consider the interests of broader stakeholders in the society who will be affected by the operations of the banking and financial system.<sup>110</sup>

In considering the merits of simple regulation versus complex financial regulation, Ingves in 2016, remarked that simple rules can sometimes be more risk-sensitive, robust and can better meet supervisory objectives unlike the complex rules that can result in several undesirable outcomes.<sup>111</sup> However, Ingves remark has been countered by scholars who argued that a complex financial regulation such as the complex rules-based Basel approach is preferred because of the complexity of modern financial system and institutions.<sup>112</sup>

Additionally, one of the defining features of the rules-based Basel II approach to bank regulation was the application of a more sophisticated, and technical capital regulation. Despite all these regulations that were put in place to strengthen Basel II, they were far from preventing the 2007 global financial crisis. Indeed, the crisis highlighted massive breakdown of trust in banks, investment advisers and rating agencies.

It brought about several questions that are yet to be answered such as - 'was the behaviour of stakeholders across the chain of the financial system influenced by greed to make quick profits? Did the bankers and investment advisers thoroughly explain the risk involved in using the complex financial products they sold to clients? And did the credit rating agencies compromise on their standards?'<sup>113</sup>

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<sup>110</sup> K. Alexander, 'Corporate governance and Basel II' (2004) Paper Presented at the Institute of Advanced Legal Studies, Russell Square, 7 October

<sup>111</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' (2017) 23 (5) European Financial Management, 902

<sup>112</sup> Kevin Davis, 'Banking Regulation: Has Complexity Worked' (2017) 2 JASSA, Sydney. 31

<sup>113</sup> B. Mahapatra, 'Implications of Basel III for Capital Liquidity and Profitability of Banks' (2012) [www.bis.org/review/r120305b.pdf](http://www.bis.org/review/r120305b.pdf) Accessed 20th December 2018.

Furthermore, the crisis exposed a lot of flaws and weaknesses that were inherent in Basel II. The major flaws that contributed to the financial crisis were attributed to weaknesses in the financial system, flaws in corporate governance and poor financial regulatory controls that included inadequate supervision, poor assessment of financial risk and lack of adequate liquidity.<sup>114</sup>

The crisis placed a lot of pressure on global bank liquidity.<sup>115</sup> Banks had insufficient liquid resources that failed to meet unexpected levels of deposit withdrawals. In other words, the amount of liquidity reserve banks held were insufficient to support the write-offs and reductions in asset values that were caused by the bursting of credit bubbles.<sup>116</sup> Certainly, Basel II outlived its purpose as it was not able to contain the 2007 global financial crisis.

## **2.5 The 2007 Global Financial Crisis**

Financial crises are mostly caused by large number of credit losses that quickly manifest in shortage of bank liquidity because banks must fund all the losses they incurred. Financial crises can also be attributed to market uncertainty, especially in the banking sector, with an outcome of banks' either lending less or not at all to each other and can consequently lead to a shortage of liquidity.<sup>117</sup>

Insufficient liquidity problem may lead to unexpected reduction in cash and need to attract additional funding that may come at a high cost. Additionally, this extra funding at a high cost can lead to a reduction in banks' profitability and in some cases, insolvency. Hence, a bank that is experiencing liquidity problem can become insolvent and a shortage at a single bank can lead to system-wide repercussions.

Therefore, it is imperative for banks to have adequate liquidity and more importantly, to have enough in distress periods. The global financial crisis that began in 2007 was said to be the biggest economic crisis ever since the Great Depression of 1929.<sup>118</sup> The crisis has been blamed on several factors. One of such factors as contained in

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<sup>114</sup> Anu Arora, 'The Global Financial Crisis: A New Global Regulatory Order?' (2010) J.B.L 670 at 671.

<sup>115</sup> Ja'nél Esterhuysen, Gary Van Vuuren and Paul Styger, 'Liquidity Creation in South African Banks Under Stressed Economic Condition' (2012) 80(1) South African Journal of Economics, 106.

<sup>116</sup> Maximilian Vermorken A. and Alphons Vermorken Th., 'Cause V Consequence-based Regulation: Basel III V the Eurocodes' (2011) 19(2) Journal of Financial Regulation and Compliance, London. 111

<sup>117</sup> Ahmed Habib, 'Basel III Liquidity Requirement Ratios and Islamic Banking' *Supra*.n.131

<sup>118</sup> Philip Arestis, R. Sobreiro, Jose Luis Oreiro, *The Financial Crisis Origins and Implications* (Palgrave Macmillan, 2011)1.

Mahaptra is the subprime mortgage company that was blamed for inappropriately selling the subprime mortgage loan to borrowers who could not afford it and who in turn were blamed for acquiring so much debt.<sup>119</sup>

Furthermore, Mahptra stated that the income of an average American was stagnant at that time that led to an increase in poverty and inequality. And instead of politicians to improve the income of the people, they devised policies to encourage people to fulfil their dreams of owning a house by taking loans from banks and financial institutions at a very low interest rate.

This is the reason Esterhuysen et al. attributed the contribution of the financial crisis to severe credit crisis because banks aggressively lent to borrowers who could not repay and unfortunately, they could not create the required liquidity needed to see them through.<sup>120</sup> Another factor is the blame on investment bankers for the creation and marketing of unreliable products.

The other factor is the blame on politicians/regulators for allowing the environment of low-interest rates and poor regulation to flourish which in turn made the crisis to ferment.<sup>121</sup> The crisis demonstrated that the banking business is associated with risk-filled human errors and misjudgement.<sup>122</sup>

Although it is difficult to say exactly when the 2007 financial crash began, its root can be traced back to 1995 when the Clinton's administration launched an affordable-housing agenda through amendments that were made on Community Reinvestment Act.<sup>123</sup> This new policy gave rise to the founding of New Century Financial in Irvine, California, that became the largest independent subprime mortgage lender in America.<sup>124</sup>

The New Century granted billions of dollars of this new subprime mortgage to people who could not afford it and those with poor credit records that were previously barred

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<sup>119</sup> B. Mahapatra, 'Implications of Basel III for Capital Liquidity and Profitability of Banks' (2012) [www.bis.org/review/r120305b.pdf](http://www.bis.org/review/r120305b.pdf) Accessed 20th December 2018.

<sup>120</sup> Esterhuysen Ja'nel, Van Vuuren Gary and Styger Paul, 'Liquidity Creation in South African Banks Under Stressed Economic Condition' (2012)80(1) South African Journal of Economics,106.

<sup>121</sup> Patrick Jenkins, 'Ten Years After The Financial Crisis Where Are We Now?' FT Weekend Magazine (London 2/3 September 2017) 12, 15.

<sup>122</sup> E. P. Ellinger, E. Lomnicka, C. Hare, Ellinger's Modern Banking Law, (Oxford University Press, 2011) 26

<sup>123</sup> Patrick Jenkins, 'Ten Years After The Financial Crisis Where Are We Now? Supra. n.141 at p.14

<sup>124</sup> Ibid



from buying a house. By 2006, the company had originated more than 50 billion dollars in mortgage loans.<sup>125</sup> Also, it relied on the new securitisation structures that involved wrapping up mortgages and reselling them to investors such as Wall Street investment banks and investors from other countries.

These mortgages were known as mortgage-backed securities (MBSs).<sup>126</sup> The demand for securitised mortgages (MBSs) increased because of the housing bubble. The housing bubble formed because of “low-interest rates set by the Federal Reserve, lax lending standards, government subsidisation and guarantees in the secondary housing market”.<sup>127</sup>

These incentives increased the demand to buy homes, making prices of houses to rise continuously while consumers’ incomes remain the same.<sup>128</sup> People quickly bought homes with mortgages that they could not afford because of the ease with which credits were assigned to them.

According to Jenkins, the market for MBS and the collateralised debt obligation (CDO) that is a complex financial instrument were so high yielding that they made mortgage companies to reduce their underwriting standard.<sup>129</sup> Subsequently, the quality of the subprime loan started to degenerate, and the interest rate was increased by the Federal Reserve because of the growing concern of consumer inflation.

The subprime borrowers started to default massively and the newly found appetite for MBS quickly disappeared. The New Century Financial could not fulfil the obligation that required them to buy back defaulting loans and they had to file for bankruptcy protection on 2<sup>nd</sup> April 2007.<sup>130</sup> One of the main problems as shown in Ferguson was on the CDO that sold over half a trillion dollars containing subprime exposure in 2006 and it turned out that these CDOs were overpriced based on erroneous estimates of likely subprime default rate.<sup>131</sup>

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<sup>125</sup> Michael J. Missal and Lisa M. Richman, ‘New Century Financial: Lesson Learned’ (2008) 69(1) Mortgage Banking, Washington. 48.

<sup>126</sup> Patrick Jenkins, ‘Ten Years After The Financial Crisis Where Are We Now?’ Supra.n.141

<sup>127</sup> Lance Breitstein and Paolo Dini, ‘A Social Constructivist Analysis of the 2007 Banking Crisis: Building Trust and Transparency Through Community Currencies’ (2012) 13(1) Journal of Banking Regulation. 36

<sup>128</sup> Ibid

<sup>129</sup> Patrick Jenkins, ‘Ten Years After The Financial Crisis Where Are We Now?’ Supra.n.141

<sup>130</sup> Michael J. Missal and Lisa M. Richman, ‘New Century Financial: Lesson Learned’ Supra.n.145.

<sup>131</sup> Ferguson Niall, ‘The Ascent of Money: A Financial History of The World (Penguin Group 2008) 271.

Subsequently, when the subprime borrowers started defaulting, the USA housing market began to crumble, making it difficult for banks to sell the houses for the amount that was equivalent to the loans. Banks had to re-assess their mortgage portfolios to know their expected profit or losses already incurred.<sup>132</sup> Over the months that followed, the crisis spread across to both emerging markets and developing economies.

Banks apparently ceased to lend money to each other because they were unsure of each other's balance sheet. Interbank market activities reduced severely that later led to liquidity dry-up in the interbank market. Indeed, the crisis developed into systemic banking liquidity crisis. There was little or no money at the interbank market for banks to borrow to increase their liquidity.

In the USA, big firms such as Citigroup, Goldman Sachs, JP Morgan, Morgan Stanley, and Bank of America were rescued through government intervention while American investment bank, Bear Stearns and Lehman Brothers were left to collapse.<sup>133</sup> Lehman Brothers failed after the Federal Reserve refused to bail it out and it filed for bankruptcy on 15 September 2008.<sup>134</sup> It was unfortunate that banks can act so irrational to the extent of getting entangled in this high-risk gambling practice that led to their self-destruction.

The subprime mortgage crisis also affected the United Kingdom, especially Northern Rock because of the interconnected nature of the financial system around the world.<sup>135</sup> Property markets in the United Kingdom (UK) were heavily damaged because of the fast-depreciating house values in the slowing world economy.<sup>136</sup> Northern Rock that was the fifth largest UK mortgage bank counted among the first casualties of the crisis in the UK.

Northern Rock was different from the normal traditional banks that relied on deposits as the basis for their lending. Northern Rock generated its funding on bond sales,

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<sup>132</sup> Alastair Hudson, *The Law of Finance* (Sweet & Maxwell, 2009) 833.

<sup>133</sup> Gunther Teubner, Alberto Febbrajo, *The Financial Crisis in Constitutional Perspective: The Dark Side of Functional Differentiation* (Hart Publishing 2011) 3

<sup>134</sup> Philip Arestis, R. Sobreiro, Jose Luis Oreiro, *The Financial Crisis Origins and Implications* Supra.n.140

<sup>135</sup> Alistair Darling, 'From Here to Uncertainty' FT Weekend Magazine (London 2/3 September 2017) 17.

<sup>136</sup> Peter Yeoh, 'Causes of the Global Financial Crisis: Learning from the Competing Insights' Supra.n.108

securities issuance, and short-term credit.<sup>137</sup> The fate of Northern Rock was sealed with the growing panic in the financial market, and it became the first casualty of that crisis. The appeal to the Bank of England for rescue by the chairman of Northern Rock, Matt Ridley could not save it.

Many factors were said to have contributed to the failure of Northern Rock. One of such factors as pointed out by the House of Commons Treasury Committee in their fifth report of session 2007-08 on the Run on the Rock, blamed the bank directors to be the initiators of the problems faced by Northern Rock since August 2007.

The reason is because of their roles in the formulation of the “high-risk, reckless business strategy of Northern Rock, with its reliance on short and medium-term wholesale funding and an absence of sufficient insurance and a failure to arrange standby facility or cover that risk, ...meant that it was unable to cope with the liquidity pressures placed upon it by the freezing of international capital markets in August 2007”.<sup>138</sup>

Northern Rock was said to be a victim of its own funding structure. Its heavy reliance on wholesale capital markets for securitised assets at the time when liquidity was drying out in such markets contributed to its demise.<sup>139</sup> In fact, it was highly leveraged at that time, as it relied heavily on debt to finance its assets. Wholesale funds are procured from money market mutual funds, foreign entities, non-financial corporations, and other financial institutions.

Also, they are raised on a short-term basis from instruments such as certificates of deposit, commercial papers, repurchase agreements and federal funds. According to Campbell, Northern Rock’s position became precarious in September of 2007 because of its inability to raise fund at a rate of interest that was sustainable, including from the Bank of England.<sup>140</sup>

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<sup>137</sup> Patrick Jenkins, ‘Ten Years After The Financial Crisis Where Are We Now?’ Supra.n.141

<sup>138</sup> The House of Common Treasury Committee, ‘The Run on Rock’ (24 January,2008) Vol 1 <https://publications.parliament.uk/pa/cm200708/cmselect/cmtreasy/56/56i.pdf> Accessed on 29th October,2017.

<sup>139</sup> Rosa M. Lastra, ‘Northern Rock, UK bank Insolvency and Cross-border Bank Insolvency’ (2008)9(3) Journal of Banking Regulation, 165 at 174.

<sup>140</sup> Andrew Campbell, ‘Insolvent Banks and the Financial Sector Safety Net-lessons from the Northern Rock Crisis’(2008)20 SACJ,25.

Although the then Governor of Bank of England, Sir Mervyn King consistent refusal to make lender of last resort assistance available to Northern Rock was criticised, his eventual acceptance to provide emergency liquidity triggered the unprecedented liquidity withdrawal from the bank. In as much as the Northern Rock was receiving liquidity support from the Bank of England and despite the public assurances by the former Chancellor, Alistair Darling, there was still panic amongst depositors as they continued to queue outside the bank from 14<sup>th</sup> September to 17<sup>th</sup> September 2007.<sup>141</sup>

In order to stop the run on the bank, the former Chancellor provided a government guarantee to all depositors at Northern Rock and other banks after due consultations with relevant parties.<sup>142</sup> The financial crisis was viewed to have been off the grip of Basel II requirements. Northern Rock was said to have complied with Basel capital requirement in that it had excess capital on the eve of its crash.<sup>143</sup>

Apart from Northern Rock, other large financial institutions worldwide with adequate capital level requirements were also affected by the crisis thereby exposing the inefficiency of Basel II capital requirement.<sup>144</sup> Another issue was the perception that bank regulators focused more on capital requirements with the problems of liquidity risk highlighted by the recent financial crisis.

Liquidity risk results from the inability to obtain cash at reasonable cost either from borrowing or sale of assets.<sup>145</sup> It occurs because of the nature of banking activities and can arise either from the side of liability that is failure to renew maturing liabilities as they become due or from the side of assets that can be failure to liquidate assets.<sup>146</sup>

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<sup>141</sup> Andrew Campbell, 'Insolvent Banks and the Financial Sector Safety Net-lessons from the Northern Rock Crisis'(2008)20 SACJ,25.

<sup>142</sup> Andrew Campbell, 'Insolvent Banks and the Financial Sector Safety Net-lessons from the Northern Rock Crisis Supra.n.167.

<sup>143</sup> S. Cociuba, 'Seeking Stability: What's Next for Banking Regulation? Supra.n.166.

<sup>144</sup> Ahmed Habib, 'Basel III liquidity Requirement Ratios and Islamic Banking'(2015)16(4) Journal of Banking Regulation,251.

<sup>145</sup> ECB(European Central Bank) 'Development in Banks' Liquidity Profile and Management(2002) Frankfurt am Main: European Central Bank in Ahmed Habib, 'Basel III Liquidity Requirement Ratios and Islamic Banking'(2015)16(4) Journal of Banking Regulation,251 at 257

<sup>146</sup> Georgios L. Vousinas, 'Supervision of Financial Institutions: The Transition from Basel I to Basel III. A Critical Appraisal of the Newly Established Regulatory Framework' (2015) 23(4) Journal of Financial Regulation and Compliance, 383.

Therefore, liquidity risk is “part of the intermediary operation of banks and cannot be erased” as shown in Vousinas.<sup>147</sup> The two fundamental liquidity risks are funding liquidity risk (that is a bank’s inability to find adequate resources from lenders or investors to continue to fund its obligations) and market liquidity risk (refers to a bank’s inability to quickly sell enough assets or liquidate an investment position without having significant impact on its market value).<sup>148</sup>

These risks are normally caused by a disruption in market that turns a liquid asset into illiquid asset.<sup>149</sup> The failure of Northern Rock, Lehman Brothers and Bear Stearns were blamed on both their inability to transfer their liabilities (funding illiquidity) and to sell their mortgage products at non-fire-sale-prices (market illiquidity).<sup>150</sup> Apart from Northern Rock, other large banking groups in United Kingdom such as the Royal Bank of Scotland PLC (RBS) and Lloyds Banking Group PLC received direct taxpayers’ bailout during the global financial crisis.

The UK Treasury injected £45 billion of equity capital into the Royal Bank of Scotland PLC in October 2008 with an 82 percent ownership of the bank and in the same year, injected capital into the Lloyds Banking Group PLC (that incurred losses during the crisis particularly on its acquisition of the Halifax Bank of Scotland (HBOS) in 2008), thereby making the UK Treasury to become a 25 percent equity owner of the Lloyds Banking Group PLC.<sup>151</sup>

However, by 2018, the Treasury had sold all its shares in Lloyds and has recently begun to gradually sell off its shares in RBS.<sup>152</sup> The global financial market seems stable now because of new measures that were introduced, especially with regards to liquidity standards through the new Basel III requirements. It is important at this point to highlight the basics of this new accord and the features that come with it.

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<sup>147</sup> Georgios L. Vousinas, ‘Supervision of Financial Institutions: The Transition from Basel I to Basel III. A Critical Appraisal of the Newly Established Regulatory Framework’ (2015) 23(4) *Journal of Financial Regulation and Compliance*, 383.

<sup>148</sup> *Ibid*

<sup>149</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* Supra.n.33

<sup>150</sup> M. Brunnermeier, A. Crockett, C.A Goodhart, A. Persaud and H.S Shin, ‘The Fundamental Principles of Financial Regulation: Geneva Reports on the World Economy 11’ (2009) Preliminary Draft in Marianne Ojo, ‘Risk Management by the Basel Committee: Evaluating Progress Made from the 1988 Basel Accord to Recent Developments’ (2010) 18(4) *Journal of Financial Regulation and Compliance*. 305.

<sup>151</sup> Kern Alexander, *Principles of Banking Regulation* (Cambridge University Press, 2019) 29.

<sup>152</sup> *Ibid*

## 2.6 Basel III

Basel III was officially endorsed in November 2010 by member states of the Group-of-Twenty (G20).<sup>153</sup> Membership of the BCBS has since its founding been restricted to central banks and supervisory bodies of advanced economies but that changed after the financial crisis in 2009 as BCBS membership was extended to G-20.<sup>154</sup> Basel III is portrayed to be different from the two previous Basel regulations because it focused on both micro-prudential measures (that risk is contained in each individual bank) and macro-prudential measures (aimed at entire banking system).

Measures at the micro-prudential level include strengthening of capital base of an individual bank through increasing the minimum equity requirement and Tier 1 Capital, and implementing international liquidity framework (LCR and NSFR) while at the macro-prudential level, measures include introducing countercyclical capital buffer to protect the entire financial system against systemic risk, addressing too-big-to-fail problem through tighter supervision, and addressing interconnectedness through various measures such as enhanced regulatory framework for global systemic important banks.<sup>155</sup>

Basel III aimed at increasing the quality and quantity of capital and liquidity of banks by introducing minimum capital requirements and buffers. Lee pointed out that the new accord is basically a set of additions made to Basel II because of the 2007 global financial crisis to strengthen the financial regulatory system, and the regulatory capital framework is built on three pillars such as was done in Basel II.<sup>156</sup>

Pillar 1 deals with capital, risk coverage and leverage ratio. Pillar 2 discusses risk management and supervision by addressing firm-wide governance, managing risk concentrations, and providing incentives for banks to better manage their risks. And Pillar 3, captures requirements for market discipline. It will be important to note that a revised Pillar 3 disclosure requirement was issued and became effective by the end of 2016.

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<sup>153</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' *Supra.n.1*

<sup>154</sup> Elisa Bengtsson Stockholm, 'The Political Economy of Banking Regulation-Does they Basel 3 Accord Imply a Change' (2013) 46(3) *Credit and Capital Markets*. 303

<sup>155</sup> Dan Nitescu and Florin Duna, 'Liquidity Management and the Banking Lending Mechanism' (2016) 17(4) *Review of International Comparative Management*. 403

<sup>156</sup> Emily Lee, 'Basel III and Its New Capital Requirements, as Distinguished from Basel II' (2014) 131 *Banking Law Journal*, 27

Apart from the revised Pillar 3, some other changes have been made to the Basel III regulatory framework and these reforms have now been integrated into the consolidated Basel Framework that comprises the full set of standards of the BCBS. According to Carney, the principal function of this new Basel III regulation is to enhance the resilience of financial institutions through the below.

- Its creation of global standards for liquidity
- the introduction of a leverage ratio as a complement to the risk-based Base II framework
- substantially raising the quality, quantity, consistency, and transparency of the tier 1 capital base
- Introduction of two additional capital buffers which are the capital conservation buffer and counter-cyclical buffer.<sup>157</sup>

One of the major key changes made in the Basel III capital framework is on pillar 1 that made provision for increase in the capital requirements in order to reduce the probability of a bank collapse.<sup>158</sup> Basel III provides that a bank's total capital must be made up of at least 8 percent of its risk-weighted assets (RWA) and at least 75 percent of the total capital has to be Tier 1 Capital, while the remaining 25 percent will consist of Tier 2 Capital.<sup>159</sup>

Tier 1 Capital is further divided into common equity Tier 1 and additional Tier 1. Common equity Tier 1 Capital must always contain at least 4.5 percent of a bank's RWA while the remaining 1.5 percent can be contained in the additional Tier 1 Capital.<sup>160</sup> In other words, at least 75 percent of a bank's Tier 1 Capital must be made up of common equity Tier 1 Capital while the remaining 25 percent of its Tier 1 Capital can be the additional Tier 1 Capital.

Common equity Tier1 Capital as contained in the BCBS publication of 2010 includes common shares issued by a bank and able to meet the criteria for classification as

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<sup>157</sup> Mark Carney, 'Countercyclical Capital Buffers and Basel III in Regulatory Reforms and Remaining Challenges' (2011) Occasional Paper No. 81 Published by Group of Thirty, Washington DC [www.group30.org/images/uploads/publications/G30](http://www.group30.org/images/uploads/publications/G30) Accessed on 02 May 2018

<sup>158</sup> Co-Pierre Georg, 'Basel III and Systemic Risk Regulation-What Way Forward' (2011) Working Papers on Financial Markets No. 17 in Emily Lee, 'Basel III and Its New Capital Requirements, as Distinguished from Basel II' (2014) 131 Banking Law Journal, 27

<sup>159</sup>Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>160</sup> Ibid

common shares for regulatory purposes. Others are surplus from common stock issuances; banks' retained earnings, other comprehensive incomes, minority interests in the common stock of consolidated subsidiaries and certain regulatory adjustments.<sup>161</sup>

Also, additional Tier 1 Capital is non-common share equity capital and include stock surplus that is subordinated to depositors, general creditors and the subordinated debt of the bank, certain instruments issued by consolidated subsidiaries of a bank held by third parties, and certain regulatory adjustments to capital.<sup>162</sup> Therefore, in order for an instrument to qualify as additional Tier 1 Capital, it has to meet certain criteria such that it must be issued and paid in, must be subordinate to debt, must not be secured and must be perpetual without maturity date.<sup>163</sup>

Tier 2 Capital on the other hand is of lower quality than Tier 1 Capital and aimed at providing loss absorption on a gone-concern basis. This means that Tier 2 Capital is meant to be absorbed by a bank as it becomes insolvent. Also, Tier 2 Capital have more debt-like features and provides a bank with a cushion of lower forms of equity and junior liabilities such as limited-life preferred stocks and loan loss reserves, goodwill, and subordinated debt.<sup>164</sup>

According to Blair and Pflleiderer, Basel III introduced two additional capital buffers in other to prevent future losses and address the issue of systemic risk within the global financial system.<sup>165</sup> These two additional buffers are the capital conservation buffer that is meant to apply to all banks and the countercyclical buffer that applies to specific banks at the discretion of the various national governments.

In the capital conservation buffer as stated in King and Tarbert, banks are required to hold an additional common equity of 2.5 percent of their RWA over and above the 4.5 percent minimum requirement.<sup>166</sup> This will automatically bring the common equity Tier 1 requirement to a total of 7 percent RWA. Additionally, banks can fall below the

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<sup>161</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>162</sup> Ibid

<sup>163</sup> Keefe Blair and Andrew Pflleiderer, 'Basel III: What It Means for the Global Banking System' (2012) 27(3) Banking and Finance Law Review. 407

<sup>164</sup> K. Aathira and R. Shanthi, 'Basel III –The Impact on Banking Sector' (2013) 2(2) Sumedha Journal of Management, 4

<sup>165</sup> Keefe Blair and Andrew Pflleiderer, 'Basel III: What It Means for the Global Banking System' (2012) 27(3) Banking and Finance Law Review. 407

<sup>166</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1



required 7 percent during stress period but must rebuild the buffer on a reduction of discretionary distributions until it is re-established.

Also, regulators can enforce reduction of discretionary distribution if a bank that is below the required buffer range voluntarily fails to do so.<sup>167</sup> The countercyclical buffer on the other hand, is intended to act as a brake on the availability of credit when there is high credit growth and in addition, lessen the pressure to restrict credit during periods of downturn.<sup>168</sup>

In other words, countercyclical buffer is meant to be used to protect the banking sector from excessive credit growth and help ensure that the banking sector has the needed capital to help maintain the flow of credit in the economy. Also, Basel III relies on national jurisdictions to impose a countercyclical buffer on banks within a range of 0 to 2.5 percent comprising of common equity. This happens when it is determined that credit growth is leading to an unacceptable build-up that can result in systemic risk.

One of the great highlights of Basel III is recognition of the importance of liquidity requirements to correct the perceived flaws and weaknesses that manifested during the 2007 global financial crisis. Basel III liquidity requirements are aimed at reducing liquidity mismatches in the banking sector to limit banks' need to liquidate assets in the event of a liquidity crisis.<sup>169</sup>

Santos and Elliott are of the opinion that the Basel liquidity requirements can help in avoiding liquidity problems that may affect the activities of the banking sector and financial market, particularly in the case of freezing of liquidity that happened during the last global financial crisis. In fact, by encouraging banks to raise enough liquidity buffers, the Basel liquidity requirements can be viewed as self-insurance for banks to liquidity shocks.

Consequently, one of the benefits of Basel III liquidity requirement as stated in Nicolo is that it gives supervisors adequate time to assess bank liquidity positions and arrange appropriate responses in a period of stress.<sup>170</sup> Therefore, the resilience and

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<sup>167</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>168</sup> Ibid

<sup>169</sup> Gianni De Nicolo, 'Liquidity Regulation: Rationales, Benefits and Costs' (2016) 235 National Institute Economic Review, 18 at 23.

<sup>170</sup> Gianni De Nicolo, 'Liquidity Regulation: Rationales, Benefits and Costs' (2016) 235 National Institute Economic Review, 18 at 23.

robustness of the banking sector can be promoted through the Basel liquidity standards. This is because BCBS defined liquidity as the ability of a bank to fund increases in assets and meet obligations as they become due without incurring unacceptable losses.

Furthermore, Ahmed identified three sources of liquidity outside the usual banking system that are – ‘funding, market and central bank’.<sup>171</sup> Funding liquidity deals with the ease with which a bank can be able to attract funding at a reasonable cost. An example is where banks often use their assets as collateral for short-term borrowings to raise fund for themselves.

The other source that is market liquidity refers to the ease with which a bank can raise enough money by selling its asset instead of borrowing against it. This is to say that it deals with the cost of selling assets.<sup>172</sup> Market liquidity can either be high or low. When market liquidity is low, it would be unreasonable for a bank to sell its asset because selling would depress its price.<sup>173</sup>

Another source of liquidity that is Central bank liquidity is deposits of financial institutions that are held at central banks and usually referred to as reserve balances.<sup>174</sup> Therefore, liquidity is very important and one of the focus of Basel III requirements. This is explained through the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) as contained in the next briefs.

## **2.7 Net Stable Funding Ratio (NSFR)**

The aim of NSFR is to achieve a more stable and long-term funding of assets. It covers both on-and-off balance sheet items and banks are expected to fund their long-term illiquid assets with a corresponding long-term capital.<sup>175</sup> Banks are also required by

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<sup>171</sup> Jaffar Mohammed Ahmed, ‘A Conceptual framework for the Basel accords-based regulation’ (2016) 24(1) Journal of Financial Regulation and Compliance. 90

<sup>172</sup> Philip Strahan, ‘Liquidity Production in 21<sup>st</sup> Century Banking (2010) in Michael R. King, ‘The Basel III Net Stable Funding Ratio and Bank Net Interest Margins’ (2013) 37 Journal of Banking and Finance. 4144

<sup>173</sup> Clemens Bonner, Iman van Lelyveld and Robert Zymek, ‘Banks’ Liquidity Buffers and the Role of Liquidity Regulation’ (2015) 48(3) Journal of Financial Services Research, 215 at 217.

<sup>174</sup> Obiageri C. Ndukwe, ‘Understanding Monetary Policy Series No 34: Banking System Liquidity’ (2013) Central Bank of Nigeria, <https://www.cbn.gov.ng> Accessed 13<sup>th</sup> February 2018.

<sup>175</sup> Michael R. King, ‘The Basel III Net Stable Funding Ratio and Bank Net Interest Margins’ *Supra.n* 233

the BCBS to maintain a stable funding profile that is in relation to the composition of their assets and off-balance sheet activities.

Furthermore, banks need to maintain a sustainable funding structure that reduces the likelihood of disruptions to their regular source of funding, and that which may destroy their liquidity positions thereby leading to systemic risk. The term, stable funding, implies that the equity or liability financing of a bank come from reliable sources of funds over one year time horizon.

The NSFR promotes both medium and long-term resilience in the banking sector by establishing minimum amounts of liquidity based on a bank's assets and activities over a one-year stress period.<sup>176</sup> Also, it is designed to minimise heavy reliance on short-term funding by banks.<sup>177</sup> Therefore, it promotes better assessment of funding risk across all on-and-off-balance sheet items, limits banks' over-reliance on short-term wholesale funding and encourages funding stability.

According to the BCBS, the NSFR is a quotient of the ratio of banks' available stable funding to its required stable funding and this ratio is expected to be equal to at least 100 percent on an ongoing basis. The amount of available stable funding and required stable funding specified in the NSFR standard are measured for the purpose of reflecting the presumed degree of stability of liabilities and liquidity assets.

Additionally, the NSFR addresses funding risks such as banks' inability to secure funding when needed<sup>178</sup> and encourages banks to have available stable funding (ASF) that exceed the required stable funding (RSF) for assets and off-balance sheet (OBS) exposures.<sup>179</sup> King and Tarbert defined ASF as the total amount of a bank's regulatory capital along with preferred stock that has a maturity period of a year or more, liabilities with maturities of a year period or more, portion of non-maturity deposits, term deposits and wholesale funding with maturity of less than a year that would be expected to stay with the bank for an extended period in a stress event.<sup>180</sup>

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<sup>176</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>177</sup> Xu-Wei Yaxian Gong and Ho Mou Wu, 'The Impact on Net Stable Funding Ratio Requirement on Banks' Choices of Debt Maturity' (2017) 82 Journal of Banking and Finance. 229

<sup>178</sup> Michael R. King, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' Supra.n. 233

<sup>179</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>180</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

Therefore, the ASF is viewed by the BCBS as that portion of capital and liability that is expected to be reliable over a one-year time horizon. In calculating the NSFR, an ASF factor is assigned to each source of funding and these factors usually depend on contract type and deposit insurance amongst others.<sup>181</sup> Furthermore, King highlighted that the NSFR also measures the sources of the ASF, and greater weights are allotted to the sources that are least likely to disappear under stressed market conditions.<sup>182</sup>

In terms of NSFR funding, the most stable form of funding is equity, long-term wholesale funding, and long-term liabilities.<sup>183</sup> Also, deposits and short-term wholesale funding with a maturity of less than one year are included in the stable funding. Liabilities and capital instruments as contained in the BCBS bulletin such as total regulatory capital, excluding Tier 2 with residual maturity of less than a year, and other capital instruments and liabilities with a residual maturity of a year or more, receive a 100 percent ASF factor.

Other liabilities such as operational deposit funding with a residual maturity of less than a year from sovereigns, national development banks, and non-financial corporate customers receive a 50 percent ASF factor. It is important to note that ASF is the numerator of NSFR while the RSF is the denominator. The RSF is defined as that part of a bank's assets and OBS that are regarded as illiquid over a one-year horizon and therefore, should be backed by stable funding sources.<sup>184</sup>

RSF is measured based on the liquidity risk profiles of a bank's assets and OBS exposures.<sup>185</sup> The RSF is assigned a factor (or haircut) that is applied based on an asset's expected liquidation value under stressed circumstances or residual maturity.<sup>186</sup> A good example is where marketable securities guaranteed by sovereigns

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<sup>181</sup> Karlo Kauko, 'A Short Note on the Net Stable Funding Ratio Requirement with Endogenous Money' (2017) 46(1) Economic Notes. 105.

<sup>182</sup> Michael R. King, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' Supra. N 233

<sup>183</sup> Michael R. King, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' Supra.n 233

<sup>184</sup> Jeanne Gobat, Mamoru Yanase and Joseph Maloney, 'The Net Stable Funding Ratio: Impact and Issues for Consideration' (2014) 14(106) IMF Working Papers. 9

<sup>185</sup> Basel Committee on Banking Supervision, Bank for International Settlements, 'Basel III: the net stable funding ratio' Supra.n.250

<sup>186</sup> Michael R. King, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' Supra. N 233

and central banks are assigned a 0 percent risk-weight that are considered highly liquid and must be assigned a 5 percent RSF factor.

Unencumbered securities with one year or more maturity and physically traded commodities including gold have 85 percent RSF factor. All assets that are encumbered for one year or more periods are assigned a 100 percent RSF factor while cash, central bank reserves, securities that have less than a year to maturity and interbank claims have a 0 percent RSF factor. The NSFR was scheduled and has become a minimum standard by 1st January 2018.

## **2.8 Liquidity Coverage Ratio (LCR)**

The LCR was first published in 2010 and was later revised in 2013. The LCR has been integrated into the consolidated Basel Framework that comprises of all current and forthcoming regulatory standards made by the BCBS for banks.<sup>187</sup> The LCR is defined by Du as the ratio of stock of HQLA (the numerator) to total net cash outflows (denominator) over a thirty-day period of stress.<sup>188</sup> The new LCR is an attempt to measure a bank's resilience over a thirty-day period when a bank is faced with a crisis.<sup>189</sup>

The chairman of the Basel Committee, Stefan Ingves is of the opinion that the LCR was mainly designed to ensure the provision of a sound minimum standard for bank liquidity, and a standard that truly reflects actual experience during periods of stress.<sup>190</sup> The LCR standard as contained in the BCBS publication of 2013 requires a bank to hold a stock of unencumbered high-quality liquid assets (HQLA) to cover the total net cash outflows over a thirty-day scenario of severe credit market stress.

In other words, banks are expected to hold enough liquid assets that can cover a run on their liabilities. This is because banks facing unexpected cash outflows can liquidate their liquefiable buffers rather than selling their illiquid assets (loans) at fire

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<sup>187</sup> BIS, 'Basel III: International Regulatory Framework for Banks' [www.bis.org/bcbs/basel3.htm](http://www.bis.org/bcbs/basel3.htm) Accessed 20th January 2020.

<sup>188</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' (2017) 23 (5) European Financial Management, 902

<sup>189</sup> Andrew W. Hartlage, 'The Basel III Liquidity Coverage Ratio and Financial Stability' (2012) 111(3) Michigan Law Review 453.

<sup>190</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' (2017) 23 (5) European Financial Management, 902

sale prices to cover their liquidity deficits.<sup>191</sup> Buffers such as treasury securities can be quickly resold or pledged as collateral at their true value when a bank needs cash.<sup>192</sup>

Also, liquidity buffers of HQLA as contained in the European Investment Bank publication of 2012 can reduce the cost of premature liquidation and mitigate liquidity risk that can arise from either the depositors' requests for early withdrawal of their funds or investors' refusal to roll over maturing debt. In contrast, buffers of liquid but low yielding assets can be costly and can lead to banks maintaining a stock of liquid assets that are insufficient to ensure an adequately systemic low risk.<sup>193</sup>

The collapse of Lehman Brothers in the USA is a reference point. The firm claimed to have liquidity fortress of 40 billion dollars in cash and liquid assets of 700 billion dollars on its balance sheet, but its liquidity holdings quickly disappeared as they were used to repay some of the creditors who became uncertain about the company's ability to service its obligations.<sup>194</sup>

Lehman Brothers was unable to service its numerous outstanding debts owing to its incapability to obtain extra liquidity from outside as well as lack of liquid assets. Subsequently, the firm declared for bankruptcy because its liquidity fortress was insufficient to prevent its collapse. This is one of the scenarios that exposed the need for liquidity buffers to counter unexpected liquidity shocks.

According to Kowalik, liquidity buffer of high-quality liquid assets (HQLAs) under the LCR can reduce the risk of systemic crisis in different ways such as:

- Making banks less vulnerable to runs. This is because substantial liquidity buffer normally boosts the confidence of banks with regards to their ability to service their obligations.
- Also, large stocks of liquidity can reduce a bank's reliance on assets sale to obtain liquidity. In other words, liquidity buffer may allow management and supervisors of a bank enough time to find a solution to their liquidity needs in a time of stress.

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<sup>191</sup> Mark House, Tim Sablik and John R. Walter, 'Understanding the New Liquidity Coverage Ratio Requirements' (2016) 16(1) Federal Reserve Bank of Richmond. Economic Brief. 1

<sup>192</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' *Supra*.n.201.

<sup>193</sup> Michal Kowalik, 'Basel Liquidity Regulation: Was It Improved with the 2013 Revisions?' (2013) *Economic Review- Federal Reserve Bank of Kansas City*. 65

<sup>194</sup> *Ibid*

- Finally, having substantial liquidity buffer reduces a bank's dependence on the central bank when faced with a liquidity crisis.<sup>195</sup>

Therefore, liquidity buffers are intended to act sufficiently as first line of defence against liquidity shocks in order to prevent banks from relying on a central bank too early.<sup>196</sup> On the contrary, Quignon argued that the LCR sort of made the central banks to go from being lender of last resort to lender of first resort because the goal of the LCR can be achieved to a large extent with the support of the central bank in normal conditions, particularly in emerging economies such as the SSA.<sup>197</sup>

In the absence of a financial stress situation, banks are required under the LCR to keep HQLA equal to at least 100 percent of total net cash outflow on an ongoing basis.<sup>198</sup> This is because banks with HQLA of at least 100 percent are deemed to have enough liquidity that can withstand a 30-day stress period and give their bank management additional time to react.<sup>199</sup>

Although banks can use their HQLA stock during financial stress periods thereby falling below the required 100 percent,<sup>200</sup> it is assumed that by the end of the 30-day stress period, a bank's management and supervisors will have been able to resolve the issue in an orderly manner or taken corrective actions on the bank.

However, questions have been asked such as to whether an individual bank can be able to sell its assets in time of stress to meet liquidity needs. The possibility of such scenario lies in such assets being liquid in markets during a time of stress and being eligible for use in central bank operations to qualify as HQLA. Therefore, it is pertinent to note here that central bank eligibility does not on its own form the basis for classifying assets as HQLA.

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<sup>195</sup> Michal Kowalik, 'Basel Liquidity Regulation: Was It Improved with the 2013 Revisions?' (2013) Economic Review- Federal Reserve Bank of Kansas City, 65

<sup>196</sup> Leo De Haan and Jan Wilem Van Den End, 'Bank Liquidity, The Maturity Ladder and Regulation' (2013) 37(10) Journal of Banking and Finance. 3930

<sup>197</sup> Laurent Quignon, 'Basel III, the Money Multiplier and Monetary Policy' (2013) [www.economic-research.bnpparibas.com/html/en-US/Basel-III-money-multiplier-monetary-policy](http://www.economic-research.bnpparibas.com/html/en-US/Basel-III-money-multiplier-monetary-policy) Accessed on 10th December 2018.

<sup>198</sup> Andrew W. Hartlage, 'The Basel III Liquidity Coverage Ratio and Financial Stability' Supra.n.202

<sup>199</sup> Mark House, Tim Sablik and John R Walter, 'Understanding the New Liquidity Coverage Ratio Requirements' (2016) 16(1) Federal Reserve Bank of Richmond. Economic Brief. 1

<sup>200</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' (2013) <https://www.bis.org/publ/bcbs238.pdf> Accessed on 13 November, 2017

Liquidity in terms of cash outflows represent the rates at which other short-term funding are expected to run-off or to be drawn down.<sup>201</sup> The total net cash flow that is the denominator of the LCR is defined as the difference between the total expected cash outflow and the total expected cash inflow in the specified stress scenario for thirty calendar days.<sup>202</sup> Also, the total cash inflow is subjected to an aggregate cap of 75 percent of total expected cash outflow.<sup>203</sup>

Therefore, the BCBS requires that the net cash outflow and the corresponding minimum for the HQLA cannot fall below 25 percent of the expected cash outflow for the 30-day stress period. According to Hartlage, this definition of the total net cash outflow limits the extent to which banks can rely on inflows to cover outflows.<sup>204</sup> This is because at no event will the total net cash outflow go less than 25 percent of a bank's projected outflow.

In other words, banks are expected to hold HQLA that are equal to at least 25 percent of their projected outflow with respect to the total net cash outflow. Total expected cash outflows as stated in Du includes outstanding balances of various types of liabilities and off-balance sheet loan commitments plus estimates of the rates at which they are expected to either run-off or be drawn down during the time of stress.<sup>205</sup>

Outflows are calculated based on run-off assumptions that are derived from a type of bank liability.<sup>206</sup> A good example is a retail deposit (deposits owned by a natural person) that is divided into stable and less stable deposits. Stable deposits are made up of government guaranteed deposits or deposits in domestic offices and withdrawal is unlikely, though deposits usually remain consistent.<sup>207</sup>

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<sup>201</sup> Laurent Quignon, 'Basel III, the Money Multiplier and Monetary Policy' (2013) [www.economic-research.bnpparibas.com/html/en-US/Basel-III-money-multiplier-monetary-policy](http://www.economic-research.bnpparibas.com/html/en-US/Basel-III-money-multiplier-monetary-policy) Accessed on 10th December 2018.

<sup>202</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' Supra.n.201.

<sup>203</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.204

<sup>204</sup> Andrew W. Hartlage, 'The Basel III Liquidity Coverage Ratio and Financial Stability' Supra.n.202

<sup>205</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' Supra.n.201.

<sup>206</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>207</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' Supra.n.201.



Runoff (outflow) rate in the stable deposit is assessed at 5 percent while the less stable retail deposit has a minimum runoff rate of 10 percent.<sup>208</sup> The less stable retail deposit can include deposits that are not fully covered by an effective deposit insurance scheme or sovereign deposit guarantee, deposits from sophisticated individuals, deposits that can be withdrawn quickly and foreign currency deposits amongst others.<sup>209</sup>

Also, there are other forms of funding such as unsecured wholesale funding that are subject to run-off factors of 5 percent, 10 percent, 25 percent, 40 percent, or 100 percent. Examples include unsecured wholesale funding provided by small business customers that have run-off factors of 5 percent, 10 percent and higher; unsecured wholesale funding provided by non-financial corporates and sovereigns, central banks, multilateral development banks that have a run-off factor of 20 percent or 40 percent; and unsecured wholesale funding provided by other legal entity customers that have a run-off factor of 100 percent.<sup>210</sup>

Therefore, run-off rates increase as funding instability increases.<sup>211</sup> However, a scheme is included in Basel III that made provision for reduced run-off factors for secured liabilities backed by level 1 and level 2 Assets, respectively.<sup>212</sup> Comparatively, inflows represent contractual repayments and interest payments from performing assets that are expected within 30 days.

Hence, inflows from fully performing outstanding exposures or contractual receivables with no reason of expected default within the 30-day period are included when a bank is calculating its expected cash inflow.<sup>213</sup> In other words, the interest a bank earns on loans and principal payments made during the applicable window constitute inflow of a bank. In terms of secured lending including reverse 'repos', the net inflow rate differs based on the quality of the asset used as collateral and other certain features.<sup>214</sup>

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<sup>208</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools' Supra.n.204

<sup>209</sup> Brian Du, 'How Useful is Basel III's Liquidity Coverage Ratio? Evidence from US Bank Holding Companies' Supra.n.201.

<sup>210</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools' Supra.n.204

<sup>211</sup> Andrew W. Hartlage, 'The Basel III Liquidity Coverage Ratio and Financial Stability' Supra.n.202

<sup>212</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>213</sup> Ibid

<sup>214</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

Additionally, the cash inflow for reverse repos or securities borrowing agreements will depend on the proportion that the regulator considers not to be rolled over if there is a liquidity crisis.<sup>215</sup> The LCR requirement was scheduled to be effective by 1st January 2015 with an initial minimum threshold of 60 percent, increasing by 10 percent points each of the next consecutive years and expected to reach 100 percent by 1st January 2019.<sup>216</sup>

In as much as LCR can improve the liquidity position of banks by encouraging them to modify their asset portfolio and redefine their strategy for funding, the requirement also forces banks to hold safe liquid assets against their liabilities, thereby limiting their liquidity transformation by restricting the asset side of their balance sheet.<sup>217</sup> This is one of the reasons some authors such as Bouwman criticised the LCR. Bouwman criticised the LCR for three main reasons.<sup>218</sup>

One of the reasons is the introduction of a one-size-fits-all liquidity run-off assumption that all banks are expected to use in determining the size of the liquidity buffer. Another reason is that banks are required under the LCR rule to apply prescribed haircuts to specific asset classes when establishing a stock of HQLA instead of asking them (banks) to discount the fair market value of assets they included in their liquidity buffer to reflect any market volatility and credit risk.

The other reason is that LCR tends to encourage increase in demand for HQLA assets in banks particularly level 1 HQLA, while demand for non-HQLA assets may decline. In view of these reasons, it will be important to understand the basics of HQLA and its components as they are captured under the LCR Basel III requirement.

## **2.9 High Quality Liquid Assets (HQLA)**

HQLA as explained by the BCBS are assets that can easily and immediately be changed into cash at little or no loss, especially during a period of stress. According to

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<sup>215</sup> Laurent Quignon, 'Basel III, the Money Multiplier and Monetary Policy' (2013) [www.economic-research.bnpparibas.com/html/en-US/Basel-III-money-multiplier-monetary-policy](http://www.economic-research.bnpparibas.com/html/en-US/Basel-III-money-multiplier-monetary-policy) Accessed on 10th December 2018.

<sup>216</sup> Michael R. King, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' (2013) 37 *Journal of Banking and Finance*, 4144

<sup>217</sup> Skander J. Van Den Heuvel, 'The Welfare Effects of Bank Liquidity and Capital Requirement' (2018) Federal Reserve Board. [www.fdic.gov/bank/analytical/cfr/bank-research-conference/annual-18th2-vandenheuvel.pdf](http://www.fdic.gov/bank/analytical/cfr/bank-research-conference/annual-18th2-vandenheuvel.pdf) Accessed 22nd November 2018.

<sup>218</sup> Christa H. S. Bouwman, 'Creation and Regulation of Bank Liquidity' (2018) Available at SSRN, Accessed on 15 December 2019

Du, the BCBS expanded on their definition of HQLA by including additional conditions such as the volume of the asset to be monetised (whether the assets can be converted to cash on a large scale), the basic stress scenario and the time considered in determining whether an asset can qualify as HQLA.

Also there have been important factors suggested by the BCBS that influence whether market for an asset can be relied on to raise liquidity especially in a time of stress. These factors will enable supervisors to determine assets that are sufficiently liquid in the market and those that can be included in the stock of HQLA.<sup>219</sup>

A test of whether an asset is of high quality is by way of sale or repo and the liquidity-generating capacity is presumed to be intact even in time of market stress.<sup>220</sup> The following factors that are grouped into fundamental characteristics and market-related characteristics by the BCBS need to be considered when assessing whether a market for an asset can be relied on to raise liquidity in a time of stress.

### **2.9.1 Fundamental Characteristics as provided by the BCBS**

- Low risk: Less risky assets tend to have higher liquidity. An example is the increase of an asset's liquidity by high credit standing of the issuer and a low degree of subordination. Other factors that enhance an asset's liquidity include low legal risk, low inflation risk and denomination in a convertible currency with low foreign exchange risk.
- Ease and certainty of valuation: Liquidity of an asset increases if market participants are more likely to agree on its valuation.
- Low correlation with risky assets: Stock of HQLA ought not to be subjected to wrong-way risk. This can be seen in times of liquidity stress in the banking sector whereby assets issued by financial institutions are more likely to be illiquid.
- Listed on a developed and recognised exchange: Asset's transparency increases if it is listed on a developed and recognised exchange.

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<sup>219</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools' Supra.n.204

<sup>220</sup> Ibid

## 2.9.2 Market-related Characteristics as provided by the BCBS

- Active and sizeable market: The asset must always possess active outright sale or repo markets.
- Low volatility: The asset's price is expected to remain relatively stable and less prone to sharp price decline over time. The asset should possess a historical evidence of the relative stability of prices, haircuts, and volumes during periods of stress.
- Flight to quality: This occurs when investors decide to sell their high-risk investments to purchase what they believe to be the safest possible investment due to uncertainty in the marketplace. Markets have shown tendencies to move into these types of assets in a systemic crisis.

An asset must be able to meet the above characteristics to form part of the stock of HQLA. Additionally, all assets that form part of the stock of HQLA are subject to the operational requirements that specify that HQLA must be unencumbered, managed for its purpose (that is using them as a source of contingent funds), kept on a firm's account and be readily available for bank use at any time to fill funding gaps.<sup>221</sup>

Also, the operational requirement provides for a bank to regularly monetise a portion of its stock of HQLA through repo or outright sale to test its access to the market and minimise the risk of negative signalling during periods of stress.<sup>222</sup> It is important to note that HQLA comprises of levels 1 and 2 Assets, respectively.

Level 1 Assets comprise of assets that are of the highest quality and are not subject to any haircut during stress periods such as cash, central bank reserves, and marketable securities issued on or guaranteed by high rated governments, central banks, multilateral development banks and other public sector entities.<sup>223</sup> However, the marketable securities must meet all requirements such as being assigned a 0 percent risk-weight for credit risk, having a proven record as a reliable source of

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<sup>221</sup> Peter King and Heath Tarbert, 'Basel III: An Overview' Supra.n.1

<sup>222</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.204

<sup>223</sup> Clemens Bonner, Lelyveld Iman Van and Robert Zymek, 'Banks' Liquidity Buffers and the Role of Liquidity Regulation' (2015) 48(3) Journal of Financial Services Research, 215

liquidity in the market and traded in large, active repo or cash market with low concentration.<sup>224</sup>

On the other hand, Level 2 Assets are made of level 2A Assets and any of level 2B Assets allowed by the supervisor and may constitute only 40 percent of the overall stock of HQLA after the required haircut has been applied.<sup>225</sup> Level 2A Assets are affected by a 15 percent haircut of current market value and includes certain other marketable securities issued by sovereigns, central banks and similar entities, certain corporate and covered bond not issued by a financial institution.<sup>226</sup>

Considerably, level 2B Assets can be allowed to form part of the stock of HQLA at the discretion of the national supervisors, have a larger haircut and include lower rated corporate debt securities not issued by a financial institution with 50 percent haircut, residential mortgage-backed securities subject to 25 percent haircut and common equities that meet certain conditions with 50 percent haircut.<sup>227</sup>

It is important to note that there are different possible ways by which a bank can meet the HQLA requirements such as shrinking the size of its balance sheet. This can be done by cutting lending to the non-financial sector and that will increase the ratio of HQLA to stressed liability outflows or increase the size of balance sheets through attracting more stable deposit funding and using the proceed to acquire HQLA.<sup>228</sup> In as much as these possible alternatives exist, it is important to ensure that the supervision and monitoring of these requirements are at parallel with each other.

## 2.10 Conclusion

The aim and justification of harmonising and implementing global banking regulations may have yielded dividends but evolving risks and incessant flaws are making it questionable. Both Basel I and Basel II lived up to their times though their demise that

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<sup>224</sup> Basel Committee on Banking Supervision, 'Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring (2010) in Peter King and Heath Tarbert, 'Basel III: An Overview' (2011) 30(5) Banking and Financial Services Policy Report.9.

<sup>225</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.204

<sup>226</sup> Ibid

<sup>227</sup> Ibid

<sup>228</sup> Ryan N Banerjee and Hitoshi Mio, 'The Impact of Liquidity Regulations on Banks' (2015) Bank of England Staff Working Paper No.536. [https://www.researchgate.net/publication/315450815\\_The\\_Impact\\_of\\_Liquidity\\_Regulation\\_on\\_Banks](https://www.researchgate.net/publication/315450815_The_Impact_of_Liquidity_Regulation_on_Banks) Accessed on 20th January 2019.

emanated from containing different financial crises seem to point to the regulators, assessors, and politics of global banking.

In terms of regulators, their roles cannot be overemphasised. This is because in as much as they have responsibilities, they are still not regulated. Basel I that was said to be insensitive to risks had the regulators probably ill equipped and with their level of insider information, was still unable to assess the various levels of such developing risks as at that time.

Another factor was their (regulators) focus on capital requirements in Basel II that later exposed the inherent risks in liquidity requirements and that eventually crashed the global financial system. On the part of the assessors, it was believed that they were compromised though they deny it. However, with the level of competition at that time, and the increase in access to credit, it was very possible that these credit agencies were complicit in their ratings.

The criteria for rating those subprime loans that misled both institutions and the public into keying into such toxic loans are yet to be verified. They (institutions and the public) bought into such credits based on trust (of the assessors) and information available at that time.

Finally, the politics of global banking that was at play in the 2007 financial crisis saw through a group of financial institutions being bailed out while others collapsed under the watchful eyes of the same respective governments. The criteria used in the bailouts are yet to be justified. Otherwise, Northern Rock will not have been allowed to fail considering the communication of events from the beginning with the Bank of England.

What more can be said as regards that of Lehman's Brothers? Again, people were handed 'three-course meals' without recourse to affordability when they could hardly afford a loaf of bread. And this was encouraged and allowed to thrive by a government that knows much better than banks being globally interconnected. Of course, one of the consequences was the fall out of the 2007 financial crisis.

The introduction of Basel III with the highlights of short-term and long-term liquidity resilience to address the shortcomings of Basel II may not be the end of Basel Accords. This is because amongst other factors, the implementation of Basel II was

still on-going, especially in developing economies at the time of the financial crash. This means that it was not fully tested.

The other factor comes from the opinion that these Basel Accords are meant to serve certain interests that do not take jurisdictional peculiarities such as the SSA region into consideration (although the SSA region was barely affected). Although, Basel III liquidity standards promote both the NSFR and LCR, the focus is more on the LCR as it dwells on the short-term that tests the liquidity resilience of a bank to keep it from blossoming into a full-term crisis.

The LCR has its positives such as a bank retaining HQLA buffer of 100 percent equivalent to its cash outflows and ensures that banks are liquid and resilient in the short-term. The requirement though not fully tested has its negatives as perceived by different school of thoughts such as the limitations of profit-taking because of holding onto a good amount of HQLA.

HQLAs serve as the LCR buffer and are made up of certain characteristics and classifications for which assets must satisfy to form the HQLA stock. Although selection of these characteristics and classifications may have been carried out thoroughly through careful considerations, it is in doubt if the peculiarities of different regions of the world such as the SSA were given a chance.

However, the Basel III regime ushers in new requirements that awaits the test of time as the dust gathers. Generally, the global harmonisation of bank regulations through Basel Accords have come to stay unless there is a revolt, or an alternative emerges. The next chapter focuses on the interests and challenges that characterise the adoption of Basel regulations especially by developing nations.

## Chapter Three

### Basic Factors in the Adoption of Basel Regulations by Developing Markets

#### 3.1 Introduction

Regulators, especially in the SSA jurisdiction, have raised concerns about the complexity of the LCR-defined HQLA requirement and have questioned its relevance to their banking systems. This is because of issues such as the definition of HQLA by the BCBS that may give false impression of secured liquidity in stress periods, thereby leading to hoarding of limited available HQLAs and defeating the essence of the liquidity regulation.<sup>229</sup>

Additionally, empirical researchers have argued that the maintenance of the LCR-defined HQLA put banks into a false sense of security that can lead to heightened risk-taking behaviour in relatively stable conditions.<sup>230</sup> Consequently, there is a general belief that implementation of the LCR-HQLA regulatory component can inhibit economic growth as it can lead banks to shift their portfolio away from sectors of the economy that are key for inclusive economic development.<sup>231</sup>

The above narratives are attested to the fact that the liquidity standard has created narrow categories of HQLAs that banks are expected to invest in and maintain while less willing to lend to businesses and commercial industries on a long-term basis.<sup>232</sup> Therefore, it is important to look at other alternatives with respect to increasing the stock of HQLA to prevent hoarding and increase lending.

Generally, there seem to be an apprehension towards the adoption of the introduced Basel Regulations, especially within the SSA region. This fear or anxiety is irrespective of the gains made in the banking industry through the harmonised Basel global regulations. Some countries especially the developing economies seem to adopt the Basel regulations as a means of compliance rather than need. This is because these

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<sup>229</sup> Thorsten Beck and Liliانا Rojas-Suarez, 'Making Basel III Work for Emerging Markets and Developing Economies' (2019) A CGD Task Force Report [www.cgdev.org/sites/default/files/making-basel-iii-work-emerging-markets-and-developing-economies.pdf](http://www.cgdev.org/sites/default/files/making-basel-iii-work-emerging-markets-and-developing-economies.pdf) Accessed 10th August 2019.

<sup>230</sup> Muhammad Saifuddin Khan, Harald Schuele and Eliza Wu, 'The Impact of Bank Liquidity on Bank Risk Taking: Do High Capital Buffers and Big Banks Help or Hinder?' (2015) [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2481887](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2481887) Accessed 10th November 2019.

<sup>231</sup> Emily Jones and Peter Knaack, 'Global Financial Regulation: Shortcomings and Reform Options' (2019) 10(2) Global Policy, <https://www.onlinelibrary.wiley.com/doi/pdf/10.1111/1758-5899.12656> Accessed 10th August 2019.

<sup>232</sup> Iris H-Y Chiu and Joanna Wilson *Banking Law and Regulation* (Oxford University Press, 2019) 416



Basel requirements are fast becoming a pre-requisite towards accessing the facilities at offer at different global bodies.

In view of the above findings, the first part of this chapter gives an insight into the recognition of Basel requirements as an important element of global financial integration. The challenges and factors relating to the adoption of the Basel standards open views for discussion as to whether the application of Basel Accords is covertly imposed or overtly suggested, especially in the context of developing nations.

The second part of the chapter highlights the alternatives and options available to increase the stock of HQLA as specified by the BCBS for jurisdictions that do not have enough stock. These highlights create an understanding of the loopholes that come with the alternatives and the possible challenges that come with it.

### **3.2 Challenges in the Adoption of Basel Regulations**

Scholars such as Jones and Knaack oppose the adoption of Basel regulations by emerging economies because of the challenges such regulatory standards pose to regulators in the emerging markets. Such challenges include the excessive complexity of the LCR-defined HQLA requirement, substantial costs involved (include tailoring the standards to make them suitable to their local context) and policy trade-offs.

These challenges are mostly encountered by lower and low-middle income countries such as the SSA region when implementing international banking standards that are poorly aligned to their respective local banking policies, and these challenges are often overlooked by the BCBS.<sup>233</sup> Therefore, for the purpose of this thesis, factors such as economic interest, cost and resources are considered in understanding the objectives that limit a bank's choice of liquid assets in relation to liquidity regulations.

#### **3.2.1 Economic Interest**

In the opinion of Dafe, the central banks in Africa face strong incentive to implement policies that favour major providers of investible resources.<sup>234</sup> So, where countries depend more on domestic business such as Kenya that is largely dependent on

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<sup>233</sup> Emily Jones and Peter Knaack, 'Global Financial Regulation: Shortcomings and Reform Options' (2019) Global Policy published by Durham University and John Wiley & Sons Ltd. <https://www.onlinelibrary.wiley.com/doi/epdf/10.1111/1758-5899.12656> Accessed 10 February 2019.

<sup>234</sup> Florence Dafe, 'The Politics of Finance: How Capital Sways African Central Banks' (2019) 55(2) Journal of Development Studies. 311

agriculture, the central bank policies are likely to reflect the preferences for stability to attract more foreign investors whereas if the countries are more dependent on natural resources such as Nigeria, the central bank policies are more likely to reflect government preferences for financial expansion.

Kenya is a relatively higher adopter of Basel standards because the government regards the implementation of the Basel standards as a key ingredient to endow Kenya with regulatory status and competitive advantage in the eye of international investors.<sup>235</sup> However, their liquidity requirements are simpler and better tailored to the characteristics of their domestic banking system when compared to the LCR requirements that was described as excessively complex as it failed to consider the different economic and regulatory environment of the banking system in emerging countries.<sup>236</sup>

On the other hand, the adoption and implementation of the Basel standards in Nigeria was primarily driven by the need to enhance financial stability, competitiveness, sound markets and financial expansion.<sup>237</sup> In fact, international active banks headquartered in Nigeria advocate for Basel III implementation to expand abroad because they tend to use it to reassure host regulators that they are well regulated in Nigeria.<sup>238</sup>

Also, the shift in structural power such as changes in leadership contributes in the adoption of the Basel standards and shaping of Nigeria's central bank policy.<sup>239</sup> The application of Basel III requirement has been slow in Nigeria as regulators have conflicting preferences and equally cautious as it can trigger regulatory interventions in several fragile domestic banks that can lead to loss of confidence in the banking industry.<sup>240</sup>

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<sup>235</sup> Radha Upadhyaya, 'Kenya-International Consensus' Global Economic Governance Programme <https://www.geg.ox.ac.uk/project/kenya> Accessed 20th January 2019.

<sup>236</sup> Thorsten Beck, Emily Jones, and Peter Knaack, 'Basel Standards and Developing Countries: A Difficult Relationship' (2018) <https://www.voxeu.org/article/basels-standards-and-developing-countries> Accessed on 10th February 2019.

<sup>237</sup> Florence Dafe, 'Nigeria-Conflicted Preferences' Global Economic Governance Programme <https://www.geg.ox.ac.uk/project/nigeria> Accessed 20th January 2019.

<sup>238</sup> Emily Jones and Peter Knaack, 'Global Financial Regulation: Shortcomings and Reform Options' (2019) 10(2) Global Policy, <https://www.onlinelibrary.wiley.com/doi/pdf/10.1111/1758=5899.12656> Accessed 10<sup>th</sup> August 2019.

<sup>239</sup> Florence Dafe, 'Fuelled Power: Oil, Financiers and Central Bank Policy in Nigeria' (2018) New Political Economy. 1

<sup>240</sup> Florence Dafe, 'Nigeria-Conflicted Preferences' Global Economic Governance Programme <https://www.geg.ox.ac.uk/project/nigeria> Accessed 20th January 2019.

Also, Nigerian regulators are aware of the challenges arising from the complexity of the Basel III liquidity standards that may be encountered when transplanting the new standards to Nigeria's environment.<sup>241</sup> Indeed, given the vast differences in political regimes and national interests across the globe, the implementation of internationally harmonised set of rules can be challenging.<sup>242</sup>

One of the reasons for these challenges is because it may be difficult for a national government to cede power to a global financial regulator such as the BCBS to make rules that will regulate its financial system without contributing or making adjustment to such rules. Based on this reason, some countries may be slow in the implementation of the Basel regulations though covertly.

Another major factor that drives regulatory direction though challenging is bank size. There has been an increase in the number of 'mega' banks because of the globalisation of financial market consolidation through cross-border and cross-pillar mergers, thereby shrinking the number of individual banks.<sup>243</sup> The more international active large banks are, the greater the likelihood that they will advocate the implementation of the Basel III liquidity standards.<sup>244</sup>

It is important to note that the size of a bank can be determined by the size of its balance sheet because a bank's balance sheet structure is the only true measurement of analysing a bank's financial performance.<sup>245</sup> Undeniably, the interest of large banks has contributed to shaping regulatory decisions and regulators are often wary of introducing regulations that could disrupt the so-called large banks status.<sup>246</sup>

Furthermore, some of the so-called large banks are regarded as 'too big to fail' because of their size as such parameter is a very important determinant in ascertaining

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<sup>241</sup> Florence Dafe, 'Nigeria-Conflicted Preferences' Global Economic Governance Programme <https://www.geg.ox.ac.uk/project/nigeria> Accessed 20th January 2019.

<sup>242</sup> Iris H-Y Chiu and Joanna Wilson, *Banking Law and Regulation* (Oxford University Press, 2019) 228

<sup>243</sup> Lawrence Kryzandowski, 'Organisational Design and Positioning of the Deposit Insurance Function in the Financial System Safety Net' in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 92

<sup>244</sup> Emily Jones and Alexandra Zeitz, 'The Limits of Globalizing Basel Banking Standards' (2017) *Journal of Financial Regulation*. 1

<sup>245</sup> Kevin N. Kombo and Amos Njuguna, 'Importance of Capital Adequacy Requirements in the Basel III Framework for Commercial Banks in Kenya' (2017) 1(4) *American Journal of Finance*. 26.

<sup>246</sup> Emily Jones and Alexandra Zeitz, 'The Limits of Globalizing Basel Banking Standards' (2017) 3(1) *Journal of Financial Regulation*. 89

banks that are susceptible to fail. A scholar, Goodhart gave three overlapping reasons why a bank might be regarded as 'too big to fail'.<sup>247</sup>

The first reason is the socially unacceptable devastation to a community because of failure of a bank that operates within it relative to size such as having a greater share of the banking business within such a community. Another reason is that a bank may be too big to save such as certain cross -border banks that have become so large relative to their home economies and their respective home governments may not easily support them in crisis.

The other reason is the interconnectedness of a large bank with a widespread external effect on other banks and financial markets if it fails. Although large banks such as found in the SSA jurisdiction are not as sophisticated as their counterparts in the developed economies, their well-established customer base is a great asset to meeting the Basel III liquidity regulatory standards as deposit is one of their main sources of funding.<sup>248</sup>

Comparatively, most small banks in the SSA region lack the resources to acquire and manage the LCR-defined HQLA requirement prescribed by BCBS due to cost implications.<sup>249</sup> This lack of resource also limit their ability to compete effectively with the large banks in the financial market as they (large banks) are viewed as stronger, well capitalised and BCBS compliant.

However, in a twist to these arguments, it is stated that pre-existing capital and liquidity requirements in emerging economies are often higher than the Basel standards.<sup>250</sup> A research carried out by Claassen and Rooyen shows that small banks in South Africa

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<sup>247</sup> Charles Goodhart, 'The Emerging New Architecture of Financial Regulation' in Monetary Policy and Financial Stability in the Post-Crisis Era, South African Reserve Bank Conference Series (2010) <https://www.resbank.co.za/Lists/New%20and%20Publications/Attachments/4908/Confproceeding2010.pdf> Accessed 10th March, 2019.

<sup>248</sup> Teboho Nkopane, 'The Relevance of the Basel III Accord within the South African Banking System' <https://www.wiredspace.wits.ac.za/jspui/bitstream/10539/23804/2/Research%20paper%20Final%202019.10.16.pdf> Accessed 20 February 2019.

<sup>249</sup> S. Claassen and J.H Van Rooyen, 'Bank Liquidity Risk Management: A South African Survey to Determine Future Changes' (2012) 2(3) Risk Governance and Control Financial Markets and Institutions. 33.

<sup>250</sup> Emily Jones and Peter Knaack, 'Global Financial Regulation: Shortcomings and Reform Options' (2019) Global Policy published by Durham University and John Wiley & Sons Ltd. <https://www.onlinelibrary.wiley.com/doi/epdf/10.1111/1758-5899.12656> Accessed 10 February 2019

have a strong customer base, large cash reserves and can meet the Basel HQLA requirements.<sup>251</sup>

The authors (Claassen and Rooyen) further stated that some of the smaller banks in South Africa do not have any need to implement the Basel III liquidity requirement because they were not affected by the last global financial crisis. Contrastingly, large local banks in Kenya are adopting the Basel standards only as a defence mechanism that allows them to easily set up business in other countries.<sup>252</sup>

### 3.2.2 Cost

A study conducted by Ihrig et al. shows that the largest amount of HQLA stock averagely held by banks are reserve balances because of its risk-free and no-interest nature and, because of non-capping of the reserve limit.<sup>253</sup> Their (Ihrig et al.) investigation also revealed that banks especially in the United States raised their liquid asset holdings based on their tolerance for interest rate risk and mainly in the form of excess reserves to become LCR compliant, and afterward adjusted them to raise their holdings of other HQLA components in a bid to achieve optimal balance.

Therefore, the maintenance of HQLA requirements creates an increased margin between raising more expensive retail deposits and reduced long-term lending.<sup>254</sup> This is because since market liquidity affects price, the strategic choice of holding liquid assets for an individual bank depends on liquidity availability in the whole market.<sup>255</sup>

The idea of holding a portfolio of HQLA especially in the event of any crisis has made funding assets to become a top priority for banks as they need to increase the liquidity of their assets while reducing the liquidity of their liabilities. Relatively, the maintenance of this LCR-defined HQLA requirement comes at a cost.

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<sup>251</sup> S. Claassen and J.H Van Rooyen, 'Bank Liquidity Risk Management: A South African Survey to Determine Future Changes' (2012) 2(3) Risk Governance and Control Financial Markets and Institutions. 33.

<sup>252</sup> Radha Upadhyaya 'Kenya-International Consensus' Global Economic Governance Programme <https://www.geg.ox.ac.uk/project/kenya> Accessed 20th January 2019.

<sup>253</sup> Ihrig J., Kim E., Kumbhat A., Vojtech C. M. and Weinbach G. C., 'How Have Banks Been Managing the Composition of High-Quality Liquid Assets?' (2017) 2017(92) Finance and Economic Discussion Series, 1-27

<sup>254</sup> KPMG International Cooperation, 'Liquidity: A Bigger Challenge than Capital' (2012) <https://assets.kpmg/content/dam/kpmg/pdf/2012/09/Liquidity-A-bigger-challenge-than-capital.pdf> Accessed on 20<sup>th</sup> January 2019.

<sup>255</sup> Viral V. Acharya, Hyun Song Shin and Tanju Yorulmazer, 'Endogenous Choice of Bank Liquidity: The Role of Fire Sales', (2009), Bank of England Working Paper No 37

The need to hold more HQLA will force banks to restructure their funding profile to attract funding greater than 30 days that will not be constantly seen as a cash outflow within the 30 days test scenario.<sup>256</sup> So, banks' that have been relying heavily on short-term funding or not holding sufficient high quality liquid assets as required may face high costs of adjusting to the LCR-defined HQLA requirement.

Scholars such as Fender and Lewrick concluded in their research work that Basel III reforms (both capital and liquidity requirements) are expected to yield sizeable macroeconomic benefits.<sup>257</sup> The study estimated the expected cost and benefit to be the reduction of the likelihood and severity of costs of financial crises (these costs include higher public debt and increased unemployment).

In other words, higher resilience enhances financial stability that in turn reduces the occurrence and costs of any financial crisis and employment losses. However, this view has been opposed by some other studies that believe a more stringent regulatory requirement such as the Basel III liquidity requirement does more harm than good as it increases the funding cost of banks that will then pass onto borrowers through higher lending spread.<sup>258</sup> This reduces overall lending and investment in the economy.

Also, academic writers such as Nkopane believe that regulations are costly to implement, and Basel III HQLA requirements are not exempted as they increase funding costs in banks that can result in less funds being available for lending and less profit.<sup>259</sup> A good example is South Africa where the most significant cost is the increased funding costs associated with acquiring and holding more HQLA.<sup>260</sup>

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<sup>256</sup> Shrinnesan Pather, 'The Impact of Base III on Bank Balance Sheet Structure in South Africa' (2017) University of Pretoria. [https://repository.up.ac.za/bitstream/handle/2263/64906/Pather\\_Impact\\_2018.pdf](https://repository.up.ac.za/bitstream/handle/2263/64906/Pather_Impact_2018.pdf) Accessed on 21st January 2019.

<sup>257</sup> Ingo Fender and Ulf Lewrick, 'Adding It All Up: The Macroeconomic Impact of Basel III and Outstanding Reform Issues' (2016) BIS Working Papers No 591. <https://www.bis.org/publ/work591.pdf> Accessed 21st February 2019.

<sup>258</sup> Financial Stability Board, 'Evaluation of the Effects of Financial Regulatory Reforms on Infrastructural Finance' (2018) [www.fsb.org/wp-content/uploads/P201118-1.pdf](http://www.fsb.org/wp-content/uploads/P201118-1.pdf) Accessed 22nd February 2019.

<sup>259</sup> Teboho Nkopane, 'The Relevance of the Basel III Accord within the South African Banking System' <https://www.wiredspace.wits.ac.za/jspui/bitstream/10539/23804/2/Research%20paper%20Final%202019.10.16.pdf> Accessed 20 February 2019.

<sup>260</sup> Evita Makura Nyandoro, 'Bank Liquidity: Basel III and South Africa's Banking Industry' (2010) The Journal of the Global Accounting Alliance <https://www.gaaaccounting.com/banks-liquidity-basel-iii-and-south-africas-banking-industry/> Accessed on 20<sup>th</sup> December 2018.



Banks' cost of funding is assumed to have an impact on their profitability, and this made South Africa's four big banks to indicate that their funding cost can increase from 20 percent to 40 percent in compliance with HQLA requirements.<sup>261</sup> Also, all the big banks in South Africa repriced their loans in response to the increased funding costs.<sup>262</sup>

These costs are dependent on some factors such as argued by Pather whereby change in funding costs will be incurred by banks in extending their funding profile and are dependent on the interest rate.<sup>263</sup> Also, South African banks on average recorded the highest funding cost of 45.3 percent in a study carried out by Mensah et al. on sovereign credit ratings and bank funding cost in Africa.<sup>264</sup>

The authors (Mensah et al.) believe that the reason for the high funding cost in South Africa was because of the country's banking sector's dominance by four large banks that may have a very large individual asset bases and as a result, pay more interest to their depositors' funds. Clearly, this dominance factor though with increased costs puts other smaller banks on the edge.

An insight into the banking industry of Nigeria shows that the cost due to reserve requirements equally add to the funding cost of acquiring and holding HQLA portfolio. For instance, balances held at the central bank by banks form part of Level 1 HQLA and banks are required to hold a fraction of their deposits at zero rates with the central bank. This increases cost on banks especially if they choose to have 100 percent of their liquidity buffer as central bank reserves since they pay a market interest rate to depositors on such reserves.<sup>265</sup>

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<sup>261</sup> Evita Makura Nyandoro, 'Bank Liquidity: Basel III and South Africa's Banking Industry' (2010) The Journal of the Global Accounting Alliance <https://www.gaaaccounting.com/banks-liquidity-basel-iii-and-south-africas-banking-industry/> Accessed on 20<sup>th</sup> December 2018.

<sup>262</sup> Tafirei Mashamba, 'The Effects of Basel III Liquidity Regulations on Banks' Profitability' (2018) 7(2) Journal of Governance and Regulations. 34

<sup>263</sup> Shrinesan Pather, 'The Impact of Base III on Bank Balance Sheet Structure in South Africa' (2017) University of Pretoria. [https://repository.up.ac.za/bitstream/handle/2263/64906/Pather\\_Impact\\_2018.pdf](https://repository.up.ac.za/bitstream/handle/2263/64906/Pather_Impact_2018.pdf) Accessed on 21<sup>st</sup> January 2019.

<sup>264</sup> Mary Opoku Mensah, Elikplimi Komla Agbloyor, Simon Kwadzogah Harvey and Vera Ogeh Fiador, 'Sovereign Credit Ratings and Bank Funding Cost: Evidence from Africa' (2017) 42 Research in International Business and Finance. 887.

<sup>265</sup> Jibrin A. Musa, G. Okorie, A. S. Okoro, E. A. Dada, C. Chiemeke and O. H. Owolabi, 'Strategies for Lowering Banks' Cost of Funds in Nigeria' (2015) CBN Working Paper Series. <https://www.cbn.gov.ng/out/2015/ccd/strategies%20for%20lowering%20cost%20of%20funds%20in%20nigeria%20%20do.pdf> Accessed on 10<sup>th</sup> January 2019.

### 3.2.3 Resources

Another important aspect to consider in maintenance of the LCR-defined HQLA requirement is resource that comprises of human and information technology. Human resource is considered as a fundamental component of any banking industry. It was established by Dawodu that training and development of human resource assist banks in achieving better results and this investment was able to proffer lasting solutions to some of the aftermath problems created during the last global economic meltdown.<sup>266</sup>

Additionally, Basel III liquidity implementation requires highly skilled supervisors to conduct critical supervisory tasks. Developing economies such as the SSA region face acute human resource challenges as employment of these highly skilled supervisors will add to cost of implementation. This resource constraint is one of the persuasive explanations of low level/selective implementation of most of the components of the Basel III liquidity regulations within the SSA region.<sup>267</sup>

A 2012 KPMG Africa Banking Survey shows that there is a limited depth of skills in consumer banking in Nigeria while there are reasonable base of skills and banking experience in South Africa and Kenya.<sup>268</sup> The reason for the disparity clearly lies in investment. This is because in South Africa, banks such as the Nedbank limited invested R355m in training and development of staff in 2017.<sup>269</sup>

Although banks such as in South Africa make investments, a 2012 report estimated that the current shortfalls in South African banking sector to meet the LCR-defined HQLA requirement were calculated to be R240 billion.<sup>270</sup> This means that a lot is required to up the skill level of personnel in the industry.

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<sup>266</sup> A. A. Dawodu, O. A. Akintunde and B. S. Olulana, 'Human Capital Development and Organizational Performance in Food, Beverage and Tobacco Industry in Lagos Nigeria' (2018) 18(2) Nigerian Journal of Management Studies. 27.

<sup>267</sup> Emily Jones and Alexandra O. Zeitz, 'The Limits of Globalizing Basel Banking Standards' (2017) 3(1) Journal of Financial Regulations, 89.

<sup>268</sup> KPMG, 'African Banking Survey' May (2012) <https://www.kpmg.de/docs/AfricaBankingSurvey.pdf> Accessed 15th January 2019.

<sup>269</sup> Nedbank Group Ltd, 'Integrated Annual Report 2017' <https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Information%20Hub/Integrated%20Report/2017/2017%20Nedbank%20Group%20Integrated%20Report.pdf> Accessed 11<sup>th</sup> January 2019.

<sup>270</sup> Pierre Venter, 'Basel III to Deliver a Further Blow to Financial Inclusion for South African Mortgages' (2012) Housing and Financial International the Quarterly Journal of the International Union for Housing Finance <https://www.housingfinance.org/uploads/Publicationsmanager/HFI%20Summer%202012.pdf> Accessed 28<sup>th</sup> January 2019.



Another resource factor is Information Technology (IT) and it plays a central role in the development of the banking sector with proven record of being the second largest fixed cost incurred by banks after personnel.<sup>271</sup> The operational costs of developing and maintaining IT systems in relation to the Basel III stock of HQLA are huge.

These IT systems are used for assessing and monitoring funding, and liquidity levels of banks at any time, and for undertaking rigorous stress tests to produce the required result which is used to determine the stability of a bank.<sup>272</sup> Banks in South Africa such as the Standard bank strive to achieve this through offering specialised skills development and learning programmes, partnering with universities to develop and expose staff to new IT models and curricula.<sup>273</sup>

Additionally, the dynamics and continuous rise in the use of technology in banking services have placed pressure on emerging economies to employ bank staff with the required skills set that must also stay abreast of the latest developments in technology.<sup>274</sup> This is one of the reasons banks in South Africa such as the Nedbank places enough emphasis on IT skills in relation to personnel.<sup>275</sup>

Also, Standard bank of South Africa places high premium on improving human capital and empowering staff suitable for addressing the rigours of the IT age.<sup>276</sup> Although IT infrastructure in SSA region is not as advanced as that of the western countries, its acquisition and application in the jurisdiction cannot be over-looked. This is because in addition to boosting the profile of banks, it forms the centre of liquidity operations irrespective of the purpose.

In the Nigerian context, a study carried out by Ekata on the impact of IT on the Nigerian financial sector showed that though IT investment does not improve the financial

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<sup>271</sup> Fabian A. Ehikhamenor, 'Information Technology in Nigerian banks: The Limits of Expectation' (2003) 10 Information Technology for Development. 13

<sup>272</sup> Evita Makura Nyandoro, 'Bank Liquidity: Basel III and South Africa's Banking Industry' (2010) The Journal of the Global Accounting Alliance <https://www.gaaaccounting.com/banks-liquidity-basel-iii-and-south-africas-banking-industry/> Accessed on 20<sup>th</sup> December 2018.

<sup>273</sup> Ibid

<sup>274</sup> Johan Coetzee, 'Strategic Implication of Fintech on South African Retail Banks' (2018) 21(1) South African Journal of Economic and Management Sciences. 2455.

<sup>275</sup> Nedbank Group Ltd, 'Integrated Annual Report 2017' <https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Information%20Hub/Integrated%20Report/2017/2017%20Nedbank%20Group%20Integrated%20Report.pdf> Accessed 11<sup>th</sup> January 2019.

<sup>276</sup> Standard Bank Group Ltd, 'Integrated Annual Report 2016' [https://annualreport2016.standardbank.com/downloads/Standard\\_Bank\\_AIR\\_2016\\_Full\\_annual\\_integrated\\_report.pdf](https://annualreport2016.standardbank.com/downloads/Standard_Bank_AIR_2016_Full_annual_integrated_report.pdf) Accessed 11<sup>th</sup> January 2019.

performance of the banking sector, it is only useful for customers' satisfaction.<sup>277</sup> This assertion does not take away the fact that it achieves other liquidity purposes other than customer satisfaction.

The revolution in the Nigerian banking industry on IT product accounted for about 70 percent of the banking sector's total investment cost.<sup>278</sup> Although there is a lack of good quality data on IT spending by Nigerian banks, a total of \$107 million US dollars was spent on IT and other related services in 2009 by 24 commercial banks.<sup>279</sup>

Similarly, Kenya banks though still faced with challenges such as huge costs of acquiring IT systems, frequent technological changes, and lack of thorough technological knowledge among staff,<sup>280</sup> the use of IT is advancing at a fast pace especially in maintaining the banking liquidity system of the nation.

The liquidity cycle and transactions are more of electronic in recent times than in the past within the SSA banking jurisdiction (from deposit taking to maintaining reserves with the central banks, and from lending to investing in government bonds). These technological investments to regulate liquidity add to the cost that equally reduces profit and probably increases interest rates.

However, it can be argued that the cost of IT is beneficial as it reduces the time, use and cost of human labour that in turn raises profit at the long run. The implication to SSA banks and the economy at large is less population generating income that translates to less deposits and more liquidity squeeze. So, IT is still a big challenge towards the adoption of Basel regulations.

### **3.3 Compliance with Basel Requirements**

Given the increasingly interrelated and cross-border nature of banking, the implementations of the Basel standards in different jurisdictions have become crucial for effective regulations and supervisions of banks. The Basel standards are regarded

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<sup>277</sup> Ibid

<sup>278</sup> Bilkisu Kabiru Usman Farouk and Kabiru Isa Dandago, 'Impact of Investment in Information Technology on Financial Performance of Nigerian Banks: Is There a Productivity Paradox' (2015) 20(1) *Journal of Internet Banking and Commerce*. 1

<sup>279</sup> Godfrey E. Ekata, 'The IT Productivity Paradox: Evidence from the Nigerian Banking Industry' (2012) 51(4) *EJISDC* <https://onlinelibrary.wiley.com/doi/epdf/10.1002/j.1681-4835.2012.tb00361.x> Accessed on 15 January 2019.

<sup>280</sup> James T. Kariuki, 'Effect of Information and Communication Technology on Service Delivery in Commercial Banks in Kenya' (2018) 20(6) *Journal of Business and Management*. 27.

as essential because they are deemed to strengthen regulations and supervisions, enhance risk management, improve ability to withstand shock, prevent excessive risk taking that can endanger the economy, and improve transparency and disclosure in banks.<sup>281</sup>

The Basel framework focuses mainly on international active banks though its regulatory principles are said to be suitable for application by banks of varying levels, complexity, and sophistication in every nation. This can be the reason why countries irrespective of their statutes adopt the Basel Accord, particularly the non-members.

The Basel regulatory standards are widely regarded by both members and non-members of the BCBS as best practice regulatory standards or gold standards for banking regulations. As such, compliance with these standards comes with economic benefits and challenges. Therefore, jurisdictions including the SSA region are expected to adopt and implement the Basel Accord irrespective of legislations that govern the regulation and supervision of a banking sector in the respective countries.

The expected economic benefits and challenges of complying with the Basel requirements for the purpose of this thesis are explained under five headings: Access to market, important element for obtaining loan, foreign direct investment, Gross Domestic Product, and for guidance.

### **3.3.1 Access to Market**

The adoption of BCBS standards in non-member countries particularly the SSA region can facilitate the operations of foreign banks in such jurisdictions (non-member states) and can help domestic banks of non-member countries access the markets of BCBS members.<sup>282</sup> This is because the Basel framework explicitly requires for the review of supervisory and regulatory standards of home countries to determine whether their standards comply with the Basel regulatory standards and other relevant international requirements.<sup>283</sup>

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<sup>281</sup> Peter Ozili, 'Basel III in Africa: Making it Work' (2019) MPRA Paper No 94222. <https://mpra.ub.uni-muenchen.de/94222/> Accessed 10<sup>th</sup> July 2019.

<sup>282</sup> B. A. Simmons, 'The International Politics of Harmonization: The Case of Capital Market Regulation' (2001) 55(3) International Organization. 589

<sup>283</sup> K. Alexander, R. Dhumale and J. Eatwell, Global Governance of Financial Systems: The International Regulation of Systemic Risk (Oxford University Press, 2005) in Emily Jones and Alexandra Zeitz, 'The Limits of Globalizing Basel Banking Standards' (2017) 3(1) Journal of Financial Regulation. 89

Therefore, it will be difficult for banks from non-adhering countries to expand into the market of BCBS abiding countries without implementing the Basel standards or providing comparable information to the Basel framework.<sup>284</sup> Also, the adoption of the Basel regulation in regions such as the SSA can help avoid major regulatory discrepancies between the local banks and foreign banks that are BCBS compliant considering that the parent companies of such foreign banks may have already implemented the Basel regulatory standards in their home countries.

Another benefit of adopting Basel regulatory standards is that they can help to facilitate cross-border coordination between supervisors and ensure that they have a 'common language' to enable both the opening and the smooth running of foreign banks operating in their respective jurisdictions.<sup>285</sup> In other words, Basel regulatory standard helps to strengthen consolidated supervision of banks which helps to affect knowledge and information sharing among supervisors in different nations.

Therefore, access to market is very important as it opens new frontiers and expands trade, otherwise there will be nothing like international trade as market access will only be limited to sovereign nations. However, access to market seems to be dominated by foreign owned banks that give local banks little or less chance to grow as most do not belong to a regional or international network.

An example is Zenith Bank of Nigeria, a local bank that is ranked as one of the big four in Nigeria. Such local banks struggle to make in-road into the international circle despite their huge asset base and contrary to its foreign counterpart in the country. This begs for an answer as to why most big international financial businesses are thriving in the Nigerian market. Some will probably say that it is because of her oil dependent economy.

### **3.3.2 Important Element in Obtaining Loan**

One of the various ways through which the BCBS ensures that its standards are adopted by countries is through the support of International Monetary Fund (IMF) and World Bank. The BCBS expects the IMF and World Bank to play a surveillance role in

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<sup>284</sup> Daniel Ho, 'Compliance and International Soft Law: Why do Countries Implement the Basel Accord' (2002) 5(3) *Journal of International Economic Law*. 647.

<sup>285</sup> Thorsten Beck, Emily Jones and Peter Knaack, 'Basel Standards and Developing Countries: A Difficult Relationship' <https://www.geg.ox.ac.uk/publication/basel-standards-and-developing-countries-difficult-relationship> Accessed on 20th February 2019

overseeing their member states adherence to the Basel principles through its various conditionality and economic restructuring programmes.<sup>286</sup>

Consequently, the World Bank and IMF play major financial roles that strongly encourage the adoption of Basel regulations by non-member countries particularly emerging economies such as the SSA region.<sup>287</sup> This is because the global bodies believe that implementation of these standards such as the Basel Core Principles (BCP) is seen as an indication of a country having a healthy national banking policy. The global financial bodies also included Basel compliance as an essential element in their lending policy.

The IMF requires countries to include specific reform steps that will bring them into compliance with the Basel regulations (particularly the Core Principles and adherence to these principles) in their letter of intent that often has a memorandum of economic and financial policy attached to it.<sup>288</sup> A letter of intent is a document that governs a country's policy reforms by which such country has undertaken or intends to undertake to obtain IMF funding.

Additionally, the IMF and World Bank assess Basel compliance through the IMF Financial Sector Assessment Programmes (FSAPs) and World Bank Financial Sector Adjustment Programmes respectively to make the financial sector of their members resilient and well regulated.<sup>289</sup> They use the Core Principles in the assessment of the effectiveness of countries' banking supervisory systems and practices.<sup>290</sup>

In 2012, the IMF and World Bank jointly undertook assessment of current state of the implementation of the BCP for effective banking supervision in Nigeria as part of a FSAP update and to reflect on the regulatory and supervisory framework in place.<sup>291</sup>

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<sup>286</sup> Kern Alexander, *Principles of Banking Regulations* (Cambridge University Press, 2019) 71

<sup>287</sup> D. W. Drezner, *All Politics is Global: Explaining International Regulatory Regimes*. (Princeton UP 2007) in Emily Jones and Alexandra O. Zeitz, 'The Limits of Globalizing Basel Banking Standards' (2017) 3(1) *Journal of Financial Regulations*. 89.

<sup>288</sup> Michael S. Barr and Geoffrey P. Miller, 'Global Administrative Law: The View from Basel' (2006) 17(1) *European Journal of International Law*. 15

<sup>289</sup> Caio Ferreira, Nigel Jenkinson and Christopher Wilson, 'From Basel I to Basel III: Sequencing Implementation in Developing Economies' 2019 IMF Working Paper WP/19/127. [www.imf/Downloads/WPIEA2019127.pdf](http://www.imf/Downloads/WPIEA2019127.pdf) Accessed 6th July 2019.

<sup>290</sup> Basel Committee on Banking Supervision, 'BCP Core Principles for Effective Banking Supervision' 2019 [https://www.bis.org/basel\\_framework/chapter/BCP/01.htm?inforce=20191215](https://www.bis.org/basel_framework/chapter/BCP/01.htm?inforce=20191215) Accessed 17<sup>th</sup> January 2020.

<sup>291</sup> The World Bank, 'Financial Sector Assessment Program: Nigeria-Basel Core Principles for Effective Banking Supervision' [www.openknowledge.worldbank.org/handle/10986/15968](http://www.openknowledge.worldbank.org/handle/10986/15968) Accessed 10th June 2019.

They conducted a detailed examination of regulatory and supervisory framework of commercial banks and, policies and practices of institutions responsible for banking supervision in Nigeria to check if they aligned with the BCP.

They (IMF and World Bank) attested to the improvement made compared to the previous BCP assessment in 2002. In the same context, South Africa though a member of BCBS that is committed to the adoption of BCP and promulgated by the BCBS nevertheless had the IMF conduct a detailed assessment of compliance of BCP in the country as part of a FSAP update in 2015.<sup>292</sup>

The pressure to implement Basel principles is felt through the IMF Article IV surveillance programme and Article V conditionality programme. These programmes are used by the IMF to regularly monitor the economic and financial policies of its members to identify weaknesses that are causing or can lead to financial or economic instability, and to offer policy advice that is subsequently transmitted to a country's government.<sup>293</sup>

IMF monitors progress towards the agreed policy goals that reflect IMF-supported programs outlined by the borrowing country (which are the conditions for the IMF loans) and the country is required to provide information in connection with the progress made on implementation of its economic and financial policies at the request of IMF.<sup>294</sup>

Also, it is important to note that members of the World Trade Organisation (WTO) use the Basel regulatory standards as an obvious yardstick for the regulation of the financial sector to foster financial services reforms in countries seeking assistance.<sup>295</sup> It has been suggested that compliance to the BCP particularly the developing

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<sup>292</sup> International Monetary Fund, 'South Africa: Financial Sector Assessment Program-Detailed Assessment of Compliance on Basel Core Principle for Effective Banking Supervision' 2015 [www.imf.org/en/Publication/CR/Issues/2016/12/31/South-Africa-Financial-Sector-Assessment-Program](http://www.imf.org/en/Publication/CR/Issues/2016/12/31/South-Africa-Financial-Sector-Assessment-Program) Accessed 10th June 2019.

<sup>293</sup> International Monetary Fund, 'Surveillance' [www.imf.org/external/about/econsurv.htm](http://www.imf.org/external/about/econsurv.htm) Accessed 10th June 2019.

<sup>294</sup> International Monetary Fund, 'IMF Conditionality' March 2019 [www.imf.org/en/About/Factsheets/Sheets/2016/08/02/21/28/IMF-Conditionality](http://www.imf.org/en/About/Factsheets/Sheets/2016/08/02/21/28/IMF-Conditionality) Accessed 10th June 2019.

<sup>295</sup> Michael S. Barr and Geoffrey P. Miller, 'Global Administrative Law: The View from Basel' (2006) 17(1) European Journal of International Law. 15.

countries, can be because of international pressures from organisations that they are signatories to institutions such as the IMF, WTO, and World Bank.<sup>296</sup>

Although, the Basel Accord system has been criticised for being inappropriate in emerging markets such as the SSA region, the incentive for compliance with the BCP stems from IMF-World bank support. The use of IMF-World bank resources is likely to affect the implementation of the BCP by emerging economies. It has also been argued by Alexander that regardless of the Basel regulatory framework being a soft law, they still exert great influence over the attitudes and behaviour of countries particularly in the regulation of their financial sector.<sup>297</sup>

Therefore, conditions/access to financial assistance from global financial bodies on country's adherence to the BCP can force unwilling countries to implement the BCP into their banking sector. This is because such countries are mostly reliant on IMF and World Bank for loans and will have no choice but to comply.

An example is Kenya that has borrowed severally from the IMF through series of written letters of intent (Kenya has written up to 15 letters of intent that started from July 2000) whereby they described the policies they intended to implement in the context of its request for financial support from the IMF.<sup>298</sup> In their recent letter of intent dated 26<sup>th</sup> February 2016, Kenya mentioned that they have continued to manage their credit and liquidity risks in banks through sufficiency of capital buffers and robustness of liquidity management strategies.<sup>299</sup>

Also, they (Kenya) have strengthened their legal and regulatory framework by implementing capital conservation buffers, conducted host country legal and regulatory assessments and intend to further strengthen their legal and regulatory framework through capital adequacy assessment framework, and stress testing

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<sup>296</sup> Kern Alexander, 'Rebuilding International Financial Regulations and Basel III' (2011) 23(5) Journal of Banking Law and Banking. 337.

<sup>297</sup> Kern Alexander, 'Rebuilding International Financial Regulations and Basel III' (2011) 23(5) Journal of Banking Law and Banking. 337.

<sup>298</sup> International Monetary Fund, 'Kenya: Letter of Intent, Memorandum of Economic and Financial Policies and Technical Memorandum of Understanding' 2016. [www.imf.org/external/np/loi/2016/ken/022616.pdf](http://www.imf.org/external/np/loi/2016/ken/022616.pdf) Accessed 20th June 2019.

<sup>299</sup> International Monetary Fund, 'Kenya: Letter of Intent, Memorandum of Economic and Financial Policies and Technical Memorandum of Understanding' 2016. [www.imf.org/external/np/loi/2016/ken/022616.pdf](http://www.imf.org/external/np/loi/2016/ken/022616.pdf) Accessed 20th June 2019.



framework to improve early warning system identification of vulnerable banks amongst others.<sup>300</sup>

Kenya's request for financial support was approved by the IMF executive Board on 14<sup>th</sup> March 2016 to the total of US\$1.5 billion.<sup>301</sup> Kenya also borrowed from the World Bank in May 2019, and the World Bank approved \$750 million credit to support Kenya's reforms in agriculture, housing, digital technology, and fiscal management.<sup>302</sup>

Similarly, Nigeria has borrowed from both the IMF and World Bank. An example was in July 2000, when Nigeria requested for financial support from the IMF. They included in their letter of intent that they will enforce the eight percent risk-weighted capital adequacy ratio and adopt the BCP including familiarising their staff with the methodology for assessing compliance with the core principles.<sup>303</sup>

It is worth to note that since 1958, the World Bank has issued more than 130 loan grants to Nigeria to help fight poverty and improve living standards in the country.<sup>304</sup> More recently, in June 2018, the World Bank approved \$2.1 billion loan for seven projects to support Nigeria's investment in energy, human capital, climate change, and governance amongst others.<sup>305</sup>

Comparatively, South Africa has borrowed money from these bodies (IMF and World Bank) and as a member of the G-20, they are already required Basel compliant. Relatively, in as much as these condition-encumbered policies are reeled out by the global institutions with little or no input from these developing economies, developing markets such as the SSA region will continue to feel undervalued.

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<sup>300</sup> International Monetary Fund, 'Kenya: Letter of Intent, Memorandum of Economic and Financial Policies and Technical Memorandum of Understanding' 2016. [www.imf.org/external/np/loi/2016/ken/022616.pdf](http://www.imf.org/external/np/loi/2016/ken/022616.pdf) Accessed 20th June 2019.

<sup>301</sup> International Monetary Fund, 'Press Release: IMF Executive Board Approves New Arrangements for Kenya Totalling US\$1.5 billion' (2016) [www.imf.org/en/News/Articles/2015/09/14/01/49/pr16110](http://www.imf.org/en/News/Articles/2015/09/14/01/49/pr16110) Accessed 20th June 2019.

<sup>302</sup> The World Bank, 'World Bank Approves \$750 for Kenya in support of Reforms in Agriculture, Housing, Digital Technology and Fiscal Management' [www.worldbank.org/en/news/press-release/2019/05/28/world-bank-approves-750-million-for-kenya-in-support-of-reforms](http://www.worldbank.org/en/news/press-release/2019/05/28/world-bank-approves-750-million-for-kenya-in-support-of-reforms) Accessed 17th June 2019.

<sup>303</sup> International Monetary Fund, 'Nigeria: Letter of Intent and Memorandum on Economic and Financial Policies' (2000) [www.imf.org/external/np/loi/mempup\\_news.asp](http://www.imf.org/external/np/loi/mempup_news.asp) Accessed 18th June 2019.

<sup>304</sup> The World Bank, 'The World Bank in Nigeria' [www.worldbank.org/en/country/nigeria](http://www.worldbank.org/en/country/nigeria) Accessed 19th April 2019.

<sup>305</sup> The World Bank, 'Nigeria: World Bank Ramps up Support for Human Capital, Governance, Energy and Climate Change' (2018) [www.worldbank.org/en/news/press-release/2018/06/27/nigeria-worldbank-ramps-up-support-for-human-capital](http://www.worldbank.org/en/news/press-release/2018/06/27/nigeria-worldbank-ramps-up-support-for-human-capital) Accessed 20th April 2019.



An example is scenario at the beginning of banking in Nigeria whereby locals were denied access to loans simply because they are termed risky, yet their deposits were collected without any fuss (refer to Chapter 4.2.1 – Introduction to the Advent of Nigeria Banking System). Clearly, countries such as Nigeria and Kenya certainly need further development but not at the dictates of these global bodies and of course, not at the expense of the ever-increasing population.

These loans other than the stringent conditions come at a great cost different from the so-called advanced economies. Repayment of such loans over multiple decades keeps such countries in perpetual debt. Additionally, such loans with a probable intrinsic knowledge of these organisations are misused thereby driving these borrowing nations further into poverty. Otherwise, how can it be explained that more huge loans are granted without the materialisation of the purposes of the previous ones.

### **3.3.3 Foreign Direct Investments (FDI)**

Competitions exist between countries to attract international capital and banking business into their respective nations. These competitive pressures often lead countries to adopt the Basel framework to match their rivals, particularly if such rivals have adopted the Basel framework. This is supported by Beck et al. whereby they argued that regulators in the SSA region do not merely adopt the Basel standards because they provide some technical solution to financial stability risks in their jurisdictions but are driven by concern about reputation and competition.<sup>306</sup>

Also, the Basel standards are adopted in some territories such as the SSA region on the belief that lack of compliance with the Basel standards can harm the confidence in a country's financial sector. Consequently, the extent to which the Basel standards are met is becoming increasingly important to international investors because they use the Basel regulatory framework as a yardstick to evaluate the strength of local financial systems.<sup>307</sup>

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<sup>306</sup> Thorsten Beck, Emily Jones and Peter Knaack, 'Basel Standards and Developing Countries: A Difficult Relationship' <https://www.geg.ox.ac.uk/publication/basel-standards-and-developing-countries-difficult-relationship> Accessed on 20th February 2019.

<sup>307</sup> Lilitiana Rojas-Suarez, 'Basel III in Chile: Advantages, Disadvantages and Challenges of Implementing the New International Standard for Bank Capital' (2015) Center for Global Development (CGD) Policy Paper 061.

The result of such evaluations usually helps investors in making decisions on whether to lend or invest in the banking industry of a country, especially emerging economies such as the SSA region. Furthermore, compliance with the Basel regulatory framework is recognised internationally as a sign of financial strength by foreign investors.<sup>308</sup>

These recognitions have given added impetus to the Basel standards and have also led politicians in SSA countries such as Kenya to advocate the implementation of the Basel regulatory standards as part of the drive to signal financial strength and sophistication to international investors, as well as to stand on an equal footing with international banks in the global financial market.<sup>309</sup>

At this point, it is necessary to understand why some regions such as the SSA countries implement the Basel regulations to attract investors irrespective of the huge cost involved in its implementation. The fact is that the financial sector FDI comes with the benefit of improved efficiency that arises from local banks' exposure to foreign banks' presence.

A host country can benefit from foreign banks' entrance through technological transfers, innovations in product and process, transformation of acquired local bank with end-result of better risk management, efficiency in the allocation of credit and a greater financial stability in the host country.<sup>310</sup>

FDI has declined in Nigeria and the substantial drop may not be unconnected with investors being cautious (even as Nigeria is BCBS compliant) because of the risk of instability associated with Nigeria's elections and disputes between Government and some international corporations. Examples include HSBC and UBS closing their Nigeria local representative offices in 2018 and an on-going litigation between a

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[https://www.researchgate.net/publication/277010569\\_Basel\\_III\\_in\\_Chile\\_Advantages\\_Disadvantages](https://www.researchgate.net/publication/277010569_Basel_III_in_Chile_Advantages_Disadvantages)  
Accessed 30th July 2018.

<sup>308</sup> Liliana Rojas-Suarez, 'Basel III in Chile: Advantages, Disadvantages and Challenges of Implementing the New International Standard for Bank Capital' (2015) Center for Global Development (CGD) Policy Paper 061. [https://www.researchgate.net/publication/277010569\\_Basel\\_III\\_in\\_Chile\\_Advantages\\_Disadvantages](https://www.researchgate.net/publication/277010569_Basel_III_in_Chile_Advantages_Disadvantages)  
Accessed 30th July 2018.

<sup>309</sup> Thorsten Beck, Emily Jones and Peter Knaack, 'Basel Standards and Developing Countries: A Difficult Relationship' <https://www.geg.ox.ac.uk/publication/basel-standards-and-developing-countries-difficult-relationship> Accessed on 20th February 2019

<sup>310</sup> BIS, 'Committee on the Global Financial System: Foreign Direct Investment in the Financial Sector of Emerging Market Economies' 2004 [www.bis.org/publ/cgfs22.pdf](http://www.bis.org/publ/cgfs22.pdf) Accessed 10th May 2019.

telecommunication giant, MTN and the Nigerian Government over the repatriation of profits.<sup>311</sup>

On the contrary, there was an increase in FDI inflow in Kenya whereby investments came through diverse industries such as manufacturing, chemical, and hospitality among others.<sup>312</sup> In fact, the Kenyan shilling appreciated by 0.2 percent in 2018 on account of increased FDI and inflows from export earnings.<sup>313</sup> Similarly, South Africa had more than double FDI inflow in 2018 that was largely due to intracompany loans and equity inflow.<sup>314</sup>

### 3.3.4 Gross Domestic Product (GDP)

GDP measures the size and health of a nation's economy over a period.<sup>315</sup> A country's GDP is negatively impacted through bank failures because of loss of funds, unemployment, and instability in the financial sector, and reduction in economic growth. The economic impact of complying with the Basel requirement can be understood to mean the reduction in the expected loss of GDP caused by banking crises.<sup>316</sup> In other words, complying with Basel requirements comes with the benefits of fewer and less costly crises.

Although it seems unlikely that strengthening prudential regulations will erase the probability of banking crisis occurring, it can help to reduce the cost. It is stated in a research carried out by Jorda et al. that an increase in bank capital (part of the Basel III capital requirement) can significantly lower the cost of a crisis by sustaining bank lending during a recession.<sup>317</sup>

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<sup>311</sup> United Nations Conference on Trade and Development, 'World Investment Report 2019' [www.unctad.org/en/PublicationsLibrary/wir2019\\_en.pdf](http://www.unctad.org/en/PublicationsLibrary/wir2019_en.pdf) Accessed 28th June 2019.

<sup>312</sup> United Nations Conference on Trade and Development, 'World Investment Report 2019' [www.unctad.org/en/PublicationsLibrary/wir2019\\_en.pdf](http://www.unctad.org/en/PublicationsLibrary/wir2019_en.pdf) Accessed 28th June 2019.

<sup>313</sup> Central Bank of Nigeria, 'Economic Report, Third Quarter 2018' <https://www.cbn.gov.ng/Out/2018/RSD/CBN%20ECONOMIC%20REPORT%20THIRD%20QUARTER%20%20%202018%20published.pdf> Accessed 20<sup>th</sup> April 2019.

<sup>314</sup> United Nations Conference on Trade and Development, 'World Investment Report 2019' [www.unctad.org/en/PublicationsLibrary/wir2019\\_en.pdf](http://www.unctad.org/en/PublicationsLibrary/wir2019_en.pdf) Accessed 28th June 2019.

<sup>315</sup> Bank of England, 'What is GDP' <https://www.bankofengland.co.uk/knowledgebank/what-is-gdp> Accessed 20 March 2019.

<sup>316</sup> Laurent Quignon, 'The Economic Impact of Basel III: Applying the BIS Analysis to the Eurozone' (2017) [economic-research.bnpparibas.com](http://economic-research.bnpparibas.com). <https://economic-research.bnpparibas.com/Viwes/DisplayPublication.aspx?type=document&IdPdf=29606> Accessed 30<sup>th</sup> May 2018.

<sup>317</sup> O. Jorda, B. Richter, M. Schularick and A. Taylor, 'Bank Capital Redux: Solvency, Liquidity and Crisis' (2017) NBER Working Paper no 23287.

Basically, the Basel standards particularly the Basel III can be used by banks to improve their operating processes which in turn increase their efficiency and lower costs of any potential banking crisis. Also, banks can manage risks created by their role as financial intermediaries that can result to soundness and improved economic environment through higher capital requirement as recommended by BCBS, and as a management tool.<sup>318</sup>

Therefore, effective regulatory and supervisory framework such as the Basel standards can help in fostering a sound and safe economic environment in the country. According to a research carried out by Podpiera, compliance with the BCP helps improve banking sector performance as it lowers non-performing loans in banks.<sup>319</sup>

As of the first quarter of 2018, Kenya's economy remained resilient and grew by 5.7 percent.<sup>320</sup> Similarly, South Africa's economy grew by 0.8 percent in 2018.<sup>321</sup> In Nigeria, the economy was estimated to grow by 2.1 percent in 2018 and 2.3 percent in 2019 on the back of improved outlook for oil prices.<sup>322</sup> However, Nigeria's economy is still recovering from its recent 2017 internal economic recession and the GDP only increased by 1.9 percent in 2018.<sup>323</sup>

The above figures reflect good economic prospects for Nigeria considering the population in comparison to Kenya and South Africa. The population of Nigeria is estimated at 199.206 million, while that of South Africa is 58.643 million and 49.364 million for Kenya.<sup>324</sup> Given the increase in population growth of South Africa, the GDP

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<sup>318</sup> Liliana Rojas-Suarez, 'Basel III in Chile: Advantages, Disadvantages and Challenges of Implementing the New International Standard for Bank Capital' (2015) Center for Global Development (CGD) Policy Paper 061. [https://www.researchgate.net/publication/277010569\\_Basel\\_III\\_in\\_Chile\\_Advantages\\_Disadvantages](https://www.researchgate.net/publication/277010569_Basel_III_in_Chile_Advantages_Disadvantages) Accessed 30th July 2018.

<sup>319</sup> Richard Podpiera, 'Does Compliance with Basel Core Principles Bring Any Measurable Benefits?' (2006) 53(2) IMF Staff Papers. 306.

<sup>320</sup> Central Bank of Kenya, 'Annual Report and Financial Statement 2017/2018' [https://www.centralbank.go.ke/uploads/cbk\\_annual\\_reports/665458124\\_Annual%20Report%202917%2018](https://www.centralbank.go.ke/uploads/cbk_annual_reports/665458124_Annual%20Report%202917%2018) Accessed on 20<sup>th</sup> May 2019.

<sup>321</sup> The World Bank, 'The World Bank in South Africa' [www.worldbank.org/en/country/southafrica/overview](http://www.worldbank.org/en/country/southafrica/overview) Accessed 10th June 2019.

<sup>322</sup> Central Bank of Nigeria, 'Economic Report, Third Quarter 2018' <https://www.cbn.gov.ng/Out/2018/RSD/CBN%20ECONOMIC%20REPORT%20THIRD%20QUARTER%20%202018%20published.pdf> Accessed 20<sup>th</sup> April 2019.

<sup>323</sup> International Monetary Fund, 'Nigeria 2019 Article IV Consultation' [www.imf.org/en/Countries](http://www.imf.org/en/Countries) Accessed 10th June 2019.

<sup>324</sup> International Monetary Fund, 'Countries' [www.imf.org/en/Countries](http://www.imf.org/en/Countries) Accessed 10th June 2019.

per capita has been close to nil since 2014 which has left little room to reduce poverty in the country.<sup>325</sup>

It is noteworthy to state that SSA region has the second largest working age population accounting for 13 percent of the world's total and more than 60 percent of the SSA population is under the age of 25.<sup>326</sup> However, given the population strength in comparison to the poverty level of the SSA region, it can be deduced that there is a wide margin between the rich and the poor, the employed and unemployed, and more importantly, banking deposits and lending.

### 3.3.5 Act as a Guide

It is often believed that regulatory banking frameworks in territories such as the SSA region are not always in line with international best practices and as such, they may induce uncertainty with international investors.<sup>327</sup> The reason had been that a central bank in the SSA region can be subject to political influences that will affect the conduct of its monetary policies and supervisory functions.<sup>328</sup>

According to Ozili, politicians in Africa often take legislative actions to prevent their central banks from implementing certain regulations that can either put weak local banks in jeopardy or affect the banks that such politicians are commercially interested in.<sup>329</sup> Also, it has been stated that the Basel framework can help to reinforce rather than undermine domestic norms.

Basel framework to support domestic norms include accountability and transparency in the banking industry, especially in countries where inside elites block reforms and

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<sup>325</sup> The World Bank, 'The World Bank in South Africa' [www.worldbank.org/en/country/southafrica/overview](http://www.worldbank.org/en/country/southafrica/overview) Accessed 10th June 2019.

<sup>326</sup> World Economic Forum, 'The Future of Jobs and Skills in Africa: Preparing the Region for the Fourth Industrial Revolution' (2017) in South African Reserve Bank, 'The Fourth Industrial Revolution and the Future of Work: Some Implications for Central Banking' (2018) Speech by Daniel Mminele, Deputy Governor SARB. [www.resbank.co.za/Lists/Speeches/Attachments/529/The%20Fourth%20Industrial](http://www.resbank.co.za/Lists/Speeches/Attachments/529/The%20Fourth%20Industrial) Accessed 10<sup>th</sup> March 2019.

<sup>327</sup> European Investment Bank, 'Banking in Sub Saharan Africa: Recent Trends and Digital Financial Inclusion' (2016) [https://www.eib.org/attachments/efs/economic\\_report\\_banking\\_africa\\_digital\\_financial\\_inclusion\\_en.pdf](https://www.eib.org/attachments/efs/economic_report_banking_africa_digital_financial_inclusion_en.pdf) Accessed 20th March, 2019.

<sup>328</sup> European Investment Bank, 'Banking in Sub Saharan Africa: Recent Trends and Digital Financial Inclusion' (2016) [https://www.eib.org/attachments/efs/economic\\_report\\_banking\\_africa\\_digital\\_financial\\_inclusion\\_en.pdf](https://www.eib.org/attachments/efs/economic_report_banking_africa_digital_financial_inclusion_en.pdf) Accessed 20th March, 2019.

<sup>329</sup> Peter Ozili, 'Basel III in Africa: Making it Work' (2019) MPRA Paper No 94222. <https://mpr.a.ub.uni-muenchen.de/94222/> Accessed 10<sup>th</sup> July 2019.

prevent transparent domestic banking regulatory processes from occurring.<sup>330</sup> Although most of the SSA countries that are outside the BCBS are not under any formal obligation to implement the Basel standards, many are implementing them because the requirements provide regulators with off-the-rack guidance in shaping their domestic regulations.<sup>331</sup>

An example is the Central Bank of Kenya (CBK) that sought to improve their regulatory and supervisory framework and turned to the Basel standards as a basis for these reforms.<sup>332</sup> In particular, was the introduction of Base II Risk Based Supervision (RBS) in 2004 that focused on the assessment of the adequacy of banks' risk management frameworks in identifying and mitigating inherent business risks.

Furthermore, the CBK conducted a survey on Risk Management practices in Kenyan banks that same year (2004) that indicated gaps in Risk Management Practices.<sup>333</sup> The gaps not only led to the issuance of Risk Management Guidelines by the CBK to guide Kenyan banks in the development of Risk Management Frameworks, but they also made the CBK to undertake various initiatives to ensure full compliance with Basel II.<sup>334</sup>

Indeed, Basel II was used as a guide by the CBK to enhance risk management system, upgrade supervisory approaches and inculcate market discipline in Kenyan banks that in turn attracted financial stability and economic growth in the country.<sup>335</sup> Similarly, the Central bank of Nigeria (CBN) uses the Basel regulatory framework as a guideline to effect improvement in its regulatory and supervisory framework and in the regulation of the Nigerian banks.<sup>336</sup>

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<sup>330</sup> Michael S. Barr and Geoffrey P. Miller, 'Global Administrative Law: The View from Basel' (2006) 17(1) European Journal of International Law. 15

<sup>331</sup> C. Brummer, 'How International Financial Law Works (and How It Doesn't)' (2010) 99 Georgetown Law Journal. 257.

<sup>332</sup> Thorsten Beck, Emily Jones and Peter Knaack, 'Basel Standards and Developing Countries: A Difficult Relationship' <https://www.geg.ox.ac.uk/publication/basel-standards-and-developing-countries-difficult-relationship> Accessed on 20th February 2019

<sup>333</sup> Njuguna Ndung'u, 'Implementation of Basel II, Risk Management Framework within Banks and the Prevention of Financial Crime' (2007) <https://www.bis.org/review/r070822d.pdf> Accessed 10th August 2018.

<sup>334</sup> Njuguna Ndung'u, 'Implementation of Basel II, Risk Management Framework within Banks and the Prevention of Financial Crime' (2007) <https://www.bis.org/review/r070822d.pdf> Accessed 10th August 2018.

<sup>335</sup> Njuguna Ndung'u, 'IFRS, Basel II and Challenges ahead in Kenya' (2008) <https://www.bis.org/review/r080328b.pdf> Accessed 20th September 2018.

<sup>336</sup> Central Bank of Nigeria, 'Annual Report' (2018) <https://www.cbn.gov.ng/Out/2019/RSD/2018%20AR%20KAMA1.pdf> Accessed 20<sup>th</sup> March 2019.



The CBN undertook a review of its prudential guidelines in accordance with the Basel standards that is aimed at addressing different aspect of bank operations such as corporate governance, anti-money laundering and counter financing of terrorism. Additionally, the CBN began the implementation of the Basel standards to ensure that better risk management is maintained in the banking sector and help protect the Nigeria financial system from problems that can arise in the context of a series of bank collapse.<sup>337</sup>

The CBN has recently issued guidance notes on regulatory capital measurement and management of the Nigerian banking system that are in line with the requirements of the Basel accords, though certain sections were adjusted to reflect peculiarities of their banking system.<sup>338</sup> In fact, most of the SSA countries such as Nigeria and Kenya are more of selective adopter as they tend to choose some components of the Basel standards while discarding others that are either complex or not suitable for their banking regulations.

### **3.4 Diversification of the Stock of HQLA**

Authors have advocated different factors that are associated with the diversification of the HQLA stock. Acharya et al. associated diversification with increase of risk in banks<sup>339</sup> while Berger et al. are of the view that it reduces bank performance.<sup>340</sup> Other authors such as Elsas et al. believed that it increases profitability and bank value <sup>341</sup> while Kiweu pointed out that high level of diversification is usually linked to low lending rate and concluded by stating that reduced lending rate is beneficial to banks as it leads to increased net interest income and more diversification.<sup>342</sup>

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<sup>337</sup> Central Bank of Nigeria, 'Annual Report' (2011) [https://www.cbn.gov.ng/Out/2012/publications/reports/rsd/arp-2011/2011%20Annual%20Report\\_Complete%20Report.pdf](https://www.cbn.gov.ng/Out/2012/publications/reports/rsd/arp-2011/2011%20Annual%20Report_Complete%20Report.pdf) Accessed 20<sup>th</sup> August 2018.

<sup>338</sup> Central Bank of Nigeria, 'Circular to All Banks and Discount Houses on The Implementation of Basel II/III in Nigeria' <https://www.cbn.gov.ng/out/2013/bsd/baselii%20iii%20implementation%20circular.pdf> Accessed on 7<sup>th</sup> February 2018.

<sup>339</sup> Viral V. Acharya, Iftekhar Hasan and Anthony Saunders, 'Should Banks be Diversified? Evidence from Individual Bank Loan Portfolios (2006) 79(3) The Journal of Business. 1355

<sup>340</sup> Allen N. Berger, Iftekhar Hasan and Mingming Zhou, 'The Effect of Focus versus Diversification on Bank Performance: Evidence from Chinese banks' (2010) 34(7) Journal of Banking and Finance. 1417.

<sup>341</sup> Ralf Elsas, Andreas Hacketthal and Markus Holzhauser, 'The Anatomy of Bank Diversification' (2010) 34 Journal of Banking and Finance. 1274.

<sup>342</sup> Ibid

Also, it is widely believed that diversification in the banking sector encourages stability by increasing the probability that a bank can repay its debt<sup>343</sup> and reduces the probability of bankruptcy and costs aligned to bank failures.<sup>344</sup> Another factor is that of size. The size of a bank is very crucial as it has been established that bigger banks such as in Kenya are more diversified and tend to have higher returns as compared to smaller banks.<sup>345</sup>

According to Elsas et al, diversification in principle can help banks to better resist shocks.<sup>346</sup> The BCBS requires a bank's stock of HQLAs to be well diversified within its asset classes except for cash, central bank reserve and certain marketable securities backed by sovereigns and central banks. These exempted assets are regarded by the BCBS to be of highest quality and most liquid without any limit regarding the extent to which a bank can hold them to meet its LCR requirement.<sup>347</sup>

Banks are therefore encouraged to have these varieties to easily eliminate the effect of idiosyncratic shocks on their asset portfolios and avoid concentration risk.<sup>348</sup> The purpose of introducing diversity within the stock of HQLA is to reduce concentration risks that may occur because of a bank having all or a large portion of their holding in one asset class. Concentration occurs when a bank relies heavily on one source of funding for its survival.<sup>349</sup>

However, the major problem with diversification is that it can be very costly. This is because a more diversified bank may have a greater need for capital, especially if the diversification involves expansion into areas where the bank lacks expertise.<sup>350</sup> In

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<sup>343</sup> Vittoria Cerasi and Sonja Daltung, 'The Optimal Size of a Bank: Costs and Benefits of Diversification' (2000) 44(9) *European Economic Review*. 1701

<sup>344</sup> Douglas W. Diamond, 'Financial Intermediation and Delegated Monitoring' (1984) 51(3) *The Review of Economic Studies*. 393.

<sup>345</sup> Josephat Mboya Kiweu, 'Income Diversification in the Banking Sector and Earnings Volatility: Evidence from Kenyan Commercial Banks' KBA Centre for Research on Financial Markets and Policy, Working Paper Series. [www.kba.co.ke/downloads/Working\\_paper\\_WPS\\_02\\_12\[3\].pdf](http://www.kba.co.ke/downloads/Working_paper_WPS_02_12[3].pdf) Accessed on 20<sup>th</sup> December 2018.

<sup>346</sup> Ralf Elsas, Andreas Hacketthal and Markus Holzhauser, 'The Anatomy of Bank Diversification' (2010)34 *Journal of Banking and Finance*. 1274.

<sup>347</sup> Basel Committee on Banking Supervision, 'Summary Description of the LCR' <https://www.bis.org/press/p130106a.pdf> Accessed on 30<sup>th</sup> November 2017.

<sup>348</sup> Lydia Dzidzor Adzobu, Elipkimi Komla Agbloyor and Anthony Aboagye, 'The Effect of Loan Portfolio Diversification on Banks' and Returns: Evidence from an Emerging Market' (2017) 43(11) *Managerial Finance*. 1274.

<sup>349</sup> William C. Handorf, 'The cost of bank liquidity' (2014) 15(1) *Journal of Banking Regulation*. 1

<sup>350</sup> Andrew Winton, 'Don't Put All Your Eggs in One Basket? Diversification and Specialization in Lending' (1999) Google Scholar, <https://pdfs.semanticscholar.org> Accessed on 30<sup>th</sup> November 2018.



other words, the cost of diversification in banks can arise through the growing size of portfolio needed to achieve the purpose.<sup>351</sup>

Another point argued by Wagner is that diversification creates a new systemic crisis and makes banks more like each other by exposing them to the same risk.<sup>352</sup> He went further to explain that although a bank can diversify into an activity other than the one undertaken by other banks, it can increase similarities among banks (because full diversification requires banks to hold an appropriately defined portfolio that normally results into banks investing in the same portfolio) thereby making their asset risks perfectly correlated.

These arguments hold true for BCBS stipulated assets that can be classified as HQLAs, making it possible for banks especially in the SSA region to hold similar assets in their portfolio because of the existence of limited assets that qualify as LCR-defined HQLA. Furthermore, one of the advantages of diversification as mentioned earlier is that it reduces concentration risk, and such limited HQLAs in the SSA region allows for the possibility of concentration risk occurring, more particularly to sovereign debt.

An example is where the rand-denominated government debt securities constituted the majority of banks' HQLAs in South Africa following the introduction of LCR as a prudential requirement on 1<sup>st</sup> January 2015.<sup>353</sup> Although higher HQLA holdings in government debt securities strengthened banks' robustness in short-term liquidity demand, it exposes them to other types of risk such as banks increased sensitivity to changes in government bond yields that may occur due to a loss in government creditworthiness.<sup>354</sup>

Therefore, the increasing interlinkages between the banking sector and government through sovereign debt expose the banking sector to risks that can occur in the event of sovereign distress. This kind of issue can give rise to financial instability such as the

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<sup>351</sup> Vittoria Cerasi and Sonja Daltung, 'The Optimal Size of a Bank: Costs and Benefits of Diversification' (2000) 44(9) *European Economic Review*. 1701

<sup>352</sup> Wolf Wagner, 'Diversification at Financial Institutions and Systemic Crises' (2010) 19(3) *Journal of Financial Intermediation*. 373

<sup>353</sup> South African Reserve Bank, 'Financial Stability Review First Edition 2018' <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8420/FSR> Accessed 10th October 2018.

<sup>354</sup> Ibid

European sovereign debt crisis (It increased international awareness of risks to the banking sector that emanate from sovereign debt) that occurred in 2010.<sup>355</sup>

Also, some bank institutions have argued for the inclusion of more assets in the Level 1 HQLA category and a wider range of assets to be included within the definition of HQLA such as gold and other trading book liquid assets.<sup>356</sup> This is consequent upon the European sovereign debt problems.

The argument of these banking institutions is based upon the fact that if at some point the liquidity treatment of some government bonds is downgraded within the Basel context, banks such as South African banks that have majority of their HQLA stock in government debt may easily use other assets to make up their stock.

Also, substantial holding of government debt in South African banks have effectively resulted in banks being aligned in terms of liquid asset instruments and minimises the benefit of diversified portfolios in banks.<sup>357</sup> Therefore, the BCBS may have to look for alternatives in increasing the stock of HQLA as the issues with diversification may come with its inherent risks or create a monopoly of available stocks.

### **3.5 Potential Options for Jurisdictions with Insufficient HQLA**

The BCBS acknowledges the existence of jurisdictions with structural shortage of HQLA and limited room for diversification such as the SSA jurisdiction. The BCBS in addressing this situation made provisions through Alternative Liquidity Approach (ALA) that was incorporated into the Basel Framework in December 2019. The Basel Framework comprises of the full set of standards of the BCBS, and the ALA (LCR31) is the first version in the format of the consolidated framework.

The ALA is an alternative treatment intended by the BCBS to widen the set of assets that count towards HQLA for banks with insufficient HQLA within their jurisdictions.<sup>358</sup>

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<sup>355</sup> South African Reserve Bank, 'Financial Stability Review Second Edition 2018' <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8904/FSR> Accessed 14th October 2018.

<sup>356</sup> KPMG International Cooperation, 'Liquidity: A Bigger Challenge than Capital' (2012) <https://assets.kpmg/content/dam/kpmg/pdf/2012/09/Liquidity-A-bigger-challenge-than-capital.pdf> Accessed on 20<sup>th</sup> January 2019.

<sup>357</sup> S. Claassen and J. H Van Rooyen, 'Bank Liquidity Risk Management: A South African Survey to Determine Future Changes' (2012) 2(3) Risk Governance and Control Financial Markets and Institutions. 33.

<sup>358</sup> Lucas Marc Fuhrer, Benjamin Muller and Luzian Steiner, 'The Liquidity Coverage Ratio and Security Prices' (2016) SNB Working Papers

A jurisdiction qualifies for this alternative treatment when it can demonstrate among other things, the existence of an insufficient supply of HQLA in its domestic currency and taking into consideration all relevant factors affecting the supply of and demand for such HQLA.

Also, the insufficiency supply of HQLA must be caused by long-term structural constraints that cannot be resolved within mid-term and the applicable jurisdiction must be committed to observing the obligations relating to supervisory monitoring, disclosure, periodic self-assessment, and independent peer review.<sup>359</sup>

Additionally, a jurisdiction is only eligible to adopt ALA (expected to apply to a limited number of currencies and jurisdictions) treatment if it has fully implemented the LCR standard of 100 percent and applies a maximum usage of any of the ALA options as specified by supervisors within the jurisdiction.

The BCBS provided three options through the ALA for those jurisdictions with insufficient HQLA and allows for applications to be judged based on qualifying criteria as set out by the body.<sup>360</sup> The first option is the use of contractual Committed Liquidity Facility (CLF) provided by the relevant central bank with a fee.

This CLF is a contractual arrangement binding on both the central bank and the commercial bank (with insufficient HQLA and allowed to access the CLF) with a maturity date that falls outside the 30-day LCR window. The CLF facility can only be used for a fee regardless of the amount drawn down against that facility.

Also, the fee as set by a central bank is to give banks similar financial incentives to reduce their exposure to liquidity risk. In other to comply with the CLF requirements, a jurisdiction (central bank) must show that it has the economic and financial capability to grant the facility to its banks.

Also, all relevant details must be provided by the jurisdiction such as types of collateral that can be accepted, legal terms of the facility, disclosure policies and a commitment

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[https://www.snb.ch/n/mmr/reference/working\\_paper\\_2016\\_11/source/working\\_paper\\_2016\\_11.n.pdf](https://www.snb.ch/n/mmr/reference/working_paper_2016_11/source/working_paper_2016_11.n.pdf)  
Accessed 29th December 2018.

<sup>359</sup> Ibid

<sup>360</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools'(2013) <https://www.bis.org/publ/bcbs238.pdf> Accessed on 13 November, 2017.

fee (that includes the basis on which it is charged and the method of calculation by the central bank).<sup>361</sup>

The second option is the use of foreign currency HQLA to cover domestic currency liquidity needs. This option allows banks with a shortfall of HQLA in their domestic currency to hold HQLA in a foreign currency of the associated liquidity risk, provided the currency mismatch is justifiable and managed within limits agreed by their supervisors. Haircuts applied under this option must be conservative and based on historical experiences, especially during periods of stress within such jurisdictions.

The third option is the additional use of lower-quality HQLA (Level 2) with a higher haircut. This option is applied where there is insufficient Level 1 HQLA though with enough Level 2A HQLA. It then means that banks experiencing a shortfall of Level 1 HQLA may be allowed to hold additional level 2A HQLA with a minimum haircut of 20 percent, which is 5 percent higher than the normal haircut that usually applies to Level 2A. This option also relaxes the 40 percent cap that is applicable to Level 2 assets.

It is important to note that application of the three options provided under the ALA is not that simple. In understanding this application, Frait and Tomsik argued that expanding the supply of HQLA through the ALA does not completely eradicate the problem of insufficient HQLAs in jurisdictions, rather it partially addresses the problem.<sup>362</sup>

They went further to explain the effect of the three options. The first option has the advantage of avoiding incentives for banks to change their asset portfolios, though a central bank must balance the potential for banks' overreliance on the facility by making the cost of the CLF unduly prohibitive and consider how the CLF would affect their monetary operations.

The second option can be a practical solution only if banks' hold a substantial number of foreign currencies HQLA and a strong management of foreign exchange risk must be a prerequisite, especially on currency risk control framework that includes quantitative regulatory requirement such as net foreign open position limits.

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<sup>361</sup> Ibid

<sup>362</sup> Jan Frait and Vladimir Tomsik, 'Impact and Implication Challenges of the Basel Framework for Emerging Developing and Small Economies'(2014) 56(4) Comparative Economic Studies. 493.

The third option may be viable to countries that have well-developed capital markets with scarcity of sovereign debt as it will enable them to diversify away from sovereign debt, though the true liquidity profile of such Level 2 Assets needs to be assessed especially during stress periods. Additionally, supervisors must guard against Level 2 Assets crowding out Level 1 assets for higher yields.<sup>363</sup>

The BCBS further advised that jurisdictions that wish to implement the ALA will first understand the characteristics of available liquid assets and the liquidity characteristics of banks' sources of funding within their jurisdiction.<sup>364</sup> Furthermore, the ALA options especially their pros and cons should be assessed in the context of each individual banking system because each jurisdiction has its own peculiarity.

It is important to note that South Africa is the only country amongst the three under study that qualifies for the ALA having fully complied with 100 percent LCR implementation. The ALA has been applied by South Africa because of the insufficiency of LCR-defined HQLA (such as shortage of government stock) that made the implementation of LCR requirement in South African banks problematic.

The introduction of LCR has been criticised in South Africa because it forces local banks to hold a larger amount of government debt than other banks in developed countries without considering the small size of South Africa's bond market.<sup>365</sup> The SARB allowed for two alternative liquidity approaches (ALAs) to help domestic banks to meet their LCR requirements for HQLAs. The two ALAs are committed liquidity facility (CLF) and additional use of foreign currency assets to cover rand-denominated net cash outflows.<sup>366</sup>

Additionally, Guidance Notes were issued by SARB to inform banks on relevant details regarding eligible collateral, pricing and other requirements relating to the use of the

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<sup>363</sup> Jan Frait and Vladimir Tomsik, 'Impact and Implication Challenges of the Basel Framework for Emerging Developing and Small Economies'(2014) 56(4) Comparative Economic Studies. 493.

<sup>364</sup> Ibid

<sup>365</sup> Ibid

<sup>366</sup> Basel Committee on Banking Supervision, 'Regulatory Consistency Assessment Programme (RCAP) Assessment of Basel III LCR Regulations-South Africa' (2015) <https://www.bis.org/bcbs/publ/d323.pdf> Accessed on 14th November 2018.

CLF.<sup>367</sup> The CLF is adopted as a substitute for Level 2A assets in South Africa and allowed a limit up to 40 percent of the total HQLA requirements.

In other to use a CLF, banks in South Africa are required to complete an application and sign a bilateral contract with the SARB if accepted. Subsequently, banks with insufficient high- quality collateral that cannot apply for this CLF can still make use of the other ALA option which is the additional use of foreign currency HQLA.<sup>368</sup>

According to the assessment team from the Regulatory Consistency Assessment Programme (RCAP), further guidance on how the peer review process will operate is needed for the smooth implementation of ALA in South Africa.<sup>369</sup> This is because the use of ALA treatment outlined in the LCR framework stated that eligibility use of ALA will be subject to an independent peer review process.<sup>370</sup> Nigeria and Kenya are yet to adopt the LCR into their banking sector and the implementation (100 percent) will determine whether the ALA will be applied.

### 3.6 Conclusion

The application of the Basel regulations has generally become a norm, especially within the SSA jurisdiction. Clearly, most countries are complying with the Basel regulations either for its benefits or to be reckoned in the circle of international players. However, there are three elements that are strategic to the functionality of these regulations.

One of the elements is the diversification and alternatives to the HQLA stock. Some countries, especially those in the SSA region have been relying heavily on the level 1 HQLA that are BCBS exempt (that are of the highest quality) in the maintenance of their liquidity requirements. These are not enough as there are potentials for risk regarding concentration on one source.

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<sup>367</sup> South African Reserve Bank, 'Guidance Note 6/2016 Provision of a Committed Liquidity Facility' <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/7394/G6%20of%202016.pdf> Accessed 15<sup>th</sup> November 2018.

<sup>368</sup> Basel Committee on Banking Supervision, 'Regulatory Consistency Assessment Programme (RCAP) Assessment of Basel III LCR regulations-South Africa' (2015) <https://www.bis.org/bcbs/publ/d323.pdf> Accessed on 14th November 2018.

<sup>369</sup> Basel Committee on Banking Supervision, 'Regulatory Consistency Assessment Programme (RCAP) Assessment of Basel III LCR regulations-South Africa' (2015) <https://www.bis.org/bcbs/publ/d323.pdf> Accessed on 14th November 2018.

<sup>370</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools'(2013) <https://www.bis.org/publ/bcbs238.pdf> Accessed on 13 November, 2017.

Also, some of the proffered arguments in relation to diversification point to possible risks, low performance, low lending rates, stability, and profit. The summary of these factors creates submissions for the expansion of HQLA stock, especially level 1 to include assets such as gold and other trading book liquid assets. Also, the ALA provision made by the BCBS as option for HQLA insufficiency does little to assuage the clamour for expansion.

This is because countries such as Nigeria and Kenya are unable to access the option as they are not Basel III compliant, and have not met the 100 percent LCR requirement. Although South Africa adopted the ALA option by virtue of meeting the 100 percent LCR requirement, the move has been criticised for not taking into consideration the size of its bond market in comparison to other developed economies.

Another element is the challenges that seem to be peculiar to developing economies and hinder them from harnessing the supposed potentials of the Basel regulations. Some of these limitations that include costs and resources are the assumed bane to the SSA jurisdiction in exercising their respective sovereign financial prowess.

This is because one of the issues such as increase in funding costs and in relation to Basel III liquidity regulation is passed onto borrowers, and in turn increases lending rates. This factor has also been determined to affect profit as well. Also, another issue that has to do with resources that often comprise of skilled supervisors and IT equipment are not at their required level within some countries such as the SSA region. In other to achieve these associated human and operational costs, banks can go over the roof by increasing rates such as lending to be able to break even.

Such compelling situations to comply with existing regulations though expensive, may have left some countries struggling. This is one of the reasons countries such as Nigeria and Kenya adopted Basel regulations with different policies tailored to their respective regulatory needs though not wishing away the associated costs that come with the regulations.

The other element that has to do with the functionality of Basel regulations is the linkage of Basel standards to some global bodies in a bid to exert these regulations by way of proxy. This connection to global bodies has raised the bar to the regulatory principles of Basel requirements higher to the effect that countries seeking financial or

trade benefits from the global bodies such as the IMF and WTO must be Basel compliant.

However, such economic benefits come at a price, especially from developing economies such as the SSA region. Such price often comes with a cost of ceding the economic and financial sovereignty of a nation to the global bodies for access to funds and trade with less consideration to the effect on the ever-increasing population that often live below the poverty line.

However, it is believed that trade is mutual. This is because foreign banks do venture out for benefits just as local banks tend to seek benefits outside their jurisdictions. The Basel regulations have taken its roots though available facts portray the BCBS standards as more of a 'top-down approach' as opposed to a 'bottom-up approach' that reflects the economic standards of various countries.

The next chapter will describe the journey to banking regulations and the establishment of central banks in the respective countries of Nigeria, Kenya, and South Africa. It portrays how indigenous banks emerged in Nigeria and Kenya, and the unfair practices that existed, especially during the colonial era.



## Chapter Four

### Introduction to the Regulatory Basics of the Banking Systems Nigeria, Kenya, and South Africa

#### 4.1 Introduction

Banks play important roles in the financial sector of most countries as they occupy a delicate position in the performance of the economic stability of such countries.<sup>371</sup> Nigeria, South Africa, and Kenya, all have their respective journey tales of banking history and regulations that culminated in today's much better banking systems within the Sub-Saharan Africa (SSA) region.

Although other traditional regulations of banking that dated back to centuries may have existed within the sub-continent, this research limits itself to between the colonial era and the present era. The colonial era was not without its fuss. Banking practices during that period was seen more at the interests and dictates of colonial masters, and at the detriment of locals.

In as much as the few banks as at that time were doing well irrespective of their monopolies, there was either absence or minimal regulations. However, over the succeeding years, efforts were made through the revision of regulations in the establishment of indigenous banks to capture the interests of locals across the SSA region.

The regulatory norms and practices of the banking systems in the SSA region before the revision of banking laws in the early 1990s were low, especially in Nigeria and Kenya. Political interference replaced prudential criteria such as Kenya where prominent politicians were placed on boards of many banks<sup>372</sup> and Nigeria, where retired military officers were made directors of many banks.<sup>373</sup>

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<sup>371</sup> Kenneth Ajibo, 'Risk-based Regulation: The Future of Nigerian Banking Industry' (2015) 57(3) Journal of Law and Management. 201.

<sup>372</sup> Martin Brownbridge, 'Financial Distress in Local Banks in Kenya, Nigeria, Uganda and Zambia: Causes and Implications for Regulatory Policy', (1998) 16, Development Policy Review, 173-188

<sup>373</sup> Peter Lewis and Howard Stern 'Shifting Fortunes: The Political Economy of Financial Liberalization in Nigeria', (1997) 25(1), World Development, 5-22

These are some of the reasons previously postulated about the region's inability to handle its banking affairs. However, such speculations have been proven wrong, especially with the SSA region's resilience during the last global financial crisis.

The sub-continent has continued to develop and expand further within established and reformed regulations in the ability to drive their respective banking systems to the next level. These developments include investment in Fintech companies that are rapidly expanding within the SSA region.

Fintech refers to technology driven companies that offer financial services such as alternative online lending platform, digital payment and transfer services, and mobile banking outside the traditional financial sector.<sup>374</sup> These technological firms try to increase access to finance for market segments that have since been in limbo, particularly in rural areas.

More recently, the number of licensed banks in Nigeria as of 2021 remained at twenty-nine, comprising of twenty-two commercial banks, five merchant banks and two non-interest banks.<sup>375</sup> The Nigerian banking industry remained dominated by domestic banks with a few international banks.

Similarly, according to the South African Registrar of Banks, banks were streamlined to seventeen registered banks, two mutual banks and twelve branches of international banks by the end of 2011.<sup>376</sup> As of 2021, South Africa has thirteen locally controlled banks and four foreign controlled banks. Also, the CBK annual report of 2016 stated that Kenya has forty-three banking institutions (twenty-five local and fifteen foreign) as of 2016 and the Kenyan Government holds majority stakes in three commercial banks while forty are privately owned.

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<sup>374</sup> Hannah Timmis, 'The Global Financial System and Developing Countries' (2018) [www.assets.publishing.services.gov.uk/media/](http://www.assets.publishing.services.gov.uk/media/) Accessed 15<sup>th</sup> June 2019.

<sup>375</sup> Central Bank of Nigeria, 'Annual Report 2018' <https://www.cbn.gov.ng/Out/2019/RSD/2018%20AR%20KAMA1.pdf> Accessed 20<sup>th</sup> April 2019

<sup>376</sup> Tankiso Moloi, 'Understanding Banking Regulatory and Market Framework in South Africa including the Perceived Strength, Weaknesses, Opportunities and Threat' (2014) 3(3) Journal of Governance and Regulation.34

## 4.2 The Advent of Banking in Nigeria, Kenya, and South Africa

Banks are fundamental to the development of every nation that has experienced an economic cycle of flourishing and recession periods.<sup>377</sup> Over the years, the banking sector within the sub-continent has grown notably because of regulatory and supervisory reforms aimed at keeping the industry sound and up to date with local and global financial trends.

The Nigerian banking industry is at present better positioned towards enhanced service delivery than it was in the previous decades. More recently, the Nigerian economy experienced several domestic and external shocks, particularly with the drop-in oil price that has impacted on the banking sector (especially those banks that rely heavily on the oil and gas sector for fund generation).

However, banks in the country were still strong because of the regulatory compliance of adequate capital and liquidity levels, though with not as much profit because of the impact of the shocks. On the part of the Kenyan banking sector, it has continued to register a robust performance particularly with the introduction of recent technological innovations and despite increasing challenges.

The introduction of such technological advancement brought about the emergence of new financial innovations such as money mobile and agency banking. Money mobile is a new payment system that uses mobile phones to transfer funds electronically. The mobile money services sector in Kenya is the most advanced in the world and used for the transfer of money in deposit accounts held with commercial banks, cash withdrawals, payment for utility bills, air tickets and many more.<sup>378</sup>

Additionally, agency banking (the use of third parties to transact banking business) has also grown in Kenya, and available in rural areas where it has been difficult for commercial banks to establish branches. Similarly, the South African banking sector has grown significantly, especially with the end of the apartheid system in 1994 that

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<sup>377</sup> Ahmed Bello Dogarawa, 'Chronology of Banking Reforms in Nigeria' (2011) 19(4). *Journal of Financial Regulation and Compliance*, 370

<sup>378</sup> Chimwenwe Chipeta and Moses M. Muthinja, 'Financial Innovations and Bank Performances in Kenya: Evidence from Branchless Banking Models' (2018)21(1) *South African Journal of Economics and Management Sciences*.2222

brought about full independence to the South African Reserve Bank (SARB) as its long history was largely subservient to a political agenda.<sup>379</sup>

It is important to note that South Africa has a sophisticated banking industry with sound regulatory and supervisory framework that is aimed at ensuring financial stability and economic growth of the country. Also, new technological innovations have continued to impact on banking activities in the country (South Africa) through the creation of new financial services such as crowd-funding and online peer-to-peer lending platform.<sup>380</sup>

These new developments and reforms have proven the capability of the region to handle their banking needs. At this stage, it will be important to have an insight in the historical steps of the banking basics undertaken by the respective SSA banking systems of Nigeria, Kenya, and South Africa.

#### **4.2.1 Introduction to the Advent of Nigeria Banking System**

Banking in Nigeria can be traced back to 1892 with the establishment of the first commercial bank, the African Banking Corporation.<sup>381</sup> It was essentially owned by foreign investors and later acquired by the Bank of British West Africa (BBWA) in 1894. This Bank of British West Africa was renamed Bank of West Africa (BWA) in 1957 and later transformed into modern-day First Bank of Nigeria.

In 1899, a second foreign bank (Bank of Nigeria) was established but was acquired in 1912 by the BBWA thereby creating a monopoly at that time.<sup>382</sup> Additionally, the BBWA was in control of banking in Nigeria up until 1916 when the Colonial Bank was established, though later merged with two other banks (Barclays Bank and the Anglo-Egyptian Bank) in 1925. Barclays bank emerged as the preferred name after the merger of the three banks.

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<sup>379</sup> Vishnu Padayachee, 'Central Banking after the Global Financial Crisis: The South African Case' (2014) The Oxford Companion to the Economics of South Africa. [www.DOI:10.1093/acprof:oso/9780199689248.001.0001/](https://doi.org/10.1093/acprof:oso/9780199689248.001.0001/) Accessed on 10<sup>th</sup> November 2018.

<sup>380</sup> SARB, 'The Fourth Industrial Revolution and the Future of Work: Some Implications for Central Banking' (2018) [www.resbank.co.za/Lists/Speeches/Attachments/529/The%20Fourth%20Industrial](https://www.resbank.co.za/Lists/Speeches/Attachments/529/The%20Fourth%20Industrial) Accessed 10<sup>th</sup> March 2019.

<sup>381</sup> Kenneth Ajibo, 'Risk-based Regulation: The Future of Nigerian Banking Industry' *Supra.n.290*

<sup>382</sup> Chibuike Uche, 'Indigenous Banks in Colonial Nigeria' (2010) 43(3) *International Journal of African Historical Studies*, 467

The entrant of Barclays bank in the commercial banking system of Nigerian colony and in addition to the existing BBWA increased the number of British banks to two. These foreign banks that dominated the entire stratum of the Nigerian economy were only concerned about the interest of the expatriate community by ensuring that credit facilities were mainly provided to the foreign commercial enterprises in existence as at that time.<sup>383</sup>

The foreign banks as stated by Uche were said to have possessed ample reserves, highly skilled executives with long experience, maintained a restricted branch system, tended to engage in capital export and provided finance only for the most respected and conventional borrowers. However, these foreign banks were accused of discriminating against Nigerian indigenes in terms of accessing and granting credit facilities and charged higher interest rates on loans because lending to the indigenes was considered as being too risky.<sup>384</sup>

The irony was that such foreign banks found it difficult to lend to the indigenes but had no problem in collecting their deposits. The foreign banks failed to satisfy the needs of the indigenous people as they (indigenes) were deemed too primitive to merit banking services and unworthy of credit.<sup>385</sup> This was one of the reasons that led to the early quest for establishment of indigenous banks in the country.

Subsequently, in the view of Chukwu, the emergence of banks that were owned by indigenous Nigerians was said to be an aspect of the nationalist movement that blew across the African continent because of the need to liberalise credit for the indigenous communities. This was because the nationalist leaders felt convinced that economic emancipation of the indigenous people from the clutches of colonial rule was necessary.<sup>386</sup>

In this regard, Uche specified that the Industrial and Commercial Bank became the first indigenous bank in Nigeria and was formed in 1929 on the belief that colonial banks discriminated against the locals, and shortly afterwards went into liquidation in

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<sup>383</sup> Dan O. Chukwu, 'The Economic Impact of Pioneer Indigenous Banks in Colonial Nigeria, 1920-1960' (2010) 19 *Journal of Historical Society of Nigeria*. 93.

<sup>384</sup> Chibuike Uche, 'Indigenous Banks in Colonial Nigeria' (2010) 43(3) *International Journal of African Historical Studies*, 467

<sup>385</sup> Chibuike Ugochukwu Uche, 'Bank of England vs the IBRD: Did the Nigerian Colony Deserve a Central Bank?' (1997) 34(2) *Explorations in Economic History*. 220.

<sup>386</sup> Dan O. Chukwu, 'The Economic Impact of Pioneer Indigenous Banks in Colonial Nigeria, 1920-1960' (2010) 19 *Journal of Historical Society of Nigeria*. 93.

1930 due to mismanagement, embezzlement, insufficient capital, and lack of regulation.

The short-life span of this bank though attributed to mismanagement and lack of regulations raise questions such as - did these foreign banks play any covert operations to undermine the activities of this first indigenous bank? Was competition at play or just a mere lack of banking knowledge by the locals?

Although it was again stated in Uche that the non-co-operative attitude and denigration by colonial banks contributed to the demise of this first indigenous bank, further research with regards to these questions and many more can provide more and real clues as to what happened.

Despite the demise of the first indigenous bank, indigenous entrepreneurs were not deterred. Other indigenous banks such as Mercantile Bank, National Bank of Nigeria and the Nigerian Farmers and Commercial Bank were established by the 1930s, though they too had short lifespans. It is noted that the banking business in Nigeria as at then was unregulated and carried out at the dictates of the promoters of the banking business.

Therefore, due to the past failures of the indigenous banks, the colonial government appointed Mr. G. D. Paton in 1948 to inquire into the business of banking in Nigeria and make recommendations pertaining to the form and extent of control to be introduced.<sup>387</sup> Again, this inquiry raises more questions as to one being a judge in his own case that amounts to 'spinning a wheel and making it point to a stop where it is intended'. Otherwise, will the contributions of the locals have made any meaning in a monopolised colonial environment that point only to foreign interests?

According to the CBN website on the history of banking, the first banking regulation in Nigeria came about with the passage of the Banking Ordinance of 1952. The regulation was designed to prevent the continuous formation of unviable banks to put a stop to unregulated banking transactions because of the absence of sustainable banking legislation and to ensure orderliness in the commercial banking industry of Nigeria.

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<sup>387</sup> Kenneth Ajibo, 'Risk-based Regulation: The Future of Nigerian Banking Industry' *Supra*.n.290

The Banking Ordinance of 1952 was enacted based on the recommendation made by the G.D Paton's commission because of the failure of 21 out of 25 Nigerian banks that occurred between the periods of 1947 to 1952.<sup>388</sup> The demise of those early indigenous banks was blamed on inadequate capital, mismanagement, over-trading, lack of regulation, unfair competition from the foreign-owned banks and lack of confidence in the ability of Nigerians to manage banking business.<sup>389</sup>

The problem of inadequate capital led to the 1952 Banking Ordinance to prescribe the minimum capital requirements for indigenous (Nigerian) banks to be £12,500 (₦25,000).<sup>390</sup> Again, in as much as regulations are good, what requirements held sway for the foreign banks or was it another form of suppressing the local banks?

Also, a motion was put forward at the Federal House of Representatives for the establishment of a central bank to strengthen the existing indigenous banks. The then colonial government's appointed financial secretary did not support the motion and insisted that Nigeria at its stage of development (it was believed that Nigeria had underdeveloped securities market and may not be able to adhere to sound principles of monetary management, particularly when exposed to political pressures) was better off with the West African Currency Board than a central bank (Monetary activities in Nigeria were overseen by the West African Currency Board that was established in 1912 and had its headquarters in London).<sup>391</sup>

However, despite all these measures, Uche stressed that there was no mention of the enormous seigniorage profit that was earned by the colonial government from the currency board system during the colonial period. Of course, this symbolises one of the benefits of colonialism that protects the interests of the colonialist.

Subsequently, based on the immense support the motion received from the parliamentarians, there was a revised government motion that led to the setting up of an inquiry into the possibility of establishing a central bank of Nigeria. The banking

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<sup>388</sup> Reforms-Experts Task CBN on Trust and Confidence AllAfrica.com (2010) in Duncan Alford, 'Nigerian Banking Reform: Recent Actions and Future Prospects' (2010) Google Scholar. [www.ssrn.com/abstract](http://www.ssrn.com/abstract) Accessed 20th April 2018.

<sup>389</sup> Ihuoma Obienusi and E. A. Obienusi, 'Banking Reforms and the Nigerian Economy, 1990-2007' (2015) 21 Historical Research Letter, 17

<sup>390</sup> Oluseun Paseda, 'Banking Regulation in Nigeria: A Review Article' (2012) [https://papers.ssrn.com/so13/papers.cfm?abstract\\_id=2900252](https://papers.ssrn.com/so13/papers.cfm?abstract_id=2900252) Accessed 20th January 2019.

<sup>391</sup> Section 4 of CBN Ordinance 1958 in Chibuike Ugochukwu Uche, 'Bank of England vs the IBRD: Did the Nigerian Colony Deserve a Central Bank?' (1997) 34(2) Explorations in Economic History. 220.

regulatory structure was strengthened with the creation of the Central Bank of Nigeria Banking Act of 1958 and came into full operation on 1<sup>st</sup> July 1959.<sup>392</sup>

It became the apex regulatory body charged with administrative responsibility for the banking industry in Nigeria such as issuance of legal tender currency, maintaining external reserves, promoting monetary stability, and acting as banker and financial adviser to the Federal Government of Nigeria.<sup>393</sup>

Furthermore, the reluctance of the expatriate banks to grant loans to indigenous people prompted the Federal Government to acquire (nationalise) 40 percent equity interest in all the expatriate banks as well as appointing nominees on the board of directors to influence lending in favour of the indigenous customers.<sup>394</sup> Also, other measures were introduced to strengthen indigenous banks and prevent them from suffering from the fate of earlier established local banks.

Amendment to the Banking legislation of 1958 as stated in Paseda occurred in 1962 with the minimum capital requirement for indigenous banks reviewed upward to £250,000 and existing banks were given seven years grace period to comply with the requirement. However, just as the seven years period was about to expire, the minimum paid up capital for indigenous banks was further raised to £300,000.<sup>395</sup>

This era of 1958 to 1972 that ensured indigenous banks lived up to recognised standards was known as the era of intensive regulation. The Nigerian government began to play a greater role in regulating and owning of banks in the country between the 1960s and 1970s and this process led to the nationalisation of many foreign-owned banks.

By the year 1969, all private indigenous banks were taken over by regional/State governments because of the increase in share capital requirement (£300,000) that made private indigenous participation in bank ownership difficult.<sup>396</sup> Banking in Nigeria

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<sup>392</sup> Central Bank of Nigeria, 'History' <https://www.cbn.gov.ng/AboutCBN/history.asp> Accessed 18th April 2018.

<sup>393</sup> R. C. Somoye, 'The Performance of Commercial Banks in the Post Consolidation Period in Nigeria: An Empirical Review' (2008) 14 *European Journal of Economics, Finance and Administrative Science* in Jude A. Aruomoaghe and Ekundayo Olugbega 'Financing Capital Investment in Nigeria: The Role of the Banking Industry' (2014) 4(8) *Asian Economic and Financial Review*.1123

<sup>394</sup> E.O. Oloyede, 'The Bank Customer and Banking Law in Nigeria' (1975) 19(1/2) *Journal of African Law*. 66

<sup>395</sup> Oluseun Paseda, 'Banking Regulation in Nigeria: A Review Article' (2012) *Supra*.n.296

<sup>396</sup> Oluseun Paseda, 'Banking Regulation in Nigeria: A Review Article' (2012) *Supra*.n.296



began to gain stability because of the oil boom that started in the early 1970s and brought about economic growth in the country.<sup>397</sup>

#### **4.2.2 Introduction to the Advent of Kenya Banking System**

The banking industry in Kenya has evolved over the years despite the numerous economic challenges, especially at the post-independence period. The banking journey in Kenya dates to the pre-colonial period whereby Indian money lenders operated quasi-bank services.

However, in 1904, the National Bank of India opened a branch in Nairobi and later became the first commercial bank in Kenya with the East Africa Post Office Savings Bank Ordinance passed in April 1909, and the ordinance for the Regulation of Banks Established or to be Established in the East Africa Protectorate passed in April 1910.<sup>398</sup>

Subsequently, by 1911, the National Bank of India, Standard Bank of South Africa, and Kathiawad & Ahmedabad Banking Corporation (in operation for only five years) became the only three banks operating in Kenya.<sup>399</sup> According to Ochieng and Maxon, a move to migrate to a gold currency in 1919 was opposed by the three big banks because white settlers rejected ties to British India that operated with Rupees as currency.<sup>400</sup> They later settled for Florin as their currency in 1920 though not widely used.

The entrant of Barclays Bank in 1926 as one of the 'big three' changed the face of Kenyan banking industry as they concentrated on indigenous customers to raise far more accounts than the white settler accounts controlled mainly by Standard Bank of South Africa.<sup>401</sup> In terms of indigenisation, Barclays had only seventy indigenes out of one thousand employees with the hierarchy comprising of whites as managers,

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<sup>397</sup> Ihuoma Obienusi and E. A. Obienusi, 'Banking Reforms and the Nigerian Economy, 1990-2007' (2015) 21 Historical Research Letter, 17

<sup>398</sup> Central Bank of Kenya, 'Development of Banking in Kenya' <https://www.centralbank.go.ke/bank-history/> Accessed 16<sup>th</sup> January 2018.

<sup>399</sup> Ibid

<sup>400</sup> W. R. Ochieng, Robert M. Maxon. 'Reviewed Work: An Economic History of Kenya' Reviewed by David Moore-Sieray, 1993 22 Transafrican Journal of History, pp209-213.

<sup>401</sup> Ibid

Indians for the middle jobs and clerical jobs for the indigenes because customers preferred not to deal with fellow Africans.<sup>402</sup>

Although there were expectations that Kenya will remain a British colony for many more decades, there seemed to be issues of unfair banking practices at that time. One of such issues was a complaint to the then colonial government about National Bank of India being favoured by the government (having monopolised the industry for over 60 years).<sup>403</sup>

Another issue was the granting of credit by these banks to settlers at high interest rates over a long period at the exclusion of the indigenes. The other issue was that the monetary policy for the country was still determined by the East Africa Currency Board in London even after independence.

After independence in 1963, there was a substantial increase in the number of banks operating in Kenya because of the conscious effort by government to transfer economic activities unto capable indigenous Kenyans. Of course, there was no wholesale nationalisation of operational foreign banks (foreign-owned banks could continue to operate as foreign banks).<sup>404</sup>

Also, as the terms (British and colonisation) were becoming unacceptable, Kenyan politicians piloted the boycott of South Africa businesses (because of apartheid) with Standard Bank of South Africa being the biggest loser, especially with its tie to white settler population and this made the bank to drop South Africa from its name to continue being in business.<sup>405</sup>

In March 1966, the Central Bank of Kenya (CBK) was established by an Act of Parliament and became operational in September of the same year.<sup>406</sup> The CBK replaced the East African Currency Board (EACB) that purely dealt with the issuance

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<sup>402</sup> Ibid

<sup>403</sup> W. R. Ochieng, Robert M. Maxon. *An Economic History of Kenya* (East Africa Educational Publishers Ltd. Kenya, 1922)

<sup>404</sup> Central Bank of Kenya, 'The First Ten Years, Nairobi (1976) in Radha Upadhyaya, 'Analysing the Sources and Impact of Segmentation in the Banking Sector: A Case Study of Kenya' (2011) Google Scholar. Accessed 20<sup>th</sup> April 2018.

<sup>405</sup> Central Bank of Kenya, 'Development of Banking in Kenya' <https://www.centralbank.go.ke/bank-history/> Accessed 16<sup>th</sup> January 2018.

<sup>406</sup> Allan Mulengani Katwlo and Stella Isendi Muhanji, 'Critical Success Factors for the "Unbanked" Customers in Kenya' (2014) 32(2) *The International Journal of Bank Marketing*, 88

of local currency for East African countries (Kenya, Uganda, and Tanganyika).<sup>407</sup> Also, Kenya's first national currency called the Kenya Shillings was introduced on the 14<sup>th</sup> of September 1966 and replaced the EACB banknotes and coins.<sup>408</sup>

The first indigenous commercial bank in Kenya is the Co-operative Bank of Kenya, though it began initially as a co-operative society and later converted to a bank that began operations in 1968.<sup>409</sup> Also, in the same year, the government of Kenya established the National Bank of Kenya that became the first bank to be fully owned by the government.

Additionally, Kenya's financial sector was associated with interest rate restrictions, domestic credit controls, high reserve requirements, segmented financial markets, underdeveloped money, and capital markets up until the 1980's.<sup>410</sup> More recently, the CBK banking survey of 2007 provided summary of developments that had occurred in the banking sector of Kenya in the previous decade.

In one of the developments, there was a shift of focus to consumers with an increase in lending to individuals in salaried employment through mortgages and consumer loans.<sup>411</sup> Also, the sector has witnessed rapid growth of customer banking products such as unsecured personal loans, auto loans and unsecured professional loans.

#### **4.2.3 Introduction to the Advent of South Africa Banking System**

The introduction of banking in South Africa began with the establishment of Lombard Bank in Cape Town on 23<sup>rd</sup> April 1793, Cape of Good Hope Bank in 1836, Standard Bank of British South Africa in 1862, and Netherlands Bank of South Africa Ltd. in 1888.<sup>412</sup> This was the era of private banking and as trade spread across South Africa, more private banks were established.

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<sup>407</sup> Njuguna Ndung'u, 'A Meeting of the Actuarial Society of Kenya' (2009) <https://www.centralbank.go.ke/images/docs/speeches/2009/Remarks%20-%20Actuarial%20Society> Accessed 20<sup>th</sup> April 2019.

<sup>408</sup> Central Bank of Kenya 'Currency History' [www.centralbank.go.ke/currency-history](http://www.centralbank.go.ke/currency-history). Accessed 20<sup>th</sup> April, 2018.

<sup>409</sup> Central Bank of Kenya, 'Development of Banking in Kenya' Supra.n.326

<sup>410</sup> A. W. Kamau, 'Efficiency in the Banking Sector: An Empirical Investigation of Commercial Banks in Kenya (2009) in Francis Mwega, 'The Competitiveness and Efficiency of the Financial Services Sector in Africa: A Case Study of Kenya' (2011) 23(1) African Development Review. 44

<sup>411</sup> Francis Mwega, 'The Competitiveness and Efficiency of the Financial Services Sector in Africa: A Case Study of Kenya' Supra.n. 337

<sup>412</sup> South African Reserve Bank, 'History' <https://www.resbank.co.za/AboutUs/History/Pages/History-Home.aspx> Accessed 5<sup>th</sup> February 2018.

These private banks were regarded as 'unit banks or one-office banks' (because they were small local banks that had very little financial expertise) and were either taken over by the much later established large banks with extensive branch networks such as the Barclays National Bank Limited (established in 1926) or simply liquidated.<sup>413</sup>

In 1879, a proposal for the establishment of a central bank of South Africa by a political party, the Afrikaner Bond, in the Cape Colony was ignored.<sup>414</sup> The following few years witnessed repeated calls for a central bank to be established. In the absence of a central bank in South Africa, the accepted practice was that commercial banks issued banknotes in exchange for gold at a fixed rate.<sup>415</sup>

There was no uniformity with regards to banking legislation that provides for the issuance of banknotes as many of the commercial banks printed their respective banknotes that were acceptable as legal tenders.<sup>416</sup> However, the issuing banks were under obligation to convert banknotes held by the public into gold whenever they were tendered at their branches.<sup>417</sup>

It will be recalled that the year 1910 brought about the formation of the union of South Africa. Commercial banks were guided by a system known as free banking, by which there was no government intervention with respect to the quantity of money, no restrictions on assets, liabilities or capital for banks, no deposit guarantee, no interest rate controls and no central bank.<sup>418</sup>

The domestic currency was pegged in value to the British pound sterling that was in turn pegged to the US dollar and the gold price.<sup>419</sup> South African currency will be converted into gold at the official rate and profit made by selling the gold in London.<sup>420</sup>

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<sup>413</sup> John Chibaya Mbuya, 'The Pillars of Banking' (2008) <https://books.google.co.za> Accessed 5th February 2018.

<sup>414</sup> South African Reserve Bank, 'Commemorative Publication' (2011) <https://www.resbank.co.za> Accessed 7th February 2018.

<sup>415</sup> Jannie Rossouw, 'A Selective Reflection on The Institutional Development of The South African Reserve Bank Since 1921' (2011) 26(1) Economic History of Developing Regions. 3

<sup>416</sup> John Chibaya Mbuya, 'The Pillars of Banking' Supra.n.367

<sup>417</sup> Ibid

<sup>418</sup> Adrian Savile, Maureen Bader, and Zane Spindler, 'Alternative Monetary Systems and the Quest for Stability: Can a Free Banking System Deliver in South Africa?' (2005) 73(4) South African Journal of Economics. 674

<sup>419</sup> South African Reserve Bank, 'Commemorative Publication' Supra.n.370

<sup>420</sup> Ibid

Domestic commercial banks in South Africa had to purchase the gold at a high price in London and re-import into South Africa to back their banknotes on issue.<sup>421</sup>

The problem as at then was that those commercial banks in South Africa were under obligation to convert their banknotes to gold on demand at a lower price in terms of the gold standard.<sup>422</sup> When this obligation to trade at loss became untenable for commercial banks and made it impossible for them to meet their obligations, they requested to be released from the commitment.<sup>423</sup> This led to the Gold Conference of October 1919.

In adopting the recommendation of the conference, a select committee consisting of ten Members of Parliament was formed. They were tasked with the duty of examining the practicability of establishing a central bank that will take up the responsibility for issuing banknotes and acquiring the gold held by commercial banks.<sup>424</sup>

Based on the recommendation of the committee, the parliament promulgated the Currency and Banking Act in December 1920 that provided for the establishment of the South Africa Reserve Bank (SARB).<sup>425</sup> The SARB opened its door for business on 30 June 1921 and on 30 June 1922; commercial banks were instructed to discontinue issuing and reissuing of banknotes, thereby leaving SARB with that sole responsibility.<sup>426</sup>

After December of 1932, banknotes could no longer be converted to gold. In other words, South Africa abolished the gold standard and linked the value of its currency to the pound sterling in 1933 that became known as the South African Pound Sterling.<sup>427</sup> Furthermore, the South African government took steps to stop trading short-term wholesale fund in the London money market with the establishment of the

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<sup>421</sup> Jannie Rossouw, 'A Selective Reflection on The Institutional Development Of The South African Reserve Bank Since 1921' Supra.n.371

<sup>422</sup> John Chibaya Mbuya, 'The Pillars of Banking' Supra.n.369

<sup>423</sup> Jannie Rossouw, 'A Selective Reflection on The Institutional Development of The South African Reserve Bank Since 1921' Supra.n.371

<sup>424</sup> South African Reserve Bank, 'Background' [www.resbank.co.za/AboutUs/history/background](http://www.resbank.co.za/AboutUs/history/background) Accessed on 5th February 2018.

<sup>425</sup> South African Reserve Bank, 'History' Supra.n.366

<sup>426</sup> South African Reserve Bank, 'Commemorative Publication' Supra n.370

<sup>427</sup> South African Reserve Bank, 'History of South African Banknotes 1782 to 1920' [www.resbank.co.za/BanknotesandCoins/SouthAfricanCurrency](http://www.resbank.co.za/BanknotesandCoins/SouthAfricanCurrency) Accessed on the 8th of June 2018.

National Finance Corporation of South Africa in 1949 for the purpose of providing call-money facilities in the country.<sup>428</sup>

It is important to note that South Africa replaced its currency of South African pound sterling with Rand by 1961.<sup>429</sup> The end of the apartheid system brought about full independence for the SARB, and the primary goal as set out in the 1996 constitution is to protect the value of the currency.

### **4.3 Recent Failures in the Banking Systems of Nigeria, Kenya, and South Africa**

According to Igoni, crises in banks occur when the capital is eroded because of poor risk management and non-performing loans leading to the adverse net worth of such banks.<sup>430</sup> Additionally, a distressed bank as described in a study by the CBN/NDIC collaborative study, is 'one with severe financial, operational and managerial weaknesses which have rendered it difficult for the institution to meet its obligation to its customers, owners and the economy as and when due'.<sup>431</sup>

Also, a distressed bank is either illiquid and, or insolvent with chances of regaining stability while a failed bank is a dead bank that had lost every chance of survival.<sup>432</sup> Therefore, distresses in banks can take place in any nation and the SSA region is not different. Over the last two decades, different banking issues arose within the SSA region that exposed the lapses in the respective banking systems of the sub-continent. These issues mostly have to do with regulatory, liquidity and management lapses that may have put the banking systems within the region at great risk.

In South Africa, the case of poor management and liquidity problems have been the major causes of some of the failed banks that occurred between the 1990s and early 2000s. In fact, between the latter part of 1999 and the end of March 2003 as specified in T. Mboweni, South Africa experienced a banking crisis whereby some of the

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<sup>428</sup> John Chibaya Mbuya, 'The Pillars of Banking' Supra.n.367

<sup>429</sup> South African Reserve Bank, 'History of South African Banknotes 1782 to 1920' Supra.n.386

<sup>430</sup> Pedro Igoni, 'Causes of Banking Crises' Understanding Monetary Policy No26 Central Bank of Nigeria.

<https://www.cbn.gov.ng/out/2016/mpd/understanding%20monetary%20policy%20series%20no%2026.pdf> Accessed 20<sup>th</sup> April 2018.

<sup>431</sup> <sup>431</sup> NDIC, 'Closed Financial Institutions' (2009) [www.ndic.gov.ng/closed-financial-institutions/](http://www.ndic.gov.ng/closed-financial-institutions/) Accessed 20<sup>th</sup> January 2019.

<sup>432</sup> Babalola Adeyemi, 'Bank Failure in Nigeria: A Consequence of Capital Inadequacy, Lack of transparency and Non-performing loans' (2011) 6(1) Banks and Banks System. 99

medium and small local banks faced liquidity pressure that led to twenty-two banks exiting from the country's banking system.<sup>433</sup>

The author continued by stating that the liquidity pressure faced by some smaller banks that led to the cancellation of their banking registrations was mostly because of the reluctance of depositors to place funds with them. Other remaining smaller banks that retained their respective registrations had to redesign their ownership structures and downsized their balance sheets.

Subsequently, follow-up regulatory actions were taken by SARB and implemented to save the remnants of the banking sector.<sup>434</sup> In similarity to South Africa, some of the causes of bank failures in Nigeria are inadequate capital, increase in non-performing loan to total loans, insufficient liquidity that may lead to an insistent desire to overdraw from the central bank window, substantial losses from banks' operations, poor supervision, and poor corporate governance.<sup>435</sup>

It has been argued that serious banking issues that led to bank distress and failures in Nigeria started with the adoption of liberalisation policies that were introduced in line with the Structural Adjustment programme (SAP) of 1986.<sup>436</sup> As stated earlier, the implementation of the structural adjustment policies brought in structural shift that relaxed the licensing and regulation of the banking sector in the country.

In the last couple of decades, between the periods of 1993 and 1998, there were upheavals in the Nigerian banking sector coupled with general economic recession and persistent illiquidity in the banking industry as stated by Ahmed. However, in the last decade, the CBN became more proactive in policing the Nigerian banks. By

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<sup>433</sup> T. T. Mboweni, 'Overview of the South African Economy' (2003) <https://www.bis.org/review/r030905b.pdf> Accessed 20th April 2018.

<sup>434</sup>South African Reserve Bank, 'Annual Report' 2004 <https://www.resbank.co.za/Publications/Reports/Document/Annual%20Report%202004.pdf> Accessed 20<sup>th</sup> April 2018.

<sup>435</sup> Pedro Igoni, 'Causes of Banking Crises' Understanding Monetary Policy No26 Central Bank of Nigeria. <https://www.cbn.gov.ng/out/2016/mpd/understanding%20monetary%20policy%20series%20no%2026.pdf> Accessed 20<sup>th</sup> April 2018.

<sup>436</sup> Thomas Agbonkpolor, 'Risk Management and Regulatory Failures in Banking: Reflections on the Current Banking Crisis in Nigeria' (2010)11(2) Journal of Banking Regulation. 146



January 2006, the banking licenses of fourteen banks such as All State Trust Bank Plc and Hallmark Bank Plc were revoked by the CBN.<sup>437</sup>

The failure of these banks was blamed on the bank consolidation programme initiated by the CBN because those banks were unable to meet the prescribed minimum capital requirement of ₦25 billion.<sup>438</sup> In fact, between 1994 and 2015, forty-nine failed banks had been successfully closed in Nigeria because their licenses were revoked, and the Federal High Court issued orders for them to be wound up.<sup>439</sup>

Although after the 2005 consolidation exercise that sanitised the Nigeria banking system, the country experienced another banking crisis in 2009 because of some factors such as capital inflow, weakness in regulatory framework, excessive credit and lending, inadequate supervision and enforcement, and poor risk management.

The CBN acted by injecting ₦620 billion (3.75 billion pounds) into the affected banks to maintain stability in the financial system and the chief executive officers and management of the affected banks were removed.<sup>440</sup> Correspondingly, the Kenya banking system is also not without blemish as it has experienced banking problems since 1986. In fact, between 1986 and 2001, Kenya recorded a total of thirty-nine bank failures and experienced two major banking crises.<sup>441</sup>

The causes of these bank failures were blamed mostly on under-capitalisation and high non-performing loans.<sup>442</sup> The single biggest contributor to the non-performing loans of many of the failed local banks was imprudent lending, and in particular, insider lending. These failed banks in Kenya such as the Continental Bank, Trade Bank and Pan African Bank was involved in extensive insider lending, and as a result, they

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<sup>437</sup> NDIC, 'Closed Financial Institutions' (2009) [www.ndic.gov.ng/closed-financial-institutions/](http://www.ndic.gov.ng/closed-financial-institutions/) Accessed 20<sup>th</sup> January 2019.

<sup>438</sup> Nelson E. Ojukwu-Ogba, 'Banking Sector Reforms in Nigeria: Legal Implications for the Banker-Customer relationship' (2009) 35(4) *Journal of Commonwealth Law Bulletin*. 675.

<sup>439</sup> World Bank Group, 'Nigeria: Methodological Approach for Development of a Target Deposit Insurance Fund Model' (2016) [www.documents.worldbank.org](http://www.documents.worldbank.org) Accessed 20<sup>th</sup> January 2019.

<sup>440</sup> Onyeka Osuji, 'Assets Management Companies, Non-performing Loans and Systemic Crisis: A Developing Country Perspective' (2012) 13(2) *Journal of Banking Regulation*. 147.

<sup>441</sup> Rose Wanjiru Ngugi, 'An Empirical Analysis of Interest Rate Spread in Kenya' *Supra.n.343*.

<sup>442</sup> Francis Mwega, 'The Competitiveness and Efficiency of the Financial Services Sector in Africa: A Case Study of Kenya' *Supra.n.337*



breached their large loan exposure limits that led to mismatch in the maturities of their bank's assets and liabilities.<sup>443</sup>

In 1998, the CBK placed five banks under statutory management including the Trust Bank that was Kenya's seventh largest bank and appointed an adviser to help manage the National Bank of Kenya (NBK) that happened to be the country's fourth largest bank at that time. These actions followed a Ksh2 billion government bailout after rumours of illiquidity prompted depositors to withdraw Ksh1.5 billion from the affected banks.<sup>444</sup>

Furthermore, between 2015 and 2016, Kenyan banking sector suffered another crisis following the collapse of three commercial banks in Kenya namely Dubai Bank, Imperial Bank and Chase Bank. These banks were placed under receivership by CBK because of factors such as capital and liquidity, unsafe and unsound business conditions and, failure to meet the statutory banking ratio and under-reporting of insider loans, respectively.<sup>445</sup>

#### **4.4 Application of Reforms and Corrective Actions Undertaken by the Banking Systems of Nigeria, Kenya, and South Africa**

It has been argued through the SARB annual report of 2004 that no amount or extent of banking regulations and supervision can ever prevent the occurrence of problems at banks because even in a sound system, there is bound to be failures. However, with prudent management, banks can limit the scope and cost of these failures. These are to be seen in some of the recent reforms and corrective actions undertaken by the respective central banks of Nigeria, Kenya, and South Africa in the last few decades.

In Kenya, major changes in the late 1980's were aimed at liberalising interest rates, improving the effectiveness of monetary policy, and strengthening of the central bank's supervisory framework.<sup>446</sup> The CBK was further empowered through the amendment

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<sup>443</sup> Nelson M. Waweru and Victor M. Kalani, 'Commercial Banking Crises in Kenya: Causes and Remedies' (2009) 3(3) Global Journal of Finance and Banking Issues.23

<sup>444</sup> Mark Turner, 'Authorities in Kenya Shore Up Troubled Bank' (1998) Financial Times Business Enterprises Limited, London. [www.search-proquest-com.eu1.proxy.openathens.net/docview/248647928?](http://www.search-proquest-com.eu1.proxy.openathens.net/docview/248647928?) Accessed 20<sup>th</sup> March 2019.

<sup>445</sup> Robert N. Gathaiya, 'Analysis of Issues Affecting Collapsed Banks in Kenya from Year 2015 to 2016' (2017) 7(3) IJMBS. 9

<sup>446</sup> Solomon W., Giorgis Sahile, Daniel Kipkirong, Tarus Thomas, Kimeli Cheruiyot, 'Market Structure-Performance Hypothesis in Kenyan Banking Industry' (2015) 10(4) International Journal of Emerging Markets

of the Banking Act to enforce these banking laws and regulations, including power to levy monetary penalties for non-compliance.<sup>447</sup>

Additionally, The Deposit Protection Fund Board was established in 1989 for the compensation of small depositors in the event of bank failure and to manage deposit insurance fund.<sup>448</sup> Also, initial capital requirement increased for setting up commercial banks in Kenya with the re-introduction of cash ratio to moderate excess liquidity within the commercial banks.<sup>449</sup> One other issue was that Kenyan banks had usually placed a major emphasis on physical security, but this changed with the growth of unsecured lending.

Public sector lending became more favourably considered by several Kenyan banks because of improved governance and as such, the establishment of commercial courts to reduce time taken to resolve default cases was introduced. The minimum capital requirement for Kenya banking sector increased systematically to Kshs 250 million by 2000; Kshs 350 million by 2009; Kshs 500 million by 2010 and Kshs 700 million by 2011.<sup>450</sup>

By December 2012, the CBK through the Financial Act 2008 raised the minimum capital requirement to Kshs 1 billion (12 million dollars).<sup>451</sup> Consequently, banks were grouped into peer groups based on their total assets by the CBK. Banks with total assets above Ksh 15 billion are classified as large banks, and those with total assets between Ksh 5 billion and Ksh 15 billion are classified as medium while small banks are classified with total assets less than Ksh 5 billion.<sup>452</sup>

Furthermore, Chipeta and Muthinja stressed that the classification of Kenya banks has been based on the weighted composite market share index (CMSI) that consists

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<sup>447</sup> Francis Mwega, 'The Competitiveness and Efficiency of the Financial Services Sector in Africa: A Case Study of Kenya' (2011) 23(1) African Development Review. 44

<sup>448</sup> Allan Mulengani Katwlo and Stella Isendi Muhajji, Critical Success Factors for the "Unbanked" Customers in Kenya' *Supra*.n.329

<sup>449</sup> *Ibid*

<sup>450</sup> Radha Upadhyaya, 'The Political Economy of Basel Adoption in Kenya' (2017) Global Economic Governance Programme, University of Oxford. GEG Working Paper 131. <https://www.bsg.ox.ac.uk/> Accessed 18<sup>th</sup> August 2018.

<sup>451</sup> Ragnar Gudmundsson, Kethi Ngoka-kisinguh and Maureen Teresa Odongo, 'The Role of Capital Requirements on Bank Competition and Stability: The Case of the Kenyan Banking Industry'*Supra*.n.363

<sup>452</sup> Chimwemwe Chipeta and Moses M. Muthinja, 'Financial Innovations and Bank Performances in Kenya: Evidence from Branchless Banking Models' (2018)21(1) South African Journal of Economics and Management Sciences.2222

of total assets, deposits, capital size, number of deposit accounts and loan accounts. Therefore, banks that have a CMSI greater than five percent are considered as large banks while those that have a CMSI of between one percent and five percent are considered as medium banks and those with a CMSI of less than one percent are regarded as small banks.<sup>453</sup>

The financial sector reforms strengthened the banking industry in Kenya through product offerings and service quality, stability, and profitability.<sup>454</sup> The banking sector grew from thirty-six operating banks in 1999 to forty-three banks in 2008 and was equipped to withstand both global and economic crisis.<sup>455</sup>

Furthermore, in 2012, Kenya Deposit Insurance Corporation was established, and the Deposit Protection Fund Board was replaced with the Deposit Insurance Fund.<sup>456</sup> This is identical to the Nigeria Deposit Insurance Corporation (NDIC) that was created in 1988 to provide deposit insurance to depositors of failed Nigerian banks.<sup>457</sup>

Correspondingly, the Nigeria banking sector introduced policies to stimulate and check financial recklessness such as the introduction of the International Monetary Fund (IMF) backed Structural Adjustment Program (SAP) in 1986. The introduction of SAP amongst other controls made investment in the banking sector more attractive, particularly with the softening of entry barriers into the banking sector and the granting of expanded powers to banks in their acquisition of assets and liabilities.<sup>458</sup>

On the 6<sup>th</sup> of July 2004, the former governor of CBN, Professor Charles Soludo in his address to the special meeting of the Bankers Committee, announced a new policy that required banks in Nigeria to raise their minimum capital to 25 billion Naira (about USD173 million) by the end of December 2005.<sup>459</sup> Hence, banks in Nigeria were given

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<sup>453</sup> Central Bank of Kenya, 'Bank Supervision Annual Report 2015' <https://www.centralbank.go.ke> Accessed 3rd February 2018.

<sup>454</sup> Ibid

<sup>455</sup> Central Bank of Kenya, 'Development of Banking in Kenya' Supra.n.326

<sup>456</sup> Central Bank of Kenya, 'The Kenya Deposit Insurance Act 2012' <https://www.centralbank.go.ke> Accessed 3rd February 2018.

<sup>457</sup> Abel E. Ezeoha, 'Structural Effects of Banking Industry Consolidation in Nigeria: A Review' Supra n 307

<sup>458</sup> A. A. Alawode, 'Financial Deregulation and the Effectiveness of Bank Supervision in Nigeria' (1992) 16(1) Savings and Development. 101

<sup>459</sup> Charles Chukwuma Soludo, 'Consolidating the Nigerian Banking Industry to Meet the Development Challenges of the 21<sup>st</sup> Century' (6 July 2004) Abuja. <https://www.bis.org/review/r040727g.pdf> Accessed 22nd December 2017.

eighteen months' notice from the announcement of the new policy, to meet the new capital requirement.

Initially, the minimum capital requirement was increased to five hundred million naira by 1997; one billion naira by 1999 and two billion naira by January 2004.<sup>460</sup> Most of the eighty-nine banks that were in existence by 2004 were classified as small and weakly capitalised with most of them having paid up capital of USD 10 million or less.<sup>461</sup>

The aim of the reform policy was to consolidate existing banks into fewer, larger, stable, and financially stronger banks with solid asset bases that can function and able to compete effectively with other international banks while maintaining a safe financial environment for depositors.

Furthermore, Professor Soludo wanted to eradicate existing weak banks and proactively control the long persistent cases of bank failures in the country. He went further to highlight the problems faced by Nigerian banks before the 2004 consolidation to include persistent illiquidity, poor asset quality, and unprofitable operations. The consolidation drew a lot of criticisms because the exercise was perceived to have targeted the elimination of small banks with the consequent job losses.<sup>462</sup>

In terms of mergers and acquisition, there were several mergers and acquisitions among banks in Nigeria during the 18-month period of the 2005 pre-consolidation as some banks were either being swallowed up by bigger banks or were completely liquidated because of their inability to raise the new capital requirement.<sup>463</sup> The existing eighty-nine banks were streamlined to twenty-five, and later to twenty-two that are larger and better capitalised.<sup>464</sup>

This merger situation is like the Kenya banking industry that had twenty successful mergers between 1994 and 2005 and by 2008, the number increased to twenty-

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<sup>460</sup> Oluseun Paseda, 'Banking Regulation in Nigeria: A Review Article' (2012) *Supra*.n.296

<sup>461</sup> Duncan Alford, 'Nigerian Banking Reform: Recent Actions and Future Prospects' (2010) *Goggle Scholar*. [www.ssrn.com/abstract](http://www.ssrn.com/abstract) Accessed 20th April 2018.

<sup>462</sup> Oluseun Paseda, 'Banking Regulation in Nigeria: A Review Article' (2012) [https://papers.ssrn.com/so13/papers.cfm?abstract\\_id=2900252](https://papers.ssrn.com/so13/papers.cfm?abstract_id=2900252) Accessed 20<sup>th</sup> January 2019.

<sup>463</sup> Nelson E. Ojukwu-Ogba, 'Banking Sector Reforms in Nigeria: Legal Implications for the Banker-Customer relationship' (2009) 35(4) *Journal of Commonwealth Law Bulletin*. 675.

<sup>464</sup> Duncan Alford, 'Nigerian Banking Reform: Recent Actions and Future Prospects' *Supra*.n.314

seven.<sup>465</sup> These mergers and acquisitions that took place in the respective banking sectors of Kenya and Nigeria were partly occasioned by the need to meet the increasing minimum core capital requirements and to enhance the institutions' market share.

In terms of enhancing the banking institutions', Molozi stated that South Africa had sustainable credit extension that was made possible by effective legislation such as the National Credit Act (2005) that prohibits reckless lending and promotes fair and responsible credit practices. Also, he continued by stating that South African banks had a limited exposure to sub-prime mortgage related products that helped limit the overall exposure to foreign risk.

Although South Africa banking sector has its fair share of banking issues, the timely application of measures to remedy situations have always kept the industry stable. An example is a case whereby Saambou bank that was the seventh largest bank in South Africa was placed under curatorship to prevent an impending crisis that led to further withdrawals by depositors as they (the depositors) lost confidence in the bank.<sup>466</sup>

The loss of confidence as asserted by Mboweni also affected the BOE bank that was the sixth largest bank in South Africa and that was seen as an indication of lack of confidence that can spread up the scale and not only down the scale. Since the trend could not be stopped as stated in Mboweni, the SARB in consultation with the National Treasury issued a guarantee to all depositors that the government will fund their withdrawals. This action was taken by the South African authorities to restore the financial health of the affected banks.

It is noteworthy to point out that South African banks are fully integrated into global financial system, and the effect of the last global financial crisis was milder in the nation than other countries within the region.<sup>467</sup> This is unlike Nigeria and Kenya that have minimal integration into the global financial market though with minimal effect of the 2007 global financial crisis.

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<sup>465</sup> Francis Mwega, 'The Competitiveness and Efficiency of the Financial Services Sector in Africa: A Case Study of Kenya' *Supra*.n.337

<sup>466</sup> The Banks Act, 'Act No. 94 of 1990 (As Amended)' <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/2591/Banks+Amendment+Act+2007%5B1%5D.pdf> Accessed 10<sup>th</sup> May 2018.

<sup>467</sup> K. Mabwe and R. Webb, 'A Financial Ratio Analysis of Commercial Bank Performance in South Africa', (2010) 2(1) *African Review of Economic and Finance*, 31-53

South Africa's resilience in the last financial global meltdown as seen in most advanced economies was because of policy components that protected the country from financial sovereign crisis that include limited exposure to foreign assets, subsidiary structure and listing requirements, sound framework for financial regulation and appropriate risk management practices at domestic banks.<sup>468</sup>

Furthermore, the SARB Supervision Report of 2009 stated that South African banks did not require any form of liquidity support from either the South African government or the Reserve Bank during the last global financial crisis of 2007 because of factors such as adequate capital levels, low leverage ratio and limited exposure to foreign assets amongst others that mitigated the effect of the crisis on South African banking sector.

After the financial crisis, the SARB focused its attention on improving their banking regulations and supervisions while avoiding the dangers of over regulation through gradual lowering of the repo rate by influencing lending rates and getting banks to tighten their lending criteria while letting credit flow.<sup>469</sup>

On the other hand, the impact of the financial crisis on Nigeria's financial system was not pronounced till the third quarter of 2008 when the stock market was rattled because of bank-stock related investments, and it registered a continuous drop in its All-Share Index and volume of traded securities at the Nigerian Stock Exchange.<sup>470</sup>

Additionally, the CBN annual report of 2009 stated that the banking sector recorded a significant asset decline of about 39.8 percent because the crisis that engulfed the capital market led to higher loss of provisioning by banks, much lower profits and a slump in lending to private sectors.

This is contrary to the Kenya banking sector that emerged from the financial crisis unharmed as the banking sector pre-tax profit by June 2007 was Kshs 16.3 billion and

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<sup>468</sup> SARB: A Safer Financial Sector to Serve South Africa Better 2011 <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8497/A%20safer%20financial%20sector%20to%20serve%20South%20Africa%20better.pdf> Accessed 16 December 2018

<sup>469</sup> Vishnu Padayachee, 'Central Banking after the Global Financial Crisis: The South African Case' (2014) The Oxford Companion to the Economics of South Africa. [www.DOI:10.1093/acprof:oso/9780199689248.001.0001/](http://www.DOI:10.1093/acprof:oso/9780199689248.001.0001/) Accessed 10<sup>th</sup> November 2018.

<sup>470</sup> Central Bank of Nigeria, 'Annual Report 2009' <https://www.cbn.gov.ng/OUT/2010/PUBLICATIONS/REPORTS/RSD/Link%20Files/INTERACTIVE%20ANNUAL%20REPORT%20FOR%20THE%20YEAR> Accessed 14 December 2018

increased further to Kshs 23.9 billion by June 2008.<sup>471</sup> This is affirmed in Katwalo and Muhanji where it is stated that banks in Kenya were stable throughout the global financial crisis in 2008 and its overall performance was an improvement from the satisfactory rating attained during a similar period in 2007.<sup>472</sup>

Also, a survey conducted by the CBK in 2008 and documented in the CBK annual report of the same year stated that the impact of the crisis was likely to be minimal in Kenya and Kenyan banks are unlikely to be impacted by the financial crisis because of their minimal integration into the global financial market.

#### **4.5 Legislative Acts that Govern the Regulation and Supervision of Banks in Nigeria, Kenya, and South Africa**

Central banks play major roles in the regulation and supervision of banks in their respective jurisdictions. Just like other central banks around the world, the central banks in the SSA countries issue legal tenders in their respective countries, formulate, and implement monetary policy directed to achieve and maintain price stability, ensure proper functioning of a stable market-based financial system, proper functioning of an efficient national payment and settlement system, and manage the external reserves amongst others. This is complemented by legislative Acts to make such regulations as functional laws.

In South Africa, the SARB is responsible for regulation and supervision of the banking sector including prompting soundness of banks through effective application of international regulatory and supervisory standards, as provided by the Bank Act. One of such Bank Acts is the Currency and Banking Act of 1920 that was replaced by the South African Reserve Bank Act of 1944.<sup>473</sup>

Correspondingly, Nigeria banks are guided by the Central Bank Act 1958 (as amended) and the Banking Decree 1969 (as amended) that became the legal frameworks within which the CBN derives its power to operate and regulate banks.<sup>474</sup>

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<sup>471</sup> Central Bank of Kenya, 'Annual Report' (2008) [https://www.centralbank.gov.ke/uploads/177787971\\_2008%20Annual%20Report.pdf](https://www.centralbank.gov.ke/uploads/177787971_2008%20Annual%20Report.pdf) Accessed 20<sup>th</sup> August 2018.

<sup>472</sup> Allan Mulengani Katwalo and Stella Isendi Muhanji, Critical Success Factors for the "Unbanked" Customers in Kenya' Supra.n.329

<sup>473</sup> John Chibaya Mbuya, 'The Pillars of Banking' Supra.n.367

<sup>474</sup> Central Bank of Nigeria, 'History' <https://www.cbn.gov.ng/AboutCBN/history.asp> Accessed 18th April 2018.



Similarly, in Kenya, the CBK carries out its supervisory functions through the Banking Supervision Department (BSD) that was established in April 1969 following the enactment of the Banking Act in 1968.

Several amendments have been made to the Banking Act of Kenya and the CBK Act over the years, particularly to give more powers to the CBK and strengthen its supervisory role.<sup>475</sup> The CBK is guided by the following legislations in the discharge of its duties: Constitution of Kenya (2010), Central Bank of Kenya Act (2015), Banking Act (2015), The National System Payment Act (2011), and Kenya Deposit Insurance Act (2012).<sup>476</sup>

Commercial banks in Kenya are regulated in accordance with the provision of the Banking Act (2015) and the Regulations and Prudential Guidelines.<sup>477</sup> The key mandate of the CBK to carry out its function is derived from Article 231 of the constitution of Kenya 2010 and Sections 4 and 4A of the CBK Act (Cap 491). The CBK provides legal and regulatory framework, issues prudential guidelines and undertake surveillance of the financial sector in the country to ensure compliances with laws and regulations.<sup>478</sup>

Correspondingly, the BSD is mandated under section 4(2) of the CBK Act to foster liquidity, solvency, and proper functioning of a stable market-based financial system.<sup>479</sup> Similarly, in South Africa, the legislation for the regulation and supervision of the banking industry includes Banks Act 1990 (Act No 94 of 1990), the Co-operative Banks Act 2007 (Act No. 40 of 2007), The Mutual Banks Act (Act No.124 Of 1993), the SARB Act 90 of 1989 that regulates the SARB and the monetary system and, the

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<sup>475</sup> Thorsten Beck, Robert Cull, Michael Fuchs, Jared Getenga, Peter Gatere, John Randa and Mircea Trandafir, 'Banking Sector Stability, Efficiency and Outreach in Kenya' (2010) Policy Research Working Paper, The World Bank Development Research Group. Goggle Scholar. Accessed on 20<sup>th</sup> April 2018.

<sup>476</sup> Central Bank of Kenya, 'Legislation and Guidelines' <https://www.centralbank.go.ke/policy-procedures/legislation-and-guidelines/> Accessed 13<sup>th</sup> November 2018.

<sup>477</sup> Central Bank of Kenya, 'Bank Supervision' <https://www.centralbank.go.ke/bank-supervision/> Accessed 14<sup>th</sup> November 2018.

<sup>478</sup> Central Bank of Kenya, 'Our Mission' <https://www.centralbank.go.ke/our-mission/> Accessed 10<sup>th</sup> August 2018.

<sup>479</sup> Central Bank of Kenya, 'Annual Report'(2016) [https://www.centralbank.gov.ke/uploads/banking\\_sector\\_annual\\_reports/323855712\\_2016%20BSD%20ANNUAL%20REPORT](https://www.centralbank.gov.ke/uploads/banking_sector_annual_reports/323855712_2016%20BSD%20ANNUAL%20REPORT) Accessed 20<sup>th</sup> September 2018.



Financial Intelligence Centre Act 38 of 2001 that regulates the combatting of money laundering activities and financing of terrorists.<sup>480</sup>

Others are the National Payment Systems Act 78 of 1998 that provides for the regulation and supervision of payment and settlement system, the Financial Advisory and Intermediary Services Act 37 of 2002 that regulates the provision of financial advisory and intermediary services to clients, the Financial Markets Act 19 of 2012 for the regulation of financial markets, the National Credit Act 34 of 2005 for the regulation of consumer credit and reckless credit granting to clients.<sup>481</sup>

Correspondingly, in Nigeria, the CBN derives its mandate from the CBN Act of 2007 and power of regulating banks and other financial institutions from the Banks and Other Financial Institutions (BOFI) Act 2020, with the aim of promoting high standards of banking practice and financial stability in the country. In addition to these two major statutes, there are other legislations such as the Bills of Exchange Act, Money Laundering Act, Foreign Exchange (Monitoring and Miscellaneous Provisions) Act and the Nigerian Deposit Insurance Corporation Act that are used to complement these two major statutes on banking regulation in Nigeria.<sup>482</sup>

More recently and within the last two decades, different legislations have been enacted within the SSA region to monitor and keep banks in checks of reckless excesses. The CBN website on history stated that the Bank and Other Financial Institutional (BOFI) Act 2020 was passed into law in response to significant developments in the financial sector. The Act replaced the BOFI Decrees 24 and 25 of Nigeria that was enacted in 1991.

The BOFI Decrees 24 and 25 repealed the Banking Decree of 1969 and all its amendment. The then BOFI Decrees 24 and 25 transferred the power to supervise and regulate all banks including non-banking financial institutions to the CBN. Afterwards, the promulgation of the CBN degree No.24 of 1991 and amended in 1993 granted more powers to the CBN.

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<sup>480</sup> South African Reserve Bank, 'Supervision' [www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/default.aspx](http://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/default.aspx) Accessed 10th June 2019.

<sup>481</sup> Joz Coetzer and Marianna Naicker, 'Banking Regulation South Africa' (2019) [www.gettingthedealthrough.com/area/4/jurisdiction/2/banking-regulation-south-africa/](http://www.gettingthedealthrough.com/area/4/jurisdiction/2/banking-regulation-south-africa/) Accessed 11<sup>th</sup> June 2019.

<sup>482</sup> Nelson E. Ojukwu-Ogba, 'Banking Sector Reforms in Nigeria: Legal Implications for the Banker-Customer Relationship' (2009) 35(4) Journal of Commonwealth Law Bulletin. 675.

In Kenya, major changes were made through the amendment of Central Bank of Kenya Act in April 1997 as reported in the CBK annual report of 1997 such as the task of appointing the management of the CBK was removed from the minister of finance and transferred to a board of directors appointed by the president to reduce political interference in the CBK.

This is contrary to Nigeria whereby in the same year 1997 as that of Kenya, the CBN website on history reported that the Federal Government of Nigeria enacted the CBN (amendment Degree No 3) and BOFI (amendment Degree No 4) that brought the CBN under the direct supervision of the Ministry of Finance and the limited autonomy that the CBN enjoyed since 1991 was completely removed. This action left little room for the CBN to exercise discretionary power in the monitoring of financial institutions.

However, in 1998 as contained in Akingbami and Ngwu, further amendments were made to the CBN and BOFI Degree that repealed the 1997 amendment, and the 1998 amendment granted a measure of operational autonomy that enabled the CBN to execute its traditional functions. Additionally, the CBN derives its power to remove management of banks from the Central Bank of Nigeria Act 2007 and the Banks and other Financial Institutions Act (BOFIA) 1991 Laws of the Federation of Nigeria (As Amended).<sup>483</sup>

Also, the Nigeria Deposit Insurance Corporation (NDIC) shares supervisory responsibilities with the CBN and the supervisory function of the CBN is divided into four departments.<sup>484</sup>

- Banking supervision department which oversees the supervision of deposit money banks and discounts houses,
- Consumer protection department protect rights of consumer of financial product and services,
- Financial policy and regulation which develop and implements policies and regulation which ensures financial stability. It also licenses and grant approval for bank and other financial institutions and

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<sup>483</sup> Folarin Akingbami and Franklin N. Ngwu, 'Overhauling the Institutional Structure of Financial Regulation in Nigeria: The Unfinished Reform' (2016) 17(4) Journal of Banking Regulation. 311

<sup>484</sup> Central Bank of Nigeria, 'Supervision Framework' <https://www.cbn.gov.ng/Supervision/> Accessed 11<sup>th</sup> August 2018.

- Other financial institutions supervision department supervise other financial institutions such as Micro-finance banks.

Correspondingly, according to the SARB supervision annual report of 2009, the SARB supervises banks through its Bank Supervision Department (BSD) and the BSD is accountable to the minister of finance. Furthermore, South Africa has implemented a new regulatory regime called the Twin Peak (Prudential Authority and Financial Sector Conduct Authority) model through the Financial Sector Regulation Act 9 of 2017 for the regulation and supervision of the financial sector.<sup>485</sup>

#### **4.6 Harmonisation of the SSA Banking Systems through Structures of Monetary Unions**

Harmonisation of banking regulations can be a huge undertaking and efforts need to be made on key concern areas that represent majority interest of individual jurisdictions. According to Beck et al, banking regulatory harmonisation can contribute to significant reduction in compliance costs across the region, consistency in implementation and raising banking standards particularly in more challenged environments.<sup>486</sup>

Also, harmonisation of banking regulations can be achieved within a monetary union that involves full integration of banking and other financial markets that are within the monetary union. In the opinion of Salami, harmonisation within a monetary union can be done via adoption of international agreements defining the rules or by way of entrusting regulations to a centralised body.<sup>487</sup>

The attraction and benefits of keying into a unified framework of harmonised regulations seems more overwhelming, though this unified term (harmonisation) may tend to be breaking the barrier of sovereignty. The SSA region has been working hard towards achieving a single monetary market with harmonised regulations through the African Union. The justification for the creation of a monetary union may have been

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<sup>485</sup> South African Reserve Bank, 'Policies and Frameworks' [www.resbank.co.za/PrudentialAuthority/PoliciesAndFrameworks/Pages/default.aspx](http://www.resbank.co.za/PrudentialAuthority/PoliciesAndFrameworks/Pages/default.aspx) Accessed 10th June, 2019.

<sup>486</sup> Thorsten Beck, Oliver De Jonghe, Glenn Shepens, 'Bank Competition and Stability: Cross-country Heterogeneity' (2013) 22(2) Journal of Financial Intermediation. 218-244

<sup>487</sup> Iwa Salami, 'Banking Harmonization in the African Context' (2008) 9(3) Journal of Banking Regulation. 187-195

propelled by the success of the European monetary zone that has brought benefits to member states.<sup>488</sup>

Although the Eurozone was not able to absorb the last global financial shock, the bloc applied some palliative measures afterwards to mitigate the effects. The pros of having a single currency by each regional bloc cannot be over emphasised. A single currency comes with the benefit of a more stable currency, elimination of exchange rate risk, fastening of cross-border payments and encouraging increased investments among the component states in each regional bloc.<sup>489</sup>

Furthermore, with the increase in cross-border transactions among nations in each regional bloc and beyond, the need for regional harmonisation of banking regulations has become crucial in SSA. Therefore, countries within regional blocs of SSA have established monetary unions in furtherance to eliminate trade and financial barriers. The CBN, CBK, and SARB are all part of their respective regional bloc initiatives that enable them to be abreast of the fast-changing regulatory environment and exposure to international developments.

According to the CBN website on Monetary Policy, two monetary structures (WAEMU - West African Economic and Monetary Union and WAMZ - West African Monetary Zone) exist within the Economic Community of West African States (ECOWAS) sub-region.<sup>490</sup> This is different from other regions with one structure each – the East African Monetary Union (EAMU) for the East African Countries (EAC) and the Common Monetary Area (CMA) that is within but independent of Southern African Development Community (SADC). It is important to note that the existing two blocs within ECOWAS are because of the differences that arise from the English-speaking and French-speaking countries of the sub-region.

All the monetary blocs within the SSA region have similar and common objectives of facilitating financial integration, stability, and harmonisation of financial systems through a common market. The desirability and feasibility of a monetary unification in

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<sup>488</sup> Paul R. Masson and Catherine Pattillo. *The Monetary Geography of Africa* (Brookings Institution Press, Washington DC. 2005)

<sup>489</sup> Abdirashid Duale, 'The Pros and Cons of EAC Monetary Union' (2014)4<sup>th</sup> Quarter African Banker.

<sup>490</sup> CBN Monetary Policy <https://www.cbn.gov.ng/MonetaryPolicy/ecowas.asp> Accessed 22 September 2019

applying a level playing field for all members, especially within the SSA region is paramount. It is stated in the United Nations Economic Commission for Africa 2018 bulletin that a regional central bank be created to replace existing national central banks such as the Eurozone countries.

However, the global body asserted that conditions should be put in place by such regional bank for admitting nations and that include amongst others –

- i. Adoption of common principles and rules for the regulation and supervision of the financial system, especially cross-border and international banking
- ii. Harmonisation and integration of fiscal, monetary and exchange rate policies.

The above conditions are theoretically workable but practically difficult to implement, especially as the SSA financial market is yet to attain its full potential. In as much as the European monetary zone became a success, replicating the monetary policies and financial regulations in a proposed African monetary unit may not always spell success. This is because of the difference peculiar to the already existing monetary blocs within the SSA region.

Although it is an uphill task by the African Union that has more of political leaning in terms of achieving a common SSA banking system, there is already some take away that point towards a possible road map. On the part of EAMU of EAC, functionality and progress have been made in the harmonisation and integration of payment systems along with the legal, regulatory, and institutional frameworks.

This is more like the WAEMU within the ECOWAS bloc though comprises of only French-speaking West African States that have a leaning towards France. WAEMU operates with a common and stable CFA franc currency that is guaranteed by France and pegged to the Euro with low interest rates.

Also, WAEMU countries have a common central bank (BCEAO), common pool of reserves and a regional surveillance of fiscal policies such as the Eurozone unlike the

CMA that has none of these as well as not being a full monetary union, though SARB wields a considerable influence in the community.<sup>491</sup>

In as much as CMA is not a full monetary union, it comprises of four countries that advocates for the advancement and equitable benefits for member nations. Although the currencies of the CMA member nations are pegged to the South African Rand that is accepted and used as 'de facto' legal tender by all participants, capital is moved freely within the union thereby benefiting smaller nations with potentials of flexibility in accommodating the changing needs of member states.<sup>492</sup>

Interestingly, members indirectly observe the same inflation targeting monetary policy framework adopted by South Africa, bound by the same financial regulations, and polices and operate the same exchange rate against external currencies.<sup>493</sup> However, there are some big challenges stalling the process of achieving desirable monetary blocs that may eventually culminate to an 'Afrizone' that is much like the Eurozone.

One of such problems is the failure of some countries to commit and implement decisions set by regional monetary and other sub committees. An example is the decision of some countries within the EAMU that adopted a price-based monetary policy framework to either postpone the agreed harmonised reserve requirement ratio set at 5 percent for 2018 to future dates or raised the requirement to a higher level because of failure to manage liquidity within the banking sector.<sup>494</sup>

Another challenge is with interest rates such as the CFA franc used by French-speaking countries of WAEMU with low interest rates. WAEMU merging with WAMZ may take interest rates higher and that may prove difficult for the WAEMU nations to accept. The other challenge is the difficulty to exclude dominance factor in such monetary arrangements.

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<sup>491</sup> Jian-Ye Wang, Iyabo Masha, Kazuko Shirono, and Leighton Harris, 'The Common Monetary Area: Shocks, Adjustments and Policy Challenges', 2007, IMF Working Paper 07158.

<sup>492</sup> South Africa's Experience of Regional Currency Areas and the Use of Foreign Currencies <https://www.bis.org/publ/bppdf/bispap17o.pdf> Accessed 10 October 2019

<sup>493</sup> Lambertus van Zyl, 'South Africa's Experience of Regional Currency Areas and the Use of Foreign Currencies' 2003, BIS Papers No.17, pp.134-139

<sup>494</sup> United Nations Economic Commission for Africa; The East African Monetary Union: Ready or Not? [https://www.uneca.org/sites/default/files/images/eamu\\_report.pdf](https://www.uneca.org/sites/default/files/images/eamu_report.pdf) Accessed 11 October 2019

The dominance of Kenya and South Africa are clearly seen within their respective unions. The CMA allows for a flexible monetary system though dominated by South Africa because of its large economy and advanced financial system. Correspondingly, Nigeria being part of WAMZ that is yet to merge with WAEMU is already showing its dominance with a large economy and huge population compared to smaller nations such as Guinea whose GDP is less than that of a State in Nigeria.

This will make it difficult for the alignment of monetary and fiscal policies within the zone. The other factor is that of volatility risk. Although country-specific monetary policies exist in response to external shocks, the regional monetary policies are yet to be tested. This is because blocs such as the CMA nations are exposed to the volatility risk because of their tie to the South African Rand.

#### **4.7 Application of the Basel Accords by the Banking Systems of Nigeria, Kenya, and South Africa**

The Basel commitment is a symbolised global way of getting all nations around the world to subscribe to a harmonised regulatory framework for a more stable and resilient banking, as well as international trades. Signing up to the Basel Accord is becoming a norm especially for countries that seek international and cross-border trades.

The SSA region is not left out in this regard as most countries within the sub-continent such as Nigeria, South Africa and Kenya have subscribed to the commitment because of the different benefits it brings to the respective countries. South Africa is a member of the Group-of-Twenty (G20) that has been relatively successful in promoting regulatory reforms in the financial sector and the only African country in the G-20.<sup>495</sup>

As the sole African representative at the table, South Africa's membership gives her the opportunity to highlight continental issues (such as recognising the huge cost that is involved in the implementation of the new regulatory framework in the banking sector by the African countries and requesting for support to be given to African countries in strengthening their financial systems) and influence key international

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<sup>495</sup> Daniel Mminele, 'South Africa and the G-20- Challenges and Opportunities' (2012) <https://www.bis.org/review/r121105e.pdf> Accessed 30th May 2018.



policies at the Basel Committee on Banking Supervision (BCBS) meetings that can have impact on the respective economies of the African continent.

The South African regulatory authorities introduced measures to comply with the minimum standards for supervision set by the BCBS. In fact, since 1993, works carried out by the authorities of SARB in the supervisory field have been shaped by the standards that were laid down by the BCBS.<sup>496</sup> Based on that, South Africa banking industry experienced a relatively sound, efficient, and profitable banking era during the mid-1990s.<sup>497</sup>

The South African measures are more like the compliance of Kenya's banking sector with the requirements of the Basel accords since 1999.<sup>498</sup> In fact, Kenya started adopting some of the Basel I requirements from 1994 via section 4 of Banking (Amendment) Act of 1994 and in 2006, CBK issued new prudential guidelines with changes that included highlighting the differences between core capital (tier1) and supplementary capital and defining four risk weights for classifying balance sheet assets.<sup>499</sup>

These changes were made to strengthen Kenya's banking regulations in line with Basel I and in preparation for Basel II. Also, the Nigerian banking industry followed a familiar path. Although, the Nigerian banking sector has implemented Basel I, it is still in the process of implementing Basel II and III, respectively.

In a circular dated 10 December 2013, the CBN issued a guidance note on the implementation of Basel II and Basel III, respectively.<sup>500</sup> It was also mentioned in that circular that the guidelines though comply with the requirements of Basel II and III,

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<sup>496</sup> John Chibaya Mbuya, 'The Pillars of Banking' Supra.n.367

<sup>497</sup> Kupukile Mlambo and Mthuli Ncube, 'Competition and Efficiency in the Banking Sector in South Africa' (2011) 23(1) African Development Review. 4

<sup>498</sup> Ragnar Gudmundsson, Kethi Ngoka-kisinguh and Maureen Teresa Odongo, 'The Role of Capital Requirements on Bank Competition and Stability: The Case of the Kenyan Banking Industry' (2013) Kenya Bankers Association, Centre for research on Financial Markets and Policy, Working paper Series. [https://www.kba.co.ke/downloads/working\\_Paper\\_WPS\\_05\\_12%5b2%5d.pdf](https://www.kba.co.ke/downloads/working_Paper_WPS_05_12%5b2%5d.pdf) Accessed on 12<sup>th</sup> February 2018.

<sup>499</sup> Radha Upadhyaya, 'The Political Economy of Basel Adoption in Kenya' (2017) Global Economic Governance Programme, University of Oxford. GEG Working Paper 131. <https://www.bsg.ox.ac.uk/> Accessed on 18<sup>th</sup> August 2018.

<sup>500</sup> Central Bank of Nigeria, 'Circular to All Banks and Discount Houses on The Implementation of Basel II/III in Nigeria' <https://www.cbn.gov.ng/out/2013/bsd/baselii%20ii%20implementation%20circular.pdf> Accessed on 7<sup>th</sup> February 2018.



certain adjustments were made in some sections to reflect the peculiarities of the Nigerian banking environment.

Furthermore, the CBN announced the implementation of Basel II with effect from January 2014, requiring all commercial banks operating in Nigeria and licenced by the CBN to comply with the provisions of Basel II taking into consideration areas of national discretion to reflect the operational jurisdiction of their banks.<sup>501</sup>

The CBN started implementing the Basel II accord to ensure better risk management, sufficient high-quality capital, adequate liquidity, and international competitiveness within the Nigerian banking industry.<sup>502</sup> It is believed that implementing Basel II/III with emphasis on adequate capital and liquidity will engender more confidence in the Nigerian banking system.<sup>503</sup>

However, the implementation and enforcement of these accords in the Nigerian banking industry have been slow though not without political interference considering the unstable policies of the ever-changing government. Correspondingly, it is stated in the CBK annual report of 2008 that the CBK carried out a survey regarding the implementation of Basel II with majority of the local affiliates of international banks (about 72 percent) subscribing to the implementation that year while 76 percent of the local banks adopted non-prepared status till 2010.

The local banks highlighted key challenges in the survey that will impact the banking industry in terms of meeting the Basel II requirement such as upscale in human resources, upgrades, and overhauls of existing IT systems to meet the rigorous Basel II Information Technology (IT) requirements.<sup>504</sup>

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<sup>501</sup> Central Bank of Nigeria, 'Circular to all Banks and Discount Houses on the Implementation of Basel II/III in Nigeria' <https://www.cbn.gov.ng/out/2013/bsd/baseI> Accessed on 22nd January, 2018.

<sup>502</sup> Central Bank of Nigeria, 'Consolidated Banking Supervision Annual Reports 2009-2014' <https://www.cbn.gov.ng/out/2015/bsd/consolidated%20> Accessed 10<sup>th</sup> December, 2018.

<sup>503</sup> Chartered Institute of Bankers of Nigeria, 'Communique Issued at the End of 7<sup>th</sup> Annual Banking and Finance conference 10<sup>th</sup> to 11<sup>th</sup> September' (2013) Transcorp Hilton Hotel Abuja, Nigeria. <https://www.cibng.org/admin/publications/57485005435290.pdf> Accessed 28th December 2018.

<sup>504</sup> Central Bank of Kenya, 'Annual Report' (2008) [https://www.centralbank.gov.ke/uploads/177787971\\_2008%20Annual%20Report.pdf](https://www.centralbank.gov.ke/uploads/177787971_2008%20Annual%20Report.pdf) in Radha Upadhyaya, 'The Political Economy of Basel Adoption in Kenya' (2017) Global Economic Governance Programme, University of Oxford. GEG Working Paper 131. <http://bsg.ox.ac.uk/> Accessed 18<sup>th</sup> August 2018

However, by January 2013, the CBK Revised Prudential and Risk Management Guidelines came into force and some features of Basel II and Basel III capital adequacy requirements such as a capital conservation buffer of 2.5 percent were included in the guidelines. The CBK is still in the process of implementing Basel III.<sup>505</sup> In fact, as of January 2015, Kenya has implemented capital conservation buffer that is part of Basel III requirement, but are yet to implement the Liquidity Coverage Ratio (LCR) component within their banking sector.<sup>506</sup>

Similarly, Basel II has been implemented in the South African banking sector through the Banks Amendment Act No. 20 of 2007 and adoption of the 'Regulations relating to Banks' issued under section 90 of the Bank Act and published under government notice No. 8815 in Government Gazette No. 30629, dated 1 January 2008 and became effective on same day.

Also, on the 1<sup>st</sup> of January 2013, South Africa implemented amended regulations to incorporate Basel III into the banking system, and in line with the provisions of the framework, included transitional arrangements that will be phased in until 1<sup>st</sup> January 2019.<sup>507</sup> The purpose of the transitional arrangements is to allow banks enough time to meet the higher standards without downsizing their credit supply to the real economy.<sup>508</sup>

The amended regulations essentially address both bank-specific and broader systemic risks such as capital framework that conforms to the requirement of Basel III, monitoring of the proposed minimum liquidity requirement standards to improve banks' resilience to acute short-term liquidity stress and long-term funding.<sup>509</sup>

The SARB in 2012 approved a Committed Liquidity Facility (CLF) to commercial banks to help them meet the required Liquidity Coverage Ratio (LCR), as there was limited availability of high-quality liquid asset (HQLA) in the country. The SARB also approved

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<sup>505</sup> Isaiah Onsarigo Miencha, Selvam Murugesan and Seline Anne Onchangu, 'Return on Assets Efficiency of Kenyan Banking Sector' (2016) 21(2) Journal of Internet Banking and Commerce. 1

<sup>506</sup> Central Bank of Kenya, 'Prudential Guidelines' (2013) <https://www.centralbank.go.ke/wp-content/uploads/2016/08/PRUDENTIAL-GUIDELINES.pdf> Accessed 30th December 2018.

<sup>507</sup> South African Reserve Bank, 'South Africa's Implementation of Basel II and Basel III' <https://www.resbank.co.za> Accessed 7th February 2018.

<sup>508</sup> Francois Groepe, 'Recent Economic and Regulatory Developments' (2015) <https://www.bis.org/review/r150306a.pdf> Accessed 28th April 2018.

<sup>509</sup> South African Reserve Bank, 'South Africa's Implementation of Basel II and Basel III' <https://www.resbank.co.za> Accessed on 7th February 2018.

statutory cash reserves as part of the stock of HQLA that would be included in the banks' HQLA for calculating the LCR.<sup>510</sup>

#### **4.8 Conclusion**

The depth and coverage of the banking sector in most SSA countries are still evolving and have gradually increased over the years supported by reform efforts. Nigeria, Kenya, and South Africa have certainly had their respective banking histories though most of them seem undocumented. Available evidence points to the fact that foreigners introduced and established banks within the SSA region.

Also, the evidence allures to the belief that the indigenous people until recent times were incapable of managing the banking system. Although there was no evidence through literature search by this thesis to prove that the indigenous people had any form of organised banking, it will be assumed that banking in the sub-continent was introduced on the wings of colonialism.

The case of Nigeria's banking history from the colonial era shows bias amongst the indigenes. One of such is the deposits collected (including that of indigenes) and being used to extend credit to the foreigners while denying same to the locals. Although the locals were termed 'too risky', a school of thought will question the conditions for such credit extension and if at all the colonisation factor was at play.

Also, in as much as local indigenous banks got on the ladder, they got liquidated sooner under the same watchful eyes of the colonial government and foreign banks. If it were a context of mismanagement and lack of regulations as stipulated by the documented papers, can the story not have been put together by the same hands that denied credit to indigenes and probably have a hand in the demise of such banks? (After all, indigenes had little or no control as regards the colonial controlled environment).

The story is not different for South Africa. The currency and gold trade-off that always results in loss of trade value by local commercial banks and because of a tie to a foreign obligation is another of such demeanour. Although literature search is limited as regards what happened in Kenya, it can be deduced from a few papers that issues

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<sup>510</sup> South African Reserve Bank, 'Committed Liquidity Facility' <https://www.resbank.co.za> Accessed 8th February 2018.

regarding bias like the case of Nigeria against the indigenes sufficed. However, the Kenyan government took bold steps in incorporating locals into the banking system immediately after independence while respecting the order of the foreign owned banks.

Despite the existence of prejudice in the early years of the SSA banking systems, the locals cannot be completely absolved of crises that befell their respective financial systems. An example is the fact that the Federal Government of Nigeria appointed nominees on the board of directors to influence lending in favour of indigenes. In as much as it may be a good step with good intentions, issues of bias and lack of requisite skills that are recipes for disaster cannot be ruled out.

A view of the crises that have enveloped the SSA banking region over the years tilts to some common factors that include poor management, insufficient liquidity, inadequate capital, and non-performing loans. Nigeria, South Africa, and Kenya all had their fair share of these crises. What baffles the mind is how repeatedly these happened in the past two decades.

Different measures have been introduced especially in recent times to counter these failures and they have been yielding optimal results. Examples are the capital requirement consolidation exercises that took place in Nigeria and Kenya in the mid-2000s. Furthermore, the present resilience of these SSA banks may be attributed to the success of continuous and recent reforms.

Nevertheless, the resilience witnessed within the sub-continent irrespective of global financial integration as in the case of South Africa (that is fully integrated) and Nigeria and Kenya (that are not integrated), brings the actual effect of global regulations to the table. Obviously, regulations are good but works differently for different jurisdictions.

Therefore, countries such as Nigeria, Kenya, and South Africa irrespective of external regulations such as that of Basel Accord enact and amend their banking laws to suit whatever flaws that may be inhibiting financial stability and growth. Although the outcome of occasional reforms through banking legislations are becoming more visible in recent years, the economic impact of tapping into harmonised banking regulations are yet to be felt within the SSA region.

This is because of the peculiar jurisdictional differences in establishing monetary blocs within the region and far from an African monetary union like the Eurozone. One of such is the attitude of member states of WAMZ tilting towards the non-legally binding harmonisation provisions as opposed to the enactment of hard laws like the Basel Accord that is regarded as a soft law.<sup>511</sup>

Additionally, the proponents of these monetary unions need to incorporate a sound and efficient response system to a common financial shock such as the 2007 global financial crisis. This common response has always been behind the clamour for harmonised global regulations.

However, it is yet to be seen how this response works for the SSA region at a global stage though it was either not incorporated or activated in the Eurozone during the last financial crisis. Although only South Africa (not scathed in the last financial crisis) among the SSA countries is fully integrated into the global financial market, Nigeria and Kenya banking sectors that have no tie were still resilient during the last financial crisis.

This raises the question of the need to be part of such global body. In as much as the SSA region are committing to the harmonised global banking regulations otherwise known as Basel Accords, the consequence of this action will be discussed in a later chapter.

The next chapter focuses on supervision and monitoring in accordance with defined liquidity regulatory requirements, particularly in relation to the SSA region. This is because having established that Basel regulations have become a global norm, it will be important to look at how the application of these regulations is safeguarded through regular checks that seek to avoid previous mistakes and enhance transparency.

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<sup>511</sup> Iwa Salami, 'Banking Harmonisation in the African Context' (2008) 9(3) Journal of Banking Regulation. 187

## Chapter Five

### Effective Supervision and Monitoring of BCBS Basel Liquidity Requirements

#### 5.1 Introduction

Requirements are introduced as guidelines that are most often laced with laxity in the absence of checks. In the absence of checks, it will be difficult to ascertain levels of compliance and implementation. Also, the effectiveness of requirements can go unnoticed where there are no tools or criteria to measure the outcome of either the success or otherwise, the failure of the end target.

The newly introduced BCBS liquidity working standards (without which there will be neither monitoring nor supervision) exists along the lines of introduced controls (BCBS Supervision and Monitoring of Basel Liquidity Requirements). These control tools ensure that banks are transparent in communicating their current positions, especially in relation to maintaining their liquidity requirements as specified by the BCBS.

Therefore, in acknowledging the significance of liquidity in the future stability of the banking industry, the BCBS published the principles for sound liquidity risk management and supervision in 2008. It also included supervisory monitoring, to assist supervisors in identifying and measuring other aspects of banks' liquidity and funding risk profile.

Moreover, in response to the emphasis on liquidity risk management during the last global financial crisis, the BCBS adopted the seventeen principles of liquidity risk management in September 2008. Afterwards, a 2017 review of the Sound Principle by the BCBS considered the liquidity standards (LCR and NSFR) introduced under Basel III as important compliment to the Sound Principle.<sup>512</sup>

Additionally, Klomp and de Haan asserted in their findings that bank regulation and supervision have more positive impact on banking risks, especially in emerging economies. In view of this, the first part of the chapter considers the HQLA operational requirements in relation to the SSA jurisdiction. It portrays an understanding of the application and compliance with these BCBS HQLA operational requirements.

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<sup>512</sup> BIS, 'Basel Committee Completes Review for Principles for Sound Liquidity Risk Management and Supervision' (17 January 2019) [www.bis.org/press/p190117.htm](http://www.bis.org/press/p190117.htm) Accessed 10th September 2019.

The second part outlines the liquidity controls (BCBS Supervision and Monitoring of Basel Liquidity Requirements) and methods of application within the SSA region. The aim is to highlight the importance of supervision and monitoring in shielding liquidity requirements and the associated processes from risks.

Also, it will be understood from this section the aspects of supervision and monitoring that may have been in place within the SSA region and their similarity (if any) to the highlighted controls. This is because the region must have done something right in enforcing liquidity standards to be able to avoid the 2007-2009 global financial crash.

## **5.2 Operational Requirements of HQLA**

According to the BCBS, all assets in the stock of HQLA are likely to be affected by some requirements because not all assets that qualify in the asset class, risk-weighting and credit rating are eligible.<sup>513</sup> Although BCBS listed a number of HQLA operational requirements, there is only quite a number being administered within the SSA region. Therefore, it is important to highlight these eligible assets within the stock of HQLA and the corresponding applicable measures in the SSA region.

These requirements are certain to further reduce the already limited amount of qualifying HQLA within the SSA region. This is because in as much as applying these operational standards is propagated as a viable short-term option in maintaining bank liquidity, there is also a need to consider the perspective of encouraging emerging financial markets such as the SSA jurisdiction by re-considering the stringency of these requirements.

### **5.2.1 Periodic Monetisation of a Stock of Unencumbered HQLA**

The requirement as specified by the BCBS allows for an even proportion of unencumbered (free of legal, regulatory, contractual) assets in the stock of HQLA to be periodically monetised through repo or outright sale to test their access, effectiveness, availability, and risk mitigation in an actual stress scenario. However, there is a grey area in this requirement such as what counts as 'evenness' whereby some jurisdictions can have one or a little more unencumbered assets while other jurisdictions can have five or more unencumbered assets.

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<sup>513</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools'(2013) <https://www.bis.org/publ/bcbs238.pdf> Accessed on 13 November, 2017.

On the one hand, repo which is a generic name for both repurchase agreement and sell/buy-backs involves selling an asset that acts as collateral to one party at a price and repurchasing it from a different party at a different price on a given date.<sup>514</sup> On the other hand, stress testing is an important risk management tool that is used to determine the stability of a bank as well as the financial system in general.<sup>515</sup>

Additionally, periodic monetisation is carried out to measure a bank's ability to perform operational activities such as building up a liquidity cushion to contain the effects of potential changes whenever it is faced with the changing market fluctuations.<sup>516</sup> In other words, periodic monetisation involves the application of an agreement (repo) with the help of a tool or technique (stress test) in ascertaining the liquidity shock of an asset.

According to Cranston et al, the liquidity stress scenarios considered by the BCBS proposal in conducting stress testing incorporated many of the shocks experienced during the last global financial crisis and they include:

- A depositors' run leading to loss of proportion of retail deposits.
- A partial drying up of wholesale lending markets leading to a partial loss of unsecured wholesale funding.
- A panic run on the repo market which would result in a partial loss of the bank's ability to borrow in secured short-term financing.
- Additional contractual outflows that would arise from a downgrade in the bank's public credit rating.
- Increases in market volatilities that impact on the quality of collateral provided by the bank in its borrowing and thus require larger collateral haircuts or additional collateral.

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<sup>514</sup> ICMA 'What is a Repo?' <https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/repo-and-collateral-markets/icma-ercc-publications/frequently-asked-questions-on-repo/1-what-is-a-repo/>  
Accessed on 22 November 2018

<sup>515</sup> Julian Liorent, Maria del Carmen Melgar, Jose Antonio Ordaz and Flor Maria Guerrero, 'Stress Test and Liquidity Crisis in the Banking System' (2013) 8(2) *Equilibrium Quarterly Journal of Economics and Economic Policy*.31.

<sup>516</sup> Adam Mohamad, Taufik Taufik, and Muhammad Aditya Erfiyan Prathama, 'Bank Liquidity-Stress Testing and Basel III Implementation in Indonesia' (2015) 7(1) *Economic Journal of Emerging Markets* 12



- Unscheduled draws on committed but unused credit and liquidity facilities that the bank has provided to its clients amongst others.<sup>517</sup>

In consideration of the listed liquidity stress test scenarios above, the SSA jurisdiction may have encountered one or more or all the scenarios. Countries within the SSA jurisdiction, especially Nigeria and Kenya that are yet to fully conform to Basel III are encouraged by the BCBS to conduct stress testing regularly and use the outcome to adjust their respective liquidity risk management strategy.

Also, banking institutions need to prove that they have the operational competence in applying necessary procedures and systems to periodically monetise a portion of the true reflection of their respective eligible HQLA stock within a standard set time. This is irrespective of the fact that they are covered by other liquidity guidelines that can make it difficult for them to default.

In Nigeria, the CBN conducts stress test on Nigerian banks twice a year to determine any vulnerability that can lead to systemic risk and disruption of its financial market.<sup>518</sup> According to the CBN website, the apex body uses the Implied Cash Flow Analysis (ICFA) and Maturity Mismatch/ Roll Over Risk methods in evaluating the liquidity level and resilience of the country's individual banks.

The ICFA evaluates deposit-runs over a five-day and cumulative thirty-day shocks while Maturity Mismatch/ Roll Over Risk method matches earning assets and deposit liabilities under different test assumptions. The recent result as contained in the CBN Financial Stability Report of 2018 showed that the banking sector though resilient to both liquidity and funding shocks, experienced liquidity shortfall especially with the cash outflow on deposit run.<sup>519</sup>

Also, the Stability Report contains a record of the percentage of assets unencumbered after fire sales that include cash and cash equivalent – 100 percent; Current account with CBN – 100 percent; Government bonds and treasury bills – 66.5 percent;

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<sup>517</sup> Ross Cranston, Emilios Avgouleas, Kristin van Zwieten, Christopher Hare and Theodor van Sante, *Principles of Banking Law* (3<sup>rd</sup> edition, Oxford University Press 2017) 58

<sup>518</sup> CBN, 'Issues and Challenges for the Design and Implementation of Macro-prudential Policy in Nigeria' (2013) [www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf](http://www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf) Accessed 10<sup>th</sup> March 2018

<sup>519</sup> Central Bank of Nigeria Financial Stability Report 2018 <https://www.cbn.gov.ng/Out/2018/FPRD/FSR%20June%202017.pdf> Accessed 10<sup>th</sup> March 2020

Certificates of deposits held – 66.5 percent; Other short-term investments – 49 percent; Collateralised placement and money at call – 49 percent; and Cash Reserve Requirement – 100 percent.<sup>520</sup>

Comparatively, banks in Kenya are mandated by the CBK to conduct liquidity stress tests individually and regularly for a variety of short-term bank-specific and market-wide scenarios to identify sources of potential liquidity issues and ensure current exposures remain in line with the CBK established liquidity risk tolerance.<sup>521</sup>

In conducting a stress test, the CBK listed possible stress scenarios that entails a significant liquidity stress in a bank and can assume the following positions: a significant downgrade in a bank's public credit rating, loss of major deposits in a bank, significant change in market interest rates, significant increase in demand for loans and other funding amongst others.<sup>522</sup>

Although the CBK takes a position of a resilient banking sector with good liquidity as shown in its Financial Stability Report of 2018, literature search has yet to reveal any known documented stress test, especially in the last three years. The SARB on its part and being Basel III compliant applies the stress test prudential requirement as outlined by BCBS.

The SARB uses a Common Scenario Test exercise whereby selected banks conduct a bottom-up stress test based on their latest end of year data while SARB simultaneously conducts a complimentary top-down stress test to confirm and benchmark the outcome.<sup>523</sup> The 2018 test carried out in banks showed a resilient sector with no material risks arising from either liquidity or funding positions of banks,

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<sup>520</sup>Central Bank of Nigeria Financial Stability Report 2018 <https://www.cbn.gov.ng/Out/2018/FPRD/FSR%20June%202017.pdf> Accessed 10<sup>th</sup> March 2020.

<sup>521</sup>CBK Risk Management Guidelines 2013 <https://www.centralbank.go.ke/wp-content/uploads/2016/08/risk-management-guidelines-january-20131.pdf> Accessed on 5<sup>th</sup> May 2019.

<sup>522</sup> CBK, 'Risk Management Guidelines January 2013' [www.centralbank.go.ke/wp-content/uploads/2016/08/risk-management-guidelines-january-20131.pdf](http://www.centralbank.go.ke/wp-content/uploads/2016/08/risk-management-guidelines-january-20131.pdf) Accessed 10<sup>th</sup> December 2019.

<sup>523</sup> Bank-Wide Stress Testing as a Risk Management Tool <https://www.bis.org/review/r170814g.pdf> Accessed 20 March 2020

though with a below prudential requirement drop in the deposit run case (not significant as HQLAs are allowed to be used in such scenario).<sup>524</sup>

Although periodic stress tests are vital in the evaluation of the operational capacity of a given system, the practice has been criticised as it can send wrong signals to other market participants. In fact, it was suggested that banks can periodically obtain reference prices from the market instead of carrying out the actual transactions (repo or outright sale).<sup>525</sup>

This sort of falsehood may have ripple effects on institutions that engage in such acts and the economy of the host nation in general. Examples are the cases of Allied Irish Bank and Bank of Ireland that passed the year 2010 stress tests, only to require bailout a few months afterward.<sup>526</sup> Therefore, there must be transparency and monitoring at every step of the process to ensure a sustainable system devoid of mistrust.

### **5.2.2 The Stock of HQLA Shall Be Placed Under the Control of a Specific Authority Responsible for Liquidity Management**

According to the BCBS operational mandate, it is required that assets in the HQLA stock be either maintained in a separate pool by a specific authority or the proceeds from their (assets) monetisation within a 30-day stress period placed under the control of the same specific authority with uninterrupted legal and operational capability. In other words, the responsible authority has absolute independence though not without checks and balance.

This standard is necessary to avoid issues in banks such as direct conflict with a risk management strategy. Also, the operational requirement will give the authority absolute control to administer the stocks free from a bank's business and external influence such as undue pressure from policies emanating from a host nation's political factors.

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<sup>524</sup> South African Reserve Bank Financial Stability Review 2018 <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8904/Second%20edition%202018%20FSR.pdf> Accessed 28 March 2020

<sup>525</sup> Jacques Prefontaine, Jean Desrochers and Lise Godbout, 'The Analysis of Comments on the Consultative Document: International Framework for Liquidity Risk Measurement, Standards and Monitoring' (2010) 9(11) The International Business and Economics Research Journal. 107

<sup>526</sup> Finch G., Martinuzzi E., Penty C., 'EU Bank Stress Tests Missing Sovereign Defaults Fail to Convince Analysts', (2011), Bloomberg

Although countries of the SSA region have proven to conduct liquidity stress tests as outlined by the BCBS, supporting literatures are yet to emerge on how the proceeds are managed. Furthermore, the issue of independence with regards to creating a specific authority for the management of the HQLA stock is of great concern considering the SSA jurisdiction as an emerging market.

This is because some authors such as Goodhart have argued that a regulator cannot be trusted to act appropriately and as such, rules and regulations are needed to constrain the regulator rather than the regulated.<sup>527</sup> Also, the objective of lack of incentive payments to regulators considering that their job interests are not cast on stone can make them directly answerable to politicians and bankers<sup>528</sup> as may be the case of the SSA jurisdiction.

Moreover, a contributory factor of excessive concentration of ownership such as the majority shares by a single person or family as some cases in SSA banks can affect a manager's independence from interference in operational decisions.<sup>529</sup> Therefore, a more diversified ownership structure such as the current restriction to 20 percent ownership of large financial organisations and more independent management with approval from the regulators may be a good deterrent in applying this requirement as managers may not want to risk their reputations and careers.<sup>530</sup>

The CBK in Kenya pegged the maximum ownership of shares by a single person or family to 25 percent through an amended Banking Act and for reasons amongst others that include ensuring independent and objective decisions that affects a bank.<sup>531</sup> This is unlike Nigeria where the CBN stipulates no limits to a single entity's shareholding as contained in the provisions of the Banks and Other Financial Institutions Act, 1991, as amended.

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<sup>527</sup> Charles Goodhart, 'Liquidity Risk Management', (2008) 11, *Financial Stability Review*, 39-44.

<sup>528</sup> E. J. Kane, 'What Economic Principles Should Policymakers in Other Countries Should Have Learned from the S & L Mess?' (2003) 38(1), *Business Economics*, 21-30.

<sup>529</sup> Peter Lewis and Howard Stern 'Shifting Fortunes: The Political Economy of Financial Liberalisation in Nigeria', (1997) 25(1), *World Development*, 5-22

<sup>530</sup> Jean Roy and Marc-Andre Flageole 'Financial Disintermediation, Financial Sector Regulation and Deposit Insurance' in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 148

<sup>531</sup> Central Bank of Kenya Supervision Annual Report 2015 [https://www.centralbank.go.ke/uploads/399346751\\_2015%20Annual%20Report.pdf](https://www.centralbank.go.ke/uploads/399346751_2015%20Annual%20Report.pdf) Accessed 28 February 2020

Additionally, there is the issue of regulatory accountability whereby Kryzanowski argued that the decentralisation of the concentration of all supervisory functions in one entity diffuses accountability for failed policy actions or evade of such responsibility.<sup>532</sup> He also presented a counter argument whereby it is more difficult to hold an entity accountable as the number of its potentially conflicting objectives increase.

### 5.2.3 Management of Intraday Liquidity Positions

Principle 8 of the Principles for Sound Liquidity Risk Management and Supervision states that “a bank should actively manage its intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions and therefore, contribute to the smooth functioning of payment and settlement systems”.<sup>533</sup> Relatively, the BCBS included the principle as part of the HQLA operational requirements.

The reason is because liquidity risk may arise in a payment or settlement process and among the payment system operators, participants, and other liquidity providers.<sup>534</sup> Also, this principle that is part of the operational requirements of assets in the stock of HQLA allows for managing authorities (Central Banks) to ensure safe and efficient system, aligned with international best practices in the regulatory framework for the payment of infrastructures.

Furthermore, the BCBS has also provided for monitoring tools for intraday liquidity management as they deemed it crucial for a bank to effectively manage its intraday liquidity, as failure could lead to inability of a bank to meet its payment and settlement obligation on timely basis. This is because of banks’ susceptibility to intraday liquidity shocks as their needs are not covered by the LCR stress scenario.

The banking authorities in SSA have demonstrated to have payments and settlement systems that ensure efficiency and security of funds transacted by the end of a day’s business. These systems that include South African Multiple Option Settlement

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<sup>532</sup> Lawrence Kryzandowski ‘Organisational Design and Positioning of the Deposit Insurance Function in the Financial System Safety Net’ in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 92

<sup>533</sup> BCBS Principles for Sound Liquidity Risk Management and Supervision 2008 <https://www.bis.org/publ/bcbs144.pdf> Accessed on 12 November 2018

<sup>534</sup> CBN, ‘Nigerian Payments System Risk and Information Security Management Framework 2020’ [www.cbn.gov.ng/Out/2020/PSMD/Nigerian%20Payments%20System%20Risk%20and%20Information%20Security%20Management%20Framework.pdf](http://www.cbn.gov.ng/Out/2020/PSMD/Nigerian%20Payments%20System%20Risk%20and%20Information%20Security%20Management%20Framework.pdf) Accessed 15<sup>th</sup> February 2020.

(SAMOS) system, Kenya Electronic Payments and Settlement System (KEPSS), and Nigerian Payments System (NPS) are operational and managed by the respective central banks.

The SARB in South Africa uses the SAMOS system in their approach towards intraday funding and collateral that allows banks to monitor their settlement exposures and reduce the potentials for crises. This allows for the system to automatically grant loan (limited to the collateral value of the loan) to a bank with insufficient funds and also, collateral of 50 percent of such bank's liquid-asset requirement is granted by the Registrar of Banks as a concession during the day.<sup>535</sup>

Similarly, in Nigeria, the CBN that is the primary provider of intraday balances and credit utilises collateralised (must be high quality and the amount determined by CBN) Intraday Liquidity Facility (ILF) to meet short-term liquidity needs by deposit money banks (DMBs) and repayable before the close of business by the day.<sup>536</sup> In the same way in Kenya, liquidity provided through the intraday liquidity facility that enables the transfer of funds between banks on a real-time basis by the CBK through KEPSS is protected by eligible collateral securities.<sup>537</sup>

Although, Nigeria's financial market system remained resilient to associated risks in relation to the payments system, some potential risks such as 'liquidity risk arising from the operation of Deferred Net Settlement system' have been outlined in the Financial Stability Report of 2018.<sup>538</sup> Also, the CBN in its bid to continue aligning with international best practices finally realised its PSV 2020 through a recently updated new guideline for management of risks related to making payments in the country that started as Payments System Vision 2020 in 2007.

This new guideline called the Nigerian Payments System Risk and Information Security Management Framework addresses systemic risk, credit risk, liquidity risk,

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<sup>535</sup> SARB Intraday Funding and Collateral Policy in the SAMOS System [https://www.resbank.co.za/RegulationAndSupervision/NationalPaymentSystem\(NPS\)/Legal/Documents/Information%20Papers/NPS01.pdf](https://www.resbank.co.za/RegulationAndSupervision/NationalPaymentSystem(NPS)/Legal/Documents/Information%20Papers/NPS01.pdf) Accessed on 10 November 2018

<sup>536</sup> CBN Financial Markets Department Half Year Activity Report 2015 <https://www.cbn.gov.ng/out/2016/fmd/2015%20half%20year%20activity%20report.pdf> Accessed on 10 November 2018

<sup>537</sup> CBK Banking Services <https://www.centralbank.go.ke/banking-services/> Accessed on 12 November 2018

<sup>538</sup> Central Bank of Nigeria Financial Stability Report 2018 [https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20\(for%20Publication\).pdf](https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20(for%20Publication).pdf) Accessed 29 March 2020

operational risks, settlement risks, information security risks amongst others.<sup>539</sup> Also, it is worth to note that the CBN in its Financial Stability Report of 2018 introduced a new department known as Payments System Management Department, to strengthen and facilitate the supervision and regulation of the payments system on issues such as early identification of evolving risks and enhancement of public confidence in the system.

Therefore, it is evident that the SSA banking systems have payment systems in place though without a known documented monitoring tool that can supply data to supervisors. In view of this, enough information is needed to identify and monitor the intraday liquidity risks run by a bank. Consequently, some monitoring tools have been developed by the BCBS to assist supervisors in assessing the intraday liquidity risk of a bank to promote global consistency in the supervision of liquidity exposure of banks that may arise in payments and settlement system.<sup>540</sup>

### **5.2.3.1 Intraday Liquidity Management Monitoring Tools**

The BCBS established the intraday liquidity monitoring tools for reporting banks to assist supervisors. This is to help in gaining a better understanding of how banks manage their intraday liquidity in payment and settlement systems, particularly banks' management of intraday liquidity risk that is considered as a crucial part of liquidity risk management.<sup>541</sup> In other words, these tools are to be used by supervisors to gather sufficient information needed to identify and monitor the intraday liquidity risk run by banks.

- **Daily Maximum Intraday Liquidity Usage Tool:** This tool requires banks to monitor the net balance of all payments made and received during the day over their settlement account either with central bank or over their account held with a correspondent bank. Also, a bank's maximum daily intraday liquidity usage

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<sup>539</sup> CBN, 'Nigerian Payments System Risk and Information Security Management Framework 2020' [www.cbn.gov.ng/Out/2020/PSMD/Nigerian%20Payments%20System%20Risk%20and%20Information%20Security%20Management%20Framework.pdf](http://www.cbn.gov.ng/Out/2020/PSMD/Nigerian%20Payments%20System%20Risk%20and%20Information%20Security%20Management%20Framework.pdf) accessed 15<sup>th</sup> February 2020.

<sup>540</sup> BIS, 'Liquidity Monitoring Metrics' [www.bis.org/basel\\_framework/chapter/SRP/50.htm?inforce=20190101](http://www.bis.org/basel_framework/chapter/SRP/50.htm?inforce=20190101) Accessed on 12<sup>th</sup> October 2019.

<sup>541</sup> Basel Committee on Banking Supervision, 'Supervisory Review Process: Liquidity Monitoring Metrics SRP (50)' (2019) [www.bis.org/basel\\_framework/chapter/SRP/50.htm?inforce=20191215](http://www.bis.org/basel_framework/chapter/SRP/50.htm?inforce=20191215) Accessed 20<sup>th</sup> May 2020.



will be determined by the largest net negative position on the account during the business day.

This tool assists supervisors to understand and monitor a bank's intraday liquidity usage in a normal condition as banks are expected to report their three largest daily negative net cumulative positions and the daily average of negative net cumulative position in the reporting period.

- **Available Intraday Liquidity at the Start of the Business Day Tool:** This tool assists supervisors in monitoring the amount of intraday liquidity of a bank available at the start of each day to meet its intraday liquidity requirements in a normal condition.

The report must include the three smallest sums by value of intraday liquidity available at the start of each business day and the average amount of available intraday liquidity at the start of each business day, coupled with the breakdown of liquidity sources available to the bank.

- **Total Payments Tool:** This tool assists supervisors to monitor the overall scale of a bank's payment activity as banks are required to report the three largest daily values for gross payments sent and received, and the average daily figure of gross payments made and received in the reporting period.
- **Time-Specific Obligations Tool:** This tool assists supervisors to have a better understanding of a bank's time-specific obligations such as obligations that have a time-specific intraday deadline. Failure to settle such obligations on time can lead to damage to the reputation of a bank or financial penalty.

Also, banks are required to report the three largest daily total values of time-specific obligations that they settle and the average daily total value to assist supervisors in understanding the scale of these obligations.<sup>542</sup>

### **5.3 Supervisory Liquidity Monitoring Tools**

Apart from the intraday liquidity monitoring tool, supervisors are encouraged to make use of the supervisory liquidity monitoring tools. The Core Principles that provide for sound supervisory practices encourage supervisors to use appropriate range of techniques and tools in the execution of their supervisory work.

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<sup>542</sup> Basel Committee on Banking Supervision, 'Supervisory Review Process: Liquidity Monitoring Metrics SRP (50)' (2019) [www.bis.org/basel\\_framework/chapter/SRP/50.htm?inforce=20191215](http://www.bis.org/basel_framework/chapter/SRP/50.htm?inforce=20191215) Accessed 20<sup>th</sup> May 2020.



Also, in line with the last global financial crisis, the supervision of liquidity in banks became very important with BCBS providing a common set of supervisory monitoring tools under Basel III called supervisory review process: liquidity monitoring metrics SRP50 that is part of the BCBS consolidated framework. These liquidity monitoring tools made up of five metrics are to be used by supervisors to acquire specific information that is related to a bank's cash flows, available unencumbered collateral, balance sheet structure and certain market indicators.<sup>543</sup>

It is also stated by the BCBS that these metrics in addition to LCR and NSFR help supervisors in assessing liquidity risk of a bank because they provide the cornerstone of information needed by supervisors.<sup>544</sup> Furthermore, these metrics encourage global consistency in supervising liquidity risk and funding risk exposures of banks and also, help to communicate these exposures to home and host supervisors.<sup>545</sup>

Therefore, supervisors are required to act as soon as they detect any potential or current liquidity problem through these metrics. Supervisory actions can take the form of requiring the bank in question to strengthen its management of liquidity risk by improving its internal policies, its contingency planning or lower its liquidity risk by holding a larger cushion of unencumbered HQLA or requiring the bank to carry out its operation with higher level of capital.<sup>546</sup>

The following metrics that help supervisors in assessing the liquidity risk of a bank are discussed under Basel III monitoring tools and they include: contractual maturity mismatch, concentration of funding, available unencumbered assets, LCR by significant currency and market-related monitoring tools.<sup>547</sup>

- **Contractual Maturity Mismatch:** The gap between the contractual inflow and outflow of liquidity in a bank is identified for a defined period. The metric offers an insight into the extent a bank relies on maturity transformation under its

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<sup>543</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.204

<sup>544</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n

<sup>545</sup> Basel Committee on Banking Supervision, Bank for International Settlements, 'Basel III: the Net Stable Funding Ratio' Supra.n.250

<sup>546</sup> Basel Committee on Banking Supervision, 'Principles for Sound Liquidity Risk Management and Supervision'(2008) <https://www.bis.org/publ/bcbs144.pdf> Accessed on 6 December, 2017

<sup>547</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.204

current contracts. A bank is expected to make a report on all its contractual cash and security flows in a defined period based on its residual contractual maturity. These maturity gaps indicate how much liquidity a bank would potentially need to raise in each of these time bands if all the expected outflows occurred at the earliest date.<sup>548</sup>

Additionally, supervisors will determine in their respective jurisdictions, a specific template to be used and required time band by which data must be reported. This measure is used to compare liquidity risk profiles in banks and helps to identify liquidity needs in banks.<sup>549</sup> However, in the utilisation of this metric, no behavioural assumptions is included in the data, and this will not reflect actual future forecasted flows under a going-concern view.<sup>550</sup>

- **Concentration of Funding:** This metric has to do with identifying those sources of wholesale funding that have such significant value in the bank and withdrawing such fund may trigger liquidity problems. Supervisors use this metric to identify and assess the extent of funding liquidity risk because of withdrawal of one or more wholesale funding sources.<sup>551</sup>

Diversification of funding resources as recommended in the Sound Principle by the Basel Committee is encouraged by this metric. In utilisation of the metric, it does not show the difficulty in replacing funding from any given source. Also, to ascertain the extent of funding concentration to certain counterparty, supervisors need to recognise that it is currently impossible to identify the actual funding counterparty for many types of debt.<sup>552</sup>

- **Available Unencumbered Assets:** In this metric, supervisors are provided with data on the quantity and important characteristics, including currency denomination and location of banks' available unencumbered assets. These

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<sup>548</sup> Ross Cranston, Emiliios Avgouleas, Kristin van Zwieteren, Christopher Hare and Theodor van Sante, *Principles of Banking Law* (3<sup>rd</sup> edition, Oxford University Press 2017) 61.

<sup>549</sup> S. Claassen and J.H. Van Rooyen, 'Bank Liquidity Risk Management: A South African Survey to Determine Future Change' (2012) 2(3) Risk Governance and Control: Financial Markets and Institutions. 33

<sup>550</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.204

<sup>551</sup> S. Claassen and J. H. Van Rooyen, 'Bank Liquidity Risk Management: A South African Survey to Determine Future Change' (2012) 2(3) Risk Governance and Control: Financial Markets and Institutions. 33

<sup>552</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' Supra.n.204

available unencumbered assets that are marketable as collateral in secondary markets or are eligible at central banks may provide additional sources of liquidity for banks.

Therefore, it is useful for supervisors to examine the potential of a bank to create additional HQLA or secured funding. However, potential changes in counterparties haircuts and lending policies that could occur in systemic event are not captured here. Also, it is important for supervisors to note that this metric does not compare available unencumbered assets to the amount of outstanding secure funding.

- **LCR by Significant Currency:** Supervisors need to monitor the LCR in each significant currency to be able to track potential currency mismatch that may arise, especially in times of stress. Significant currency is determined when ‘the aggregate liabilities denominated in that currency amount to 5 percent or more of the bank’s total liabilities.’<sup>553</sup> The minimum monitoring ratio for foreign exchange LCR could be set by supervisors in their different jurisdictions. Also, supervisors should appraise the ability of a bank to raise funds in foreign currency markets and its ability to transfer a liquidity surplus from one currency to another, and across different jurisdictions. This is as the Basel Committee suggested that supervisors should implement higher ratios for currencies in which banks can easily raise funds in foreign currency markets or limited transfer for a liquidity surplus from one currency to another, and across different jurisdictions.
- **Market-related Monitoring Tools:** Market data can be monitored by supervisors to discover potential liquidity difficulties in banks. Supervisors under the market-related monitoring tools will be able to monitor market data at the following levels:
  1. Market-wide information: This is important, especially when supervisors are evaluating assumptions that are behind a bank’s funding plan. Essential market information that can be monitored by supervisors includes equity prices, debt markets, foreign markets, commodity markets, etc.

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<sup>553</sup> Basel Committee on Banking Supervision, ‘Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools’ Supra.n.204

2. Information on the financial sector: Supervisors can track whether the financial sector is experiencing difficulties through monitoring information on equity and debt market.
3. Bank-specific information: Supervisors can monitor whether a market is losing confidence or identify risks in a bank through information on equity prices, CDS spreads, money-market trading prices, roll-overs, and prices for various lengths of funding, price/yield of bank debenture or subordinated debt in the secondary market.

#### **5.4 Provisions of the Principles for Sound Liquidity Risk Management and Supervision**

Liquidity risk management has been deemed essential since the occurrence of the financial crisis that raised doubts on the soundness of liquidity management of so many banks.<sup>554</sup> It is a key aspect of banking because one of the fundamental roles of a bank is its maturity transformation of short-term deposits into long-term loans and this fundamental role makes it vulnerable to liquidity risk.<sup>555</sup>

Therefore, liquidity risk management is important because it ensures that banks can meet their cash flow obligations and help prevent systemic risk that can be caused by a liquidity shortfall in a single institution.<sup>556</sup> In the aftermath of the 2007 subprime mortgage crisis, banks placed the blame amongst other things on lack of experience in the basic principles of liquidity risk management.

This reason for the blame is because many large and medium sized banks were unable to manage their risk exposures during the financial crisis, thereby leading loss of access to funding and inability to sell off assets from their balance sheets which they thought were liquid.<sup>557</sup> As a result of the crisis, the need to establish ethics for liquidity risk management became apparent. This led the BCBS to publish the Principles for Sound Liquidity Risk Management and Supervision (Sound Principles) in 2008.

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<sup>554</sup> Sebastian Pokutta and Christian Schmalz, 'Managing Liquidity: Optimal degree of centralization' (2011) 35(3) *Journal of Banking and Finance*.627

<sup>555</sup> Basel Committee on Banking Supervision, 'Principles for Sound Liquidity Risk Management and Supervision'(2008) <https://www.bis.org/publ/bcbs144.pdf> Accessed on 6 December, 2017

<sup>556</sup> Ibid

<sup>557</sup> Kern Alexander, *Principles of Banking Regulation* (Cambridge University Press, 2019) 109

According to Alexander, the Sound Principles were published based on the notion that lack of access to funding sources and weak liquidity management are typical factors that can lead to bank failures.<sup>558</sup> However, these Sound Principles have been criticised because of the strong preference for more flexibility in their application as opposed to the rigid principle-based approach adopted in the draft phase.<sup>559</sup>

Although these Principles provide guidance that helps to ensure that banks have the policies and procedures to monitor their liquidity position, it has been suggested that consideration be given to the size, nature of business and complexity of a bank's activities.<sup>560</sup> The Sound Principles for management and supervision of liquidity risk are summarised under five headings by the BCBS and they include:<sup>561</sup>

- **Fundamental Principle for the Management and Supervision of Liquidity Risk:** This is contained under principle one. It gives a bank the responsibility of establishing a robust liquidity risk management framework that ensures sound management of liquidity risk. Banks are encouraged to maintain enough liquidity that can be able to withstand a range of stress periods. This is because liquidity is crucial for the viability and continuity of any banking sector.
- **Governance of Liquidity Risk Management:** This cuts across principles two, three and four. In these principles, banks are expected to formulate liquidity risk tolerance suitable for their respective business strategies. Senior management of banks is also expected to formulate policies and practices that they can use to manage liquidity risk in line with their risk tolerance.

They are also required to regularly report to the board of directors on their bank's liquidity developments. The board of directors should review and approve the strategy, policies and practices relating to the management of liquidity at least once a year.

- **Measurement and Management of Liquidity Risk:** This is provided for under principles five to twelve. Here, banks are required to incorporate a sound

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<sup>558</sup> Kern Alexander, *Principles of Banking Regulation* (Cambridge University Press, 2019) 110

<sup>559</sup> Jacques Prefontaine, Jean Desrochers and Lise Godbout, 'The Analysis of Comments Received by the BIS on Principles for Sound Liquidity Risk Management and Supervision' (2010) 9(7) *The International Business and Economics Research Journal*. 65.

<sup>560</sup> Gideon F., Mark A. Petersen, Mukuddem-Petersen Janine, and Hlatshwayo L. N. P., 'Basel III and Net Stable Funding Ratio' (2013) *ISRN Applied Mathematics*. 1

<sup>561</sup> *Ibid*

process that will be used to measure, identify, monitor, and control liquidity risk. Also, liquidity risk exposures and funding need both within and beyond business lines, and currencies should equally be monitored and controlled by banks.

Furthermore, funding strategy that supports efficient diversification in the sources and tenor of funding should be established by banks, together with a formal contingency funding plan (CFP) that addresses liquidity shortfalls in emergency situations. Banks are expected to regularly conduct stress test for a variety of short-term and market-wide stress scenarios to identify sources of possible liquidity stress.

- **Public Disclosure** This is contained in principle thirteen. It requires a bank to regularly disclose information publicly as it helps market participants make a reliable judgement regarding the soundness of its liquidity risk management framework and liquidity position.
- **The Role of Supervisors** This appeared under principles fourteen to seventeen. It provides that an extensive assessment of a bank's overall liquidity risk management framework and liquidity position should be regularly carried out by supervisors to determine a bank's ability to deliver an adequate level of resilience in liquidity stress.

Supervisors are expected to intervene in the event of deficiencies in liquidity risk management processes or liquidity positions of a bank by requiring effective and timely remedial action to address such deficiencies. There should also be a regular communication and information sharing of supervisors with other relevant supervisors and public authorities both within and outside a jurisdiction. It is provided here that supervisors need to have a range of monitoring tools at their disposal to be able to address any deficiency in a bank's liquidity position.

The SSA banking sector is guided by these Sound Principles that are applied in the strengthening of liquidity risk management and have designed policies that identify, monitor, control and report related issues. In South Africa, the provisions of the Sound Principles were incorporated into the nation's domestic framework (Banks Act) such as the Banks Act Regulation 26 and 39 that deal with liquidity risk and corporate

governance that requires a bank to have a robust liquidity risk management process, practices, policies, and procedures to identify, monitor and address liquidity risks.<sup>562</sup>

This is similar to Kenya where the CBK has incorporated the provisions of the Sound principles into its Risk Management Guidelines of 2013 as a minimum requirement to guide banks in the management of their liquidity risk.<sup>563</sup> The CBK set out the roles of the board and senior management of banks in establishing a robust liquidity risk management framework with policies, procedures and limits for measuring and monitoring liquidity risks, including formulating liquidity risk tolerance suitable for their respective business strategies.

The Kenya's apex bank also encourages the board and senior management of banks to have a contingency plan for handling liquidity crisis and review their liquidity risk management policies at least once a year, and when there are material changes in their liquidity risk profile.<sup>564</sup>

Relatively, the CBN in Nigeria issued Guidelines for the Development of Liquidity Management Policies in 2003 and Guidelines for Developing Risk Management Framework for individual risk elements in 2007 to enable banks develop strategies for managing liquidity and associated risks.

However, the IMF report of May 2013 advised the CBN to update these Guidelines to reflect important subsequent reforms relating to liquidity risk management including the BCBS Sound Principles.<sup>565</sup> This report was issued because of lack of sound processes in identifying, monitoring, and controlling liquidity risks in most deposit money banks of Nigeria.

Consequently, the concept of adequate liquidity risk management has since been a vital tool used by the CBN to ensure established clear policies and practices of

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<sup>562</sup> South African Reserve Bank, 'Bank Act 1990 (Act No 94 of 1990) Regulation Relating to Banks' [www.gov.za/sites/default/files/gcis\\_document/201409/35950rq9872gon1029.pdf](http://www.gov.za/sites/default/files/gcis_document/201409/35950rq9872gon1029.pdf) Accessed 10th December 2019.

<sup>563</sup> CBK, 'Risk Management Guidelines January 2013' [www.centralbank.go.ke/wp-content/uploads/2016/08/risk-management-guidelines-january-20131.pdf](http://www.centralbank.go.ke/wp-content/uploads/2016/08/risk-management-guidelines-january-20131.pdf) Accessed 10th December 2019.

<sup>564</sup> Ibid

<sup>565</sup> IMF, 'Nigeria: Detailed Assessment of Compliance on Basel Core Principles for Effective Banking Supervision' (2013) [imf.org/en/Publications/CR/Issues/2016/12/31/Nigeria-Publication-of-Financial-Sector-Assessment-Program](http://imf.org/en/Publications/CR/Issues/2016/12/31/Nigeria-Publication-of-Financial-Sector-Assessment-Program) Accessed 12<sup>th</sup> December 2018.

individual banks to maintain continuous sustainability and stability of the banking industry in Nigeria.

Comparatively, the Banking Supervision Department (BSD) in South Africa monitors the degree of compliance and liquidity risk exposures through a liquidity risk return Form BA 300 submitted monthly by all banks. In banks with shortcomings such as contingency planning for funding is identified, as was the case with some banks in 2010, such affected banks were required by SARB to act in strengthening their liquidity risk management.<sup>566</sup>

## **5.5 Introduction of the Core Principles for Effective Banking Supervision (The Core Principles)**

Banking supervision can be referred to as a process of monitoring the financial health of banks to ensure that their activities are carried out in a safe and sound environment, and in accordance with stipulated laws, rules, and regulations. The principal aim is to prevent avoidable losses in the banking sector that can lead to loss of confidence in banks.

Therefore, supervision of banks has become very important as it ensures the maintenance of adequate capital and liquidity to help avoid poor lending decisions that could lead to high number of non-performing loans in banks. There are two types of bank supervisory regime that exist globally.

One of them is bank supervision that is combined with the monetary policy function within a central bank (such as in Nigeria and Kenya where the central bank is responsible for both monetary policy and supervision of banks) while the other regime involves the separation of the two (bank supervision and monetary policy function), as one is separated and placed in a specialist agency outside the central bank.<sup>567</sup>

Banking supervision was found wanting in many jurisdictions during the last financial crisis because of failure of supervisors to properly identify, evaluate and hedge against

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<sup>566</sup> IMF, 'South Africa: Detailed Assessment of Compliance on Basel Core Principles for Effective Banking Supervision' (2010) [www.imf.org/external/pubs/ft/scr/2010/cr10353.pdf](http://www.imf.org/external/pubs/ft/scr/2010/cr10353.pdf) Accessed 10th December 2018.

<sup>567</sup> CBN, 'Understanding Monetary Policy Series 11: Risk-Based Banking Supervision' [www.cbn.gov.ng/Out/2014/MPD/UNDERSTAINING%20MONETARY%20POLICY%20SERIES%20NO%202011.pdf](http://www.cbn.gov.ng/Out/2014/MPD/UNDERSTAINING%20MONETARY%20POLICY%20SERIES%20NO%202011.pdf) Accessed 20<sup>th</sup> August 2018.



risk exposures<sup>568</sup>. Also, it became imperative for BCBS to develop robust and effective supervisory standards to combat any potential risk that can arise with the introduction of complex financial products in banks.

Basically, the BCBS enhances financial stability through improving supervisory knowhow and the quality of banking supervision universally.<sup>569</sup> The Committee sought to achieve this by recommending sound supervisory practices and formulating supervisory standards and guidelines through the Core Principles in the expectation that they will be implemented by national authorities.<sup>570</sup>

Effective supervision in the eyes of the Basel Committee incorporates the proper regulatory and legal framework as set out in the Core Principles. The BCBS encourages countries to implement the Core Principles for effective supervision in line with their supervisory framework and the SSA region is not an exception.

The Core Principles were originally issued in 1997 and produced through a collaboration of the BCBS members that include the IMF, World Bank, and a small number of other non-G-10 supervisory authorities.<sup>571</sup> The Core Principles was reviewed by 2006 and later in 2012, the principles and methodology of the Core Principles were combined into a single comprehensive document.<sup>572</sup>

Furthermore, in 2019, the BCBS incorporated the Core Principles and other Basel standards into the Basel Framework that comprises of the full set of standards of the BCBS. The Core Principles (BCP01) became the first version in the format of the consolidated framework and was made effective on the 15<sup>th</sup> of December 2019.

The revised Core Principles has continued to provide a comprehensive minimum standard that is needed to establish a sound foundation, particularly for the regulation,

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<sup>568</sup> CBN, 'Issues and Challenges for the Design and Implementation of Macro-prudential Policy in Nigeria' (2013) [www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf](http://www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf) Accessed 10<sup>th</sup> March 2018

<sup>569</sup> Basel Committee on Banking Supervision, 'A Brief History of Basel Committee' October 2015 [www.bis.org/bcbs/history.pdf](http://www.bis.org/bcbs/history.pdf) Accessed on 20th August 2018

<sup>570</sup> Basel Committee on Banking Supervision, 'A Brief History of Basel Committee' October 2015 [www.bis.org/bcbs/history.pdf](http://www.bis.org/bcbs/history.pdf) Accessed on 20th August 2018

<sup>571</sup> Iris H-Y Chiu and Joanna Wilson *Banking Law and Regulation* (Oxford University Press, 2019) 212.

<sup>572</sup> Basel Committee on Banking Supervision, 'BCP Core Principles for Effective Banking Supervision' September 2012 [www.bis.org/publ/bcbs230.pdf](http://www.bis.org/publ/bcbs230.pdf) Accessed 17<sup>th</sup> June 2019.

supervision, governance, and risk management of banks.<sup>573</sup> It provides sound supervisory practices that can be used to assess the quality of countries banking supervisory systems. The revised Core Principles provide for 29 Principles needed for effective supervision in banks and are divided into two parts.

The first part comprising of Principles 1 to 13 covers the power, responsibilities, and functions of supervisors with emphasis on effective risk-based supervision, and timely supervisory actions while the other part comprising of Principles 14 to 29 covers prudential regulations and requirements for banks with emphasis on good corporate governance, risk management and compliance with supervisory standards.

Also, the approaches to supervision and supervisors' expectations of banks have been strengthened by the revised Core Principles through an increased focus on effective risk-based supervision and the need for both early intervention and timely supervisory actions. It is expected that these consolidated measures will help avoid some of the identified pitfalls of the 2007 financial crisis.

In exercising the supervisory duties, Principle 8 of the Core Principle requires supervisors to develop and maintain a forward-looking assessment of risk profile of individual banks while principle 10 requires supervisors to collect, review and analyse reports from banks through on-site examinations and use of external experts.<sup>574</sup> This is to identify, assess and address risks originating from banks through a framework in place for early intervention and timely supervisory actions.

Although supervision weaknesses relating to mostly enforcement of banking laws and regulations exist in different countries of the SSA region, most of these countries are at different stages of implementing international supervision standards. In the SSA jurisdiction, South Africa is said to have a high level of compliance with regards to the Basel Core Principles.

According to the IMF FSAP detailed assessment report in March 2015, South Africa has continuously made significant improvement in their supervisory framework since

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<sup>573</sup> Basel Committee on Banking Supervision, 'BCP Core Principles for Effective Banking Supervision' 2019 [https://www.bis.org/basel\\_framework/chapter/BCP/01.htm?inforce=20191215](https://www.bis.org/basel_framework/chapter/BCP/01.htm?inforce=20191215) Accessed 17<sup>th</sup> January 2020.

<sup>574</sup> Basel Committee on Banking Supervision, 'BCP Core Principles for Effective Banking Supervision' 2019 [https://www.bis.org/basel\\_framework/chapter/BCP/01.htm?inforce=20191215](https://www.bis.org/basel_framework/chapter/BCP/01.htm?inforce=20191215) Accessed 17<sup>th</sup> January 2020

their previous assessment in 2010 to align their banking supervision with the Basel Core Principles.<sup>575</sup> In recent times, the SARB has adopted a forward-looking approach to supervision that incorporates both on- and off-site supervision.

The adoption of the forward-looking approach is to identify the key risk factors that can affect individual banks, assess the risk management policies used to mitigate risks and promptly deploy resources to the most critical risk areas through early intervention.<sup>576</sup> Also, information gathered through the on- and off-site supervision is used to assess individual banks compliance with the relevant legislation.<sup>577</sup>

It is worth to note that the BSD of SARB has conducted several reviews in banks to evaluate their current practices using questionnaires. These questionnaires cover banks' policies, procedures, and internal controls relating to funding, liquidity risk and interest rate risk in the banking book.<sup>578</sup> Also, on-site meetings were conducted with board members, senior managers, and internal auditors, following the responses received to ascertain the level and intensity of supervisory action needed.<sup>579</sup>

Appropriate actions were taken by banks in cases where there were short comings and monitored by the BSD. Sanctions or enforcement actions are applied to areas of concern identified either through on-site or off-site supervision of an individual bank. The objective is to safeguard amongst others, the interests of depositors that are likely to suffer the impact of bank failure, and to ensure that confidence and trust is retained in the South African banking system.

These sanctions can take the form of imposing conditions or directives requiring specific actions or prohibiting certain actions, making debarment orders, accepting a written undertaking that automatically becomes enforceable upon acceptance, varying

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<sup>575</sup> SARB, 'Regulatory Consistency Assessment Programme' [www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/Regulatory-Consistency-Assessment-Programme.aspx](http://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Supervision/Pages/Regulatory-Consistency-Assessment-Programme.aspx) Accessed 10th April 2020

<sup>576</sup> SARB, 'Bank Supervision Department Annual Report 2016' [www.resbank.co.za/Lists/News%20and%20Publications/Attachments/7813/01%20BankSupAR2016.pdf](http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/7813/01%20BankSupAR2016.pdf) Accessed 10<sup>th</sup> November 2019.

<sup>577</sup> SARB, 'Prudential Authority: Enforcement' [www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Enforcement/Pages/default.aspx](http://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Enforcement/Pages/default.aspx) Accessed 10th May 2020.

<sup>578</sup> SARB, 'Bank Supervision Department Annual Report 2017' [www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8507/01%20BankSupAR2017.pdf](http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8507/01%20BankSupAR2017.pdf) Accessed 15<sup>th</sup> December, 2018.

<sup>579</sup> Ibid

license conditions, removing individuals from their positions or from holding senior roles and imposing appropriate administrative penalties.<sup>580</sup>

Furthermore, the BSD of SARB uses Risk Based Supervisory approach to monitor and access banks' risk profiles as they (banks) are encouraged to develop and use better risk management techniques in identifying, monitoring and management of their risks with expected supervisors' evaluation, and intervention where necessary.<sup>581</sup>

Comparatively, the Kenyan banking sector was deemed to be in a vulnerable state as the joint report of March 2005 by the IMF and World Bank through their financial sector assessment program identified some gaps and shortcomings within the banking system of Kenya. These identified anomalies such as poor supervision include lack of decisive supervisory/ corrective action against non-compliant banks, and the weakness of the prudential regulations.<sup>582</sup>

Consequently, the CBK commenced a comprehensive review of the Banking Act in 2006 that strived to address the identified shortcomings to bring its banking supervision to conform to best practices as outlined in the Core Principles.<sup>583</sup> Additionally, more changes to enhance its banking supervisory framework such as strengthening prompt corrective actions by the banking supervisory authority and consolidated supervision were introduced.

These introduced corrective actions and supervision are in line with Principles 11 and 12 of the Core Principles and backed through amendments to the Banking Act of 2012 in addition to a newly issued Prudential Guideline on Consolidated Supervision.<sup>584</sup>

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<sup>580</sup> SARB, 'Prudential Authority: Enforcement' [www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Enforcement/Pages/default.aspx](http://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Banks/Enforcement/Pages/default.aspx) Accessed 10th May 2020.

<sup>581</sup> Basel Committee on Banking Supervision, 'Supervisory Review Process' [https://www.bis.org/basel\\_framework/chapter/SRP/10.htm?inforce=20191215](https://www.bis.org/basel_framework/chapter/SRP/10.htm?inforce=20191215) Accessed 20 February 2020

<sup>582</sup> World Bank, 'Financial Sector Assessment: Kenya March 2005' [documents.worldbank.org/curated/en/832771468272356331/pdf/](https://documents.worldbank.org/curated/en/832771468272356331/pdf/) Accessed 10th November 2019.

<sup>583</sup> CBK, 'Bank Supervision Annual Report 2006' [www.centralbank.go.ke/images/docs/Banks%20Supervision%20Reports%20Annual%20Reports/bsd2006.pdf](http://www.centralbank.go.ke/images/docs/Banks%20Supervision%20Reports%20Annual%20Reports/bsd2006.pdf) Accessed 10th August 2018.

<sup>584</sup> CBK, 'Bank Supervision Annual Report 2012' [www.centralbank.go.ke/images/docs/Banks%20Supervision%20Reports%20Annual%20Reports/bsd2012-r.pdf](http://www.centralbank.go.ke/images/docs/Banks%20Supervision%20Reports%20Annual%20Reports/bsd2012-r.pdf) Accessed 20th November 2019.

There was also a review of the CBK Prudential and Risk Management Guidelines to reflect the revised Core Principles.<sup>585</sup>

Furthermore, the CBK adopted the Risk Based Supervision (RBS) in the supervision of licensed banks that are in line with the Core Principles to assess the risk profile and supervisory plan of individual banks detailing the supervisory resources needed to formulate a bank's risk profile and risk management system.<sup>586</sup> Also, the BSD of CBK periodically conducts both on-site evaluation and off-site review of the financial condition of licenced banks, and their compliance with statutory and prudential requirements.<sup>587</sup>

The frequency of the on-site examination depends on individual bank's risk assessment that may either be based on full scope or specific risk examination while off-site surveillance involves comprehensive review of the performance and financial health of a bank including implementing directives and recommendations from the CBK.<sup>588</sup> Furthermore, prudential meetings with a bank's senior management or board of directors can be scheduled by the CBK depending on the severity of supervisory issues that arose during the evaluation.

The essence of the prudential meeting is to allow the CBK gain a better understanding of the bank's management control, operations, business situation/prospects, financial health/performance, risk drivers and any issue that requires supervisory attention. Although Kenya has not fully implemented all the twenty-five BCP, it is said to be largely compliant with most of the BCP because of improvements made in addressing the deficiencies that were highlighted in the 2003 FSAP.<sup>589</sup>

In the Nigeria experience, the 2005 banking consolidation exercise that aimed to strengthen the banking sector partly failed because of lack of effective supervision and

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<sup>585</sup> CBK, 'Bank Supervision Annual Report 2012' [www.centralbank.go.ke/images/docs/Banks%20Supervision%20Reports%20Annual%20Reports/bsd2012-r.pdf](http://www.centralbank.go.ke/images/docs/Banks%20Supervision%20Reports%20Annual%20Reports/bsd2012-r.pdf) Accessed 20th November 2019.

<sup>586</sup> CBK, 'Bank Supervision' [www.centralbank.go.ke/bank-supervision/](http://www.centralbank.go.ke/bank-supervision/) Accessed 10<sup>th</sup> July 2018.

<sup>587</sup> CBK, 'Bank Supervision Annual Report 2017' [www.centralbank.go.ke/uploads/banking-sector-annual-reports/849246690\\_2017%20Annual%20Report.pdf](http://www.centralbank.go.ke/uploads/banking-sector-annual-reports/849246690_2017%20Annual%20Report.pdf) Accessed 20<sup>th</sup> November 2018.

<sup>588</sup> CBK, 'Risk-Based Supervisory Framework' (2013) [www.centralbank.go.ke/wp-content/uploads/2016/08/CBKs-Risk-Based-Supervioion-Framework-May-2013-1.pdf](http://www.centralbank.go.ke/wp-content/uploads/2016/08/CBKs-Risk-Based-Supervioion-Framework-May-2013-1.pdf) Accessed 29<sup>th</sup> October 2019

<sup>589</sup> World Bank, 'Kenya Financial Sector Assessment Kenya' (March 2005) in Emily Jones, *The Political Economy of Bank Regulation in Developing Countries: Risk and Reputation* (Oxford Scholarship Online, May 2020)

enforcement in monitoring the capital and liquidity of the merged banks. This lack of effective supervision contributed to 10 banks being either insolvent or undercapitalised as was revealed in 2009 during a joint special audit examination of the banking system by CBN/NDIC under the Resident Examination Program to ascertain the financial health of banks.<sup>590</sup>

Since the occurrence of these events in Nigeria, regular updates on supervisory framework in line with the Basel Core Principles are continuously implemented and monitored by the CBN to strengthen banking supervision. In 2011, the CBN released its Supervisory Intervention Framework for the Nigerian banks that reflects the use of Risk-Based and Consolidated Supervision Framework in line with the Basel Core Principles to address contemporary challenges and risks faced by banks.<sup>591</sup>

The Risk-Based Supervisory framework enables the BSD of the CBN to have a better understanding of the risks of individual banks. In 2012, Nigeria was judged to be compliant or largely compliant with eighteen of the twenty-five BCP by the IMF.<sup>592</sup> This verdict proves that the CBN took the right steps in its pursuit of a standardised and compliant supervisory approach.

The supervisory process in Nigeria involves both on-site and off-site examinations. On-site examination provides supervisors the opportunity to determine whether a bank is adhering to laws and regulations governing banks and help prevent problem situations from deteriorating and remaining uncorrected for a long time.<sup>593</sup> The on-site examination is divided into three namely maiden, routine, and special.<sup>594</sup>

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<sup>590</sup> CBN, 'Annual Report and Statement of Accounts 2009' [www.cbn.gov.ng/Out/2010/PUBLICATIONS/REPORTS/RSD/Link%20Files/](http://www.cbn.gov.ng/Out/2010/PUBLICATIONS/REPORTS/RSD/Link%20Files/) Accessed 10<sup>th</sup> December 2019.

<sup>591</sup> CBN, 'Issues and Challenges for the Design and Implementation of Macro-prudential Policy in Nigeria' (2013) [www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf](http://www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf) Accessed 10<sup>th</sup> March 2018

<sup>592</sup> IMF, 'Nigeria: Detailed Assessment of Compliance on Basel Core Principles for Effective Banking Supervision' (2013) [imf.org/en/Publications/CR/Issues/2016/12/31/Nigeria-Publication-of-Financial-Sector-Assessment-Program](http://imf.org/en/Publications/CR/Issues/2016/12/31/Nigeria-Publication-of-Financial-Sector-Assessment-Program) accessed 12<sup>th</sup> December 2018.

<sup>593</sup> CBN, 'Issues and Challenges for the Design and Implementation of Macro-prudential Policy in Nigeria' (2013) [www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf](http://www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf) Accessed 10<sup>th</sup> March 2018

<sup>594</sup> Adedoyin Soyibo, S. O. Alashi and M. K. Ahmad, 'A Positive and Nominative Analysis of Bank Supervision in Nigeria' (2004) African Economic Research Consortium AERC Research Paper 145 Kenya. [opendocs.ids.ac.uk/bitstream/handle/20.500/2583/](http://opendocs.ids.ac.uk/bitstream/handle/20.500/2583/) Accessed 28<sup>th</sup> December 2019.



The maiden examination is carried out after six months of a new bank commencing operation with the aim of ascertaining compliance level in line with the conditions of the licence granted. The routine examination is carried out at least once every year to ascertain the soundness of a bank with regards to the following: its ability to issue loans and meet demand deposits, compliance with banking regulations, competence of their management and to establish if the bank is solvent and viable.

A follow up action aimed at monitoring compliance with recommendations made in a report after the routine examination will be carried out too. The special examination is carried out when the CBN has reason to suspect that a bank may be carrying on its business in a manner contrary to the conditions of its licence, contravening the provisions of the Banking Act or have insufficient assets to cover its liabilities.

On the other hand, the off-site assessment provides information about a bank and identifies an early warning of potential area of risk exposure.<sup>595</sup> Compliance with statutory requirements such as the liquidity ratio and cash reserves is also covered during the assessment by the CBN. The CBN adopted a forward-looking focus approach in the evaluation of risk profile of individual banks.

The adoption of this approach is to identify and assess inherent risks and risk management processes, and promptly allocate supervisory resources to the most critical risk areas in an identified bank. To facilitate the prompt identification of risks in banks and ensure efficient allocation of supervisory resources, the CBN with the technical assistance of the IMF developed a framework for an Early Warning System (EWS) for banking supervision.<sup>596</sup>

The EWS framework is an offsite surveillance tool that combines a set of financial soundness indicators with information gathered from on-site examination reports on banks, and macro-economic variables to estimate the likelihood of a bank's failure

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<sup>595</sup> CBN, 'Issues and Challenges for the Design and Implementation of Macro-prudential Policy in Nigeria' (2013) [www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf](http://www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf) Accessed 10<sup>th</sup> March 2018

<sup>596</sup> CBN, 'Annual Report 2017' [www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT\\_WEB.pdf](http://www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT_WEB.pdf) Accessed 10<sup>th</sup> October 2018.

over four quarters.<sup>597</sup> Relatively, the on-site examination will need to be conducted first (as its report is part of the EWS framework) to enable the EWS tool become effectively functional.

The EWS tool is used by supervisors to predict the likelihood of bank failures under normal and stress conditions. Supervisors can achieve this because it provides them with prudential reports on the conditions, performance, and compliance status of a supervised bank.<sup>598</sup> Additionally, supervisors are expected to exercise caution and act prudently in the performance of their duties including correcting and sanctioning banks under principle 11 of the Core Principles.

In terms of supervisory sanctions, these can be formal or informal in Nigeria. Informal actions such as supervisory letter (Involving findings and recommendations to a bank) and memorandum of understanding (corrective agreements between CBN and the board of directors of a bank) are not legally enforceable by law while formal actions such as consent order, temporary cease and desist order, removal and prohibition, and monetary penalties are legally enforceable agreements and are publicly disclosed.<sup>599</sup>

Furthermore, troubled banks are closely monitored by the BSD in Nigeria with prompt corrective actions taken to remedy a situation and based on the condition of a bank. The condition of a bank varies such that being slightly illiquid or critically illiquid attracts different corrective actions to remedy the respective situations.

The supervisory action on slightly illiquid banks involves an invitation to the management of the affected bank for a discussion on its plans and implementation to enhance liquidity and make submission to the CBN for approval while supervisory action taken on a bank that is critically illiquid involves change in management or board and suspending the bank from clearing until it sorts out its clearing position.<sup>600</sup>

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<sup>597</sup> CBN, 'Annual Report 2017' [www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT\\_WEB.pdf](http://www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT_WEB.pdf) Accessed 10<sup>th</sup> October 2018.

<sup>598</sup> CBN, 'Understanding Monetary Policy Series 11: Risk-Based Banking Supervision' [www.cbn.gov.ng/Out/2014/MPD/UNDERSTAINING%20MONETARY%20POLICY%20SERIES%20NO%202011.pdf](http://www.cbn.gov.ng/Out/2014/MPD/UNDERSTAINING%20MONETARY%20POLICY%20SERIES%20NO%202011.pdf) Accessed 20<sup>th</sup> August 2018.

<sup>599</sup> CBN, 'Supervisory Intervention Framework for the Nigerian 2011' [www.cbn.gov.ng/OUT/2011/PUBLICATIONS/bsd/CBN%20SUPERVISORY%20INTERVENTION%20GUIDELINE%202011%20FINAL](http://www.cbn.gov.ng/OUT/2011/PUBLICATIONS/bsd/CBN%20SUPERVISORY%20INTERVENTION%20GUIDELINE%202011%20FINAL) Accessed 20<sup>th</sup> September 2019

<sup>600</sup> CBN, 'Framework for Contingency Planning for Banking Systemic Distress and Crises' [www.cbn.gov.ng/Out/Publications/bsd/2002/contingency.pdf](http://www.cbn.gov.ng/Out/Publications/bsd/2002/contingency.pdf) Accessed 20<sup>th</sup> October 2019.



These actions became necessary because for a bank to be critically illiquid, it must be unable to meet its maturing obligations and must have suffered clearing operational losses for 15 continuous days or up to 20 days in a calendar month. And this kind of situation often leads to crisis if left unchecked or without an intervention.

## **5.6 Designation of Domestic Systemically Important Banks (D-SIBs) in the Banking Systems of Nigeria, Kenya, and South Africa**

The BCBS established a regulatory and supervisory framework effective from 15 December 2019 for Domestic Systemically Important Banks D-SIBs that detail a set of 12 principles that are categorised into assessment methodology and higher loss absorbency, and to be applied by national jurisdictions in accordance with their legal and regulatory frameworks.<sup>601</sup>

Furthermore, the Committee recommended regular assessments of these D-SIBs, especially when there are significant structural changes to the banking system and these periodic assessments ought not to exceed intervals of one year. This is to reduce the probability of banks from failing as they are very important and require closer supervision with little or no public support.

Although it is not yet clear how national authorities carry out these assessments, the BCBS acknowledged the use of an indicator-based measurement that incorporates several aspects that contribute to systemic risk with selected indicators. These selected indicators as specified by the BCBS include size, interconnectedness, substitutability, global activity, and complexity while the methodology allows for the customisation of the indicators to reflect country-specific features of financial jurisdictions.

Additionally, the Committee admitted that these assessment criteria cannot fully capture the systemic risks and further allows the use of some level of decision devoid of a one-size fits all approach, especially in a domestic context. The countries of the SSA jurisdiction seem to have quickly adopted the BCBS approach with additions that reflect and enhance their jurisdictional circumstances following the effective date of 15 December 2019.

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<sup>601</sup> BCBS DISB [https://www.bis.org/basel\\_framework/chapter/SCO/50.htm](https://www.bis.org/basel_framework/chapter/SCO/50.htm) Accessed 21 March 2020

In the South African context, the Prudential Authority designates banks as D-SIBs for supervisory purposes in line with the BCBS principles. This is an internal process that allows for higher loss absorbing measures and intensified supervision.<sup>602</sup> On the other hand, the Systemically Important Financial Institutions (SIFIs) backed by the Financial Sector Regulation Act 9 of 2017 (FSR Act) is a public process that does not necessarily equate to the D-SIB with a wider potential regulatory and supervisory measures such as imposing of additional requirements to mitigate systemic risks.<sup>603</sup>

The SARB indicators and weightings shows size – 40 percent, interconnectedness, and substitutability – 40 percent, global activity – 10 percent, complexity – 10 percent. These are like that of Nigeria’s CBN that shows size – 30 percent, substitutability – 30 percent, interconnectedness – 15 percent, and complexity – 25 percent. These differences in the assigned weightings and choice of indicators can be attributed to the peculiarities of South Africa and Nigeria domestic conditions respectively as suggested by the BCBS.

The CBN carries out re-assessment of D-SIBs under its jurisdiction every six months with the objective of complying with the Supervision requirements of the BCBS and ensuring transparent assessment of the basis for DSIBs regulation. Additionally, provision of high-quality data by D-SIBs and monthly monitoring of their key performance indicators by the CBN, as well as half yearly meetings with board and management shall be carried out for the purposes of enhanced supervision and supervisory concerns, respectively.<sup>604</sup>

Recently, during the 2018 review period as stated in the Financial Stability Report of 2018, the CBN assigned seven banks as D-SIBs based on their supervisory framework, size, interconnectedness, substitutability, complexity and accounting for

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<sup>602</sup> South African Reserve Bank Financial Stability Department: A Methodology to Determine Which Banks Are Systematically Important Within the South African Context <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9105/Systematically%20important%20financial%20institutions%20discussion%20paper.pdf> Accessed 1 April 2020

<sup>603</sup> South African Reserve Bank Financial Stability Review 2019 <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9276/FSR%20First%20Edition%202019.pdf> Accessed 1 March 2020

<sup>604</sup> Framework for the Regulation and Supervision of Domestic Systemically Important Banks (SIBs) in Nigeria <https://www.cbn.gov.ng/out/2014/bsd/approved%20sib%20supervisory%20framework%20.pdf> Accessed 9 January 2019

65.23 percent and 66 percent of the banking sector's total deposits and loans respectively.<sup>605</sup>

On the contrary, there is no clear data or literature on D-SIBs in Kenya jurisdiction. However, the CBK developed a framework for assessing host country regulatory and supervisory framework in 2015. The framework was developed to reflect CBK as the home regulator for the eleven banks with cross border operations, and with the objective of forming supervision strategies for Kenyan banks with regional operations among others.<sup>606</sup>

## 5.7 Conclusion

Arguably, it is very difficult for supervisors to completely identify or foresee potential risks, especially as they work in a flawed global environment. This can be attested to the fact that events that led to the last global financial crisis failed to capture continually evolving liquidity risks. Evidence abounds in the article point to the fact that the banking systems of Nigeria, Kenya and South Africa are complying with the supervisory and monitoring standards of the global authority.

Although South Africa's compliance process is understandable by virtue of being a BCBS member, Nigeria and Kenya are living up to expectation with little literature available to support some of Kenya's processes. These countries have proven to conduct liquidity stress tests as outlined by the BCBS though supporting literatures are yet to emerge on how the proceeds are managed.

Furthermore, the functional payment systems within these SSA banking systems have no known documented monitoring tool that supply data to supervisors. However, BCBS provided for five metrics to cover different aspects of liquidity monitoring to include country-specifics such as determining of template and period of contractual maturity mismatch metric.

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<sup>605</sup> Central Bank of Nigeria Financial Stability Report 2018  
[https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20\(for%20Publication\).pdf](https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20(for%20Publication).pdf)  
Accessed 29 March 2020

<sup>606</sup> Central Bank of Kenya Annual Supervision Annual Report 2015  
[https://www.centralbank.go.ke/uploads/399346751\\_2015%20Annual%20Report.pdf](https://www.centralbank.go.ke/uploads/399346751_2015%20Annual%20Report.pdf) Accessed 25 July 2019

Also, the Sound Principles and Core Principles as specified by the BCBS are provided for by the SSA banking systems with defined procedures of applying them. Therefore, the designation of systemic important banks especially by CBN and SARB reflects the importance accorded to liquidity supervision and monitoring, and the ability to quickly align with global best practices.

The next chapter creates an explicit understanding of the objective and management of liquidity in the countries of Nigeria, Kenya, and South Africa. It compares how the banks in these countries seek and make profit while staying within the ambit of existing liquidity regulations.

## Chapter Six

### Experiences of the Banking Systems of Nigeria, Kenya, and South Africa in Maintaining Liquidity (HQLA)-Profitability Balance

#### 6.1 Introduction

The impact of the liquidity requirement buffer (HQLA) certainly attracts different responses from different jurisdictions with regards to their respective economic situations. Although these responses may not be new, most jurisdictions especially emerging economies such as the SSA region aim to sustain a stable balance between liquidity generation and its maintenance within existing liquidity standards.

These liquidity standards that seem to be running parallel to the HQLA buffer requirements may have shaped the process by which SSA banks remained liquid and resilient, especially in the last global financial crisis. More recently, banks in the SSA region have been proven to accumulate large amounts of liquid assets as insurance against liquidity risks with a consequence of low returns on credit.<sup>607</sup>

This assertion is supported with the empirical evidence as stated by Bordeleau and Graham that banks' profits diminish at a certain point because of holding much more liquid assets.<sup>608</sup> Additionally, a view of the research carried out by Okaro and Nwakoby showed that excess liquidity is a financial disease that can easily erode the profit base of a bank as it affects a bank's attempt to attain a higher profitability level.<sup>609</sup>

On the contrary, some authors such as Beck and Cull countered these assertions by proving that average profits of banks in the SSA region over the last decade were significantly higher than that of other regions of the world such as Asia-Pacific, Latin America, Central, and Eastern Europe.<sup>610</sup> What is unknown is whether these significant or less profits from the emerging economies of this region are because of banks holding onto more liquid assets in accordance with existing liquidity regulations.

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<sup>607</sup> P. V. Nketcha Nana and Lucie Samson, 'Why Are Banks in Africa Hoarding Reserves? An Empirical Investigation of the Precautionary Motive', (2014) 4(1) *Review of Development Finance*, 29-37

<sup>608</sup> E. Bordeleau and C. Graham, 'The Impact of Liquidity on Bank Profitability' (2010) Bank of Canada Working Paper, 2010

<sup>609</sup> Celestine Sunday Okaro and Clement Ndukaife Nwakoby, 'Effect of Liquidity Management on Performance of Deposit Money Banks in Nigeria (2000-2015)' (2016) 10(3) *Journal of Policy and Development Studies*. 156.

<sup>610</sup> T. Beck and R. Cull, 'Banking in Africa', World Bank Policy Research, Working Paper, 6684

Therefore, it is significantly important to understand the application of LCR-HQLA factor in relation to maintaining liquidity in banks. This is because banks are expected to be highly liquid, profitable, and able to withstand shocks, especially with the introduction of LCR-HQLA requirements to strengthen liquidity mostly during times of financial stress. The experiences of Nigeria, Kenya and South Africa are considered in the representation of the SSA region.

The chapter applies the principles and objectives of liquidity management in comparing the regulatory factors that account for the liquidity-profitability balance (if any) in the banking systems of Nigeria, Kenya, and South Africa. To this end, different sources of liquidity revenue, available HQLAs and liquidity regulatory management are considered in determining a possible balance with profitability in accordance with the introduced LCR-HQLA liquidity framework.

## **6.2 Basel III LCR-HQLA Factor**

Basel III focuses on increasing the quality and quantity of both capital and liquidity of banks by introducing minimum capital requirements and liquidity buffers. One of its principal functions is to enhance the resilience of financial institutions through creation of global standards for liquidity.<sup>611</sup> The objective is to enhance short-term liquidity resilience in the banking sector through maintaining adequate HQLA.

A quick reminder of HQLAs as defined by the BCBS are assets that can easily and immediately be changed into cash at little or no loss, especially during a period of stress. The risk of non-compliance in maintaining adequate HQLA increases with the question of interpreting what is eligible as a liquid asset that is principle-based and differs across jurisdictions.

In terms of jurisdiction and in relation to Nigeria, Kenya and South Africa, liquid asset is defined under section 15(6) (a-h) of Banks and Other Financial Institutions Act 1991 Laws of the Federation of Nigeria (As Amended)<sup>612</sup>; section 19(2) of the Banking Act

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<sup>611</sup> Mark Carney, 'Countercyclical Capital Buffers and Basel III in Regulatory Reforms and Remaining Challenges' (2011) Occasional Paper No. 81 Published by Group of Thirty, Washington DC [www.group30.org/images/uploads/publications/G30](http://www.group30.org/images/uploads/publications/G30) Accessed on 2 May 2018

<sup>612</sup> Central Bank of Nigeria, 'Banks and Other Financial Institutions Act 1991 as Amended' <https://www.cbn.gov.ng/OUT/PUBLICATIONS/BS/1991/BOFIA/PDF> Accessed on 29th December 2018

of Kenya<sup>613</sup> and section 1(a-j) Banks Act, 1990 of South Africa as amended,<sup>614</sup> respectively. The definition of such eligible liquid assets is heavily weighted towards government securities and other liabilities such as cash deposits in a central bank.<sup>615</sup>

Although the SSA banking systems may not have enough liquid assets that qualify as HQLAs, a viewpoint of the liquidity theory shows that banks tend to hold liquid assets to overcome stress periods and take advantage of valuable projects as they emerge.<sup>616</sup> Furthermore, documented reports show improved liquidity over the years and in compliance to regulations as reflected in the liquidity ratios of the SSA banking systems.

The Liquidity Ratio (LR) is cash balances held against other liabilities for emergencies and is still very much in use in Nigeria and Kenya, though slightly different from South Africa that uses the LCR as specified by the BCBS. LR is like LCR in that they both measure a bank's capacity to fund its short-term monetary commitments and differ slightly with the LCR's inclusion of HQLAs within a 30-day timeframe.

The introduction of LCR by BIS with a minimum requirement of 60 percent by 1<sup>st</sup> January 2015 has seen only South Africa complying amongst the three SSA countries under study.<sup>617</sup> SARB adoption of LCR by 1<sup>st</sup> January 2015 reflected in the substantial increase of South Africa's banking sector's holdings of HQLA.<sup>618</sup> This is because it is argued that compliance with liquidity regulations in jurisdictions with excess reserves (Level 1 HQLA) is less expensive and the relatively high dividends from these reserves compared to other market rates, provide banks with an incentive to hold them.<sup>619</sup>

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<sup>613</sup> Central Bank of Kenya, 'Laws of Kenya: The Banking Act Chapter 488' <https://www.centralbank.go.ke/wp-content/uploads/2016/08/BankingActOct2015.pdf> Accessed on 20th December 2018.

<sup>614</sup>South African Reserve Bank, 'The Banks Act 1990 As Amended' <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/2591/Banks+Amendment+Act+2007> Accessed on 29<sup>th</sup> December 2018.

<sup>615</sup> William Allen, 'Liquidity Regulation and its Consequences' (2010) 21(2) Central Banking, London. 33

<sup>616</sup> Aneta Hryckiewicz and Lukasz Kozlowski, 'Do Powerful Banks Use Their Power in Liquidity Management? The Trade-Off Between Bank Power and Liquidity Buffer' (2017) <https://www.researchgate.net/publication/> Accessed on 20<sup>th</sup> January 2019.

<sup>617</sup> BCBS LCR Disclosure Standards <https://www.bis.org/publ/bcbs272.pdf> Accessed on 27 October 2018

<sup>618</sup> South African Reserve Bank, Financial Stability Review 2018 <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8420/FSR%20First%20Edition%202018.pdf> Accessed 24 October 2018

<sup>619</sup> BIS 'Regulatory Change and Monetary Policy' (2015) CGFS Papers No 54 <https://www.bis.org/publ/cgfs54.pdf> Accessed on 20 December 2018

As a result of being LCR-HQLA compliant, South Africa recorded a 12 percent increase between February 2017 and January 2018 in the level of HQLAs that reflected in the upward movement of their LCR to 120.3 percent within the same period.<sup>620</sup> This is one of the dividends of implementing LCR-HQLA standards by SARB in 2015 as they have raised their LCR to a level much higher than statutorily required by January 2019 (100 percent).

On the other hand, LR that is applicable in Nigeria increased to 51.70 percent for the banking industry by December 2018 and this reflects an upward movement from 45.62 percent as of December 2017 because of banks' preference for holding liquid assets as against lending.<sup>621</sup> The increased ratio is well above the 30 percent retained by the CBN.<sup>622</sup>

Similarly, the LR in Kenya stood at 48.6 percent by December 2018 compared to 43.7 percent as of December 2017 as contained in the supervision annual report of 2018.<sup>623</sup> Furthermore, the report attributed the increase that is well above the statutory requirement of 20 percent to higher growth in total liquid assets compared to the growth in total short-term liabilities. Also, in the year 2017, seven banking institutions in Kenya were found to be in violation of the minimum LR<sup>624</sup> compared to four banks in Nigeria<sup>625</sup> with applicable measures applied to the respective erring banks.

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<sup>620</sup>South Africa Reserve Bank Financial Stability Report 2018 <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8420/FSR%20First%20Edition%202018.pdf> Accessed 11<sup>th</sup> June 2019.

<sup>621</sup> Central Bank of Nigeria Financial Stability Report 2018 [https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20\(for%20Publication\).pdf](https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20(for%20Publication).pdf) Accessed 29 March 2020

<sup>622</sup> CBN Monetary Policy Decisions <https://www.cbn.gov.ng/MonetaryPolicy/decisions.asp> Accessed 18 January 2020

<sup>623</sup> Central Bank of Kenya Bank Supervision Annual Report 2018 [https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports/1174296311\\_2018%20Annual%20Report.pdf](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports/1174296311_2018%20Annual%20Report.pdf) Accessed 29 March 2020

<sup>624</sup> CBK, 'Bank Supervision Annual Report 2017' [www.centralbank.go.ke/uploads/banking-sector\\_annual\\_reports/849246690\\_2017%20Annual%20Report.pdf](http://www.centralbank.go.ke/uploads/banking-sector_annual_reports/849246690_2017%20Annual%20Report.pdf) Accessed 20<sup>th</sup> November 2018.

<sup>625</sup> CBN, 'Annual Report 2017' [www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT\\_WEB.pdf](http://www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT_WEB.pdf) accessed 10<sup>th</sup> October 2018.



### **6.3 Availability of the Stock of HQLAs in the Banking Systems of Nigeria, Kenya, and South Africa**

The BCBS through Basel III provided a set of criteria to assess liquid assets that can be eligible to form part of HQLAs. These criteria include asset types, credit rating of the asset, issuer type and maximum price changes of the asset over a 30-day stress period.<sup>626</sup> Unfortunately, the SSA region that is classified as an emerging market has few assets that qualify as HQLAs under the Basel III criteria.

The available HQLA stock includes cash, central bank reserves, and certain securities backed by sovereigns. Coincidentally, they all form part of Level 1 HQLAs and are also viable liquid assets of high quality in use by the region. Reference as to these available stock meeting the criteria and qualifying as Level 1 HQLAs can be seen in chapter 2.10

#### **6.3.1 Cash**

The importance of cash holdings in bank portfolios gained so much significance during the last global financial crisis. Cash holdings in the USA shot up dramatically by the beginning of September 2008 and its subsequent rapid build-up highlights the importance of having sufficient liquidity in banks.<sup>627</sup> Usually, banks are to hold too little cash during booms and much more during busts.

However, there is a twist as banks in the SSA region still hold excess cash as a precautionary motive to mitigate the risk of liquidity shortage and not for meeting the HQLA requirement.<sup>628</sup> According to Ezike and Mo, a bank's liquidity strength can be measured through its ability to periodically meet up with cash demands of their customers.<sup>629</sup> Furthermore, Acharya et al. hold the view that banks can hold cash for

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<sup>626</sup> Giovanni Petrella and Andrea Resti, 'What Drives the Liquidity of Sovereign Bonds When Markets are Under Stress? An Assessment of the New Basel 3 Rules on Bank Liquid Assets' (2017) 33 *Journal of Financial Stability*.297

<sup>627</sup> Viral V. Acharya, Hyun Song Shin and Tanju Yorulmazer, 'Crisis Resolution and Bank Liquidity' (2011) 24(6) *The Review of Financial Studies*. 2166.

<sup>628</sup> P. V. Nketcha Nana and Lucie Samson, 'Why are Banks in Africa Hoarding Reserves? An Empirical Investigation of the Precautionary Motive' (2014) 4 *Review of Development Finance*. 29.

<sup>629</sup> John Emeka Ezike and Oke Mo, 'Capital Adequacy Standards, Basel Accord and Bank Performance: The Nigerian Experience (A Case Study of Selected Banks in Nigeria) (2013) 3(2) *Asian Economic and Financial Review*. 146

various reasons such as a form of precautionary motive for insurance against their depositors' uncertain liquidity needs.<sup>630</sup>

These cash holdings in bank portfolios include vault cash, cash balances held with the central bank, cash balances held with offices and branches outside the country, and deposits with other banks. Cash is one of the available stocks of HQLA in the SSA region and the most liquid of current assets. Its liquidity generating capacity always remains intact even in a period of market stress.

Therefore, managing cash properly is essential for banks to remain solvent. This implies that holding too little cash can affect banks' ability to meet their short-term needs while holding much more can lead to a loss in business investment and profitability. Also, cash has no concentration limit based on the Basel III rules. An example is when a commercial bank holds 100 percent of its assets in currency; it reduces to zero the risk of becoming illiquid at some point because any adventurous investment involves some degree of liquidity risk.<sup>631</sup>

Additionally, the underdeveloped and unreliable payment system in many African countries made it possible for cash to be largely used as a medium of exchange such that banks are frequently faced with demands for cash withdrawals.<sup>632</sup> Reliably, this narration is changing at a fast pace in recent times. The payment system is a channel through which liquidity and credit are transferred from one person to another in the banking sector.<sup>633</sup>

Basically, a well-designed and managed payment system helps to maintain financial stability in a country through commercial banks as financial intermediaries. This is seen in the Nigerian payment system that has witnessed several reforms with the introduction of various initiatives to facilitate the circulation of money.<sup>634</sup> However, cash remains the dominant form of payment medium in Nigeria compared to other payment

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<sup>630</sup> Viral V. Acharya, Hyun Song Shin and Tanju Yorulmazer, 'Crisis Resolution and Bank Liquidity' (2011) 24(6) *The Review of Financial Studies*. 2166.

<sup>631</sup> William Allen, 'Liquidity Regulation and its Consequences' (2010) 21(2) *Central Banking*, London. 33

<sup>632</sup> P. V. Nketcha Nana and Lucie Samson, 'Why are Banks in Africa Hoarding Reserves? An Empirical Investigation of the Precautionary Motive' (2014) 4 *Review of Development Finance*. 29.

<sup>633</sup> Central Bank of Nigeria, 'Understanding Monetary policy Series No6: The Nigeria Payment System' (2011) <https://www.cbn.gov.ng/out/2016/mpd/understanding%20monetary%20policy%20series> Accessed 20<sup>th</sup> October 2018.

<sup>634</sup> Central Bank of Nigeria, 'Payment System' <https://www.cbn.gov.ng/Paymentsystem/> Accessed 20<sup>th</sup> September 2018.

channels such as Automated Teller Machines (ATM), Point of Sale (POS) devices, Internet online, and Mobiles.<sup>635</sup>

Consequently, banks in Nigeria are making efforts to encourage the use of other means of payment though still faced with the big challenge of customers' preference for cash as a medium of exchange. The currency in circulation in Nigeria rose to ₦2,179.17 billion as of December 2016 because of cash dominant transactions in the economy.<sup>636</sup> Interestingly, the CBN in recent years introduced a new cash policy that affects cash-based transactions (withdrawals) with the aim of reducing the amount of physical cash in circulation and likewise, encourage electronic-based transactions.

The policy provides for a cash handling charge on daily cash withdrawals that exceed five hundred thousand naira for individuals and three million naira for corporate bodies.<sup>637</sup> Also, the policy intends to curtail some of the negative consequences in the economy such as high costs associated with the volume of cash handling and related risks that encourage robberies or financial loss through fire.

However, the impact of this policy is yet to be felt as the economy is still very much cash dependent mainly because of lack of trust in the electronic payment system and the unstable access to internet medium in the country. Contrastingly, Kenya mobile money transfer services have grown significantly under the retail payment system because of the convenience, ease of use and the secured platform it provides to customers compared to cash usage.<sup>638</sup>

In fact, the number of subscribers to mobile money services in Kenya increased to 37.4 million and the transacted value through the services grew by 8 percent by 2017.<sup>639</sup> Similarly, South African banks have a variety of payment choices ranging from cash to electronic payments. Undoubtedly, the demand for cash by bank

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<sup>635</sup> Central Bank of Nigeria, 'Payment Modes in Nigeria' <https://www.cbn.gov.ng/Paymentsystem/> Accessed 20<sup>th</sup> September 2018.

<sup>636</sup> Central Bank of Nigeria, 'Annual Report 2016' [https://www.cbn.gov.ng/Out/RSD/CBN%202016%](https://www.cbn.gov.ng/Out/RSD/CBN%202016%20Annual%20Report%202016.pdf) Accessed 27<sup>th</sup> September 2018.

<sup>637</sup> Central Bank of Nigeria 'Cash-Less Nigeria' <https://www.cbn.gov.ng/cashless/> Accessed 20<sup>th</sup> September 2018.

<sup>638</sup> Central Bank of Kenya, 'National Payment System' <https://www.centralbank.go.ke/national-payments-system/> Accessed 20<sup>th</sup> September 2018.

<sup>639</sup> Central Bank of Kenya, 'The Kenya Financial Sector Stability Report 2017' (2018)9 Financial Sector Regulators Forum [https://www.centralbank.go.ke/uploads/financial\\_sector\\_stability/](https://www.centralbank.go.ke/uploads/financial_sector_stability/) Accessed 18<sup>th</sup> October 2018.

customers is still largely unaffected despite the growing use of other payment channels.

### 6.3.2 Government Securities

Marketable securities in banks are necessary for acquiring short-term cash and also for investing excess cash for a limited period. They (Marketable securities) can be backed by a government or central bank. The government can issue securities such as treasury bills, repos, government bonds among others.<sup>640</sup>

Government securities can also, considerably generate liquidity for banks through three different channels: an outright sale on the secondary market called the cash channel, a repo with a private counterparty called the private repo channel and a refinancing operation with the central bank called the central bank channel.<sup>641</sup>

The Basel III regulations specify that the stock of HQLA is required to be well diversified except for government securities.<sup>642</sup> In fact, 100 percent of a bank's liquidity buffer can be made up of government securities since they are deemed safe by the BCBS. This is the reason for the appetite of local commercial banks with a large concentration of such government securities that are usually oversubscribed at auctions in many SSA countries.<sup>643</sup>

On this basis and for the purpose of meeting the HQLA stock, Allen argued that banks will be pressured to maintain large amounts of these government securities under the Basel III provisions that will in turn make the market to be distorted by inelastic demand from banks.<sup>644</sup> Furthermore, he stated that market liquidity for these securities will deteriorate because a substantial amount will be stored away in the banks' mandatory portfolio.

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<sup>640</sup> D. Maphiri, 'Treasury's Role in Promoting Efficient Cash Management: Evidence from South Africa' (2001) 69(3) *The South African Journal of Economics*. 385

<sup>641</sup> Giovanni Petrella and Andrea Resti, 'What Drives the Liquidity of Sovereign Bonds When Markets are Under Stress? An Assessment of the New Basel 3 Rules on Bank Liquid Assets' (2017) 33 *Journal of Financial Stability*. 297

<sup>642</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' (2013) <https://www.bis.org/publ/bcbs238.pdf> Accessed on 13 November, 2017.

<sup>643</sup> Kathrin Berensmann, Florence Dafe and Ulrich Volz, 'Developing Local Currency Bond Markets for Long-Term Development Financing in Sub-Saharan Africa' (2015) 31(3-4) *Oxford Review of Economic Policy*. 350.

<sup>644</sup> William Allen, 'Liquidity Regulation and its Consequences' (2010) 21(2) *Central Banking*, London. 33

In essence, the author is saying that a bank may have no chance to sell these securities if a government loses its creditworthiness thereby rendering them ineligible as liquid assets (loss of both market and liquidity value). The consequence of this will be very grave for such banks that rely heavily on government securities as their liquidity level can be eroded.

In Nigeria, government securities such as the Nigeria Treasury Bills (NTB) and the Federal Republic of Nigeria Development Stocks (FRNDS) are issued by the CBN on behalf of the Federal government.<sup>645</sup> Similarly, the CBK acting as agent for National Treasury issues government securities that include treasury bills and treasury bonds in Kenya.<sup>646</sup>

Government securities are regarded as highly liquid by the BCBS and as a Level 1 Asset, it is assumed that they can be traded without their market price been unduly affected at any time. This is reflected in the banking sector of Kenya that recorded an improvement in its financial strength because of increased investment in government securities by 15.3 percent as at December 2017.<sup>647</sup>

**6.3.2a Treasury Bills:** Treasury bills are short-term securities that are used by banks as collateral for short-term borrowings and can easily be converted to cash because there exist facilities in the market for enhancing the liquidity of instruments.<sup>648</sup> Also, they are usually used by banks to meet their prescribed liquid asset requirements.<sup>649</sup>

Furthermore, banks are required to hold some of their assets in treasury bills under the monetary policy measures of liquidity ratios.<sup>650</sup> Treasury bills are known to be free of default risk and are considered to be highly liquid compared to other assets. They normally have maturities of 91 days, 182 days and 364 days.

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<sup>645</sup> Central Bank of Nigeria, 'Nigeria Treasury Bill' <https://www.cbn.gov.ng/> Accessed on 30<sup>th</sup> August 2018.

<sup>646</sup> Central Bank of Kenya, 'Government Securities' <https://www.centralbank.go.ke/securities> Accessed 31<sup>st</sup> August 2018.

<sup>647</sup> Central Bank of Kenya, 'Bank Supervision Annual Report 2017' [https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports) Accessed 15<sup>th</sup> October 2018.

<sup>648</sup> Central Bank of Nigeria, 'Nigeria Treasury Bill' <https://www.cbn.gov.ng/> Accessed on 30<sup>th</sup> August 2018.

<sup>649</sup> National Treasury Republic of South Africa, 'Government Debt and Contingent Liabilities'. [www.treasury.gov.za/documents/national%20budget/](http://www.treasury.gov.za/documents/national%20budget/) Accessed on 3<sup>rd</sup> September 2018.

<sup>650</sup> Uhomoibhi Toni Aburime, 'Determinant of Bank Profitability: Macroeconomic Evidence from Nigeria' (2008) Google Scholar. <https://ssrn.com/abstract> Accessed on 29 August 2018.

According to Jenkinson, a bank holding a buffer of reliable HQLAs such as treasury bills or other government securities can draw on them immediately and directly in event of an unexpected increase in its funding requirement.<sup>651</sup> However, he stated that safe liquid assets offer lower returns than other types of assets but provide the most readily available and reliable buffer against liquidity risk.

The first Nigerian treasury bill was introduced in 1960 and the federal government uses them as issued by the CBN on their behalf to borrow money from banks to meet its budgetary needs.<sup>652</sup> Also, the CBN uses the instrument to drain excess liquidity in banks and have become the most important interest-earning asset after the 1998 Nigerian banking crisis.<sup>653</sup>

In 1999, the CBN introduced Special Treasury Bills (STB) for the purpose of draining excess liquidity generated by the abolition of the retail banking functions.<sup>654</sup> Also, in 2016, banks took up ₦2,633.04 billion representing 57.80 percent of the total NTBs issued as against 71.92 percent in the preceding year.<sup>655</sup>

Comparatively, in South Africa, the treasury bill is issued by the SARB on behalf of the National Treasury and are mostly held by commercial banks for the purpose of maintaining cash reserve requirements.<sup>656</sup> It is important to note that treasury bills held by banks in South Africa increased to 86.1 percent by March 2017.<sup>657</sup>

Similarly, treasury bills in Kenya are issued by the government through the CBK and the consistently competitive returns of these treasury bills make them attractive investments for banks in the country.<sup>658</sup> More importantly, in the third quarter of the

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<sup>651</sup> Nigel Jenkinson, 'Strengthening Regimes for Controlling Liquidity Risk: Some Lesson from the Recent Turmoil' (2008) 48(2) Bank of England Quarterly Bulletin. London. 223.

<sup>652</sup> Central Bank of Nigeria, Monetary Policy Department, 'Central Banking at a Glance' <https://www.cbn.gov.ng/Out/2017/CCD/> Accessed on 3<sup>rd</sup> September 2018.

<sup>653</sup> Robert C. Asogwa and Charles C. Ezema, 'Domestic Government Debt Structure, Risk Characteristics and Monetary Policy Conduct, Evidence from Nigeria' (2005) <https://www.researchgate.net/profile/> Accessed on 30<sup>th</sup> August 2018.

<sup>654</sup> John A. Enahoro, Olabisi Jayeola and Dafe P. Onou, 'Operational Performance of Fiscal and Monetary Policies in Nigerian Financial Institutions' (2013) 3(1) Asian Economic and Financial Review. 62

<sup>655</sup> Central Bank of Nigeria, 'Annual Report 2016' [https://www.cbn.gov.ng/Out/RSD/CBN%202016%](https://www.cbn.gov.ng/Out/RSD/CBN%202016%20Annual%20Report%202016%20.pdf) Accessed 27<sup>th</sup> September 2018.

<sup>656</sup> Ailie Heather Charteris and Barry Strydom, 'Capital Market Openness and Volatility: An Investigation of Five Sub-Saharan Treasury Bill Rates' (2016) 11(3) International Journal of Emerging Markets. 438.

<sup>657</sup> National Treasury Republic of South Africa, 'Debt Management Report 2016/2017' [www.treasury.gov.za/publications/others/Debt](http://www.treasury.gov.za/publications/others/Debt%20Management%20Report%202016%202017%20.pdf) Accessed on 3<sup>rd</sup> September 2018.

<sup>658</sup> Central Bank of Kenya, 'Treasury Bills' <https://www.centralbank.go.ke/securities/treasury-bills/> Accessed 24<sup>th</sup> October 2018.

financial year 2017/18, treasury bill holdings increased by 12.8 percent because of an increased preference for shorter-dated securities and also, there was an increase in the treasury bill market with banks accounting for 53.8 percent of the total amount of outstanding treasury bills in Kenya.<sup>659</sup>

**6.3.2b Government Bonds/ Sovereign Bonds:** Bonds are backed by law and contain the detailed amount an investor loaned to a borrower, its redemption maturity date and interest rate amount to be paid back to the investor.<sup>660</sup> They (bonds) can be issued in either local or foreign currency depending on the bond type. Government bonds are issued by a national government in its local currency while Sovereign bonds are issued in foreign currency.<sup>661</sup>

Governments of SSA started tapping into the international bond market by 2006 and have been issuing US dollar-denominated bonds in the international capital market.<sup>662</sup> Contrastingly, most of the domestic currency denominated government debt securities are predominantly held by local commercial banks and have been on the increase since 2007.<sup>663</sup>

Government bonds that form part of the HQLAs available in the SSA are not subject to any eligibility requirements as provided in Basel III. In Nigeria, the Debt Management Office (DMO) issues the Federal Government of Nigeria (FGN) Bonds on behalf of the government and the FGN is obligated to pay both the principal and interest to the bond holder when they become due.<sup>664</sup>

It is important to note that the FGN Bond with a minimum bond of two years is classified as a risk-free debt instrument (though with the possibility of default because of political

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<sup>659</sup> Central Bank of Kenya, 'Quarterly Economic Review' January - March (2018) 2(4) [https://www.centralbank.go.ke/uploads/quarterly\\_economic\\_review/](https://www.centralbank.go.ke/uploads/quarterly_economic_review/) Accessed 25<sup>th</sup> October 2018.

<sup>660</sup> Moses O. Oduh, Understanding Monetary Policy Series No 30: Central Banks and Management of Assets Price Bubbles' (2013) <https://www.cbn.gov.ng/out/2016/mpd/understanding%20monetary%20policy%20series> Accessed 17<sup>th</sup> October 2018.

<sup>661</sup> Trading Economics, South Africa Government Bonds 10Y' <https://tradingeconomics.com/south-africa/government-bond> Accessed on 30<sup>th</sup> August, 2018

<sup>662</sup> Florence Dafe, Dennis Essers and Ulrich Volz, 'Localising Sovereign Debt: The Rise of Local Currency Bond Markets in Sub-Saharan Africa' (2017) SOAS Department of Economics Working Paper No. 202, London, SOAS University of London. <https://www.africanbondmarkets.org/> Accessed 25 October 2018.

<sup>663</sup> Kathrin Berensmann, Florence Dafe and Ulrich Volz, 'Developing Local Currency Bond Markets for Long-Term Development Financing in Sub-Saharan Africa' (2015) 31(3-4) Oxford Review of Economic Policy. 350.

<sup>664</sup> Debt Management Office Nigeria, 'Bonds' <https://www.dmo.gov.ng/fgn-bonds> Accessed on 20 August 2018



instability in relation to government policies) and interests earned on them are tax exempt.<sup>665</sup> The structure of the debt instrument holdings showed that 41.5 percent were held by banks and discount houses in 2015<sup>666</sup> while 36.31 percent and 2.19 percent were held by DMBs and merchant banks respectively as at June 2017.<sup>667</sup>

Other type of bonds issued by the DMO and existing in Nigeria as at the end of December 2017 are FGN 'Sukuk' with a tenor of seven years and worth ₦100 billion, FGN Green bonds with a tenor of five years and worth ₦10.69 billion, FGN Special bond worth ₦200.54 billion and Nigerian Treasury bond (NTB) worth ₦3,579.80 billion.<sup>668</sup>

Relatively, treasury bonds in Kenya are medium to long-term investment with maturities ranging from one year to thirty years. Investors usually receive interest payment every six months throughout the life of that bond, and they receive the face value amount they invested by the end of the tenure.<sup>669</sup> Also, the government of Kenya in their 2009/10 budget reduced the withholding tax charged on interest income earned from long-term bonds from 15 percent to 10 percent to encourage the development of the bond market and promotion of long-term treasury bonds.<sup>670</sup>

Comparatively, government bonds in South Africa are issued by the asset and Liability Management Division of the National Treasury. Long-term bonds in South Africa consist of fixed-rate bonds, inflation-linked bonds, and retail savings bonds. As at 31<sup>st</sup> March 2017, 16.6 percent of the fixed-rate bonds and 19.6 percent of the inflation-linked bonds were held by the monetary authorities of South Africa.<sup>671</sup>

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<sup>665</sup> Debt Management Office Nigeria, 'Bonds' <https://www.dmo.gov.ng/fgn-bonds> Accessed on 20 August 2018

<sup>666</sup> Central Bank of Nigeria, 'Annual Report 2015' <https://www.cbn.gov.ng/Out/2017/RSD/Annual%20Report%202015> Accessed 25<sup>th</sup> September 2018.

<sup>667</sup> Alvan E. Ikoku, 'Financial Markets Department Half Year Activity Report 2017' <https://www.cbn.gov.ng/out/2018/fmd/> Accessed 3<sup>rd</sup> September 2018.

<sup>668</sup> Central Bank of Nigeria, 'Annual Activity Report 2017' <https://www.cbn.gov.ng/out/2018/fmd/annual%20annual%20activity%20report> Accessed 13 November 2018

<sup>669</sup> Central Bank of Kenya, 'Government Securities' <https://www.centralbank.go.ke/securities> Accessed 31<sup>st</sup> August 2018.

<sup>670</sup> Francis M. Mwega, 'Global Financial Crisis Discussion Series Paper17: Kenya Phase 2' (2010) Overseas Development Institute <https://assets.publishing.service.gov.uk/media/> Accessed on 20 August 2018

<sup>671</sup> National Treasury Republic of South Africa, 'Debt Management Report 2016/2017' [www.treasury.gov.za/publications/others/Debt](http://www.treasury.gov.za/publications/others/Debt) Accessed on 3 September, 2018



Although the Rand-denominated debt securities constituted the majority of the banking sector's HQLA, they potentially expose the banking sector to risks such as increasing the sector's sensitivity to changes in government's bond yields.<sup>672</sup> However, some school of thoughts believe that the South African banking sector still has appetite for these bonds despite these risks.

### 6.3.3 Central Bank Reserves

Balances held at a central bank by banks form part of Level 1 HQLA. Banks are expected to hold minimum reserve assets that are equivalent to a fraction of their liabilities and are usually in the form of balances.<sup>673</sup> According to the Basel III requirement, this reserve ensures that banks can cover their cash outflows when the need arises and can as well choose to have 100 percent of their liquidity buffer as central bank reserves.

The demand for reserves can be relatively high as banks can easily switch between reserves and other types of HQLA if the interest rate paid on the reserve balances is close to that paid on other forms of Level 1 HQLA.<sup>674</sup> Also, a bank can choose to increase its cash reserve in order to ease its liquidity risk.<sup>675</sup> These reserves are viewed as draw-able during stress periods by the SARB's banking supervision department and incorporated as Level 1 Asset under Banks Act Directives 7/2014 of South Africa.<sup>676</sup>

The justification of reserve being part of the level 1 HQLA has witnessed an increase in jurisdictions such as Kenya and Nigeria. Bank reserves in Kenya increased by 5.3 percent in the 2017/2018 financial year because of increase in retained earnings.<sup>677</sup>

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<sup>672</sup>SARB <https://www.resbank.co.za/publications/detail-item-view/pages/publications.aspx>?Accessed on 5 August 2018

<sup>673</sup> Simon Gray, 'Central Bank Balances and Reserve Requirements' (2011) IMF Working Paper <https://books.google.co.uk/> Accessed 10<sup>th</sup> September 2018.

<sup>674</sup> BIS 'Regulatory Change and Monetary Policy' (2015) CGFS Papers No 54 <https://www.bis.org/publ/cgfs54.pdf> Accessed on 20 December 2018

<sup>675</sup> William Allen, 'Liquidity Regulation and its Consequences' (2010) 21(2) Central Banking, London.33

<sup>676</sup> Basel Committee on Banking Supervision, 'Regulatory Consistency Assessment Programme (RCAP) Assessment of Basel III LCR Regulations-South Africa' (2015) <https://www.bis.org/bcbs/publ/d323.pdf> Accessed on 14th November 2018.

<sup>677</sup> Central Bank of Kenya Annual Report 2018 <https://www.centralbank.go.ke/AnnualReport/CBKAnnualReport2018.pdf> Accessed on 10 December 2019

Correspondingly, bank reserves in Nigeria grew by 4.79 percent as of December 2018.<sup>678</sup>

Generally, the SSA banks retain liquidity through mandatory reserves at their respective central banks with the rates assigned by their respective monetary policy committees at no interest rates. However, in as much as the SSA banks are encouraged to explore other forms of Level 1 HQLA in the absence of interest payments on reserves, the demand for reserves that constitute most of their HQLAs is still high within the region.

#### **6.4 Common Sources of Bank Liquidity Funding in Nigeria, Kenya, and South Africa**

One of the important functions of a bank is to create liquidity. Banks create liquidity by mismatching their long-term assets with short-term liabilities.<sup>679</sup> In other words, liquidity is created when liquid liabilities such as transaction deposits are used to finance illiquid assets such as long-term loans.<sup>680</sup> Also, liquidity, as stated by Ndukwe, can be created on the balance sheet by banks through financing their lesser liquid assets with funds from relatively liquid liabilities.<sup>681</sup>

In terms of financial crises, bank liquidity creation is more prominent as the potential gains of banks holding liquid assets will not only increase the chance of survival during a crisis but also take advantage of fire sales of resources.<sup>682</sup> However, liquidity creation is greatly affected by regulatory interventions, especially on the liability-side and off the balance sheet (though without impact on the asset-side balance sheet, and more specifically, lending).<sup>683</sup>

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<sup>678</sup> Central Bank of Nigeria Annual Report 2018 <https://www.cbn.gov.ng/Out/2019/RSD/2018%20AR%20KAMA1.pdf> Accessed January 3, 2020

<sup>679</sup> Theo Tran Vuong, Chien-Ting Lin and Hoa Nguyen, 'Liquidity Creation, Regulatory Capital and Bank Profitability' (2016) 48 *International Review of Financial Analysis*, 98

<sup>680</sup> Allen N. Berger and Christa H. S. Bouwman, 'Bank Liquidity Creation' (2009) 22(9) *The Review of Financial Studies*, 3779

<sup>681</sup> Obiageri C. Ndukwe, 'Understanding Monetary Policy Series No 34: Banking System Liquidity' (2013) Central Bank of Nigeria, <https://www.cbn.gov.ng> Accessed 13<sup>th</sup> February 2018.

<sup>682</sup> V. V. Acharya, H. S. Shin and T. Yorulmazer, 'Endogenous Choice of Bank Liquidity: The Role of Fire Sales' (2009) Working Paper No 376, Bank of England

<sup>683</sup> Allen N. Berger, Christa H. S. Bouwman, Thomas Kick, Klaus Shaeck 'Bank Liquidity Creation Following Regulatory Interventions and Capital Support', (2016) 26, *Journal of Financial Intermediation*, 115 - 141

This is one of the reasons authors such as Figuet et al. stressed that economies such as the developing markets are prone to explore alternative sources of funding such as the bond market in satisfying the new Basel III requirements with regards to cross border banking. Relatively.

Ndukwe stated that banks can increase their liquidity through funding sources such as loan portfolio, asset sale, deposit, and central bank funds amongst others that are common within the SSA region.<sup>684</sup> Undoubtedly, these funding sources have their respective risks though dependent on a bank's liquidity position.

#### **6.4.1 Loan Portfolio**

Loan portfolio often constitutes the greatest proportion of banks' assets with equivalent imminent risks to their capital.<sup>685</sup> Also, banks at the present seem to retain more of their assets in loans than in the past. This is because banks with more liquid loan portfolios are less vulnerable to shocks with regards to credit supply than those with less liquid loan portfolios.<sup>686</sup>

A loan may be repayable either on demand or at an agreed future date with interest and perhaps, capital repayments being made throughout the lifetime of the loan.<sup>687</sup> Deep and Schaefer consider all loans with a maturity of one year or less to be liquid.<sup>688</sup> On the contrary, Berger and Bouwman classified loans by category rather than maturity.<sup>689</sup>

The authors (Berger and Bouwman) believe that business loans and leases should be treated as illiquid assets regardless of their maturity because they cannot be easily disposed off by banks to meet liquidity needs without incurring major losses. However, a loan either by category or maturity is a good source of fund generation in the SSA region.

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<sup>684</sup> Obiageri C., Ndukwe 'Understanding Monetary Policy Series No 34: Banking System Liquidity' (2013) Central Bank of Nigeria, <https://www.cbn.gov.ng> Accessed 13<sup>th</sup> February 2018.

<sup>685</sup> Gifty Adjei-Mensah, Mohammed Amidu and Joshua Yindenaba Abor, 'Executive Compensation, Ownership Structure and Loan Quality of Banks in Ghana' (2015) 27(3) African Development Review, 331

<sup>686</sup> Elena Loutskina, 'The Role of Securitisation in Bank Liquidity and Funding Management' (2011) 100(3) Journal of Financial Economics, 663

<sup>687</sup> Supra.n.3

<sup>688</sup> A. Deep and G. Schaefer, 'Are Banks Liquidity Transformers?' (2004) Working Paper, Harvard University.

<sup>689</sup> Allen N. Berger and Christa H. S. Bouwman, 'Bank Liquidity Creation' (2009) 22(9) The Review of Financial Studies, 3779

According to the SARB 2010 annual report, loans and advances represented an average 74 percent of South Africa's banking sector total assets during the year 2010.<sup>690</sup> However, by December 2017, the overall growth in gross loans and advances remained slow with an annual growth of 2.5 percent because of a decline in the growth of term loans, foreign currency loans, specialised lending, and home loan advances.<sup>691</sup> Similarly, by 2017, loans and advances accounted for 50.3 percent of the total net assets and remain one of the main components of banks' liquidity in Kenya.<sup>692</sup> Comparatively, the major asset class of most commercial banks in Nigeria is the loan portfolio<sup>693</sup> and the largest constituent of income is interest on loans.<sup>694</sup>

Most of these commercial banks in Nigeria increase their liquidity by adhering to the commercial loan theory (that is short-term in maturity due to the maturity profile of the deposit liabilities portfolio).<sup>695</sup> More importantly, loans and advances decreased by 2.0 percent by the end of 2017 in Nigeria, though with a 3.22 percent increase on interest income in the same year.<sup>696</sup>

In as much as loan is a good generator of funds, it comes with its consequent risks that have brought about turbulent times for both the banking industry and depositors within the SSA region. Loans were dished out by banks while neither adhering to policies nor complying with regulations that often led to non-performing loans (NPLs).

NPL is a major threat to the business of banking and occurs when the principal or interest on a loan is due and not repaid over a prolonged period, usually ranging from

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<sup>690</sup> Ibid

<sup>691</sup> South African Reserve Bank, 'Bank Supervision Department Annual Report 2017' <https://www.resbank.co.za/Lists/News%20and%20Publications/> Accessed 15 October 2018.

<sup>692</sup> Central Bank of Kenya, 'Bank Supervision Annual Report 2017' [https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports) Accessed on 15 October 2018.

<sup>693</sup> Andrew Campbell, 'Bank Insolvency and the Problem of Non-performing Loans' (2007) 9(1) Journal of Banking Regulation. 25.

<sup>694</sup> H. I. Ahmad, 'Trend in Profitability of Banks in Nigeria Before and During Interest Rate Regulation' (2003) 13(3) Nigerian Deposit Insurance Corporation Quarterly Report. 59

<sup>695</sup> Adolphus Toby, 'Empirical Study of the Liquidity Management Practices of Nigerian Banks' (2006) 19(1) Journal of Financial Management and Analysis. 57

<sup>696</sup> Central Bank of Nigeria, '2017 Annual Activity Report' <https://www.cbn.gov.ng/Out/2018/PSMD/Banking%20and%20Payments%20System%20Department%20Annual%20Activity%20Report> Accessed 20<sup>th</sup> November 2018.

90 days or more.<sup>697</sup> Also, excessive credit creation by banks, poor loan recovery strategies and relaxed credit conditions are some of the causes of NPLs.<sup>698</sup>

A school of thought has it that the quality of a bank's loan portfolio has a direct bearing to its profitability and minimising NPL increases banks' liquidity. Also, the accumulation of such risky assets impacts on the quality of such assets.<sup>699</sup> Therefore, apex banks within the SSA jurisdiction introduced different measures over time that until recent began to yield results in curbing the excesses of NPLs.

In Kenya, banks took precautionary measures by tightening their lending standards (to reduce the number of loan approvals) and shortened their loan maturities to less than five years (to reflect their short-term funding that is dominated by demand deposit).<sup>700</sup> This measure is also echoed by Thiong'o et al. as they stated that Kenya commercial banks exercise caution in lending as their loan portfolios are grown by the reduction of lending rates that increases the amount of non-performing loans (NPL).<sup>701</sup>

Although this measure recorded improvement on net loans and advances that registered a decrease of 7.7 percent by December 2017 compared to December 2016, net NPLs increased by 15.3 percent in the same period.<sup>702</sup> The contributory factors to NPLs in Kenya as stated in Kwambai and Wandera include lending to serial loan defaulters, high-interest rates, lack of commitment by borrowers to repay the loan and lack of collateral for banks.<sup>703</sup>

These authors (Kwambai and Wandera) went further to state that the trend keeps increasing because of lack of commitment from the CBK to address these problems.

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<sup>697</sup> Aniefiok Akpan Umoren, Aloysius Chidi Nwosu and Sunday Brownson Akpan, 'Empirical Analysis of Non-Performing Loans Trend and Growth Rate in Nigerian Banking System' (2016) 5(3) International Journal of Finance and Banking Studies. 57

<sup>698</sup> Ibid

<sup>699</sup> Central Bank of Kenya, 'The Kenya Financial Sector Stability Report 2018' [https://www.centralbank.go.ke/uploads/financial\\_sector\\_stability/1928014428\\_Kenya%20Financial%20Sector%20Stability%20Report%202018.pdf](https://www.centralbank.go.ke/uploads/financial_sector_stability/1928014428_Kenya%20Financial%20Sector%20Stability%20Report%202018.pdf) Accessed 10 January 2020

<sup>700</sup> Central Bank of Kenya, 'The Kenya Financial Sector Stability Report 2017' (2018)9 Financial Sector Regulators Forum [https://www.centralbank.go.ke/uploads/financial\\_sector\\_stability/](https://www.centralbank.go.ke/uploads/financial_sector_stability/) Accessed on 18 October 2018

<sup>701</sup> P. K. Thiong'o, Dr. K. Matata & Mr. A. Simiyu, 'Effect of Loan Portfolio Growth on Financial Performance of Commercial Banks in Kenya' (2016) 2(11) Imperial Journal of Interdisciplinary Research, 2113.

<sup>702</sup> Central Bank of Kenya, 'Bank Supervision Annual Report 2017' [https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports) Accessed on 15 October 2018

<sup>703</sup> Kipyego Daniel Kwambai and Moses Wandera, 'Effect of Credit Information Sharing on Non-Performing Loans: The Case of Kenya Commercial Bank Kenya' (2013) 9(13) European Scientific Journal. 168.

Additionally, Waweru and Kalani in their study stated that customer-specific factors such as customers' failure to disclose essential information during the loan application process and bank-specific factors such as the absence of aggressive debt collection policies are the most significant factors causing NPLs in Kenya.<sup>704</sup>

According to Ugoani, one of the major issues of bank failures in Nigeria in the 1990s and beyond was the issue of NPL that in turn had a negative impact on profitability.<sup>705</sup> He stated further in his paper that it is on record that most technically distressed Nigerian banks accumulated NPLs more than shareholders' fund. In fact, eight deposit money banks were declared insolvent in 1992 mostly because of NPLs and six others failed in 2009 for the same reason.<sup>706</sup>

The increased problems of NPLs in Nigeria were because CBN's structures and processes for supervision of banks and enforcement were weak and inadequate at the time.<sup>707</sup> One of those measures aimed at tackling NPL was the mandate given to banks to 'classify their credit as either performing or non-performing'.<sup>708</sup>

Also, Asset Management Corporation of Nigeria (AMCON) was another measure introduced with a view to strengthen the balance sheet of defaulting banks and to improve their ability to extend credit to the economy.<sup>709</sup> AMCON was established in 2010 with subscriptions from the CBN and other Nigerian banks to manage toxic assets (purchase of NPL), especially in Nigeria deposit money banks (DMBs) and contrary to the Basel Committee's preferred option of liquidation using private techniques.<sup>710</sup>

In as much as AMCON's existence to clean up NPL helps reduce the risk of non-compliance of capital adequacy and liquidity requirements, it acquires rather than

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<sup>704</sup> N. Waweru and V. M. Kalani, 'Commercial Banking Crises in Kenya: Causes and Remedies Africa' (2009) 4(4) *Journal of Accounting, Economics, Finance and Banking Research*.

<sup>705</sup> John N.N. Ugoani, 'Non Performing Loans Portfolio and Its Effect on Bank Profitability in Nigeria' (2016) 7(2) *Independent Journal of Management and Production*. 303.

<sup>706</sup> Ibid

<sup>707</sup> Onyeka Osuji, 'Asset Management Companies, Non-performing Loans and Systemic Crisis: A Developing Country Perspective' (2012) 13(2) *Journal of Banking Regulation*. 170.

<sup>708</sup> Thomas Agbonkolor 'Risk Management and Regulatory Failures in Banking Reflections on the Current Banking Crisis in Nigeria', (2010) 11(2) *Journal of Banking Regulation*, 146-155

<sup>709</sup> Central Bank of Nigeria Annual Report for 31 December 2010, Abuja

<sup>710</sup> Onyeka Osuji 'Asset Management Companies, Non-performing Loans and Systemic Crisis: A Developing Country Perspective', (2012) 13(2) *Journal of Banking Regulation*, 147-170

resolve such NPL issues, especially in developing countries.<sup>711</sup> Also, the creation of AMCON with no time limit seems to push banks towards accumulating more toxic assets and issuing of NPLs with the belief that AMCON will always acquire such debts.<sup>712</sup>

Consequently, the CBN adopted a risk-based supervision involving prompt identification, evaluation and tackling of NPLs and this has led to a decline of NPL in Nigeria.<sup>713</sup> Toby highlighted in his findings on Nigerian banks that the decline in NPL from 21.1 percent (1999-2001) to 7.1 percent (2007-2009) can be attributed to regulatory interventions and industry consolidation rather than internal loan recovery.<sup>714</sup>

Correspondingly, the SARB Annual Report of 2010 stated that the high levels of NPL (known as impaired advances in South Africa) has continued to be a priority area for the banking industry as they grew slowly from January to October 2010, peaking at R138billion, and later declined to R134billion by December 2010.<sup>715</sup>

#### **6.4.2 Deposits**

A deposit is defined as the transfer of a specified legal tender (money) by one party to the other in accordance with an agreement of which whole or part will be repaid on demand upon agreed circumstances, and/or a given date.<sup>716</sup> Also, it is contractual because of the legal relationship as established between a bank and a depositor (translates to debtor and creditor relationship), and once a deposit is made, ‘...it is then the banker’s money; he is known to deal with it as his own; he makes what profit of it he can, which profit he retains for himself ...’.<sup>717</sup>

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<sup>711</sup> Andrew Campbell, ‘Bank Insolvency and the Problem of Non-Performing Loans’. In: Omar P. J. (ed) *International Solvency Law. Themes and Perspectives*. (2008) Aldershot, UK: Ashgate, 211-235

<sup>712</sup> Chinenyeze J. Amaechi, Ozioma Mary Amaechi, Adeyemo Folashade, ‘A Comparative Analysis of the Asset Management Corporation of Nigeria and the Troubled Asset Relief Program of the United States’, (2017) 22(3) *Banking & Finance Law Review*, 441-459

<sup>713</sup> Onyeka Osuji, ‘Asset Management Companies, Non-performing Loans and Systemic Crisis: A Developing Country Perspective’ (2012) 13(2) *Journal of Banking Regulation*, 147-170.

<sup>714</sup> Adolphus Toby, ‘Financial Fragility and Performance of Nigerian Banking Institutions: An Inter-temporal Analysis’ (2014) 4(6) *Journal of Applied Finance and Banking*. 137.

<sup>715</sup> South African Reserve Bank, ‘Annual Report 2010’ <https://www.resbank.co.za/Publications/Reports/Departments/Annual> Accessed on 10 October 2018

<sup>716</sup> South African Reserve Bank, ‘Prudential Authority: Bank Licensing in the Republic of South Africa’ [https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Documents/Banking%20licencing%](https://www.resbank.co.za/PrudentialAuthority/Deposit-takers/Documents/Banking%20licencing%20) Accessed 11th October 2018.

<sup>717</sup> Edward Thomas Foley v Hill [1848] II H.L.C., 27 1002 in Andrew Campbell and Dalvinder Singh ‘Legal Aspects of the Interests of Depositor Creditors: The Case of Deposit Protection Systems’ in



Relatively, banks are deposit-taking financial intermediaries that accept deposits to include all the funds held to the credit of their customers, and are either withdrawable on demand or at an agreed period.<sup>718</sup> Therefore, deposit is an important source of liquidity that constitutes unsecured funds from individuals and institutions and is considered not to be the original but an equal or equivalent amount (debt) of a specified legal tender that is made due by the banker to the depositor upon request.<sup>719</sup>

Usually, banks mobilise deposits that will have otherwise remained idle and unproductive in the surplus economic unit with the intention to return such with or without interest, on demand or at a given date.<sup>720</sup> It is worth to mention that a deposit placed with a bank by a natural person is called a retail deposit while that placed by legal entities, sole proprietorships or partnerships is regarded as a wholesale deposit.<sup>721</sup>

According to Campbell and Singh, deposit-taking by banks have been the primary focus of prudential regulation and supervision, and deposit insurance, and in the absence of this responsibility, depositors can exercise the common law right to demand their deposited money that can lead to 'bank run'.<sup>722</sup>

They (Campbell and Singh) went further to highlight the legal perception of the effect on depositors of a bank as they (depositors) are classified as unsecured creditors at the mercy of government protection or insurance system (if) provided for in law (within a jurisdiction) in the case of liquidation.

It is on this premise that Kryzandowski advocated for a country's financial system to create a balance through effective prudential regulation in safeguarding the interests of depositors and banks by applying the three functions of liquidity lending, deposit

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Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 42

<sup>718</sup> W. F. Crick, 'The Genesis of Bank Deposits' (1927) 7(20) *Economica*, 191

<sup>719</sup> Andrew Campbell and Dalvinder Singh 'Legal Aspects of the Interests of Depositor Creditors: The Case of Deposit Protection Systems' in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 41

<sup>720</sup> Heidi Mandanis Schooner and Michael W. Taylor, *Global Bank Regulation: Principles and Policies* (Academic Press, 2010) xiv

<sup>721</sup> Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' (2013) <https://www.bis.org/publ/bcbs238.pdf> Accessed on 13 November, 2017.

<sup>722</sup> Andrew Campbell and Dalvinder Singh 'Legal Aspects of the Interests of Depositor Creditors: The Case of Deposit Protection Systems' in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 41



insurance and supervision, and can reside in one or more entities.<sup>723</sup> An example is Nigeria where the three functions reside in two separate entities namely the CBN and Nigeria Deposit Insurance Corporation (NDIC).

Although deposit insurance provides a safety net (with a limit) for depositors, it comes with its own problems such as banks taking on riskier assets to increase their profits thereby decreasing the effectiveness of the financial regulation.<sup>724</sup> It is worth to note that customers' deposits in Kenya are protected by insurance because of a government policy directing all licensed financial institutions to register with the Kenya Deposit Insurance Corporation (KDIC).<sup>725</sup> This is quite similar to the NDIC of Nigeria.

Also, South Africa, unlike Nigeria and Kenya, do not have any deposit insurance scheme and their banks are classified as less stable.<sup>726</sup> This is because for effective management, LCR rules require banks to classify their deposits as either stable (backed by a deposit insurance scheme) or less stable.<sup>727</sup> The SARB is currently working on introducing deposit insurance and it is expected to reduce the risk of retail bank runs within their banking system.

In the SSA region, there is higher volatility of deposits as the respective economies are much more cash dependent and such deposits can be withdrawn on short notice.<sup>728</sup> In as much as these deposits are not usually dependable and reliable as they cannot be used for long-term planning, more of them from customers mean that banks can grant more loans or invest in instruments that will yield higher returns.<sup>729</sup>

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<sup>723</sup> Lawrence Kryzandowski 'Organisational Design and Positioning of the Deposit Insurance Function in the Financial System Safety Net' in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 92

<sup>724</sup> Jean Roy and Marc-Andre Flageole 'Financial Disintermediation, Financial Sector Regulation and Deposit Insurance' in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 148

<sup>725</sup> Kenya Deposit Insurance Corporation, 'Our Role' <https://www.depositinsurance.go.ke/index.php/about-kdic/our-role> Accessed 30th October 2018.

<sup>726</sup> Basel Committee on Banking Supervision, 'Regulatory Consistency Assessment Programme (RCAP) Assessment of Basel III LCR Regulations-South Africa' (2015) <https://www.bis.org/bcbs/publ/d323.pdf> Accessed on 14th November 2018.

<sup>727</sup> Mark Pengelly, 'Liquidity Bites' (2010) Risk South Africa, London 4. < <http://0-search.proquest.com.wam.leeds.ac.uk/docview/89061150?accountid=14664>> Accessed on 19<sup>th</sup> November 2017

<sup>728</sup> P. V. Nketcha Nana and Lucie Samson, 'Why are Banks in Africa Hoarding Reserves? An Empirical Investigation of the Precautionary Motive', (2014) 4(1) Review of Development Finance, 29-37

<sup>729</sup> D. R. Ikpefan and Ochei Ailemen, 'The Impact of Bank Capitalization in the Performance of Nigerian Banking Industry (1986-2006)' (2012)4(1) The Journal of Commerce.24

Also, these customers' deposits depend on their investment options, default risk of the bank and interest rate on offer with which the bank competes for funds in the market.<sup>730</sup> Therefore, deposit as a major source of funding liability for banks need to be effectively managed to safeguard the integrity of these banks.<sup>731</sup>

To encourage effective management of deposit by banks, especially during a period of stress, the BCBS specified a percentage of deposit liabilities that will be assumed to run off and appropriate higher run-off rates can be established by individual jurisdictions to capture depositor behaviour in a stress period.

According to Elliot, in practice, retail deposits tend to remain and not move, especially when they are included in the deposit guarantee limits (effective deposit insurance scheme) and therefore, a little run-off is assumed from them while wholesale deposits are less likely to remain and are assumed to run off in greater volume.<sup>732</sup>

Frait and Tomsik are of the view that banks can effectively manage their deposits under the Basel III rule if they are able to distinguish correctly the different types of deposit liability and probabilities of their run-off rates in their respective jurisdictions.<sup>733</sup> The authors (Frait and Tomsik) suggested that since developing economies such as the SSA banking sector rely heavily on deposit for funding, the unique characteristics of depositors can pose a problem (as deposits may disappear more rapidly than assumed).

Additionally, they (Frait and Tomsik) recommended that for effective management of deposits, banks need to put a system in place that can be able to differentiate relevant criteria in their deposit base such as distinguishing between insured deposits from uninsured funds, stable deposits from unstable deposits and differentiating operational deposits from other wholesale deposits.

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<sup>730</sup> Weining Bao and Jian Ni, 'Could Good Intentions Backfire? An Empirical Analysis of the Bank Deposit Insurance' (2017) 36(2) Marketing Science. 301.

<sup>731</sup> Fatimoh Mohammed, 'Impact of Corporate Governance on Banks Performance in Nigeria' (2012) 3(3) Journal of Emergence Trends in Economics and Management Sciences. 257.

<sup>732</sup> Douglas J. Elliott, 'Bank Liquidity Requirements: An Introduction and Overview' (2014) The Brookings Institution. [https://www.brookings.edu/wp-content/uploads/2016/06/23\\_bank\\_liquidity\\_requirement](https://www.brookings.edu/wp-content/uploads/2016/06/23_bank_liquidity_requirement) Accessed on 5 December 2018.

<sup>733</sup> Jan Frait and Vladimir Tomsik, 'Impact and Implication Challenges of the Basel Framework for Emerging Developing and small Economies'(2014) 56(4) Comparative Economic Studies. 493

It is stated in DeYoung and Rice that 57 percent of the banking industry's assets and 82 percent of the typical banking company's assets in 2003 were financed with deposits.<sup>734</sup> Also, in terms of attracting and retaining customer deposits, especially among banks in Nigeria, the quality of these deposits can depend on the financial efficiency of a bank with significant factors such as convenience, higher deposit rates, first-class customer service, widespread ATM networks, and low fee accounts.<sup>735</sup>

Some or all these factors have contributed to the continued rise in the total current liabilities of the DMBs in Nigeria since 2012 which in turn was attributed to an increase in deposit liabilities.<sup>736</sup> Also, the NDIC was established by law as the liquidator of failed banks and contributes to the financial stability through the provision of deposit guarantee, effective banking supervision, and distress resolution.<sup>737</sup>

It is important to note that the DMBs in Nigeria lobbied for political connections that were used to obtain public sector deposits (that formed the bulk of the banking sector's deposit until recent) thereby reducing the need to mobilise funds from the public.<sup>738</sup> However, the introduction of treasury single account (TSA) domiciled with the CBN in August 2015 brought about the transfer of all public sector funds from the DMBs to the CBN, and this is believed to be a liquidity concern as about 75 percent of Nigerian banks' deposits are from the public sector funds.<sup>739</sup>

According to Okerekeoti and Okoye, the adoption of TSA caused insufficiency of available cash in the banking sector and resulted in a surge of money market rates as banks were forced to source for funds to cover their poor liquidity positions.<sup>740</sup> This is

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<sup>734</sup> R. DeYoung and T. Rice, 'How Do Banks Make Money? The Fallacies of Fee Income' (2004) 28(4), Federal Reserve Bank of Chicago, Economic Perspectives, 35-51

<sup>735</sup> Obiageri C. Ndukwe, 'Understanding Monetary Policy Series No 34: Banking System Liquidity' (2013) Central Bank of Nigeria, <https://www.cbn.gov.ng> Accessed on 13 February 2018.

<sup>736</sup> Central Bank of Nigeria, 'Deposit Money Banks Monthly Activities Report for March 2012' <https://www.cbn.gov.ng/Out/2012/PUBLICATIONS/REPORTS/GOV/DMBS> Accessed on 25 October 2018.

<sup>737</sup> Ganiyu A. Ogunleye 'The Role of Deposit Insurance in Promoting Financial System Stability in Nigeria' in Andrew Campbell, John Raymond LaBrosse, David G. Mayes and Dalvinder Singh, *Deposit Insurance* (Palgrave Macmillian, 2007) 325

<sup>738</sup> Martin Brownbridge, 'Financial Distress in Local Banks in Kenya, Nigeria, Uganda and Zambia: Causes and Implications for Regulatory Policy', (1998) 16, *Development Policy Review*, 173-188

<sup>739</sup> Celestine Sunday Okaro and Clement Ndukaife Nwakoby, 'Effect of Liquidity Management on Performance of Deposit Money Banks in Nigeria (2000-2015)' (2016) 10(3) *Journal of Policy and Development Studies*. 156.

<sup>740</sup> Chinedu U. Okerekeoti and Emma I. Okoye, 'Treasury Single Account (TSA) in Nigeria: A Theoretical Perspective (2017) The 2017 International Conference on African Entrepreneurship and Innovation for

also confirmed by Onasanya as he stated that liquidity in commercial banks shrank because public accounts previously domiciled in commercial banks have since been moved to the CBN because of the adoption of TSA.<sup>741</sup>

Contrastingly, in Kenya, customers' deposits grew by 10.75 percent by December 2017 and the growth was attributed to the mobilisation of deposits through agency banking and mobile phone platforms.<sup>742</sup> Additionally, the CBK report stated that these mobilised deposits came from demand local currency deposits with the implication of limited capacity to fund long-term assets.

Comparatively, South Africa's main source of banking deposits came from corporate and retail customers.<sup>743</sup> Basically, these deposits that comprised mainly of fixed and notice deposits, current accounts, and call deposits funded the country's banking sector assets and constituted 86.4 percent of banking sector liabilities as of December 2017.<sup>744</sup>

### 6.4.3 Asset Sale

Financing is the key driver of many asset sales, and they (Asset sales) are used by banks to fund investments, recapitalise in response to regulatory concerns and address a one-time cash need.<sup>745</sup> The proceeds from asset sale can either be used to repay debts or retained by the bank. This view is called financing hypothesis of the asset sale.<sup>746</sup>

A bank can undertake asset sale to match its liquidity need when it is the cheapest source to raise funds and when such asset can be sold for a higher-than-expected price.<sup>747</sup> In other words, asset sales can provide funds for banks when an alternative

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Sustainable Development (AEISD) <https://www.researchgate.net/publication/> Accessed on 17<sup>th</sup> December 2018.

<sup>741</sup> Bisi Onasanya, 'First Bank Under Onasanya's Leadership: An Overview' (2011) The Guardian cited in Dorcas Adetula, Stephen Adegbenjo, Folashade Owolabi, Uzoma Achugamonu and Stephen Ojeka, 'Treasury Single Account Policy and Government Revenue in Nigeria', (2017) 22(s8) Journal of Internet Banking and Commerce. 1

<sup>742</sup> Central Bank of Kenya, 'Bank Supervision Annual Report 2017' [https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports) Accessed 15<sup>th</sup> October 2018.

<sup>743</sup> South African Reserve Bank, 'Annual Report 2010' <https://www.resbank.co.za/Publications/Reports/Departments/Annual> Accessed 10 October, 2018.

<sup>744</sup> South African Reserve Bank, 'Bank Supervision Department Annual Report 2017' <https://www.resbank.co.za/Lists/News%20and%20Publications/> Accessed 15<sup>th</sup> October 2018.

<sup>745</sup> Alex Edmans and William Mann, 'Financing Through Asset Sales (2018) Management Science 1.

<sup>746</sup> Ibid

<sup>747</sup> Matthew J. Clayton and Natalia Reisel, 'Value Creation from Asset Sales: New Evidence from Bond and Stock Market' (2013) 22 Journal of Corporate Finance. 1

source of financing is either unavailable or too expensive to undertake, probably because of agency costs of debt.<sup>748</sup>

However, information asymmetries can make asset sales unattractive, especially if there is limited information on the asset. Also, asset sale can arise because of surplus in a bank's asset portfolio either through merger or acquisition. Mergers and acquisitions are essential channels through which organisations achieve economies of scale or respond to regulatory shocks with potential benefits of maximising profits.<sup>749</sup>

After a merger or acquisition, a bank can have some of its assets with duplicate functions within the same proximity, thereby making them surplus. Such assets are maximised through liquidation to generate fund either as an extra or to make up for the cost of acquisition. An example is the mergers and acquisitions that took place during the 2005 banking consolidation in Nigeria. This exercise produced mega banks such with about 5 branches on the same street.

Another factor that drives asset sales in banks is the liquidation of distressed assets during banking crises. Banks tend to off-load some of their assets in a bid to restructure their balance sheets during a crisis even though such assets fall below their fundamental value because of 'fire-sale' pricing.<sup>750</sup>

Additionally, Acharya et al. stated that such banks that take advantage of fire sales do not only hold liquid assets to survive in the event of a crisis, but also, benefit through the potential gains of fire-sale acquisition.<sup>751</sup> Although SSA banks are involved in asset sales, especially after acquisitions or mergers, there are sparingly known literature on them.

#### **6.4.4 Interbank Market**

The interbank market plays a crucial role in the economy through the central bank as it provides a platform for the allocation of liquidity from banks with a surplus to banks facing liquidity deficit, and in restoring effectiveness in the event of bank run, bank

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<sup>748</sup> Larry Lang, Annette Poulsen and Rene Stulz, 'Asset Sale, Firm Performance and the Agency Costs of Managerial Discretion' (1995) 37 *Journal of Finance Economics*. 3

<sup>749</sup> Abdul Azeez and J.O. Ojenike, 'Impact of Mergers and Acquisitions on Performance of Companies in Oil and Gas Industry', (2014) 6(32), *European Journal of Business and Management*, 133-138

<sup>750</sup> Viral V. Acharya, Hyun Song Shin and Tanju Yorulmazer, 'Endogenous Choice of Bank Liquidity: The Role of Fire Sales', (2009), Bank of England Working Paper No 376

<sup>751</sup> Viral V. Acharya, Hyun Song Shin and Tanju Yorulmazer, 'Crisis Resolution and Bank Liquidity' (2011) 24(6) *The Review of Financial Studies*. 2166.

collapse or placement of a bank under statutory management.<sup>752</sup> Also, it is a financial market whereby banks borrow from or extend loans to one another for a given period with interest rates and for managing and satisfying liquidity regulations.<sup>753</sup>

According to Moore, a bank is expected to hold liquid assets to be able to meet the cash requirement of its customers.<sup>754</sup> However, if a bank does not have enough resources to satisfy its customers' demand, then it can borrow from either the inter-bank market or the central bank.<sup>755</sup> Most of the interbank loans have maturities of one week or less, with the majority of them being overnight, and the interbank rate is that rate of interest that is charged on such short-term loans (interbank loans).<sup>756</sup>

Interestingly, Toby pointed out that huge reliance on purchased liquidity such as the inter-bank money market amongst others, facilitate liquidity crisis in banks.<sup>757</sup> On the contrary, though the existence of the interbank market does not guarantee a complete solution to liquidity challenges, it serves as a liquidity co-insurance market.<sup>758</sup>

The reason is because in as much as reserves serve as a self-insurance instrument for banks, they come at an opportunity cost of income by not investing in liquid assets that are illiquid.<sup>759</sup> Also, the 'small bank – big bank' contrast as explained by Kim draws on three outcomes – big banks lend to each other at a rate close to the central bank target rate; small banks tend to pay higher rates than the stipulated central bank target

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<sup>752</sup> Jared Osoro and David Muriithi, 'The Interbank Market in Kenya: Picking the Distress Signal from the Treasury Bills Market' (2017) KBA Centre for Research on Financial Markets and Policy, Working Paper Series. [www.kba.co.ke/downloads/Working\\_paper\\_WPS%2017.pdf](http://www.kba.co.ke/downloads/Working_paper_WPS%2017.pdf) Accessed on 20<sup>th</sup> December 2018.

<sup>753</sup> CBK Interbank Rates <https://www.centralbank.go.ke/rates/interbank-rates/> Accessed on 30 September 2018

<sup>754</sup> Winston Moore, 'How Do Financial Crisis Affect Commercial Bank Liquidity? Evidence from Latin America and the Caribbean' (2009) in Samuel O. Fadare, 'Banking Sector Liquidity and Financial Crisis in Nigeria (2011) 3(5) International Journal of Economics and Finance. 3

<sup>755</sup> Winston Moore, 'How Do Financial Crisis Affect Commercial Bank Liquidity? Evidence from Latin America and the Caribbean' (2009) in Samuel O. Fadare, 'Banking Sector Liquidity and Financial Crisis in Nigeria (2011) 3(5) International Journal of Economics and Finance. 3

<sup>756</sup> CBK Interbank Rates <https://www.centralbank.go.ke/rates/interbank-rates/> Accessed on 30 September 2018

<sup>757</sup> Adolphus J. Toby, 'Empirical Study of the Liquidity Management Practices of Nigerian Banks' (2006) 19(1) Journal of Financial Management & Analysis, 57

<sup>758</sup> Castiglionesi F., Feriozzi F., Loranth G., and Pelizzon L., 'Liquidity Coinsurance and Bank Capital', (2014) 46(2-3), Journal of Money, Credit and Banking, 409-443

<sup>759</sup> Jared Osoro and David Muriithi, 'The Interbank Market in Kenya: Picking the Distress Signal from the Treasury Bills Market' (2017) KBA Centre for Research on Financial Markets and Policy, Working Paper Series. [www.kba.co.ke/downloads/Working\\_paper\\_WPS%2017.pdf](http://www.kba.co.ke/downloads/Working_paper_WPS%2017.pdf) Accessed on 20<sup>th</sup> December 2018.

rate when borrowing from big banks and charge less vice versa; and small banks only get favourable terms for larger loans when trading with big banks.<sup>760</sup>

The implication for the SSA banking systems, especially Kenya banks, is that there may be a risk of default by small banks that may be struggling to keep afloat and break-even as well. In as much as the big banks are not immune, they often have access across the banking industry as they belong to either a regional or international network.

Also, this point is buttressed by Berrospide et al. whereby benefits of banking go beyond spreading credit and boosting interbank market at the local level.<sup>761</sup> Therefore, fair play is eliminated from the market with the creation of the 'big banks club' that may end up being the determinants of the interbank rate.

The interbank rates stood at 8.46 percent as of February 2020 and published by the CBN<sup>762</sup>; 4.27 percent as of April 2020 and published by the CBK<sup>763</sup>; and 2.75 percent as of April 2020 and published by SARB,<sup>764</sup> respectively. The high rate as reflected in the CBN status is because of the tightening of the local currency through sale of treasury bills to drain liquidity.<sup>765</sup>

These sales often leave some banks short of liquidity, thereby making their sourcing for cash at the interbank bank market push up the cost of borrowing. Also, the average interbank rate in Kenya for the financial year 2017/2018 increased in the first half because of tight liquidity conditions resulting largely from government expenses during a lengthy electioneering period and decreased in the second half because of improved liquidity conditions in the interbank market.<sup>766</sup>

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<sup>760</sup> Kim K. 'A Price-Differentiation Model of the Interbank Market and its Empirical Application', (2014), Department of Economics, Massachusetts Institute of Technology

<sup>761</sup> J. M. Berrospide, L.K. Black, and W.R. Keeton, 'The Cross-Market Spill of Economic Shocks through Multimarket Banks', (2016) 48(5), Journal of Money, Credit and Banking, 409-443

<sup>762</sup> CBN Money Market Indicators <https://www.cbn.gov.ng/rates/mnymktind.asp> Accessed 30 April 2020

<sup>763</sup> CBK Interbank Rates <https://www.centralbank.go.ke/rates/interbank-rates/> Accessed 1 May 2020

<sup>764</sup> SARB Selected Historical Rates <https://www.resbank.co.za/Research/Rates/Pages/SelectedHistoricalExchangeAndInterestRates.aspx> Accessed on 1 May 2020

<sup>765</sup> Ikechukwu Kelilume, 'Effects of the Monetray Policy Rate on Interest Rates in Nigeria', (2014) 8(1), The International Journal of Business and Finance Research, 45-55

<sup>766</sup> CBK Annual Report and Financial Statements 2017/2018 [https://www.centralbank.go.ke/uploads/cbk\\_annual\\_reports/665458124\\_Annual%20Report%202917%2018%20low%20resolution.pdf](https://www.centralbank.go.ke/uploads/cbk_annual_reports/665458124_Annual%20Report%202917%2018%20low%20resolution.pdf) Accessed 7 January 2019



Therefore, such high rates of lending are attributed to the peculiarity of each jurisdiction. In the South African context, the SARB publishes several overnight rates with the objective of providing the benchmark for rates paid, enhancing the transparency and price discovery, and serves as a reliable measure for liquidity conditions in the overnight interbank market.

However, in 2007, the SARB replaced the South African Overnight Interbank Average (SAONIA) rate with an improved benchmark rate known as South African Benchmark Overnight Rate (SABOR) that has proved to be less volatile, broadly based, credible, and above all, gives a better reflection of underlying market conditions.<sup>767</sup> Therefore, in considering the impact of LCR-HQLA on the interbank market from the regulatory perspective, it can be deduced that these SSA countries embraced interbank as a preferred short-term source of funding.

#### **6.4.5 Central Bank Funds**

Central bank funds can be accessed by banks to meet their short-term obligations through the central bank windows or facilities. Banks in Nigeria access the central bank standing lending facility (SLF) at a specified interest rate that is above the monetary policy rate to meet their temporal liquidity shortage.<sup>768</sup> The SLF can be accessed at a stipulated time at the end of the business day allows banks to square up their positions overnight.<sup>769</sup>

In 2016, the average daily request for SLF inclusive of intra-day liquidity facility amounted to ₦130.47 billion in 207 days while the average daily interest income was ₦94.76 million as against ₦216.34 billion in 246 days, and ₦159.96 million respectively in 2017.<sup>770</sup> Such high demand for SLF by banks in 2017 reflected the effect of tight monetary policy conditions in Nigeria at the time.

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<sup>767</sup> SARB: South African Benchmark Overnight Rate (SABOR) <https://www.resbank.co.za/Markets/Domestic/SABOR/Pages/default.aspx> Accessed on 28 December 2018

<sup>768</sup> Central Bank of Nigeria, 'Understanding Monetary policy Series No 4: Liquidity Management in Nigeria' (2011) <https://www.cbn.gov.ng/out/2012/ccd/series%204.pdf> Accessed 24th October 2018.

<sup>769</sup> Central Bank of Nigeria, 'Monetary, Credit, Foreign Trade and Exchange Policy Guidelines for Fiscal Year 2018/2019 (Monetary Circular No 42)' <https://www.cbn.gov.ng/Out/2018/MPD/> Accessed 30<sup>th</sup> October 2018.

<sup>770</sup> Central Bank of Nigeria, 'Annual Activity Report 2017' <https://www.cbn.gov.ng/out/2018/> Accessed 29 October 2018.



Comparatively, in South Africa, the required liquidity is funded by the SARB at the main refinancing repo auctions in the event of liquidity shortage in the money market.<sup>771</sup> The SARB equally provides liquidity to commercial banks through repurchase agreements (repo) in exchange for the temporal sale of their financial assets such as government bonds, treasury bills, SARB debentures amongst others. Furthermore, commercial banks pay a repo rate on the cash they receive.

Relatively, commercial banks in Kenya can access secured loans on an overnight basis with a penal rate that is higher than the central bank rate through the CBK discount window or standing facility.<sup>772</sup> However, banks in using this facility more than twice a week are scrutinised and supervisory action taken.<sup>773</sup>

## **6.5 Regulatory Principles, Objectives and Processes of Liquidity Management in the Banking Systems of Nigeria, Kenya, and South Africa**

The liquidity problems experienced by banks during the last global financial crisis were partly attributed to imprudent liquidity management practices. Banks failed to develop proper liquidity management procedures and over-relied on volatile short-term wholesale funds such as repurchase agreements (repos) and asset-backed commercial paper to finance their activities.<sup>774</sup> Also, the fact that liquidity was cheaply and readily available made banks complacent in their liquidity management.<sup>775</sup>

Therefore, liquidity management is vital, and the need for banks to efficiently manage their liquidity stem from their maturity-transformation functions in the economy.<sup>776</sup> Liquidity management from the regulatory point of view entails the monitoring of liquidity products, counterparties, and the financial market, with attention being

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<sup>771</sup> SARB, 'South African Reserve Bank's System of Accommodation' <https://www.resbank.co.za/Lists/News%20/%20Publications/Attachments/> Accessed on 20<sup>th</sup> October 2018.

<sup>772</sup> Central Bank of Kenya, 'Monetary Policy' <https://www.centralbank.go.ke/monetary-policy> Accessed 30th October, 2018.

<sup>773</sup> Ibid

<sup>774</sup> Tafirei Mashamba and Farai Kwenda, 'A Look at Liquidity Management Practices of Banks in South Africa' (2017) 9(3) Journal of Economics and Behaviour Studies, 113

<sup>775</sup> Basel Committee on Banking Supervision, 'Basel III: A Global Regulatory Framework for more Resilient Banks and Banking System (2010)' <https://www.bis.org/pub/bcbs189pdf> Accessed on 10 November, 2017.

<sup>776</sup> Tafirei Mashamba and Farai Kwenda, 'A Look at Liquidity Management Practices of Banks in South Africa' (2017) 9(3) Journal of Economics and Behaviour Studies, 113

focused on liquidity-efficient activities while decisions are taken in accordance with levels of liquidity risk and regulatory requirements.

Additionally, liquidity management as defined by Bassey et al. is the ability of an organisation to meet demands for funds thereby ensuring that the organisation maintains sufficient liquidity to satisfy each client demands for credit and withdrawals, and to meet its expected expenses.<sup>777</sup>

Concisely, it involves the market supply or withdrawal of the amount of liquidity that is consistent with the desired level of short-term interest rates or reserve money.<sup>778</sup> Also, Wang describes liquidity management as a trade-off between liquidity and operating performance.<sup>779</sup> It is equally seen as key to the transmission and implementation of monetary policy by creating a balance between lending and holding liquid assets.<sup>780</sup>

Unfortunately, in a bid to create a balance or trade-off, banks are exposed to illiquidity risk that involves the disposing of illiquid assets in a fire sale to meet the demands of liquid liabilities.<sup>781</sup> In order to prevent this exposure to illiquidity risk, a daily assessment of liquidity conditions in the banking system with appropriate measures, are taken to prevent such undesirable market developments.<sup>782</sup>

The required liquidity buffer with respect to standard rules becomes tenable with reduced cash inflows by cutting on lending with increased repayment which in turn matches cash outflows. In other words, banks need to have an established liquidity management procedure for monitoring and managing their liquidity system which is known to be vested in the central bank of each jurisdiction.

According to Bhattacharyya and Sahoo, liquidity management by central banks deals with the framework, set of instruments and rules that a monetary authority follows in

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<sup>777</sup> Francis A. Bassey, Edu G. Tobi, Frank I. Bassey and Raymond Enang Ekwere, 'Liquidity Management and Performance of Banks in Nigeria (2000-2010)' (2016) 6(1) International Journal of Academic Research in Accounting, Finance and Management science.41

<sup>778</sup> Central Bank of Nigeria, 'Educational: Liquidity Management by CBN' <https://www.cbn.gov.ng/Out/EduSeries/Liquidity> Accessed 2nd November 2018.

<sup>779</sup> Yung-Jang Wang, 'Liquidity Management, Operating Performance, and Corporate Value: Evidence from Japan and Taiwan, (2002) 12(2) Journal of Multinational Financial Management, 159-169

<sup>780</sup> Javier Bianchi, Saki Bigio, 'Banks, Liquidity Management and Monetary Policy', (2014) National Bureau of Economic Research Working Paper 20490

<sup>781</sup> Theo Tran Vuong, Chien-Ting Lin and Hoa Nguyen, 'Liquidity Creation, Regulatory Capital and Bank Profitability' (2016) 48 International Review of Financial Analysis, 98

<sup>782</sup> Andrew O. Agbada and C. C. Osuji, 'The Efficacy of Liquidity Management and Banking Performance in Nigeria' (2013) International Review of Management and Business cited in Goggle Scholar

managing systemic liquidity, consistent with the ultimate goals of monetary policy.<sup>783</sup> Monetary policy as described by Abata et al. is a measure applied by monetary authorities to regulate money supply to achieve desired macroeconomic objectives.<sup>784</sup>

It is important to note that macroeconomic objectives are external as DMBs have no control over the variables such as inflation rate, interest rate, exchange rate, and other monetary policy tools. In the Nigerian banking sector, liquidity management has always been a critical issue. In fact, Nigerian banks have experienced inefficient liquidity management in the late 1980s and 1990s that led to so many liquidations and banks failures.<sup>785</sup>

The negative cumulative effects of those liquidity crises in Nigerian banks persisted till the re-capitalisation of banks in 2005 by the CBN.<sup>786</sup> This move was believed to be part of a remedy for liquidity problems that were inherent in the Nigerian banking sector.

The liquidity framework as contained in the CBN regulatory guidelines of 2011 stipulates that a bank shall periodically analyse its net funding requirements under alternative circumstances, create contingent liquidity planning and apply procedures that effectively identify, measure, and manage their liquidity risks.<sup>787</sup>

Although both direct and indirect techniques exist, the CBN employs the indirect instruments of liquidity management that include Open Market Operations (OMO), reserve requirements and standing facility window.<sup>788</sup> Similarly, the CBK prudential guidelines of 2013 provide for banks to measure liquidity on an on-going basis and assess alternatives to funding requirements during periods of stress.

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<sup>783</sup> Indranil Bhattacharyya and Satyananda Sahoo, 'Comparative Statistics of Central Bank Liquidity Management, Some Insights' (2011) Economic Research International cited in Goggle Scholar.

<sup>784</sup> M. A. Abata, J. S. Kehinde and S. A. Bolarinwa, 'Fiscal/Monetary Policy and Economic Growth in Nigeria: A Theoretical Exploration' (2012) 1(5) International Journal of Academic Research in Economics and Management Science, 75-88

<sup>785</sup> Sunny Obilor Ibe, 'The Impact of Liquidity Management on the Profitability of Banks in Nigeria' (2013) 1(1) Journal of Finance and Bank Management, 37

<sup>786</sup> Andrew O. Agbada and C. C. Osuji, 'The Efficacy of Liquidity Management and Banking Performance in Nigeria' (2013) 2(1) International Review of Management and Business. 223.

<sup>787</sup> CBN Regulatory and Supervisory Guidelines for Development Finance Institutions in Nigeria 2015 <https://www.cbn.gov.ng/out/2015/ofisd/regulatory%20and%20supervisory%20guidelines%20for%20development%20finance%20institutions%20in%20nigeria.pdf> Accessed 14 December 2018

<sup>788</sup> J. B. Adesina, M. B. Nwidobie, N. A. Amadi, 'Monetary Policy and Finance Performance of Nigerian Deposit Money Banks' (2018) 8(7) Asian Economic and Financial Review, 853-869

Also, in addition to complying with the minimum statutory requirements that includes holding a minimum of 20 percent (currently) of all deposit liabilities, matured and short-term liabilities in liquid assets, banks shall: measure and monitor net funding requirements, create a strategy and formal contingency funding plan, conduct regular liquidity stress tests, provide appropriate measures for managing internal control, foreign currencies, structure, and information systems.<sup>789</sup>

Conversely, the SARB applies two domestic prudential liquidity standards for banks in compliance with Basel Core Principles for Effective Banking Supervision (BCP) as published in 2015 by the IMF.<sup>790</sup> These regulations that are cash reserve requirement and liquid asset requirement entail banks to report their LCR and liquid asset positions daily.

Also, the SARB prudential requirements as contained in the Banks Act 1990 (As amended 2007) provides that banks shall comply with minimum share capital and unimpaired reserve funds, minimum liquid asset requirements and reporting with details in the event of non-compliance.<sup>791</sup>

### **6.5.1 Regulatory Objectives of Central Bank Monetary Policy Operations Management in Nigeria, Kenya, and South Africa**

According to the CBN, there are indications that monetary policy and macro-prudential regulations can work harmoniously in the same direction rather than the opposite. This is as Garcia and Pedro pointed out the possibility of a compromise outside of their (monetary policy and macro-prudential) complimentary relationship.<sup>792</sup>

Also, banks' balance sheet effect may be badly affected by higher interest rates (monetary tightening) in a measure to control inflation. This is because of the inability of banks to simultaneously pass increased cost to assets unlike when it affects

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<sup>789</sup> Central Bank of Kenya Prudential Guidelines 2013 <https://www.centralbank.go.ke/wp-content/uploads/2016/08/PRUDENTIAL-GUIDELINES.pdf> Accessed on 15 December 2018

<sup>790</sup> International Monetary Fund, 'South Africa Financial Sector Assessment Program: Basel Core Principles for Effective Banking Supervision', (2015) Detailed Assessment of Compliance

<sup>791</sup> South African Reserve Bank: The Banks Act, 1990 [https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/2591/Banks+Amendment+Act+2007\[1\].pdf](https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/2591/Banks+Amendment+Act+2007[1].pdf) Accessed on 17 December 2018

<sup>792</sup> CBN: Issues and Challenges for the Design and Implementation of Macro-prudential Policy in Nigeria [www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf](http://www.cbn.gov.ng/out/2014/rsd/cbn%20occasional%20paper%20no.%2046%20design%20and%20implementation.pdf) Accessed 15 June 2019

liabilities. Therefore, access to increased capital flow in this situation may lead to over-borrowing, increased interest rate mismatch and increased credit risk, among others.

The macro-prudential assessment of the above-mentioned variables considers the strengths and weaknesses of the SSA banking systems using qualitative information on new liquidity regulatory frameworks by evaluating compliance of liquidity regulations such as liquidity stress tests.<sup>793</sup> Information on compliance and outcome of liquidity stress tests on the SSA banking systems are outlined in chapter 4.2.

Furthermore, experiential results have shown that in the case of a booming economy and a potential risk of build-up of financial imbalances, macro-prudential guidelines will successfully strengthen liquidity squeeze in complement to monetary policy, thereby supporting both (macro-prudential and monetary policy) objectives at the same time.<sup>794</sup> This view point is upheld by Krug as he stated that macro-prudential regulation has the ability to weaken the build-up of imbalances in the banking system by restricting unsustainable lending.<sup>795</sup>

One of the major objectives of the monetary policy operations is to transmit the Monetary Policy Committee (MPC) rates to changes in short-term interest rates that translate to either a reduction or increase in the market interest rates with the end target of encouraging economic growth.<sup>796</sup> The product in the event of a decrease will be a reverse of the intended effect because banks will be more cautious in lending, especially to perceived risky borrowers which may attract negative consequences for borrowers, lenders and the economy as a whole.

Considerably, the corridor system of monetary policy operating framework as widely adopted across jurisdictions is characterised by a deposit facility and a lending facility, and relies on the ability of banks' and other market participants to redistribute reserves

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<sup>793</sup> Financial Soundness Indicators: Compilation Guide Appendixes; 2006 <https://www.imf.org/external/pubs/ft/fsi/guide/2006/pdf/appendix.pdf> Accessed on 28 December 2019

<sup>794</sup> Valentina Bruno, Ilhyok Shim, Hyun Song Shin, 'Comparative Assessments of Macroprudential Policies', (2017) 28 Journal of Financial Stability, 183-202 <https://www.sciencedirect.com/science/article/pii/S1572308916300134> Accessed 19 January 2020

<sup>795</sup> Sebastian Krug, 'The Interaction between Monetary and Macroprudential Policy: Should Central Banks 'Lean against the Wind' to Foster Macro-Financial Stability' (2018) 12(7) Journal of Economics, 1-69 <https://www.econstor.eu/handle/10419/174596> Accessed on 4 January 2020

<sup>796</sup> CBK Monetary Policy <https://www.centralbank.go.ke/monetary-policy/> Accessed on 16 October 2018

in the system, especially in response to unanticipated distress.<sup>797</sup> Additionally, the corresponding interest rates influence the exchange between lending and holding liquid assets and by extension, the transmission of monetary policy.<sup>798</sup>

Monetary policy rate is believed to be the foundation of all monetary operations and targets central bank reserves which are the most liquid asset. Monetary policy rates as referred differently in most jurisdictions stood at: 13.50 percent as of February 2020 for Nigeria and known as Monetary Policy Rate (MPR);<sup>799</sup> 7.00 percent as of April 2020 for Kenya and known as Central Bank Rate (CBK);<sup>800</sup> and 4.25 percent as of April 2020 for South Africa and known as Repurchase Rate (REPO),<sup>801</sup> respectively.

Correspondingly, average prime lending rates (average annual interest rates charged on new credits by commercial bank to credit-worthy borrowers) stood at: 17.0 percent as at December 2018 which is a reduction from 17.52 percent as at December 2017 for Nigeria and reflects the high cost of capital and the cost of doing business, as well as high inflation;<sup>802</sup> 12.24 percent as of December 2018 which is down from 12.51 percent as of December 2017 for Kenya and attributed to existing liquidity conditions and a law that put a cap on interest rates; and 7.75 percent as of April 2020 which is a reduction from 10.25 percent as at April 2019 for South Africa.<sup>803</sup>

The significance is that high lending rates such as that of the CBK (despite their preference for investment in treasury bills as opposed to issuing loans<sup>804</sup>) can lead to default of borrowers because of difficulty in repaying at a high rate. This factor of lending at high interest rates to certain high-risk borrowers with the aim of making

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<sup>797</sup> BIS 'Regulatory Change and Monetary Policy' (2015) CGFS Papers No 54 <https://www.bis.org/publ/cgfs54.pdf> Accessed on 20 December 2018

<sup>798</sup> Bianchi Javier and Saki Bigio, 'Banks, Liquidity Management and Monetary Policy', (2017) Federal Bank of Minneapolis, Staff Report 503

<sup>799</sup> CBN Money Market Indicators <https://www.cbn.gov.ng/rates/mnymktind.asp> Accessed 30 April 2020

<sup>800</sup> CBK Central Bank Rate <https://www.centralbank.go.ke/rates/central-bank-rate/> Accessed 1 May 2020

<sup>801</sup> South African Reserve Bank Selected Historical Rates <https://www.resbank.co.za/Research/Rates/Pages/SelectedHistoricalExchangeAndInterestRates.aspx> Accessed on 1 May 2020

<sup>802</sup> Central Bank of Nigeria, 'Annual Report' [https://www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT\\_WEB.pdf](https://www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT_WEB.pdf) Accessed on August 6, 2018

<sup>803</sup> The South African Reserve Banks' System of Accommodation <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/5001/Fact%20sheet%209.pdf> Accessed 3 April 2020

<sup>804</sup> Jacob Oduor, Stephen Karingi, Stephen Mwaura, 'Efficiency of Financial Market Intermediation in Kenya: A Comparative Analysis' (2011) 33(2) Journal of Policy Modelling. 226.



profits is mostly at the expense of high cost of deposit mobilisation by banks, especially in the SSA region.<sup>805</sup>

However, it is believed that lower lending rates will normally translate to higher deposit rates because highly liquid banks associated with lower interest rates are proven to be at an advantage when faced with increased demand for credits as they (banks) do not have to generate extra costs of sourcing funds.<sup>806</sup>

### **6.5.2 Regulatory Processes of Nigeria, Kenya, and South Africa Banking Systems Approach to Liquidity Control**

Central banks ensure the sustenance of the economy of a nation by managing the amount of money in circulation through procedures such as OMO, reserve requirements and interest rates.<sup>807</sup> The implication is that more money in the economy increases individual spending at the micro level and influences the GDP and interest rates at the macro level.

Open Market Operations (OMO) as stated by Rocheteau et al. is a policy instrument used by a central bank to swap currency for bonds<sup>808</sup> while reserve requirements are used to compel banks to maintain a reasonable degree of liquidity to be able to meet demands such as unforeseen large withdrawals.<sup>809</sup>

The advantages of using these indirect policy instruments (OMO and reserve requirements) include encouragement of greater competition in the banking sector, removal of political influence in the allocation of credits and better management of monetary conditions in the economy by a central bank.<sup>810</sup> Also, the liquidity level is

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<sup>805</sup> Martin Brownbridge, 'Financial Distress in Local Banks in Kenya, Nigeria, Uganda and Zambia: Causes and Implications for Regulatory Policy', (1998) 16, *Development Policy Review*, 173-188

<sup>806</sup> Maureen Were and Joseph Wambua, 'What Factors Drive Interest Rate Spread of Commercial Banks? Empirical Evidence from Kenya' (2014) 4(2) *Review of Development Finance*, 73.

<sup>807</sup> Prableen Bajpai 'Investopedia Stock Analysis: How Central Banks Control the Supply of Money' (2015) *Newstex Finance & Accounting Blogs*, Chatham: Newstex.

<sup>808</sup> G. Rocheteau, R. Wright, S. X. Xiao, 'Open Market Operations', (2018) 98, *Journal of Monetary Economics*, 114-128

<sup>809</sup> Adebayo Olagunju, David Olanrewaju Adeyanju and Samuel Oluwayinka Olabode, 'Liquidity Management and Commercial Banks' Profitability in Nigeria' (2011) 2(7/8) *Research Journal of Finance and Accounting*. 24

<sup>810</sup> SARB Monetary Policy in the Decade 1989 to 1990 <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/4939/SARB%20monetary%20policy%20in%20the%20decade%201989%20to%201999.pdf> Accessed on 20 October 2018

very important for the action of a central bank as it greatly affects the monetary policy transmission and stability conditions of banks.

This is the reason a central bank is compelled to play its role and intervene with greater flexibility during liquidity crises.<sup>811</sup> Over the years, the CBN has applied a few monetary policy frameworks in controlling liquidity ranging from exchange rate targeting to the current monetary targeting. The monetary targeting framework comprises of operating targets (Monetary Policy Rate), intermediate targets (Reserve money, exchange rate, interest rate) and ultimate objectives (inflation & price stability).<sup>812</sup>

According to the CBN website, the processes and objectives of managing liquidity in Nigeria include controls on the price of reserve money, statutory reserve requirements (CRR and LR) and cash outflow commitments.<sup>813</sup> Also, OMO is the major procedure used by the apex body to inject or curtail liquidity in the system which it considers to be consistent with the desired level of short-term interest rates or reserve money<sup>814</sup> and this is complemented by the CRR that helps to bring a balance to the liquidity cycle.<sup>815</sup>

Nigeria's method is like that of Kenya whereby the fundamental means of managing liquidity by the CBK are the OMO (which the bank is heavily reliant on) and reserve requirements (for the daily proportion of cash maintenance by the commercial banks).<sup>816</sup> The use of CRR by the CBK in relation to liquidity has been more effective in 'curtailing demand-driven inflation or stimulating aggregate demand'.<sup>817</sup>

The CBK Supervision Annual Reports of 2013 to 2017 show that the average minimum liquidity requirement for the banking industry in Kenya was maintained at a level much

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<sup>811</sup> O. De Bandit, C. Pfister, 'Monetary Policy, Banking Capital and Market Liquidity', (2004) 73, *Journal Review of Financial Economics*, 213-226

<sup>812</sup> Central Bank of Nigeria 'Monetary Policy at a Glance' <https://www.cbn.gov.ng/Out/2017/CCD/MONETARY%20POLICY%20AT%20A%20GLANCE.pdf> Accessed on October 19 2018

<sup>813</sup> Central Bank of Nigeria, 'Understanding Monetary Policy Series No 4: Liquidity Management in Nigeria' (2011) <https://www.cbn.gov.ng/out/2012/ccd/series%204.pdf> Accessed on 1<sup>st</sup> July 2018.

<sup>814</sup> Samuel O. Fadare, 'Banking Sector Liquidity and Financial Crisis in Nigeria (2011) 3(5) *International Journal of Economics and Finance*, 3

<sup>815</sup> Central Bank of Nigeria 'The Conduct of Monetary Policy' <https://www.cbn.gov.ng/monetarypolicy/conduct.asp> Accessed on 20 October 2018

<sup>816</sup> R. N. Misati and E. M. Nyamongo, 'Asset Prices and Monetary Policy in Kenya' (2012) 39(4) *Journal of Economic Studies*, 451

<sup>817</sup> Maureen Were, Nyamongo E., Kamau A. W., Sichie M. M., Wambua J., 'Assessing the Effectiveness of Monetary Policy in Kenya: Evidence from a Macroeconomic Model' (2014) 37 *Economic Modelling*, 193



higher than statutorily required (20 percent).<sup>818</sup> However, it drew criticism as to the need for maintaining such high liquidity in a country with serious credit needs.<sup>819</sup>

Correspondingly, the SARB adopted inflation targeting in the year 2000 as its monetary policy framework and uses OMO (by issuing its own debentures), reverse repos by (swapping US dollars for Rands) in curtailing Rand liquidity from the market.<sup>820</sup> Additionally, SARB uses the repo (MPC) rate (which sways the rates charged by commercial banks) to provide liquidity to South African Banks.

Although SARB uses the CRR to control the minimum amount banks are required to hold as well as the amount of money in circulation, it does not pay interest on reserve balances and there is no pressure on banks in meeting this reserve requirement.<sup>821</sup> This is because of some reasons that include occasional reduction of the reserve requirements, concession on the inclusion of vault cash as part of the minimum reserve requirements by banks, and the adoption of a single reserve ratio to simplify the CRR.<sup>822</sup>

### **6.5.3 Mandatory Reserves of Nigeria, Kenya, and South Africa Banking Systems**

Central banks took on the role of maintaining reserve balances for banks within their jurisdictions partly for prudential reasons, and for the assumed purpose of settling the clearance differences between banks. Also, central banks will primarily target a lower level of interest rates to achieve the same economic outcome within such jurisdictions where they influence the overnight rates as the new liquidity regulations increase the demand for reserve balances and other forms of HQLA.<sup>823</sup>

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<sup>818</sup> Central Bank of Kenya, 'Banking Sector Annual Report' [https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports/873911276\\_2017](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports/873911276_2017) Accessed on August 5, 2018

<sup>819</sup> A. W. Kamau, 'Efficiency in the Banking Sector: An Empirical Investigation of Commercial Banks in Kenya' (2009) A Thesis Submitted in Partial Fulfillment of the Requirements of Nairobi University for the Degree of Doctor of Philosophy. Nairobi: University of Nairobi.

<sup>820</sup> South African Reserve Bank History, Functions and Institutional Structure <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/4937/2nd%20Edition%20July%202011.pdf> Accessed on 18 October 2018

<sup>821</sup> South African Reserve Bank, 'Management of the South African Money and Banking System' [www.resbank.co.za/AboutUs/Functions](http://www.resbank.co.za/AboutUs/Functions) Accessed on 27 July, 2018.

<sup>822</sup> H. F. Nel, 'Minimum Reserve Requirements' (2000) South African Reserve Bank Article, Quarterly Bulletin, 63-72

<sup>823</sup> BIS 'Regulatory Change and Monetary Policy' (2015) CGFS Papers No 54 <https://www.bis.org/publ/cgfs54.pdf> Accessed on 20 December 2018

An example is the positive effect of the new liquidity regulatory process on SARB monetary policy framework as reflected in the changes of their overnight rate that subsequently translated into changes in other interest rates in the economy of the country.<sup>824</sup> Therefore, the reserve requirement is a source of liquidity creation (as it is a portion of deposits that cannot be loaned to customers) and also, a measure of liquidity control as an increase or decrease determines liquidity level in banks.<sup>825</sup>

More importantly, an increase or decrease in reserve requirements will impact on DMBs available cash and in turn, affect loan disbursements and interest incomes.<sup>826</sup> Reserve requirements are of two types: Cash reserve and liquidity reserve. The cash reserve requirement (CRR) is a primary requirement that involves a portion of a DMB total deposit liabilities held as a reserve by the monetary authority over a given period while the liquidity requirement (LR) is a secondary requirement that involves a portion of the liquid assets held by a DMB relative to its total liabilities.<sup>827</sup>

The advantages of these reserve balances which are a source of strength for the banking system of a nation include effective utilisation during a crisis or to attend a bank's emergency needs, facilitation of currency supply to banks, and finally, to boost the financial positions of central banks.<sup>828</sup> Controversially, other than banks being given access to loans at the discount windows of central banks, it is argued that reserve requirements should be abolished to create an even playing field for the financial system.<sup>829</sup>

The CRR in Nigeria was moved from 22.5 percent (rate since September 2015) to 27.5 percent by January 2020.<sup>830</sup> This is contrary to Kenya that has consistently

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<sup>824</sup> SARB Rates <https://www.resbank.co.za/Research/Rates/Pages/Rates-Home.aspx> Accessed on 15 September 2018

<sup>825</sup> S. Y. Kamgna and H. Ndambendia. 'Excess Liquidity and Monetary Policy Effectiveness: The Case of CEMAC Countries', (2008), Munich Personal RePEc Archive, 1-26

<sup>826</sup> F. O. Olokoyo, 'Determinants of Commercial Banks' Lending Behaviour in Nigeria' (2011) 2(2) International Journal of Financial Research, 61-72

<sup>827</sup> Stanislaus A. Ukeje, 'How Central Banks Achieve Price Stability', (2012), Understanding Monetary Policy Series No 24

<sup>828</sup> H. F. Nel, 'Minimum Reserve Requirements' (2000) South African Reserve Bank Article, Quarterly Bulletin, 63-72

<sup>829</sup> SARB Monetary Policy in the Decade 1989 to 1990 <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/4939/SARB%20monetary%20policy%20in%20the%20decade%201989%20to%201999.pdf> Accessed on 20 October 2018

<sup>830</sup> CBN Monetary Policy decisions <https://www.cbn.gov.ng/MonetaryPolicy/decisions.asp> Accessed on 3 April 2020

maintained its CRR at 5.25 percent to date<sup>831</sup> and South Africa with a stable CRR of 2.5 percent.<sup>832</sup> The high rate of the CBN can be attributed to a strategy in accelerating credit growth amongst DMBs as well as risks associated with severe uncertainties such as the unstable oil market.<sup>833</sup>

Although there is no pressure on South African banks in meeting the CRR, its LCR is way above the BCBS stipulated 100 percent target that acts as a guard against liquidity shortage.<sup>834</sup> According to the BIS, central banks will need to consider the changes in the relationship between market conditions and the resulting interest rate when deciding on monetary policy operations brought about by the new liquidity regulation since reserves are part of banks' portfolio of highly liquid assets.<sup>835</sup>

In essence, central banks can choose to adjust their operational frameworks to align with the new regulatory threshold and at a minimum, monitor factors that affect both the LCR of the banking system as well as reserve markets. However, there exist a puddle of risks that can lead to crisis should banks decide otherwise.

## **6.6 The Liquidity (HQLA) – Profitability Regulatory Balance of Nigeria, Kenya, and South Africa Banking Systems**

The effect of LCR introduction on banks' asset holdings is huge. This is because in assessing the factors that motivate a bank's choice of maintaining liquid assets, its internal (profit) and external (regulations) objectives are put into perspective. Banks are established to make profits along given guidelines, and there is need to strike a balance between the desire to make a profit and remain liquid which is two conflicting goals.

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<sup>831</sup> CBK Monetary Policy <https://www.centralbank.go.ke/monetary-policy/> Accessed 3 April 2020

<sup>832</sup> The South African Reserve Banks' System of Accommodation <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/5001/Fact%20sheet%209.pdf> Accessed 3 April 2020

<sup>833</sup> Central Bank of Nigeria, <https://www.cbn.gov.ng/Out/2018/MPD/> Accessed on August 12, 2018

<sup>834</sup> H. F. Nel, 'Minimum Reserve Requirements' (2000) South African Reserve Bank Article, Quarterly Bulletin, 63-72

<sup>835</sup> Morten Bech and Todd Keister, 'On the Liquidity Coverage Ratio and Monetary Policy Implementation' (2012) BIS Quarterly Review, 49-61 [https://www.bis.org/publ/qtrpdf/r\\_qt1212g.pdf](https://www.bis.org/publ/qtrpdf/r_qt1212g.pdf) Accessed 18 December 2018

These goals are parallel because an attempt to achieve higher profitability by a bank will erode its liquidity and perhaps its solvency position and vice versa.<sup>836</sup> Also, it is canvassed that the viability of a bank in a short-term depends on its liquidity while that of the long run and its continuity depend on profitability.<sup>837</sup>

The profitability of a bank can be defined as the measure of the difference between the bank's operating expenses and income.<sup>838</sup> It is the ability of a bank to generate revenue more than cost, and in relation to its capital base.<sup>839</sup> There exists a view that holding liquid assets lowers bank revenues since liquid assets tend to generate lower returns relative to illiquid assets.<sup>840</sup>

Also, the increased holdings on liquid assets in emerging economies have been proven to yield less profit owing to strong liquidity regulations and large buffers already in place before the introduction of LCR.<sup>841</sup> This view is supported by Fuhrer et al as they believe that banks will incur opportunity costs in holding this HQLA because of the low yield it will generate compared to using the funds to make higher profits through loans.<sup>842</sup>

Additionally, it is presumed that in practice, banks will incur cost by adjusting their balance sheets on the asset side to hold more low yielding HQLA that can reduce profit on banks' assets while holding more retail deposits and more long-term wholesale funding on the liability side which increases the cost of their liabilities.<sup>843</sup>

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<sup>836</sup> Adebayo Olagunju, David Olanrewaju Adeyanju and Samuel Oluwayinka Olabode 'Liquidity Management and Commercial Banks' Profitability in Nigeria' (2011) 2(7/8) Research Journal of Finance and Accounting, 24

<sup>837</sup> Rahmat Abdillah, Hosen Muhamad Nadratuzzaman and Muhar Syafaat, 'The Determinants Factor of Islamic Bank' Profitability and Liquidity in Indonesia' (2016) 8(2) Knowledge Horizons Economics. 140

<sup>838</sup> Idowu Akinyele Akinwumi, Joseph Micheal Essen and Raymond Adegboyega, 'Liquidity Management and Banks Performance in Nigeria' (2017) 5(6) Business Management and Economics 88

<sup>839</sup> Celestine Sunday Okaro and Clement Ndukaife Nwakoby, 'Effect of Liquidity Management on Performance of Deposit Money Banks in Nigeria (2000-2015)' (2016) 10(3) Journal of Policy and Development Studies. 156.

<sup>840</sup> Theo Tran Vuong, Chien-Ting Lin and Hoa Nguyen, 'Liquidity Creation, Regulatory Capital and Bank Profitability' (2016) 48 International Review of Financial Analysis, 98

<sup>841</sup> Taifirei Mashamba, 'The Effects of Basel III Liquidity Regulations on Banks' Profitability' (2018) 7(2), Journal of Governance and Regulation, 34-48

<sup>842</sup> Lucas Marc Fuhrer, Benjamin Muller and Luzian Steiner, 'The Liquidity Coverage Ratio and Security Prices' (2017) 75 Journal of Banking and Finance. 292

<sup>843</sup> KPMG International Cooperation, 'Liquidity: A Bigger Challenge than Capital' (2012) <https://assets.kpmg/content/dam/kpmg/pdf/2012/09/Liquidity-A-bigger-challenge-than-capital.pdf> accessed on 20<sup>th</sup> January 2019.

The increase in cost of liabilities is because banks are forced to have a longer average maturity profile on their liabilities, which comes at an increased cost (banks will pay higher average interest rates on deposits because the maturity profile of their liabilities book will be extended in form of more stable and longer maturity deposits).<sup>844</sup>

On the contrary, it has been argued that in as much as performance has less to do with high liquid assets and liquidity management, banks operating with high quality assets and low non-performing loans are more profitable than others.<sup>845</sup> Interestingly, the SSA banks' profitability drive rests on the various interest rates that determine return on assets.

In emphasising the liquidity conditions of the SSA banking systems, liquid assets to total assets (LA to TA) and liquid assets to short term liabilities (LA to STL) are used as indicators of liquidity conditions. In Nigeria, a liquidity increase as published by the CBN was attributed to banks preference for treasury bills as compared between December 2017 and December 2018: LA to TA (Dec. 2017 – 19 percent; Dec. 2018 – 22.64 percent) and LA to STL (Dec. 2017 – 27.5 percent; Dec. 2018 – 34.15 percent).<sup>846</sup>

Similarly, the data for SARB shows LA to TA (Aug. 2018 – 10.2 percent; Aug. 2019 – 11.2 percent) and LA to STL (Aug 2018 – 20.7 percent; Aug. 2019 – 23.0 percent).<sup>847</sup> Relatively, data for Kenya's CBK shows LA to TA (Jun. 2017 – 32.69 percent; Jun. 2018 – 36.83 percent).<sup>848</sup> These statistics show an increase in liquidity levels in the respective jurisdictions.

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<sup>844</sup> Shrinnesan Pather, 'The Impact of Base III on Bank Balance Sheet Structure in South Africa' (2017) University of Pretoria.  
[https://repository.up.ac.za/bitstream/handle/2263/64906/Pather\\_Impact\\_2018.pdf](https://repository.up.ac.za/bitstream/handle/2263/64906/Pather_Impact_2018.pdf) accessed on 21st January 2019.

<sup>845</sup> Vincent Okoth Onogore, Kusa Gbemchu Berhanu, 'Determinants of Financial Performance of Commercial Banks in Kenya' (2013) 3(1) International Journal of Economics and Financial Issues 237

<sup>846</sup> Central Bank of Nigeria Financial Stability Report 2018  
[https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20\(for%20Publication\).pdf](https://www.cbn.gov.ng/Out/2019/FPRD/FSR%20December%202018%20(for%20Publication).pdf)  
Accessed 29 March 2020

<sup>847</sup> South African Reserve Bank Financial Stability Review Second Edition 2019  
<https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9606/FSR%20nd%20edition%20Nov%202019.pdf> Accessed 23 April 2020

<sup>848</sup> Central Bank of Kenya, 'Annual Report'  
[https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports/873911276\\_2017](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports/873911276_2017) Accessed on August 5, 2019

Generally, it is believed by many regulators that return on assets (ROA) is the best measure of bank's profitability because it represents a better measurement of the ability of a bank to generate returns on its portfolio of assets and it gives an idea as to how efficient bank management is at using its assets to generate earnings.<sup>849</sup> The average return on assets (ROA) by December 2018 stood at: 2.03 percent for the CBN;<sup>850</sup> 2.8 percent for the CBK<sup>851</sup> and 1.26 percent for the SARB,<sup>852</sup> respectively. These figures do not really represent much of a profit.

In recent times, there seem to be a decrease in profitability in the SSA banking system, especially within the last two years. It is important to note that the capability of banks to create safeguards using retained income to absorb shocks is weakened by a reduction in profitability.<sup>853</sup> The banking sector in Kenya recorded a decrease of 9.6 percent in profitability by the end of 2017 compared to that of 2016 and this is attributed to a higher decrease in income compared to a decrease in expenses.<sup>854</sup>

This is not different from South Africa that equally recorded a decrease in profitability from 17.4 percent in February 2017 to 16 percent in January 2018 and, due to increase in operating expenses that exceeded operating income.<sup>855</sup> In the Nigeria context, banks' exposure to the oil and gas sector remains a threat to the overall profitability of the banking industry.

Banks tend to be influenced by profitability in their liquidity management with the decline in oil sales and the recent economic recession.<sup>856</sup> Also, it is stated in a recent study that Nigeria DMBs experience a major challenge in the liquidity-profitability

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<sup>849</sup> ThankGod Oyinpreye Apere, 'Return on Assets and Capital Adequacy of Banks in Nigeria' (2016) 3(12) *Advances in Social Sciences Research Journal*. 139.

<sup>850</sup> Central Bank Nigeria Financial Stability Report 2017 <https://www.cbn.gov.ng/Out/2018/FPRD/FSR%20June%202017.pdf> Accessed on 10<sup>th</sup> April 2019.

<sup>851</sup> CBK Reports and Financial Statements <https://www.centralbank.go.ke/reports/cbk-reports-and-financial-statements/> Accessed on 15 September 2019

<sup>852</sup> SARB Rates <https://www.resbank.co.za/Research/Rates/Pages/Rates-Home.aspx> Accessed on 15 September 2018

<sup>853</sup> Central Bank of Kenya, 'The Kenya Financial Sector Stability Report 2018' [https://www.centralbank.go.ke/uploads/financial\\_sector\\_stability/1928014428\\_Kenya%20Financial%20Sector%20Stability%20Report%202018.pdf](https://www.centralbank.go.ke/uploads/financial_sector_stability/1928014428_Kenya%20Financial%20Sector%20Stability%20Report%202018.pdf) Accessed 10 January 2020

<sup>854</sup> Central Bank of Kenya, 'Annual Report' [https://www.centralbank.go.ke/uploads/banking\\_sector\\_annual\\_reports/873911276\\_2017](https://www.centralbank.go.ke/uploads/banking_sector_annual_reports/873911276_2017) Accessed on August 5, 2019

<sup>855</sup> South Africa Reserve Bank, <https://www.resbank.co.za/publications/detail-item-view/pages/publications.aspx?> Accessed August 5, 2018.

<sup>856</sup> Sunny Obilor Ibe, 'The Impact of Liquidity Management on the Profitability of Banks in Nigeria' (2013) 1(1) *Journal of Finance and Bank Management*, 37





However, in as much as the LCR-HQLA component envisaged good profits for highly liquid banks, the quest for these profits may lead to unanticipated risk exposure of these banks. One of the reasons suggested in finding the best trade-off between profits and regulatory capital is that banks may opt for higher net yield of liquidity buffer built on sovereign bonds and corporate debt as against that of highly rated government debt and covered bonds.<sup>862</sup>

This reason is because bank profits are eroded whenever the return on HQLAs is lower than the cost of deposits.<sup>863</sup> This view is also supported by Banerjee and Mio in their finding that tougher liquidity regulation such as the LCR affects banks profitability primarily through the substitution towards lower yielding HQLAs and more expensive non-financial deposit funding.<sup>864</sup>

It is on this premise that banks in emerging economies such as South Africa have employed new business strategies such as switching from low yield assets that include mortgages to high yield assets that include re-pricing loans and unsecured lending to improve their profits.<sup>865</sup>

## 6.7 Conclusion

Most jurisdictions especially emerging economies such as the SSA banking systems aim to create a stable balance between liquidity generation and its maintenance within existing liquidity standards. The SSA banking systems are proven to have good fund generating mechanisms as well as liquid assets that qualify as HQLAs though limited.

The application of the LCR-HQLA factor has seen Nigeria, South Africa and Kenya conforming to the liquidity requirements well above the required minimum, though with Nigeria and Kenya using the LR standard. This signifies one of the key gains of

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<sup>862</sup> Tracey Alloway, 'Liquidity: Banks Debate Liquidity Trade-Off', (2013), Financial Times, <https://www.ft.com/content/e7b743ec-8a67-11e2-9da4-00144feabdc0> Accessed on 28 December, 2018

<sup>863</sup> Marie Hoerova, Caterina Mendicino, Kalin Nikolov, Glenn Schepens and Skander Van den Heuvel, 'Benefits and Costs of Liquidity Regulation' (2018) European Central Bank, Eurosystem Working Paper Series No 2169. <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2169.en.pdf?e9d2a8ca0fed2743d8518de1a7c109ea> Accessed 20<sup>th</sup> December 2018.

<sup>864</sup> Ryan N. Banerjee and Hitoshi Mio, 'The Impact of Liquidity Regulations on Banks' (2014) BIS Working Papers No.470. <https://www.bis.org/publ/work470.pdf> Accessed on 20th January 2019.

<sup>865</sup> Taifirei Mashamba, 'The Effects of Basel III Liquidity Regulations on Banks' Profitability' (2018) 7(2), Journal of Governance and Regulation, 34-48



standardised regulations. The compliance with the liquidity regulations such as mandatory reserve requirements and daily reporting of liquidity positions have made it increasingly difficult for these SSA banks to lend to high-risk borrowers.

This factor in addition to high interest rates certainly impacts on the liquidity-profitability balance. The figures in the literature show that banks in the three countries of Nigeria, Kenya and South Africa have well enough reserve balances though with different interest rates that reflects varying conditions rather than profitability. The consequent result is a highly liquid and resilient jurisdiction with less profit though open to exploring options for increase within regulatory indices.

Therefore, in a bid to create a good regulatory balance between liquidity and profitability drive, the SSA banking systems ought to adopt different and more proactive channels in attracting higher yield HQLAs to improve their profitability within regulatory indices. Alternatively, these liquidity conditions in place can be altered to reflect different regulatory needs that pertain to different banking jurisdictions.

The reason is to prevent banks from relying on regulatory loopholes in their quest for profits (which is the reason they are in business), thereby exposing them to unforeseen risks. The next chapter outlines the experiences of the SSA banking systems and developing economies in general towards the adoption of the Basel standards.

The next chapter considers the resilience of banks' liquidity in the face of the present Covid-19 pandemic. It highlights the challenges brought about by the pandemic and some measures introduced to alleviate. Also, it stresses on the importance of the introduced Basel III liquidity regulations.

## Chapter Seven

### Developments in Banking Liquidity During Covid-19 Pandemic

#### 7.1. Introduction

The effect of Covid-19 is beginning to take its toll globally as different countries have been forced to either partially or completely shut down their economy to contain the spread of the virus. The effect of the lockdown in most countries has led to disruptions in economic activities with extreme uncertainties ahead as to global growth that is expected to shrink drastically.

The IMF projections for 2020 shows that the global economy is expected to experience its worst recession since the 'Great Depression' as trade flows in and outside countries have been significantly disrupted by the lockdown.<sup>866</sup> According to the IMF report in April of 2020, the global economic growth was projected at minus 3.0 percent and at minus 4.9 percent later in June for the same year 2020.<sup>867</sup>

The June projection shows that the global economic growth has deteriorated further than was expected because of the negative impact of the pandemic. Furthermore, advanced economies are expected to contract by minus 8.0 percent while the developing economies are expected to shrink by minus 3.0 percent in the remaining part of the year 2020.<sup>868</sup>

The negative status and low difference in the projection makes it the first time both economies (developing and developed) are on the same side and that means they are declining together. However, data from the April 2021 report shows that the SSA countries in general shrunk by minus 1.9 percent with Nigeria and South Africa being the two biggest SSA economies having shrunk by minus 1.8 percent and minus 7.0 percent, respectively as of 2020.<sup>869</sup>

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<sup>866</sup> IMF, 'World Economic Outlook' April 2020. [www.imf.org/Publications/WEO](http://www.imf.org/Publications/WEO) Accessed 1st May 2020.

<sup>867</sup> IMF, 'World Economic Outlook' June 2020. [www.imf.org/Publications/WEO](http://www.imf.org/Publications/WEO) Accessed 1st May 2020.

<sup>868</sup> IMF, 'World Economic Outlook' June 2020. [www.imf.org/Publications/WEO](http://www.imf.org/Publications/WEO) Accessed 1st May 2020.

<sup>869</sup> IMF, 'World Economic Outlook: Managing Divergent Recoveries' April 2021 [www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021](http://www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021) Accessed 10th May 2021.

Although the IMF anticipated a stronger global economic growth for the second half of 2021 and 2022 because of the growing roll out of vaccines, general recovery seems highly uncertain.<sup>870</sup> Also, the financial market has been unstable, especially with the knock-on effect of the oil market that experienced a sharp drop in price because of low demand and shortage of storage spaces.

The oil market is expected to remain weak for a while and this development has led countries such as Nigeria with an oil dependent economy to turn to IMF, World Bank, and others for funds. Furthermore, the unfolding events with regards to the Covid-19 pandemic has seen banks retreating with tighter fists with regards to lending though with little or no sign of liquidity stress.

Perhaps, this is one of the major liquidity stress tests since the introduction of LCR-HQLA standards. The result of the Covid-19 pandemic and impact on liquidity is yet to be seen. This is because if businesses are closed and people are unemployed, banks may find it difficult to match their inflows with outflows, thereby further restricting lending with lesser profit.

## **7.2. The BCBS Response to The Covid-19 Pandemic**

The Covid-19 crisis has continued to test reforms made in the financial sector since the 2007 global financial crisis. The pandemic came with potential new hazards that cannot be ignored. In the banking sector, the crisis has affected the information systems, personnel, IT facilities, third party technological-based service providers, relationship with customers and increased business uncertainties.<sup>871</sup>

Indeed, the full impact of the pandemic on the global economy and banking industry is yet to be determined. The BCBS stated that as the pandemic continues to unfold, the vulnerabilities and risks to global banking system will continue to evolve with

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<sup>870</sup> IMF, 'World Economic Outlook: Managing Divergent Recoveries' April 2021 [www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021](http://www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021) Accessed 10th May 2021.

<sup>871</sup> BCBS, 'Consultative Document Principles for Operational Resilience' November 2020 [www.bis.org/bcbs/publ/d509.pdf](http://www.bis.org/bcbs/publ/d509.pdf) Accessed 20th December 2020.

several factors that contribute to increased risks in the banking sector and deterioration of banks' asset quality.<sup>872</sup>

Factors such as resurgence of the pandemic infection cases and containment measures, protracted recovery period and the unwinding and expiration of support measures can lead to increase in bank losses and risks to global banking system.<sup>873</sup> Consequently, these support measures/actions that were introduced by respective central banks and governments have helped to temporarily alleviate the impact of the pandemic crisis on the banking sector though the vulnerabilities of the banking system can be exacerbated when these support measures are removed.

Relatively, supervisors have been advised by the BCBS to adopt a flexible approach towards some of the Basel regulations (such as encouraging banks to use their HQLA to meet their liquidity demands during this period of stress, and using flexibility inherent in the expected credit loss accounting framework to take account of mitigating effect of the pandemic support measures in banks) that can enhance banks' ability to withstand, adapt and recover from potential hazards and in turn, reduce any severe adverse impacts that can occur in the banking system.<sup>874</sup>

The BCBS was said to have responded to the pandemic by safeguarding the financial and operational resilience of the global banking sector, ensuring the continuous lending to creditworthy households and businesses by banks, and ensuring that there is available or sufficient operational capacity in banks to address short-term financial stability priorities.<sup>875</sup> However, most banks are unwilling to lend especially to households. The inability of banks cautiousness to lend especially from developing nations such as the SSA region is attributed to lack of collaterals by clients and the difficulty in assessing their creditworthiness by the system.<sup>876</sup>

The BCBS stated that the pandemic crisis has demonstrated the benefit of having a resilient banking system supported by a prudent regulatory framework that emanated

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<sup>872</sup> BIS, 'Governors and Heads of Supervision Commit to ongoing Coordinated Approach to Mitigate Covid-19 Risks to the Global Banking System and Endorse Future Direction of Basel Committee Work' 30<sup>th</sup> November 2020 [www.bis.org/press/p201130.htm](http://www.bis.org/press/p201130.htm) Accessed 12th January 2021.

<sup>873</sup> Ibid

<sup>874</sup> Ibid

<sup>875</sup> BCBS, 'Covid-19 and Banking Supervision: where do we go from here?' [www.bis.org/speeches/sp201019.pdf](http://www.bis.org/speeches/sp201019.pdf) Accessed 19th January 2021.

<sup>876</sup> Andy W. Mullineux and Victor Murinde, 'Financial Sector Policies for Enterprise Development in Africa', (2014) 4(2), Review of Development Finance, 66-72

from the introduction of Basel III.<sup>877</sup> The global body went further to claim that implementation of the Basel III enabled banks to enter the Covid-19 pandemic with sufficient capital and liquidity. The capital and liquidity buffers introduced in the Basel III framework allowed banks to be able to withstand shocks and remain in the business of lending.

In view of the absorbance level of banks during this pandemic and their proven ability to remain resilient, the BCBS encouraged other jurisdictions that have neither implemented nor complied with Basel III standards to quickly complete the adoption with an extended period, and potential for possible selection of aspects of the requirements.

Also, the IMF and World Bank have re-emphasised the implementation of the Basel III particularly for emerging economies as they stated that higher reliance on policy responses that are not in line with standards of international best practices can have severe adverse impacts on the financial system of emerging economies. This is because of having fewer policy options through lack of implementation, and less sophisticated regulatory frameworks that can risk jeopardising their financial stability during this pandemic period.<sup>878</sup>

Consequently, the BCBS has continued to monitor the risks to banking systems brought about by the pandemic, particularly to see the extent to which the Basel regulations have achieved the intended objectives, and if there are gaps in the regulatory framework or significant unintended effects. Their aim is to use a consultation process to reflect on lessons to be learned from the impact of the pandemic in the banking sector.

However, despite alleviations regarding the situation of the pandemic, credit has become scarcer as lenders are holding back on extending credits, especially to households and businesses because of the fear that borrowers might not be able to repay back such loans.<sup>879</sup> In other words, amidst these huge uncertainties, banks still

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<sup>877</sup> BCBS, 'Research and the Basel Committee on Banking Supervision' [www.bis.org/speeches/sp201117.pdf](http://www.bis.org/speeches/sp201117.pdf) Accessed on 5<sup>th</sup> February 2021.

<sup>878</sup> IMF Blog, 'Combating COVID 19: How Should Banking Supervisors Respond?' [www.blogs.imf.org/2020/06/15/combating-covid-19-how-should-banking-supervisors-respond/](http://www.blogs.imf.org/2020/06/15/combating-covid-19-how-should-banking-supervisors-respond/) Accessed 2<sup>nd</sup> July 2020.

<sup>879</sup> IMF, 'World Economic Outlook' April 2020. [www.imf.org/en/Publications/WEO](http://www.imf.org/en/Publications/WEO) Accessed 1st May 2020.

fear that the pandemic can lead to high levels of debt becoming unmanageable for some of their borrowers that can result in losses to banks.

These losses can be a real test to bank resilience. Therefore, banks want to avoid credit risk crisis and with the increase in unemployment because of closure of businesses, banks are certain that borrowers will find it difficult to meet their loan obligations in accordance with their contractual terms.

To assist businesses in alleviating the financial impact of Covid-19 on the economy, some central banks have begun implementing regulatory and supervisory measures that provide additional liquidity to banks, support provision of lending to real economy, and facilitate banks' ability to absorb losses in an orderly manner.<sup>880</sup>

Therefore, banks on the one hand are encouraged to use their HQLA to meet liquidity demands during this period of stress, and to renegotiate loan terms for distressed borrowers without lowering loan classification, and provisioning standards while central banks on the other hand are encouraged to provide ample liquidity to banks, particularly those lending to small and medium businesses.<sup>881</sup>

Despite the negative impact of the Covid-19 on the global economy, banks have so far been able to remain resilient mainly because of a decade spent in building their capital and liquidity buffers, the regulatory reform introduced by Basel III, and the aggressive policy support introduced by respective central banks. Even with significant increase in loan losses, most banks continued to report positive earnings.<sup>882</sup>

Although it is expected that with the low interest regime during the pandemic period there will be a reduction in profitability for banks, they (banks) are expected to figure out how they will continue to protect profitability and manage cost as their revenues can be affected by these low interest rates, and reduced business activities. Also, another area of concern is the asset quality of banks.

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<sup>880</sup> BIS, 'Basel Committee Coordinate Policy and Supervisory Response to Covid 19' [www.bis.org/press/p200320.htm](http://www.bis.org/press/p200320.htm) Accessed 10th April 2020.

<sup>881</sup> IMF, 'World Economic Outlook' April 2020. [www.imf.org/Publications/WEO](http://www.imf.org/Publications/WEO) Accessed 1st May 2020.

<sup>882</sup> IMF, 'Global Financial Stability Report: Bridge to Recovery' October 2020 [www.imf.org/en/Publications/GFSR/Issues/2020/10/13/global-financial-stability-report-october-2020](http://www.imf.org/en/Publications/GFSR/Issues/2020/10/13/global-financial-stability-report-october-2020) Accessed 10<sup>th</sup> December 2020.

The reason is because asset quality of some banks can worsen in this pandemic period, particularly those banks that have significant concentration of exposures to economic sectors that were severely hit by the Covid-19 crisis. In as much as the Covid-19 pandemic was felt by industries, respective national economies, and the society in general, some sectors such as the hospitality, oil and gas, transport, retail, and manufacturing sectors were more affected.

Therefore, banks need to be mindful of the quality of their asset portfolio as they can deteriorate because of loan losses that can gradually deplete a bank's capital buffers that will in turn affect a bank's solvency. This process can lead to bank failure that can have spiral effects. However, the question that comes to mind is how prepared banks in the developing markets are such as the SSA region's ability to withstand the continued challenging economic conditions brought about by the pandemic.

### **7.3 Response to the Covid-19 Pandemic by the Banking Systems of Nigeria, Kenya, and South Africa**

Policies such as liquidity provision to banks through commercial paper purchases, special central bank lending and banks' ability to use their capital and liquidity buffers to absorb losses and sustain credit have been adopted by some central banks in the SSA to help reduce challenges brought about by the pandemic. Nigeria, Kenya, and South African banking systems have reacted to the pandemic in their respective ways to starve off crisis and keep their economies alive.

Generally, there are some positive outlooks amidst the pandemic. In 2020, there has been acquisition of banks such as Trans-national Bank in Kenya acquired by Access bank of Nigeria, Mayfair bank in Kenya acquired by CIB Bank of Egypt amongst others.<sup>883</sup> Also, the IMF has made a new growth projection of the global economy for 2021 on the back of recent vaccine approvals in the fight against the pandemic.

The global economy has been projected to grow by 6.0 percent in 2021 and 4.4 percent in 2022 with Nigeria and South Africa projected to grow by 2.5 percent and

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<sup>883</sup> CBK, 'MPC Meeting Briefing' November 2020, [www.centralbank.go.ke/uploads/mpc\\_press\\_release/206152226\\_MPC](http://www.centralbank.go.ke/uploads/mpc_press_release/206152226_MPC)  
[www.centralbank.go.ke/uploads/mpc\\_press\\_release/571726806\\_MPC%20Press%20Release-%20Meeting%20of%20November](http://www.centralbank.go.ke/uploads/mpc_press_release/571726806_MPC%20Press%20Release-%20Meeting%20of%20November) Accessed 30<sup>th</sup> December 2020

3.1 percent respectively in 2021.<sup>884</sup> Kenya is also expected to make a strong recovery in 2021 with the reopening of the economy driven by increased performance in agriculture, construction, and manufacturing sectors.<sup>885</sup>

### 7.3.1 The South African Reserve Bank Response to Covid-19 Pandemic

The SARB recently disclosed that banks in South Africa already have built in buffers on capital and liquidity elements to draw on during financial stress because of the Basel framework upon which they based their Regulation (Bank Act). The South African banking sector is said to have one trillion rand of HQLA as buffers for banks in event of short-term stress as of January 2020.<sup>886</sup>

Unfortunately, these liquidity buffers that include large portions of the HQLA have decreased in value because of negative market adjustments. An example is the downgrading of the domestic government bonds by rating agencies that in turn affected demand of such bonds negatively, thereby putting a constraint on liquidity in the financial system.<sup>887</sup>

Also, a few changes to the monetary policy operations were introduced by the SARB to inject liquidity and some of such changes were intraday overnight supplementary repurchase operations and purchase of government securities. The intraday overnight supplementary repurchase operations will increase liquidity and support the daily flow of funds in the banking system because the additional liquidity provided to clearing banks will lower the money market shortage and make it possible for banks to extend credit to clients.<sup>888</sup>

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<sup>884</sup> IMF, 'World Economic Outlook: Managing Divergent Recoveries' April 2021 [www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021](http://www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021) accessed on 10th May 2021.

<sup>885</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 27<sup>th</sup> January 2021 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/1010635752\\_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/1010635752_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf) Accessed 3<sup>rd</sup> February 2021

<sup>886</sup> SARB, 'Annual Report 2019/2020' [www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf](http://www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf) Accessed 13th January 2021.

<sup>887</sup> J. M. Shikwane, A. M. de Beer and D. H. Meyer, 'Notes on South Africa's Liquidity Measures in Response to the COVID-19 Pandemic' [www.resbank.co.za/Lists/News%20and%20Publications/Attachments/10089/04Note%20on%20South%20Africa's%20liquidity%20measures](http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/10089/04Note%20on%20South%20Africa's%20liquidity%20measures) Accessed 10<sup>th</sup> July 2020.

<sup>888</sup> J. M. Shikwane, A. M. de Beer and D. H. Meyer, 'Notes on South Africa's Liquidity Measures in Response to the COVID-19 Pandemic' [www.resbank.co.za/Lists/News%20and%20Publications/Attachments/10089/04Note%20on%20South%20Africa's%20liquidity%20measures](http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/10089/04Note%20on%20South%20Africa's%20liquidity%20measures) Accessed 10<sup>th</sup> July 2020.



It is important to note that purchase of government securities is a programme used by the SARB in the secondary bond market to increase money supply, encourage lending and promote the smooth functioning of the domestic financial market.<sup>889</sup> There is also a Covid-19 guarantee scheme that is guaranteed by the South African government though with some of the risks shared by banks to assist eligible businesses in the pandemic period.<sup>890</sup>

Furthermore, regulatory relief measures were provided such as capital relief on restructured loans that were in good standing before the Covid-19 crisis, a lower liquidity coverage ratio and capital requirement. Also, the SARB made provision to allow for banks' LCR to fall below 100 percent and banks can take additional time to rebuild their LCR. Therefore, loans restructured because of the Covid-19 will have LCR that sets out liquid assets a bank has to maintain in relation to its anticipated outflows lowered from 100 percent to 80 percent with effect from 1st April 2020.<sup>891</sup>

Although South Africa was initially reluctant to seek support from IMF, it was later confirmed that the country has requested support under the IMF Rapid Financing Instrument.<sup>892</sup> However, the amount to be released was to be discussed and decided by the IMF executive board though eligible for as much as \$4.2 billion under IMF emergency assistance to fight the Covid-19 pandemic.<sup>893</sup>

In terms of profit, the South African banking sector remained profitable in 2020 though there was a decline in the profitability ratios when compared to 2019. The average return on equity ratio deteriorated from 15.69 percent in March 2019 to 13.50 percent

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<sup>889</sup> J. M. Shikwane, A. M. de Beer and D. H. Meyer, 'Notes on South Africa's Liquidity Measures in Response to the COVID-19 Pandemic' [www.resbank.co.za/Lists/News%20and%20Publications/Attachments/10089/04Note%20on%20South%20Africa's%20liquidity%20measures](http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/10089/04Note%20on%20South%20Africa's%20liquidity%20measures) Accessed 10<sup>th</sup> July 2020.

<sup>890</sup> SARB, 'Update on COVID-19 Loan Guarantee Scheme' [www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2020/10119](http://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2020/10119) Accessed 20<sup>th</sup> December 2020.

<sup>891</sup> SARB Prudential Authority, 'Press Release on Regulatory Relief Measures and Guidance to the Banking Sector in Response to COVID 19, 06 April 2020' [www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9842/Prudential%20Authority](http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9842/Prudential%20Authority) Accessed 10<sup>th</sup> April 2020.

<sup>892</sup> IMF, 'Transcript of IMF Press Briefing of Gerry Rice of Communication Department' 7<sup>th</sup> May 2020. [www.imf.org/en/News/Articles/2020/05/07/tr050720-transcript-of-imf-press-briefing](http://www.imf.org/en/News/Articles/2020/05/07/tr050720-transcript-of-imf-press-briefing) Accessed 8<sup>th</sup> May 2020.

<sup>893</sup> Bloomberg, 'South Africa Eligible for \$4.2 Billion in Emergence IMF Fund' 21<sup>st</sup> April 2020 [www.bloomberg.com/news/articles/2020-04-21/south-africa-eligible-to-4-2-billion-with-few-strings-imf-says](http://www.bloomberg.com/news/articles/2020-04-21/south-africa-eligible-to-4-2-billion-with-few-strings-imf-says) Accessed 06 May 2020.

in March 2020 while the return on assets ratio deteriorated from 1.27 percent in March 2019 to 1.06 percent in March 2020.<sup>894</sup> The decline in profit can be attributed to weak domestic economic growth, downgrade in sovereign bond, declining income and increase in credit losses.<sup>895</sup>

### **7.3.2 The Central Bank of Nigeria Response to the Covid-19 Pandemic**

In the Nigeria context, the country relies hugely on crude oil export as its main source of foreign exchange and government revenue, and this has placed the country in a very difficult situation given the uncertainties surrounding the oil market because of the pandemic. This vulnerability to external shock has led the Nigerian economy to enter recession in 2020.

However, the CBN through its Governor announced a policy response timeline to help reboot the Nigeria economy. It divided this policy into immediate-term policy (0-3 months), short-term policy priority (0-12months) and medium-term policy priority (0-3years). Some of the immediate-term policy responses are aimed at encouraging the banking sector.

They include granting banks regulatory forbearance to restructure loan terms for businesses and households mostly affected by this pandemic such as oil and gas, and agriculture, reduction of interest rates on intervention facilities from 9.0 percent to 5.0 percent for one year and expires by 28<sup>th</sup> February 2022, the grant of additional moratorium of one year on CBN intervention facilities and strengthening the loan-deposit ratio (LDR) policy to encourage significant extra lending from banks.<sup>896</sup>

Banks in Nigeria were said to have agreed to forgo profit to support the economy during this pandemic though remained vulnerable to deteriorating credit quality

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<sup>894</sup> SARB 'Prudential Authority Annual Report 2019/2020' [www.resbank.co.za/en/home/publications/publication-detail-pages/reports/annual-reports/2020/10042](http://www.resbank.co.za/en/home/publications/publication-detail-pages/reports/annual-reports/2020/10042) Accessed 10th January 2021.

<sup>895</sup> SARB, 'Annual Report 2019/2020' [www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf](http://www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf) Accessed 13th January 2021.

<sup>896</sup> CBN, 'Turning the Covid-19 Tragedy into an Opportunity for a New Nigeria by Godwin Emefiele' 15<sup>TH</sup> April 2020 [www.cbn.gov.ng/Out/2020/CCD/EDITED-Turning%20Covid%20Tragedy%20into%20Opportunity%20for%20New%20Nigeria](http://www.cbn.gov.ng/Out/2020/CCD/EDITED-Turning%20Covid%20Tragedy%20into%20Opportunity%20for%20New%20Nigeria) Accessed 20<sup>th</sup> April 2020.

because of exposure to oil and gas that accounts for 26 percent of total loans.<sup>897</sup> Also, it is stated that in addition to an expected sharp increase in non-performing loans (NPL) during this pandemic, the CBN's imposed caps on bank fees and the pressure on net income interest will limit profitability in banks.<sup>898</sup>

Nigerian banks were said to be under pressure from their regulator with the CBN wielding the big stick by taking a total sum of ₦1.47 trillion from the accounts of about thirty commercial lenders held with the CBN as additional cash reserve because of the lenders failing to meet the regulatory goal of extending 65 percent of their deposits as credit.<sup>899</sup> Available prints also have it that the lenders are appealing the action.

Consequently, the MPC meeting held in July 2020 continued to retain the CRR at 27.5 percent and liquidity ratio at 30.0 percent.<sup>900</sup> Also, the IMF recently granted Nigeria a loan of \$3.4 billion under the Rapid Financing Instrument (that will be repaid in five years with repayment starting in the third year of the loan issue) to assist her in the fight against Covid-19 and maintain financial stability in the country.<sup>901</sup>

### **7.3.3 The Central Bank of Kenya Response to the Covid-19 Pandemic**

The Kenya economy is still strong with an estimated overall growth of 2.3 percent in 2020 because of their diversified economy (export of tea, coffee, floral plants amongst others).<sup>902</sup> Although the effect of this pandemic is still unfolding, it is assumed that the Kenyan economy will experience a significant decline after the outbreak is curbed

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<sup>897</sup> Bloomberg, 'Virus Adds to Woes of Nigerian Banks Beset by Oil's Collapse by Emele Onu' 30<sup>th</sup> April 2020 [www.bloomberg.com/news/articles/2020-04-30/virus-adds-to-woes-of-nigerian-banks-beset-by-oil-s-collapse](http://www.bloomberg.com/news/articles/2020-04-30/virus-adds-to-woes-of-nigerian-banks-beset-by-oil-s-collapse) Accessed 3rd May 2020.

<sup>898</sup> Bloomberg, 'Virus Adds to Woes of Nigerian Banks Beset by Oil's Collapse by Emele Onu' 30<sup>th</sup> April 2020 [www.bloomberg.com/news/articles/2020-04-30/virus-adds-to-woes-of-nigerian-banks-beset-by-oil-s-collapse](http://www.bloomberg.com/news/articles/2020-04-30/virus-adds-to-woes-of-nigerian-banks-beset-by-oil-s-collapse) Accessed 3rd May 2020.

<sup>899</sup> Bloomberg, 'Virus Adds to Woes of Nigerian Banks Beset by Oil's Collapse by Emele Onu' 30<sup>th</sup> April 2020 [www.bloomberg.com/news/articles/2020-04-30/virus-adds-to-woes-of-nigerian-banks-beset-by-oil-s-collapse](http://www.bloomberg.com/news/articles/2020-04-30/virus-adds-to-woes-of-nigerian-banks-beset-by-oil-s-collapse) Accessed 3rd May 2020.

<sup>900</sup> CBN, 'Central Bank of Nigeria Communique No 131 of the 274<sup>th</sup> Monetary Policy Committee Meeting Held on Monday 20<sup>th</sup> July 2020' [www.cbn.gov.ng/Out/2020/MPD/Central%20Bank%20of%20Nigeria%20Communique%20No%20131%20of%20the%20Monetary%20Policy](http://www.cbn.gov.ng/Out/2020/MPD/Central%20Bank%20of%20Nigeria%20Communique%20No%20131%20of%20the%20Monetary%20Policy) Accessed 22<sup>nd</sup> July 2020.

<sup>901</sup> IMF, 'IMF Executive Board Approves a US\$3.4 billion in Emergence Support to Nigeria to Address the COVID-19 Pandemic' 28<sup>th</sup> April 2020 [www.imf.org/en/News/Articles/2020/04/28/pr20191-nigeria-imf-executive-board--aproves-emergence-support-to-address-covid-19](http://www.imf.org/en/News/Articles/2020/04/28/pr20191-nigeria-imf-executive-board--aproves-emergence-support-to-address-covid-19) Accessed 2nd May 2020.

<sup>902</sup> CBK, 'CBK MPC Media Briefing April 30<sup>th</sup>, 2020' [www.centralbank.go.ke](http://www.centralbank.go.ke) Accessed, 1<sup>st</sup> May 2020.

because of a decline in goods export, disruption of production and supply chains, as well as job losses.<sup>903</sup>

Also, with agriculture projected to decline by 2.0 percent, liquidity risk is expected to increase in banks and credit risk is expected to escalate with an increase in NPL. Additionally, Kenya is expected to immensely benefit from oil importation because of price reduction.<sup>904</sup> This comes on the heels of claim by the CBK of having an adequate policy buffer that will help them cushion the effect of this pandemic on the economy. This is because the economy is still active and reflects in the upward increase towards the use of mobile phones in conducting bank transactions that rose from 44.4 percent before the COVID 19 pandemic to 61 percent during the pandemic.<sup>905</sup>

In response to this pandemic, the CBK monetary policy committee (MPC) in March reduced the CBR from 8.25 percent to 7.25 percent and the CRR by 1.0 percent from 5.25 percent to 4.25 percent. This move released KES35.2 billion as additional liquidity to banks in direct support of lending to target sectors/ borrowers affected by the pandemic of which KES32.6 billion has already been used.<sup>906</sup>

Additionally, the CBR was further reduced to 7.0 percent in June 2020 and likewise, the lending and deposit rates were also reduced to 11.92 percent and 7.01 percent respectively, resulting to lower cost of lending to borrowers.<sup>907</sup> Furthermore, the IMF approved the sum of \$739million to be drawn by Kenya under the Rapid Credit Facility that help provide budget financing/ liquidity support needed to fight Covid-19 and the impact of the fund is already being felt in the economy, particularly in tourism and trade.<sup>908</sup>

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<sup>903</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 23<sup>rd</sup> March 2020. [www.centralbank.go.ke/uploads/mpc\\_press\\_release/765216187\\_MPC%20Press%20Release-%20Meeting%20of%20March%2023,%202020.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/765216187_MPC%20Press%20Release-%20Meeting%20of%20March%2023,%202020.pdf) Accessed 29<sup>th</sup> April 2020.

<sup>904</sup> CBK, 'CBK MPC Media Briefing April 30<sup>th</sup>, 2020' [www.centralbank.go.ke](http://www.centralbank.go.ke) Accessed, 1<sup>st</sup> May 2020.

<sup>905</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 25<sup>th</sup> June 2020 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/571726806\\_MPC%20Press%20Release-%20Meeting%20of%20June%2025,%202020.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/571726806_MPC%20Press%20Release-%20Meeting%20of%20June%2025,%202020.pdf) Accessed 10<sup>th</sup> July 2020.

<sup>906</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 26<sup>th</sup> November 2020 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/206152226\\_MPC](http://www.centralbank.go.ke/uploads/mpc_press_release/206152226_MPC) [www.centralbank.go.ke/uploads/mpc\\_press\\_release/571726806\\_MPC%20Press%20Release-%20Meeting%20of%20November](http://www.centralbank.go.ke/uploads/mpc_press_release/571726806_MPC%20Press%20Release-%20Meeting%20of%20November) Accessed 30<sup>th</sup> December 2020

<sup>907</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 25<sup>th</sup> June 2020 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/571726806\\_MPC%20Press%20Release-%20Meeting%20of%20June%2025,%202020.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/571726806_MPC%20Press%20Release-%20Meeting%20of%20June%2025,%202020.pdf) Accessed 10<sup>th</sup> July 2020.

<sup>908</sup> IMF, 'IMF Executive Board Approves a US\$739 Million Disbursement to Kenya to Address the Impact of the COVID-19 Pandemic' May 06, 2020, [www.imf.org/en/News/Articles/2020/05/06/pr20208-kenya](http://www.imf.org/en/News/Articles/2020/05/06/pr20208-kenya)

According to the IMF, Rapid Credit Facility is a loan that provides rapid concessional financial assistance to low-income countries in urgent need with a zero-interest rate and a grace period of five and half years with a final maturity of 10 years.<sup>909</sup> In terms of profitability, banks in Kenya reported a reduction as of September 2020 because of the pandemic and a reduction in the return on asset and return on equity.<sup>910</sup>

#### **7.4 Restructuring of Non-Performing Loans During the Covid-19 Era by the Banking Systems of Nigeria, Kenya, and South Africa**

Bank funding is one of the major sources of finance for both government and businesses as it assists in stabilising the financial and economic health of the society. Also, since lending is at the core of banking business, the risk of loan losses can be detriment to banks' profitability, liquidity, and capital. This is because having reduced cash inflows from loan repayments and high level of NPLs can impair a bank's balance sheet and depress its credit growth.<sup>911</sup>

More importantly, the rise in NPLs in banks is considered as a major source of bank failure and must be avoided. Also, high level of NPLs can increase the uncertainty with regards to the capital position that will in turn limit a bank's ability to access finance. Therefore, it is important to look at issues surrounding NPLs as it is anticipated that there will be an increase in the number of loans that cannot be repaid back by borrowers, especially within the Covid-19 pandemic era.

The reason is because of some factors such as the decline in income and unemployment. The rise in unemployment during the pandemic period has created a growing tension in banks as they are torn between supporting their customers and

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[imf-executive-board-approves-us-million-disbursement-adress-impact-covid-19-pandemic](#) Accessed 7th May 2020.

<sup>909</sup> IMF, 'IMF Rapid Credit Facility' 9<sup>th</sup> April 2020. [www.imf.org/About/Factsheets/Sheets/2016/08/02/21/08/Rapid-Credit-Facility](http://www.imf.org/About/Factsheets/Sheets/2016/08/02/21/08/Rapid-Credit-Facility) Accessed 22nd April 2020.

<sup>910</sup> CBK, 'MPC Meeting Briefing' November 2020, [www.centralbank.go.ke/uploads/mpc\\_press\\_release/206152226\\_MPC](http://www.centralbank.go.ke/uploads/mpc_press_release/206152226_MPC) [www.centralbank.go.ke/uploads/mpc\\_press\\_release/571726806\\_MPC%20Press%20Release-%20Meeting%20of%20November](http://www.centralbank.go.ke/uploads/mpc_press_release/571726806_MPC%20Press%20Release-%20Meeting%20of%20November) Accessed 30<sup>th</sup> December 2020

<sup>911</sup> Anil Ari, Sophia Chen and Lev Ratnovski, 'Covid-19 and Non-performing loans: Lessons from Past Crises' May 27 2020 [www.ecb.europa.eu/pub/economic\\_research/rebull/2020/html/ecb.rb200527-3fe177d27d.en.html](http://www.ecb.europa.eu/pub/economic_research/rebull/2020/html/ecb.rb200527-3fe177d27d.en.html) Accessed 30<sup>th</sup> December, 2020.

protecting their capital because of increased concern about the rise in NPLs that can result in the depletion of their capital base.

To avoid such high level of NPLs, respective central banks have come up with different measures to support banks within their jurisdictions in absorbing losses related to the pandemic that can help prevent a surge or future build-up of NPLs in the long run. Also, it is expected that any support from government to the banking sector such as taking on bad debt through acquiring of banking assets at minimum prices and encouraging lending through government-backed guarantees will ensure continued funding of economic activities.<sup>912</sup>

Also, it has been suggested that early identification of debtor distress and promptly engaging proactively with their debtors in a timely manner to appropriately restructure loans when needed will help banks avert potential NPLs in the future.<sup>913</sup> Additionally, measures that involve payment deferrals (such as mortgage holiday and credit card holiday that were offered to borrowers by some banks) can assist borrowers that are facing temporary liquidity problem by giving them more time to pay off their loans and in turn reduce NPLs.

In Kenya, the CBK stated that banks are highly liquid though not lending because of the fear of increasing their NPLs as borrowers can default in repaying back such loans.<sup>914</sup> In February 2020, Kenya recorded an increase in NPLs in the manufacturing, energy, and personal/household sectors while in May of the same year, the ratio of gross NPLs to gross loans decreased to 13.0 percent with repayments and recoveries made in the trade, manufacturing, and real estate sectors.<sup>915</sup>

Although banks in Kenya are still being prudent in managing their loans and arranging their asset positions to make provisions for any potential losses that can arise from their loans, the ratio of gross NPLs to gross loans increased to 14.1 percent as of

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<sup>912</sup> Ibid

<sup>913</sup> European Commission, 'Communication from the Commission to the European Parliament , the Council and the European Central Bank : Tackling non-performing loans in the aftermath of the COVID-19 pandemic' [www.ec.europa.eu/finance/docs/law/201216-communication-non-performing-loans\\_en.pdf](http://www.ec.europa.eu/finance/docs/law/201216-communication-non-performing-loans_en.pdf) Accessed 10th January 2021.

<sup>914</sup> CBK, 'CBK MPC Media Briefing June 26<sup>th</sup>, 2020' [www.centralbank.go.ke](http://www.centralbank.go.ke) Accessed, 10<sup>th</sup> July 2020.

<sup>915</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 23<sup>rd</sup> March 2020. [www.centralbank.go.ke/uploads/mpc\\_press\\_release/765216187\\_MPC%20Press%20Release-%20Meeting%20of%20March%2023,%202020.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/765216187_MPC%20Press%20Release-%20Meeting%20of%20March%2023,%202020.pdf) Accessed 29<sup>th</sup> April 2020.



December 2020.<sup>916</sup> Furthermore, the Basel Committee encouraged banks to work constructively and prudently with their borrowers with issued guidance on how to treat restructured loans.<sup>917</sup>

To protect their balance sheets, banks in Kenya have continued to adhere to this guidance by having that restructuring loan discussion with their borrowers to arrive at solutions that will be beneficial to both the borrower and the bank. In fact, 46.5 percent of the total banking sector loan book of KES 2.97 trillion that cut across all kinds of borrowers has been restructured by banks during the pandemic period of November 2020.<sup>918</sup>

One of the benefits of the pandemic crisis is that it helped banks in Kenya to closely understand their customers' business models through having a one-on-one loan restructuring discussion rather than a pre-pandemic generic idea.<sup>919</sup> This understanding helped banks to assist each customer in the best way possible. By December 2020, the highest beneficiary of loan restructuring was the personal and household sector that restructured loans amounting to KES 333.0 billion by having their repayment period extended.<sup>920</sup>

In Nigeria, the CBN in March 2020 granted all Deposit Money Banks leave to consider temporary and time-limited restructuring of their loan terms for businesses and households that are most affected by the pandemic, particularly oil and gas, agriculture, and manufacturing sectors. In June 2020, seventeen banks requested

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<sup>916</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 27<sup>th</sup> January 2021 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/1010635752\\_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/1010635752_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf) Accessed 3<sup>rd</sup> February 2021.

<sup>917</sup> IMF, 'Global Financial Stability Report: Bridge to Recovery' October 2020 [www.imf.org/en/Publications/GFSR/Issues/2020/10/13/global-financial-stability-report-october-2020](http://www.imf.org/en/Publications/GFSR/Issues/2020/10/13/global-financial-stability-report-october-2020) Accessed 10<sup>th</sup> December 2020.

<sup>918</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 26<sup>th</sup> November 2020 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/206152226\\_MPC%20Press%20Release-%20Meeting%20of%20November](http://www.centralbank.go.ke/uploads/mpc_press_release/206152226_MPC%20Press%20Release-%20Meeting%20of%20November) Accessed 30<sup>th</sup> December 2020.

<sup>919</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 27<sup>th</sup> January 2021 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/1010635752\\_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/1010635752_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf) Accessed 3<sup>rd</sup> February 2021.

<sup>920</sup> CBK, 'Press Release Monetary Policy Committee Meeting' 27<sup>th</sup> January 2021 [www.centralbank.go.ke/uploads/mpc\\_press\\_release/1010635752\\_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf](http://www.centralbank.go.ke/uploads/mpc_press_release/1010635752_MPC%20Press%20Release-%20Meeting%20of%20January%2027%202021.pdf) Accessed 3<sup>rd</sup> February 2021.

permission from the CBN to restructure more than 32,000 loans for their individual and business customers that were affected by the pandemic.<sup>921</sup>

However, there was an increase in NPL ratio as of December 2020 that rose to 6.01 percent above the prudential maximum threshold of 5.0 percent as stated by the Monetary Policy Committee.<sup>922</sup> The increase was expected because of the pandemic though banks were encouraged to take steps to reduce such NPLs below the prudential maximum threshold.

In South Africa, directives were given to banks on loan restructuring because of Covid-19 related factors that were classified as Covid-19 related restructures. In relation to the treatment of the Covid-19 related restructured loans, banks were instructed to establish an appropriate process of corporate governance that includes the development of an internal policy in the management of these loans.<sup>923</sup>

Banks in South Africa as in Nigeria and Kenya, provided some relief such as payment holidays to certain borrowers in the retail sector to help prevent them from going into arrears in their loan repayment and help to mitigate the impact of the pandemic on those borrowers.

However, an increase in impaired advances was recorded by banks in South Africa during the pandemic period as well as losses in their holdings of financial assets.<sup>924</sup> This reflected in an increase from 3.77 percent in 2019 to 5.03 percent in November 2020 for impaired advances to gross loan and advances.<sup>925</sup>

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<sup>921</sup> CBN, 'Central Bank of Nigeria Communique No 131 of the 274<sup>th</sup> Monetary Policy Committee Meeting Held on Monday 20<sup>th</sup> July 2020' [www.cbn.gov.ng/Out/2020/MPD/Central%20Bank%20of%20Nigeria%20Communique%20No%20131%20of%20the%20Monetary%20Policy](http://www.cbn.gov.ng/Out/2020/MPD/Central%20Bank%20of%20Nigeria%20Communique%20No%20131%20of%20the%20Monetary%20Policy) Accessed 22<sup>nd</sup> July 2020.

<sup>922</sup> CBN, 'Central Bank of Nigeria Communique No 134 of the Monetary Policy Committee Meeting Held on Monday 25<sup>th</sup> and Tuesday 26<sup>th</sup> January 2021' [www.cbn.gov.ng/Out/2021/CCD/COMMUNIQUE%20No%20134%20of%20THE%20277%20MEETIN%20G%20OF%20THE%20MPC](http://www.cbn.gov.ng/Out/2021/CCD/COMMUNIQUE%20No%20134%20of%20THE%20277%20MEETIN%20G%20OF%20THE%20MPC) Accessed 5<sup>th</sup> February 2021.

<sup>923</sup> SARB, 'Prudential Authority: Directive issued in Matters Related to the Treatment of Restructured Credit Exposures due to the Coronavirus (Covid-19) Pandemic' [www.resbank.co.za/en/home/publications/publication-detail-page/prudential-authority/pa-deposit-takers/banks-directives/2020/9844](http://www.resbank.co.za/en/home/publications/publication-detail-page/prudential-authority/pa-deposit-takers/banks-directives/2020/9844) Accessed 15<sup>th</sup> January 2021.

<sup>924</sup> SARB, 'Annual Report 2019/2020' [www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf](http://www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf) Accessed 13<sup>th</sup> January 2021.

<sup>925</sup> SARB, 'Annual Report 2019/2020' [www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf](http://www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf) Accessed 13<sup>th</sup> January 2021.



## 7.5 Low Interest Regime in Covid-19 Era by the Banking Systems of Nigeria, Kenya, and South Africa

Banks have at different times played a key role in supporting economic recovery through lending to government and private sectors. Unlike the last global financial crisis whereby banks were seen to be part of the problem, they are deemed to be part of the solution during the present Covid-19 pandemic because of their role in ensuring that there is continuous flow of credit to the economy.

This can be seen through different initiatives taken by central banks of different countries and regions such as the US Federal Reserve and the European Central Bank (ECB) that aggressively ensured that there is enough liquidity in banks that grant continuous flow of credit to their respective economies.

The US Federal Reserve took the initiative of cutting the interest rates back to zero and expanded its assets purchases beyond government backed securities to prevent a credit crunch from happening.<sup>926</sup> The ECB on the other hand expanded its assets purchases and targeted bank lending programmes that allowed banks access to cheap funds for lending to the real economy at lower lending rates with the lowest available at minus 1.0 percent.<sup>927</sup>

Also, the emerging economies such as the SSA countries reduced their lending rates. In Nigeria, banks reduced their interest rates on loans granted to customers as of October 2020 and was stated to be considerably below 20 percent.<sup>928</sup> This is lower than the maximum lending rate that was set at 28.36 percent at the same period.<sup>929</sup>

Banks in Nigeria have continued to issue credit to both private and government sectors. Credit to private sector grew by 10.0 percent as private businesses sought more credit from banks to improve their liquidity while that of the government sector

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<sup>926</sup> SARB, 'Monetary Policy Review' October 2020 [www.resbank.co.za/en/home/publications/publication-detail-pages/monetary-policy-review/2020/10299](http://www.resbank.co.za/en/home/publications/publication-detail-pages/monetary-policy-review/2020/10299) Accessed 12th January 2021.

<sup>927</sup> Ibid

<sup>928</sup> CBN, 'Central Bank of Nigeria Communique No 133 of the Monetary Policy Committee Meeting Held on Monday 23<sup>rd</sup> and Tuesday 24<sup>th</sup> November 2020' [www.cbn.gov.ng/Out/2020/MPD/Central%20Bank%20of%20Nigeria%20Communique%20No%20133%20of%20the%20Monetary%20Policy](http://www.cbn.gov.ng/Out/2020/MPD/Central%20Bank%20of%20Nigeria%20Communique%20No%20133%20of%20the%20Monetary%20Policy) Accessed 5<sup>th</sup> January 2021.

<sup>929</sup> CBN, 'Money Market Indicators' [www.cbn.gov.ng/rates/mnymktind.asp](http://www.cbn.gov.ng/rates/mnymktind.asp) Accessed 20th January 2021.

grew to 8.2 percent by end of September 2020 that reflected in slight growth of domestic borrowing.<sup>930</sup>

However, in a twist to the lending business, the banking sector in Nigeria recorded adequate liquidity levels in October 2020 due to decline in key lending and money market rates.<sup>931</sup> This reflects the fact that in as much as lending to government and private sectors improved, banks are still being cautious when it comes to lending to certain customers and sectors.

Other major sources that helped improve liquidity in the Nigerian banking sector during the pandemic period in October 2020 were repayments received from matured CBN bills, Federal Government bonds and Nigerian Treasury bills that accounted for a net injection of N839.38 billion.<sup>932</sup> In Kenya, a reduced lending rate ensured there is available and stable money supply at a cheaper rate during the present pandemic for the purpose of funding economic activities in the country.

The lending rate was reduced from 12.43 percent in October 2019 to 11.98 percent in October 2020.<sup>933</sup> However, banks are still being cautious of new lending irrespective of reduced cash inflows from loan repayments and increased cash withdrawals by depositors though with adequate levels of liquidity.

In South Africa, the South African Reserve Bank reduced the repo rate from 6.5 percent to 3.75 percent per annum in May 2020 to assist borrowers meet their financial obligations.<sup>934</sup> With domestic interest rates at record low, the apex bank claimed that the low-rate increased household demand for credit and is beneficial to government

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<sup>930</sup> CBN, 'Economic Report Third Quarter 2020' [www.cbn.gov.ng/Out/2020/RSD/Third%20Quarter%202020%20Economic%20Report.pdf](http://www.cbn.gov.ng/Out/2020/RSD/Third%20Quarter%202020%20Economic%20Report.pdf) Accessed 10<sup>th</sup> December 2020.

<sup>931</sup> CBN, 'Economic Report October 2020' [www.cbn.gov.ng/Out/2021/RSD/October%202020%20Economic%20%20Report%20\(Published\).pdf](http://www.cbn.gov.ng/Out/2021/RSD/October%202020%20Economic%20%20Report%20(Published).pdf) Accessed 10<sup>th</sup> January 2021.

<sup>932</sup> CBN, 'Economic Report October 2020' [www.cbn.gov.ng/Out/2021/RSD/October%202020%20Economic%20%20Report%20\(Published\).pdf](http://www.cbn.gov.ng/Out/2021/RSD/October%202020%20Economic%20%20Report%20(Published).pdf) accessed 10<sup>th</sup> January 2021.

<sup>933</sup> CBK, 'Interest Rates Statistics' [www.centralbank.go.ke/statistics/interest-rates/](http://www.centralbank.go.ke/statistics/interest-rates/) Accessed 15<sup>th</sup> January 2020.

<sup>934</sup> SARB, 'Our Response to Covid-19' October 2020 [www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/Our-response-to-COVID-19](http://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/Our-response-to-COVID-19) Accessed 10<sup>th</sup> February 2021

as it allowed them to borrow more cheaply. In other words, it has allowed the government to fund their emergency spending through low interest rate regime.

Additional liquidity was also made available to banks by SARB through increasing the size and duration of repo facilities and by purchasing government bonds in the secondary market. The aim was to ensure that banks continued to have stable and enough source of refinancing.<sup>935</sup> Also, regulatory relief measures such as a lower liquidity coverage ratio and lower capital requirements, and guidance to banks on managing crisis were some of the supports given to banks by the Prudential Authority in South Africa<sup>936</sup>.

Although banks in South Africa remained highly liquid, they were cautious in terms of lending because of the official unemployment rate that was said to have increased to 30.8 percent in the third quarter of 2020 because of the pandemic. The increase in unemployment resulted in further decrease to lending. This is because of the total loans and advances granted to domestic private and household sectors by banks decreased during the third quarter of 2020 and attributed to reduced creditworthiness of borrowers that was impacted by job losses.<sup>937</sup>

Also, there was a decline in credit extension to the cooperate sector. Additionally, with the downgrade of government bond in March 2020 that account for 15 percent of total banking sector assets, banks are having to hold more capital against their sovereign exposures that in turn constrained further lending in South Africa.<sup>938</sup>

## **7.6 Challenges Faced by Bank Supervisors During the Covid-19 Pandemic**

Bank supervisors especially in the SSA region are faced with unprecedented challenges of maintaining stability and fostering more efficient banking system that supports the real economy. This is because they are required amongst others to assess the safety and soundness of banks, and to ensure that they have the

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<sup>935</sup> Ibid

<sup>936</sup> SARB, 'Our Response to Covid-19' October 2020 [www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/Our-response-to-COVID-19](http://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/Our-response-to-COVID-19) Accessed 10th February 2021.

<sup>937</sup> SARB, 'Full Quarterly Bulletin' December 2020 [www.resbank.co.za/content/dam/sarb/publications/quarterl-bulletins/quarterly-bulletin-publications/2020/qb-dec-2020](http://www.resbank.co.za/content/dam/sarb/publications/quarterl-bulletins/quarterly-bulletin-publications/2020/qb-dec-2020) Accessed 10th February 2020.

<sup>938</sup> SARB, 'Annual Report 2019/2020' [www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf](http://www.resbank.onlinereport.co.za/2020/documents/report-on-financial-stability.pdf) Accessed 13th January 2021.

appropriate risk identification tools and risk management processes for prudent banking.

However, the IMF and World Bank made some recommendations to guide bank supervisors in their response during this Covid19. Some of the recommendations include the use of embedded flexibility in the regulatory and supervisory framework while upholding minimum prudential standards in line with international standards, and facilitation of public and private support measures that target affected borrowers and sectors.

Other recommendations from the global bodies include the limit to moral hazard while adhering to sound credit risk management practices and facilitating effective allocation of new credit, suspension on corrective supervisory action triggers to focus on the extraordinary circumstances arising from the current pandemic, review supervisory priorities, postponing routine stress tests and reducing non-essential examinations and reporting, and coordinating actively with both domestic and international supervisory colleagues.<sup>939</sup>

Most of the SSA region particularly South Africa, Nigeria, and Kenya have technologically advanced banks (though not as sophisticated as those of advanced economies) with globally respected bank supervisory framework that have attracted considerable foreign participation in their banking sector. Unfortunately, bank supervisors in the region are still faced with challenges in the execution of their supervisory duties particularly during the period of Covid-19 pandemic.

The pandemic has caused unprecedented banking and regulatory interruption because of the imposed shutdowns, social distancing measures and self-isolation introduced by various governments. These measures hinder effective supervision as banks are still in operation covertly or overtly to keep governments and global economy afloat.

Furthermore, it was argued by Nyantakyi and Mouhamadu that Basel III is mainly intended to address the weaknesses that existed among the developed countries

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<sup>939</sup> IMF, 'Covid-19: The Regulatory and Supervisory Implications for the Banking Sector: A Joint IMF-World Bank Staff Position Note' [www.imf.org/en/Publications/Miscellaneous-Publication-Other/Issues/2020/05/20/COVID-19-The-Regulatory-and-Supervisory-Implications](http://www.imf.org/en/Publications/Miscellaneous-Publication-Other/Issues/2020/05/20/COVID-19-The-Regulatory-and-Supervisory-Implications) Accessed on 2nd July 2020.

banking sectors with the SSA banking sector being far from that level of development.<sup>940</sup> This was before the Covid-19 pandemic began.

The authors (Nyantakyi and Mouhamadu) went further to suggest that since the SSA banking sector is liquid and well capitalised, the regulatory and supervisory authorities in the SSA region must focus their attention on improving the quality of assets, increasing the transparency of both financial transaction and governance, training of staff and continued improvement on information technology in their respective banking systems.<sup>941</sup>

Therefore, challenges such as shortage of high-quality human resources and technological changes that have attracted an increasingly hostile cyber environment during the pandemic period have led to a shift towards achieving operational resilience that will ensure the continuity of the banking business in support of the real economy in the region.

### **7.6.1 Shortage of High-Quality/Experienced Supervisors**

The Shortage of high-quality/experienced supervisors especially in the SSA region have been a constraint and a deterrent to moving from Basel I. Basel I is a relatively simple compliance-based supervision compared to Basel III that is risk-based. This is because additional tasks are required to be carried out by supervisors such as monitoring the credit rating agencies and the appropriate use of their ratings by banks to effectively supervise the standardised approach to credit risk.<sup>942</sup>

The SSA region is faced with acute human resource challenges as employment of these highly skilled supervisors needed to conduct critical supervisory tasks are still lacking in most of the SSA countries. According to Enoch et al, supervisory capacity is already constrained and under-resourced in most countries in the SSA region.<sup>943</sup>

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<sup>940</sup> Eugene Bempong Nyantakyi and Mouhamadu Sy, 'The Banking System in Africa: Main Facts and Challenges' (2015) 6(5) Africa Economic Brief, 1

<sup>941</sup> Eugene Bempong Nyantakyi and Mouhamadu Sy, 'The Banking System in Africa: Main Facts and Challenges' (2015) 6(5) Africa Economic Brief, 1

<sup>942</sup> Emily Jones, 'Challenges International Banking Standards Pose for Peripheral Developing Countries' in Emily Jones, *The Political Economy of Bank Regulation in Developing Countries: Risk and Reputation* (Oxford Scholarship Online, May 2020)

<sup>943</sup> Charles Enoch, Paul Mathieu, Mauro Mecagni and Jorge Canales Kriljenko, 'Pan African Banks: Opportunities and Challenges for Cross-border Oversight' (2015) IMF eLIBRARY [www.elibrary.imf.org/view/IMF087/22419](http://www.elibrary.imf.org/view/IMF087/22419) Accessed on 10th April 2020.

SSA countries supervisory capacity can be assessed through their ability to implement and use effectively international supervisory standards and best practice.

However, with Covid-19 pandemic in place, the shortage of high-quality/experienced supervisors in the SSA region has become obvious as a significant absenteeism rate is being recorded. This significant absenteeism rate and limited availability among bank supervisors can affect the critical functions necessary to deliver important business services.

To compact the impact of these absenteeism rate, bank supervisors can consider rescheduling upcoming inspections in banks and extending deadlines for banks to correct identified shortcomings. Also, limiting the number of bank supervisors on site to the barest minimum required to perform essential services have been encouraged to reduce the spread of the virus. Furthermore, supervisors are encouraged to work remotely to reduce the spread of the virus and combat absenteeism though available literature has not shown how they are equipped to effectively carry out their duties.

### **7.6.2 Technology Challenge**

Covid-19 pandemic has shown that digitalisation of finance can present risks and challenges to the banking sector. The pandemic has continued to test banking system's operational resilience because of increase in remote working. This has led to banks' increased dependency on technology and the use of third-party technological-based services in the provision of financial services to customers.

Recently, there has been a shift towards the use of digital channels by supervisors to maintain effective supervisory engagement with banks during the pandemic period. The cessation or postponement of some of the on-site supervisions (that cannot be assessed through digital channels) have been supplemented with more off-site supervisions that is applicable with the help of technology.

However, this shift to technology can expose banks to cyber-risks such as ransomware attacks, phishing, and scams. In fact, ICT related risks have made banks more vulnerable, especially during the present pandemic.<sup>944</sup> This is because internet fraudsters are becoming more sophisticated with new attack techniques as they have

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<sup>944</sup> KPMG, 'A Supervisory View of IT and Cyber Risks Since the Outbreak of COVID-19 : where are banks now as we enter this new normal' [www.home.kpmg/xx/en/home/insights/2020/05/it-and-cyber-risks-during-covid-19.html](http://www.home.kpmg/xx/en/home/insights/2020/05/it-and-cyber-risks-during-covid-19.html) Accessed 24th July 2020.

taken the advantage of remote working to expand their cyber threat attack on banks' IT network by trying to exploit any weakness that can result from an increased use of technology.

According to SARB Prudential Authority, technological changes increase risk of exposures that introduce known and unknown risks, and sometimes create unintended consequence.<sup>945</sup> Therefore, it is crucial to duly consider the risks, opportunities, and rewards that these changes can bring as understanding them will be necessary in implementing adequate risk management, sound governance and compliance.

Furthermore, bank supervisors are advised to monitor new risks that can emerge from remote working, evaluate if banks fully understand the main risks related to innovative technologies and assess if a robust cyber incident protection procedure is in place for the new remote working conditions.<sup>946</sup>

Also, the same point was made by the BCBS as they encouraged banks to improve their operational resilience by adopting principles aimed at strengthening bank's ability to withstand operational risk related events such as cyber incidents and technological failures in order to safeguard the banking sector.<sup>947</sup> They went further to advise banks to effectively manage their operational risks through identification and assessment to minimise any impact or losses on operational disruptions and their intended effect.

The BCBS through the publication of revisions to the principles for the Sound Management of Operational Risk desire to promote the effectiveness of operational risk management in the banking sector particularly with significant disruptions to bank operations such as the present pandemic, cyber security incidents and technological failures.<sup>948</sup> Banks are expected to adhere to these sound practices to enable them isolate from inadequate or failed internal processes, people, and systems or from external events.

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<sup>945</sup> SARB, 'Guidance Note on the Impact of New Technology on Regulated Financial Institution' [www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9764/Guidance%20Note%20%20of%202020.pdf](http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/9764/Guidance%20Note%20%20of%202020.pdf) Accessed 9<sup>th</sup> July 2020.

<sup>946</sup> KPMG, 'A Supervisory View of IT and Cyber Risks Since the Outbreak of COVID-19 : where are banks now as we enter this new normal' [www.home.kpmg/xx/en/home/insights/2020/05/it-and-cyber-risks-during-covid-19.html](http://www.home.kpmg/xx/en/home/insights/2020/05/it-and-cyber-risks-during-covid-19.html) Accessed 24th July 2020.

<sup>947</sup> BIS, 'Principles for Operational Resilience' [www.bis.org/bcbs/publ/d509.htm](http://www.bis.org/bcbs/publ/d509.htm) Accessed 13th January 2021.

<sup>948</sup> BCBS, 'Consultative Document Revision to the Principles for the Sound Management of Operational Risk' November 2020 [www.bis.org/bcbs/publ/d508.pdf](http://www.bis.org/bcbs/publ/d508.pdf) Accessed 24th December 2020.



In South Africa, the Prudential Authority has taken giant steps by conducting IT risk on-site visit in banks and discussed how to tackle issues pertaining to topics such as governance structure and human resources, information security and cybercrime, operational resilience, and emerging technologies.<sup>949</sup> The key outcomes from their visit revealed issues such as reporting lines for information security and cyber governance that were deemed inappropriate with revealed shortcomings relating to capacity and capability.

Also, there were concerns regarding outsourced and third-party management monitoring and reporting in most banks, deficiency in risk reporting practices, the adoption of evolving technologies based on their proof of concepts, and scarcity of skilled IT resources, particularly in smaller banks.<sup>950</sup>

To resolve some of the issues raised, the Prudential Authority in South Africa issued a directive to banks on minimum reporting requirements pertaining to material IT and cyber incidents.<sup>951</sup> It is believed that this directive will assist banks to establish and maintain a sufficient robust IT and incident management framework to manage and report any IT and cyber incident in their respective banks.

Consequently, the CBN introduced guidelines on risk-based cybersecurity framework that outlined the minimum requirements for enhancing cybersecurity. These guidelines will assist banks in Nigeria to establish and maintain a sufficient and robust cybersecurity framework that will protect them from cybersecurity threats.<sup>952</sup> Additionally, the framework is designed to enhance resilience, ensure proper mitigation, and maintain public confidence.

In Kenya, the CBK gave some illustrations of sources of cybercrime activities that can affect cybersecurity of banks such as a non-privileged user having unauthorised access to privileged accounts. This source can enable the non-privileged user to gain

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<sup>949</sup> SARB 'Prudential Authority Annual Report 2019/2020' [www.resbank.co.za/en/home/publications/publication-detail-pages/reports/annual-reports/2020/10042](http://www.resbank.co.za/en/home/publications/publication-detail-pages/reports/annual-reports/2020/10042) Accessed 10th January 2021.

<sup>950</sup> Ibid

<sup>951</sup> SARB, 'Prudential Authority: Reporting of Material Information Technology and/or Cyber Incidents' [www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2019/9487](http://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-deposit-takers/banks-directives/2019/9487) Accessed 11th January 2021

<sup>952</sup> CBN, 'Risk-Based Cybersecurity Framework and Guidelines for Deposit Money Banks and Payments Service Providers' [www.cbn.gov.ng/Out/2018/BSD/RISK%20BASED%20CYBERSECURITY%20FRAMEWORK%20Exp%20Draft%20June.pdf](http://www.cbn.gov.ng/Out/2018/BSD/RISK%20BASED%20CYBERSECURITY%20FRAMEWORK%20Exp%20Draft%20June.pdf) Accessed on 22<sup>nd</sup> December 2020.



control of the entire system thereby modifying or deleting file logs, introduce phishing and malware through social engineering to gain access to critical systems, having poor authentication measures/controls that will protect customer data, transactions, and systems.<sup>953</sup>

Also, the CBK provided a guideline on cybersecurity for banks that stipulate the minimum requirements in formation and implementation of strategies, policies and procedures aimed at mitigating cyber risk in banks.<sup>954</sup> Banks are required to develop effective cybersecurity governance and risk management frameworks that is aimed at preventing and combating cybercrime and creating a safer and more secured cyberspace.

## **7.7 Conclusion**

The outbreak of Covid-19 has shown how external shock in the form of global infection (health emergency) can affect the banking industry. More recently, the pandemic has taken its toll on the economy of most nations. Although the pandemic has caused loss of businesses and jobs, banks are still standing tall with no known reported cases of crisis in relation to the pandemic.

This can be attributed to the liquidity regulations in place through Basel III and a lesson from the last global financial crisis. However, there may be a dip in profit within the period as banks have further tightened their purses and unwilling to lend even within the low interest rate regime. It is still too early to talk about liquidity positions of banks as the pandemic is far from over.

Relatively, the pandemic created some challenges for the bank supervisors as they become limited to the discharge of their duties such as no show for on-site visits. These challenges faced by supervisors especially in developing nations such as Nigeria, Kenya, and South Africa include shortage of experienced human resources, and IT expertise and infrastructure. However, the IMF and World Bank advised the supervisors to apply some flexibility in the discharge of their duties.

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<sup>953</sup> Ibid

<sup>954</sup> CBK, 'Guidelines on Cybersecurity for Payment Service Providers' [www.centralbank.go.ke/wp-content/uploads/2019/07/GuidelinesonCybersecurityforPSPs.pdf](http://www.centralbank.go.ke/wp-content/uploads/2019/07/GuidelinesonCybersecurityforPSPs.pdf) Accessed on 12th January 2021.

## Chapter Eight

### Conclusion and Recommendation

#### 8.1 Conclusion

The liquidity (HQLA) standards as introduced under Basel III have made some gains as banks in recent years boast of adequate liquidity that resonate confidence in the public and the banking system in general. However, there will always be facts to support or disprove regulations that brought about maintenance of adequate liquidity in the present-day banking system. This thesis relying on the research questions and objectives highlights four main points.

One of the points is the justification for global synchronisation of banking regulations. The introduction of harmonised global regulations in the banking industry stems from multiple crises that have one way or the other affected cross-border trade. The justification for introducing these global standards is hinged on the protection of depositors' funds and containing the fall-out of banking issues in a country from affecting other nations amongst others. However, the justifications for introducing these regulations have often been faulted.

One of the reasons is because of not completely addressing the issues that generate crises such as miscommunication between banks and regulators, and more importantly, non-consideration of different country specifics that have brought about poor implementation and compliance of these regulations. These issues and probably more have been the bane of new regulations not been able to keep-off the development of further financial crisis.

A reflection on the harmonised banking regulations recalls the introduction of Basel I through the BCBS (without a legal mandate) to create a single framework that guides the entire global banking system. The aim is to attain a global financial and monetary stability within the banking system. The Basel Capital Accord was introduced for two main reasons that include non-capture of essential gap between capital requirements and actual risk levels and increased international competition among banks.

To remedy these concerns, an 8 percent minimum capital ratio (adequate capital) was introduced to counter the aggressive competition for market shares, protect depositors' funds and stop the increased exposure to credit risks. Unfortunately, Basel

I failed as it did not meet the expected needs. Some of the reasons advanced for the failure include its rigidity in adapting to risk management techniques, indifference in the management and evaluation of bank performance, and lack of information from bank regulators.

These problems are some of the issues that contributed to the crux of what brought about a review of the Basel regulations that signalled a new regime of Basel II. Basel II was introduced with a three-pillar structure to address the gaps in Basel I. This three-pillar structure comprises of capital adequacy requirement, supervision review of banks' capital adequacy and internal assessment process, and market discipline.

Sadly, Basel II in the manner of Basel I did not prevent another crisis from occurring. In fact, the financial crisis was so severe it affected most developed economies. The crisis portrayed the flaws inherent in Basel II that include inadequate financial regulatory controls and supervision, poor assessment of financial risks, and lack of adequate liquidity. These flaws inherent in Basel II made it difficult to stop one of the worst financial crises in history that began in the year 2007.

Some of the factors that were attributed to the 2007 global financial crisis include the inappropriate sale of subprime mortgage to borrowers that have no affordability, marketing of unreliable financial products, and poor regulatory low-interest rate regime. Although different national governments provided financial stimulus to keep their respective nations' banking institutions afloat, it did not stop the crisis from spreading.

Consequently, the provision of respective financial stimuli was viewed to be biased in some jurisdictions because there was not enough reason to explain why some institutions were bailed and others allowed to collapse. This crisis and the issues surrounding it brought about yet another review of the Basel regulations that gave birth to a new Basel III regime. Basel III focused on micro– and macro-prudential measures, especially with the increase in quantity and quality of capital and liquidity through the introduction of buffers.

These buffers that include the NSFR and LCR contribute to the changes made in Basel III to create a full set of standards of the BCBS known as the consolidated Basel Framework. One of its objectives is to develop global standards for liquidity and a leverage ratio to complement the risk-based Basel II Framework.

In as much as these introduced harmonised measures have helped cross-border trades, they have failed to stop further crises from occurring. These failures can be seen from the reasons brought about by the introduction of Basel I, II, and III respectively. Although unanticipated risks keep evolving over time, there is no mention of holistic consultation that takes different country peculiarities into consideration.

Furthermore, in as much as justifying the reasons for harmonising Basel regulations and the subsequent implementation and compliance come with benefits such as access to market and FDI, these regulations are not without criticisms. One of such criticism is the squeezing out of smaller or local banks by regional or international banks through their huge financial prowess.

Another criticism is aimed at the arm twisting of developing economies into complying with the benefit of accessing loan facilities. The other criticism is the concern for reputation and competition rather than financial stability by the developing nations. Some of these criticisms may have come in the face of challenges often faced by some nations especially the developing economies in the implementation and compliance of these regulations.

This is as Basel requirements are fast becoming a pre-requisite in the acceptance of nations in the international financial community such as IMF. This reason is good enough to defeat the real objectives of global harmonisation as such countries that face challenges will have to operate based on stipulated conditions. Some of these challenges that include inadequate resources are encountered by lower and low-middle income countries such as Nigeria and Kenya.

In terms of resources, banks especially the local ones in the developing markets have little or no choice as human requisite skills need to be acquired along the lines of advancing technological developments that come at a cost. Such costs have seen the maintenance of Basel standards such as the HQLA requirements create a huge gap between raising funds by banks and lending.

This is because banks that rely on short-term funding will have to attract more funds to match their outflow with such costs being passed onto borrowers. However, lack of resources may differ from another challenge that has to do with economic interest whereby some developing nations adopt Basel regulations for the said purpose.

An example is Nigeria keyed into Basel regulatory regime to enhance its financial stability and competitiveness while Kenya embraced these requirements as a means of compliance to attract investors. Interestingly, Nigeria and Kenya are clamouring for Basel III not for its intended purpose but as a means of expanding their banking businesses abroad.

Additionally, factors such as bank size and issue of sovereignty contribute to slowing the process of implementation and compliance, especially in the developing nations. This is because some national governments seem unwilling to share their sovereign powers with a global body such as the BCBS though covertly.

Also, local banks within developing nations that are considered large because of the sizes of their balance sheets and network coverage hardly make any mark outside their domain while the same cannot be said of foreign owned banks that most often dominate the space of these developing nation.

Although the BCBS created alternatives to encourage implementation and compliance such as diversification of the stock of HQLA, it is argued that diversification increases risks and lending rates in banks. Also, the ALA option made for nations with insufficient HQLA comes with a condition that is dependent on the complete implementation of the LCR standards thereby leaving countries such as Nigeria and Kenya out in the cold as they are yet to implement the LCR standards.

The next point is the regulatory path that defined the present-day banking systems of Nigeria, Kenya, and South Africa. Ideally, the SSA banking systems have had their history of operations though mostly unregulated in the last two centuries. Literature within the thesis has it that regulated banking in the SSA countries of Nigeria, Kenya, and South Africa began taking shape under respective colonial governments. The path to standardised banking is reflected in the experiences of Nigeria, Kenya, and South Africa.

In the Nigeria experience, the first branch of a formal bank in Nigeria was traced back to 1892 with the establishment of the African Banking Corporation owned by largely foreign investors. Although, other foreign owned banks were later established, their general objective was to cater for interests of commercial enterprises owned by expatriates.

These foreign owned banks were equipped with ample reserves and highly skilled executives and involved in capital export. However, indigenes were denied access to credit as they were categorised as risky borrowers though deposits were collected from them. This kind of treatment led to the quest for the establishment of indigenous banks.

The first indigenous bank in Nigeria was established in 1929 though collapsed soon afterwards. Other indigenous banks were established afterwards but were all short-lived. The short life spans of these banks were attributed to mismanagement and lack of regulations. It is important to note that the banking system in Nigeria as at that era was largely unregulated. The demise of these banks brought about an inquiry that led to the establishment of the first banking regulation through the Banking Ordinance of 1957.

The Banking Ordinance stipulated a minimum capital of £12500 as the minimum capital requirement for indigenous banks. Also, a motion for the establishment of a central bank was turned down in the parliament because the colonial government was better off with the Currency Board that was headquartered in London while earning a great amount of seigniorage profit.

Consequently, the CBN was created and became operational in 1959 with responsibilities that include the promotion of monetary stability. Furthermore, the Nigerian government took a very proactive measure by acquiring forty percent share of all foreign owned banks to influence lending in favour of indigenes. Also, capital requirements were raised to the point where State governments took over indigenous banks and this brought about economic stability and growth in the country.

Relatively, the Kenya experience shows that the first commercial bank that opened was the National Bank of India that began operations in 1904 and backed by the Ordinance for the Regulation of Banks Established in 1910. Although the entrant of three more foreign banks in the Kenyan market (with the demise of one) dominated the banking space for a long period, one of them, Barclays bank, concentrated more on indigenous customers to raise greater funds than others.

Also, Barclays employed less indigenes and for clerical positions because local customers preferred not to be served by their fellow indigenes. In as much as Barclays embraced the locals, there existed unfair practices in the system such as the

monopolisation of the market by a government backed bank and the common exclusion of indigenes in terms of access to loans.

The post-independence of Kenya witnessed the establishment and operation of CBK in 1966. A couple of years later, the first indigenous bank, Co-operative Bank of Kenya emerged. Also, it is important to note that the government of Kenya allowed foreign owned banks to operate as they were while empowering capable indigenous Kenyans in the banking business.

In the context of South Africa, banking began as private establishments as early as 1873 and operated as small units though taken over by larger banks in later years such as Barclays National Bank limited in the year 1926. These banks operated at free will without a common legislation and issued independent and acceptable legal tenders that were pegged to the gold price through the United States dollar and British pound.

This practice brought about a motion in the parliament for the establishment of a central bank that was subsequently turned down. The issue of unfair practices was not uncommon such as the obligation to convert bank notes to gold on demand at lower price with a trade loss that led to the 1919 Gold Conference. The recommendations of the Gold Conference brought about the Act of parliament that established the SARB that began operations in 1921.

The establishment of respective central banks within Nigeria, Kenya, and South Africa was to serve the common objective of managing the respective banking systems. These banking systems that all began with a strong will were bedeviled with crisis in later years. Nigeria, Kenya, and South Africa all had their fair share of banking crisis that emanated from poor management and capitalisation, NPLs and liquidity problems.

These crises got to the peak in the 90s with the respective central banks reeling out proactive measures in the last two decades to curtail the tide. Some of the measures include liquidation, down-sizing, bail-out funds, and increase in capitalisation of banks. Also, these measures were backed by legislative Acts that gave the respective actions a legal backing.

The legislative Acts that focused more on regulations and supervision came as either new or amended. As amended because the Act has been made though proved not to

be effective and reviewed for better performance. However, in recent times, there has been a clamour for a unified banking system in the SSA region through a monetary union that will enhance common regulatory standards, help cross-border trade, and reduce costs.

Although Nigeria, Kenya, and South Africa have begun the move by being part of their respective sub-regional monetary units, they have also committed to the application of Basel Accord for its benefits. In as much as the three countries have implemented Basel I, there is a selective application of new regulations by Nigeria and Kenya to reflect their respective country specifics. Nigeria and Kenya are still in the process of implementing Basel II and Basel III respectively though South Africa has implemented both, especially by virtue of being a member of the BCBS.

The other point in this thesis is the strengthening of supervisory tools to countercheck the operations of introduced regulations. The BCBS introduced and strengthened controls in the form of supervisory tools and criteria to guide given regulations. These regulations are made practicable through standards such as the HQLA operational requirements in complement to stipulated supervisory features. This enables healthy checks and balances to avert such crisis as the 2007 global financial crisis.

Although the specified HQLA operational standards are stringent, Nigeria, Kenya and South Africa formulated their respective ways of applying some of them. One of the HQLA operational standards is the periodic monetisation of the stock of unencumbered HQLA. This requirement tests the worth of an even proportion of the stock of unencumbered HQLA in a stress scenario.

In Nigeria, the stress test is carried out using the ICFA and Maturity Mismatch/ Roll Over Risk method. This is different from South Africa that uses a Common Scenario Test exercise though both countries aim to achieve the same purpose. Another HQLA operational standard is the placement of the stock of HQLA under a specific management authority.

The beauty of this requirement is that it takes away control from a single entity to deter interference and encourage independence and transparency. Kenya on its part pegged the maximum ownership of shares by a single entity to 25 percent unlike in Nigeria that has no limit though applies to the board of directors of a given bank with a maximum tenure of eight years.



The other operational requirement is the intraday liquidity management that takes account of liquidity risks that can arise in a payment and settlement process. This payment and settlement system is operational in Nigeria, Kenya, and South Africa and known as NPS, KEPSS, and SAMOS, respectively. Also, there are special intraday liquidity monitoring tools that keep track of this requirement.

To ensure compliance of the introduced regulations such as the stated operational requirements, supervisory tools were recommended by the BCBS, especially to monitor the liquidity requirements. These liquidity supervisory and monitoring tools help to check the exposure to risks by banks and ensure global consistency. Some of these tools such as the liquidity monitoring tools include Contractual Maturity Mismatch and Concentration of Funding.

Additionally, the Sound Principles and Supervision was introduced to ensure sound liquidity risk management and supervision. Nigeria, Kenya, and South Africa have incorporated these Sound Principles in their respective banking systems to guide and strengthen policies that identify and monitor liquidity exposures in banks. The respective central banks of these countries apply the Basel Core principles through their respective BSDs that use the RBS approach to monitor and assess the risk profiles of banks within their domain.

Furthermore, the BCBS established a regulatory and supervisory framework that categorise banks as D-SIBs. This framework comes with a set of indicators to be applied by respective countries according to country-specific features. Nigeria, Kenya, and South Africa have accorded this status to some of their banks with regular assessments that do not exceed an interval of one year. This is to reduce the probability of banks from failing since they have little or no public support.

The final point in the thesis dwells on the ability of a bank to get business benefits (profit) while maintaining existing regulations. This is portrayed through the lens of a bank creating a balance between taking profit and holding onto its liquid assets (HQLA) drawn from the experiences of Nigeria, Kenya, and South Africa.

The creation of the balance comes with the objective of Basel III LCR-HQLA factor in enhancing short-term liquidity resilience through maintenance of adequate HQLA in the banking system. In as much as Nigeria and Kenya still make use of the LR, South Africa applies the LCR as stipulated by the BCBS. Irrespective of the different

standards, the three countries recorded an improved liquidity in 2018 largely because of good maintenance of their respective reserves.

Although these reserves are not enough to be in the stock of HQLA, banks in the respective countries do retain them to match their outflows while sourcing for additional funds. Some of the common sources of liquidity funding in Nigeria, Kenya, and South Africa include loans, deposits, asset sale, interbank market, and central bank reserves. In as much these sources of funding are lucrative; they come with their respective inherent risks.

The prospect of these risks brings the need to inculcate proper liquidity management through defined principles, objectives, and processes. The management of liquidity involves the market supply or withdrawal of the amount of liquidity consistent with the desired level of short-term interest rates. This means creating a balance between lending and holding onto liquid assets though exposing banks to illiquidity risks. Such illiquidity risks are put in check through introduced measures such as good liquidity management.

Therefore, in the maintenance of liquidity by banks, the monetary policy operation is central to managing the objectives. One of the major objectives of liquidity management is to transmit the MPC rates to changes in short-term interest rates. The consequence is that a decrease will encourage economic growth while an increase will lead to less lending that will in turn affect economic growth.

Interestingly, Nigeria, Kenya, and South Africa all recorded reduced lending rates in recent times. This can be attributed to the processes in controlling liquidity within their respective banking systems. OMO is the major procedural tool used by these three countries to either inject or curtail liquidity in their respective economic systems. Although these SSA countries complement the OMO with CRR, South Africa does not put much emphasis on it for reasons such as occasional reduction of reserve requirements.

However, banks in a bid to maintain adequate liquidity, especially against unforeseen circumstances sometimes struggle between holding onto liquid assets and the desire to make profit. These two conflicting objectives have formed the basis of different arguments as to how banks strike a balance between them. This is because there will be an impact on one whenever the other is circumvented.

In measuring liquidity and profitability, this thesis adopted the LA to TA and LA to STL as indicators for liquidity, and ROA as indicator for profitability. Accessed data showed that Nigeria, Kenya, and South Africa represented good amount of liquidity though with not too impressive profits. This supports existing literature that shows that it is reasonably difficult for banks to strike a good balance between making profit and holding onto liquid assets.

The difficulty in striking the balance can be attributed to banks keeping faith with the liquidity standards (that in a way have greatly affected lending) though with failure to expand on investments in other assets. To improve profits, banks such as in South Africa have devised new strategies that include switching from low yield to high yield assets. Hopefully, new literatures will soon prove these new strategies right.

In the turn of events, the Covid-19 pandemic came as one the unforeseen circumstances that rattled the financial market though halting the global economy in general. The Covid-19 pandemic came just about a decade from the last global financial crisis. It came with its own consequence. The spread of the virus was so severe that it completely shut down the global economy.

The lockdown in most countries brought about business closures, loss of jobs, and increased debts as there is little or no income to match rising expenditures. The uncertainties surrounding the pandemic led the BCBS to take proactive measures with respect to the banking sector. This is because of the critical nature of the banking sector and the pandemic came with potential new hazards that cannot be ignored.

These potential new hazards can bring about losses that can lead to a bank failure with consequent spiral effects. In this regard, the BCBS recommended a flexible approach towards some Basel regulations by supervisors and encouraged continuous lending to creditworthy households and businesses. Although lending was encouraged as a way of alleviation, banks were covertly or overtly not willing. This is probably because of the experience of the last global financial crisis whereby inappropriate lending contributed to the crisis.

However, despite the pandemic, banks continued to record increased earnings. The BCBS attributed the increase to the workability of the introduced Basel liquidity regulations. Also, to this effect, the global body encouraged nations that are yet to

implement the liquidity standards to embrace it with additional time given, and the possibility of allowing the implementation of selected aspects.

Furthermore, the banking systems of various countries such as Nigeria, Kenya, and South Africa introduced measures to cushion the effect of the pandemic in their respective financial systems and the economy in general. The three SSA countries applied some common measures such as changes in their respective monetary policies to reflect a low interest regime while seeking emergency support from the IMF.

In as much as profits declined in the three SSA countries in 2020 as compared to 2019, it is a wonder that banks made profit, remained very liquid and resilient amid the pandemic. This can be attributed to their already built-in capital and liquidity buffers that can be drawn upon in time of crises such as the present pandemic. Also, the restructuring of loan portfolios was considered and implemented to prevent further slide in NPLs.

The restructuring of NPLs yielded some positives as banks such as in Kenya understood the business models of their customers better through a one-on-one discussion strategy. Also, various countries such as Nigeria, Kenya, and South Africa granted payment holidays to customers that indicated interest. Although this strategy did not erase the NPLs, it did bring some relief to the customers.

Additionally, respective central banks such as that of Nigeria, Kenya, and South Africa introduced low interest regimes with additional liquidity injected into the systems that did not witness many effects in households as understandably banks reduced lending to a bare minimum. The low interest regime and liquidity injection targeted more of government borrowings to help fund economic activities.

In conclusion, this thesis agrees with the justification for introducing harmonised global banking regulations though faulting the fulfilment of the intended objectives. This is because issues are bound to arise when justification does not clearly meet the needs of an objective. A clear example is the introduction of Basel I, II, and III respectively through respective reviews with the possibility of Basel IV, V, and VI respectively being on the way.

In as much as global banking regulations with benefits through the Basel Accords have come to stay, there exist continuous challenges. These challenges can be traced back

to the basics of banking in countries such as Nigeria, Kenya, and South Africa where unfair practices held sway. Some of these unfair practices such as discrimination of indigenes in terms of access to loans and failure of pioneer indigenous banks were some of the issues that surely need in-depth answers.

The reason is because in acknowledging the Basel global regulations that do not consider country-specifics appears to be a one way of mimicking the banking era during the colonial era in Nigeria, Kenya, and South Africa. Otherwise, how can it be explained that most of these challenges are common only within the developing nations.

At the present, these three SSA countries are doing well in applying the Basel regulations though slowly with only South Africa being fully compliant. This is because countries are complying for different reasons other than the intended purpose of the regulations. Therefore, in complying with the global regulations, especially the liquidity standards, Nigeria, Kenya, and South Africa devised ways of achieving them with the same set objectives though with different labels.

Furthermore, in as much as this thesis acknowledges the application of the HQLA operational standards, and liquidity supervision and monitoring tools by the banking systems of Nigeria, Kenya, and South Africa, it does not reflect any parallel link between the two. This does not mean that such do not exist but became one of the limitations of this thesis as literatures in this regard seem to be scarce.

Also, there have been arguments and counterarguments about banks being profitable due to the retention of high-quality assets. This thesis supports the argument that reflects the retention of HQLA as a bane to less profitability. This is because the banking systems of the three countries (Nigeria, Kenya, and South Africa) have proven to maintain strong liquidity within existing liquidity indices while battling with profits. Also, this is much reflected in the reduced lending that is in turn affecting economic growth.

The situation is not made better with the current Covid-19 pandemic that has made lending tighter as understandably banks may not want to risk opening their purses to a static economy. One positive from the Covid-19 pandemic situation is that there is no known report of bank failure, and this proves that the liquidity regulation is working though not without criticism. Only time will tell how the global economy grows in the

wake of the present pandemic as banks may have to devise ways of increasing lending while staying within the limits of stipulated regulations.

## **8.2 Recommendation**

This thesis highlighted the Basel regulations, especially the liquidity (HQLA) standards through the experiences of Nigeria, Kenya, and South Africa. These experiences point in one direction that reflects lack of comprehensive consultations in creating new regulations. This has been one of the major contributors to the poor implementation and compliance of such regulations by some nations.

One of the major lessons from this thesis is bringing to light through available literature and data the ability of these SSA countries to weave together local and international regulations to keep their respective banking systems robust. This is because these countries went through the last global financial crisis of 2007 unscathed and are strongly going through the storm of the Covid-19 pandemic.

It therefore brings a question to mind of the real objectives of Basel regulations when such countries as Nigeria and Kenya that are yet to implement Basel II and III respectively currently have their banking systems liquid and resilient just as South Africa that has full implemented and complied to date with the regulations. The answer cannot be far from going back to the drawing table to inculcate some of the positives from these nations.

The process of consultation using the 'bottom-up' approach can help create an in-depth understanding of the local level contents that works best for a jurisdiction. This can be replicated at the sub-regional level such as the ECOWAS countries and so on. More importantly is to create a practical understanding of fair practices in the interconnectedness of global banking system and the assurance of these regulations not being a threat to sovereignty of nations, especially the developing markets.

Finally, in as much as BCBS may have good intentions in crafting banking regulations that works for every banking system, there must be a fair play at the global level for all economies. Failure to adhere to this simple principle can only amount to going around in circles with the target objective being far-fetched.

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