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DECLARATION

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DEDICATIONS

I dedicate this dissertation to my four children Mapalo Ryan, Chipalila Clarence, Mwaku Christina and Kuhana Catherine Gabriella who have been my reason to push my personal objectives in the last decade, one of which was to obtain a Master's Degree before attaining the age of forty.....I have done it my munchkins as per home motto "you can do anything you put your mind to". To you I would like to say, love God always and REMEMBER THE FAMILY RULES. Mummy will always love you.

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Mother who has been my source of academic inspiration. She is phenomenal. My dad too for the support he never tires to give, I thank you. To my siblings I say thank too because they are a great support system for me. My go-to people. I love you guys.

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ACRONYMS

BCBS - Basel Committee on Bank Supervision

BOZ – Bank of Zambia

EAZ – Economic Association of Zambia

GDP – Gross Domestic Product

MOFNP – Ministry of Finance and National Planning

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ABSTRACT

The purpose of this study is to conduct a detailed evaluation of Liquidity Crisis in Zambia with particular reference to the impact of the 2007-2008 Global Financial Crisis. The research will also seek to find out the impact of the Liquidity Crisis on the economy and more specifically the banking industry in Zambia. Ultimately, this study will explore measures to reduce Liquidity Crisis in the banking industry in Zambia, especially in the wake of the past Global Economic Crisis. The study will employ a mix of both qualitative and quantitative research methods. Data will be obtained from sources such as the Case Study of Zambia during the Global Financial Crisis and the review of secondary data, especially that provided by the Central Bank, Bank of Zambia.

The main finding of the study indicated that a liquidity crisis has a devastating impact on the banking industry, especially in terms of performance and ability to lend, ultimately leading to a slowdown of the overall economy. The main limitation of the study was the insufficiency of information relating specifically to the recent Global Financial Crisis and its impact on the Zambian banking industry. The study recommends that the Zambian government, through the central bank, should apply measures that will spur growth, while reducing risk from external economic forces. It concludes that the central bank has the role of overseeing the overall economic landscape and thus, reflecting the working dynamics of the government.

CHAPTER 1: INTRODUCTION

1.1 Introduction

Chapter 1 will entail a brief description of the background of the problem in the context of the research. It will also give the purpose, question, as well as objectives of the research. The chapter also introduces the scope of the research and the methodology that will be used.

1.2 Background, Research Problem, and Justification

Across history, banks have been and will continue to be important institutions in the maintenance of the welfare of any economy, especially given the significant role that they play in supporting the transfer of funds and their related frameworks. In most developing economies, commercial banks remain the most dominating financial institutions, leaving the capital market authorities to a subsidiary role. Among the most significant roles of commercial banks is ensuring the availability of funds to support the transactions of their customers and other stakeholders. For them to be in a strategic position to do so, they need to be in a healthy liquidity position.

Liquidity entails the availability of funds and/or the assurance that they are available to play the role of honoring the cash flow commitments of a bank as and when they fall due. Such also includes all off-balance sheet transactions since they still fall under such commitment of the bank to its customers (Charles, et al., 2012). According to most banking systems, especially in developing economies, liquid assets include local and foreign currency notes and coins, balances with the economy's central bank, balances with the local commercial banks, foreign banks, financial institutions, mortgage finance firms, and building societies, treasury bills and bonds, as well as certificates of deposit that are held within the system's jurisdiction (Bookstabler, 2000).

From this point of view, the management of a financial institution should ensure that it has the capacity to meet its financial obligations in full as and when they fall due. The ability of banking institutions to meet all their financial obligations in a prompt manner enables them to secure a sense of confidence from their existing and potential customers. Such a capability goes a long way towards the achievement of long-term customer satisfaction, loyalty, and ultimate

retention. In order to check on the banking institutions' liquidity position, it is essential to consider its liquidity risk.

Liquidity risk refers to the current and future risk that a bank could face due to its inability to meet financial obligations as and when they fall due (Bookstaber, 2000). A banking institution might lose its liquidity if it experiences an unforeseen cash outflow, for instance through large deposit withdrawals, massive credit disbursements, crystallization of its contingent obligations, as well as unfavorable market changes. In addition, other events might occur leading to counterparties avoiding lending to or trading with the banking institution concerned. Instances where the markets that a banking institution encounters experiences losses due to liquidity, the banking institution might face a liquidity risk as well.

Subsequently, liquidity risk is considered to have a spiraling effect and thus, it has high chances of compounding other risks that might include market, as well as credit risks (Diamond & Rajan, 2001). For instance, if a trading bank is involved in an attachment to an illiquid asset, then it means that its limited capability of liquidating such an attachment in the short run might result in a market risk. Furthermore, an attachment might be hedged from market risk, but it will still be faced with the liquidity risk. The occurrence of a liquidity risk that might face a variety of banking institutions in an economy might culminate into a liquidity crisis that can cause devastating impacts on the overall economy.

An understanding of how a liquidity crisis comes about is important in getting to understand how to develop effective solutions of how it can be avoided if it can. A liquidity crisis entails a negative financial situation that is mainly characterized by lack of cash flow (Williams, 2010). From a business point of view, a liquidity crisis involves a situation where an otherwise solvent business lacks liquid assets that are necessary to enable it to cater for its short-term obligations as and when they fall due (Charles, et al., 2012).

Like most banking sectors globally, the Zambian sector is made up of commercial banks that are regulated by a central bank. The central bank of Zambia is the Bank of Zambia which plays this role. Upon its establishment in 1964, the Bank of Zambia was given the full powers of performing the functions of a conventional central bank such as controlling the monetary policy, managing the foreign exchange reserves of the country, and being the bank to the existing government, among others (Bank of Zambia, 2008). Another major role played by the Bank of Zambia is the function of controlling the liquidity of the economy's commercial banks.

The Bank of Zambia plays a key role in formulating and implementing measures to counter the occurrence of a liquidity crisis that could adversely impact the banking sector and ultimately the overall economy of Zambia (Bank of Zambia, 2018). On the contrary, liquidity crises have been very difficult to avoid in most of the developing economies across the globe, Zambia inclusive. It is thus, essential for central banks in these economies to gain a better understanding of the dynamics of liquidity crises and the measures that can be put in place to counter their occurrence.

Globally, the 2007-2008 liquidity crisis was the latest one to affect most economies in the world. The crisis led to a situation where banks and other financial institutions were negatively impacted. It should be noted that in Zambia, the most recent liquidity crisis can be considered to have happened between 2015 and 2016 (Bank of Zambia, 2018). During that crisis, most of the commercial banks had liquidity shortfalls with some being caused by expansion of loan portfolio where they were giving massive loans to borrowers. Unfortunately non-performing loans also increased across all commercial banks in this period. Subsequently, most of the affected commercial banks sought liquidity from the Bank of Zambia (Bank of Zambia, 2009a).

1.3 Research Aim, Question, and Objectives

The section evaluates the purpose of the research, the research question, and the research objectives that will be pursued in this research study.

1.3.1 Research Aim

The research in this context will examine the impact of a liquidity crisis on the banking industry, as well as come up with strategies to reduce this impact considering that such a crisis is indeed unpredictable and can happen to any economy at any time.

In order to develop ways of mitigating this risk, the research will also consider evaluating the main causes of a liquidity crisis with specific emphasis being given to causes that involve the banking sector. It will be critical in this research to consider some of the findings of past research studies to build on the information gaps related to liquidity crises. Most importantly, the research will use the case study of the Bank of Zambia and its efforts to counter liquidity crises in the country in the past, especially given the concern that it is a challenging task in most of the developing countries in the world.

1.3.2 Research Question

The research will seek to answer the following research questions:

1. What was the impact of the 2007-2008 Global Financial Crisis on the banking industry in Zambia?
2. Were there risks in the economy that could have played a role in facilitating the occurrence of the crisis?
3. What was the government's response to the crisis?
4. Was the central bank's response to the crisis sufficient?

1.3.3 Objectives

The research objectives for this study are as follows:

1. To examine the impact of the 2007-2008 Global Financial Crisis on the banking industry in Zambia
2. To identify risks in the economy that could have played a role in facilitating the occurrence of the crisis
3. To evaluate the government's response to the crisis
4. To examine the sufficiency of the central bank and government's response to the crisis

1.4 Chapter Summary

The chapter gave the general framework of the whole research study, while specifying the problem statement, the questions, as well as the objectives. It also identified the background information of the problem in question. A detailed theoretical analysis of the problem area is given in Chapter 2.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter will be to give a detailed review of the existing literature on the problem in question in this research. The main literature will focus on theoretical concepts revolving around the issue of liquidity and its relation to the 2007-2008 Global Financial Crisis. Past research studies will also be evaluated to determine any existing gaps in their findings.

2.1 Background Information

The issue of the liquidity of commercial banks has received significant attention from both academics and researchers in the fields of finance and banking. A wide variety of studies have been conducted to evaluate the aspect of bank liquidity, its major influencing factors, as well as strategies of controlling it to ensure it remains at reasonable levels. John Maynard Keynes is famous for the presentation of the Liquidity Preference Theory that defined the three main reasons why liquidity is demanded and preferred, especially in the context of the working dynamics of commercial banks and related financial institutions (Keynes, 2006).

According to this theory, the transaction motive depicts that holding cash enables the entity concerned to cater for their daily transactions to ensure that the business operations are consistent. In addition, the precautionary motive proposes that a firm must keep its liquidity to cater for unforeseen cash outflows (Keynes, 2006). From another point of view, the speculative motive proposes that businesses should maintain liquidity so that they can take advantage of arising investment opportunities, which will in turn help in enhancing the profits earned. There are also a wide range of study topics from past research that are related to the issue of bank liquidity as will be discussed in this review.

Commercial banks play a critical role in the financial world, with the Global Financial Crisis between 2007 and 2008 giving a good account of this reality. Commercial banks play an important role in an economy because they help in the transfer of surplus funds from the developed parts of the economy to the ones with a cash deficit (Konovalova & Zarembo, 2015). They in turn help in the creation of a balance between the sectors with a surplus and those with a deficit, while helping in strengthening the aggregate economic position of the respective economy. As confirmed by (Moussa, 2015) Liquidity and its management are the key factors

that influence the strength and capability of commercial banks to conduct their business operations while influencing the position of the economy. The liquidity management of commercial banks is thus, vital for ensuring that opportunities in the economy are well taken care of and risks mitigated in an effective way (Eakins, 2008). It shows the importance of effective liquidity management in supporting the operations of commercial banks and other related financial institutions and ultimately the stability of the economy, especially amid growing economic opportunities in the modern world.

According to the Bank of International Settlements, liquidity refers to the ability of a banking institution to meet arising financial obligations as and when they fall due and to fund any increments in its assets (Acharya, 2006). Such a definition is in congruence with the definition given by Bookstaber (2000), Charles, Florian, and Marie (2012), as well as Eakins (2008). The banking institutions should be able to meet their financial obligations without leading to unacceptable losses and financial risks.

For different participants in the financial sector of an economy, it is critical to understand the liquidity risk that could be faced when financial institutions such as banks are on the verge of being challenged by low capability to fund arising financial obligations and thus, meet the needs of their customers. Such assessment of risk is important for different stakeholders, including shareholders, government, market authorities, borrowers, bondholders, and other banking institutions. As bank management and regulators have the responsibility for ensuring financial stability, they should have an interest in the overall risk that could be facing the financial institutions (Saxegaard, 2006).

For instance, bondholders usually have concern about the chances of bank default, as well as the overall risk facing their capital invested in the banks. As demonstrated by Williams (2010) in reference to the case of Lehman Brothers, the financial company had borrowed significant amounts aimed at funding its real estate mortgages, which in turn led to the bankruptcy in 2008. The assets that were held by the firm, especially in illiquid form were more as compared to the owners' equity.

Such was a vulnerable position because a slight decline in the value of the assets held could entirely consume the overall equity book value (Williams, 2010). On the other hand, shareholders are usually concerned with the liquidity risk to determine the systemic and thus, overall risk that could face their investment at any given time. Charles, Florian, and Marie

(2012) suggested that, in most instances, all of a commercial bank's stakeholders are concerned about the overall financial health of their respective banks to cater for their interests and thus, they have an interest in knowing the liquidity risk of their financial institutions.

2.3 Liquidity Regulations

There are a wide range of local and international banking regulations that are applied to control liquidity of commercial banks and other financial institutions, including Basel I, II, and Basel III. According to the Basel Committee (2010), Basel refers to a variety of international banking regulations that have been formulated and implemented by the Basel Committee on Bank Supervision (BCBS). It gives a set of the minimum capital requirements that financial institutions should hold with the main objective of minimizing credit risk. Basel III was formulated to attain the aim of overcoming the shortfalls of Basel II, especially in relation to bank liquidity.

The Basel Report that was published in 2010 has a clear statement requiring banks to maintain a liquidity coverage ratio that gives a reflection of a reasonable liquid assets level. Furthermore, banks are required to fulfill the liquidity requirements for a full month, especially in situations of rigorous liquidity activities (Basel Committee, 2010). In the early stages of the economic downturn, large banks were on the verge of facing more failure because of the lack of liquidity even in instances where they received extensive liquidity help, especially from central banks. During the aftermath of the crisis, banking regulators started making suggestions to implement liquidity ratios to complement the existing capital standards so as to better control liquidity.

Furthermore, Saxegaard (2006) concluded that low liquidity level was caused by the global crisis. From this point of view, any international or local standards that have been set to control bank liquidity should be considered for implementation by banking institutions to guard against liquidity crises. Apart from the liquidity issues, banks should have robust internal and external controls to avoid internal and external failures by increasing oversight measures and strengthening corporate governance standards.

2.4 Liquidity Risk

A liquidity crisis in an economy that impacts the banking industry can be forecasted through an analysis of the liquidity risk facing banking institutions. As depicted by Diamond and Rajan

(2001), liquidity risk originates from the fundamental role of banking institutions in the long-term transition of short-term deposits and other assets into long-term loans. Subsequently, liquidity risk can be viewed from the point of view of funding and market liquidity risk.

Diamond and Rajan (2001) further propose that funding liquidity risk entails the probability that the banks in the economy are not able to effectively meet the current and future cash flows and related needs without leading to negative impact on the financial health and daily operations of the banks concerned. Furthermore, market liquidity risk refers to the risk that a banking institution is not in a position to offset a position or change it at the prevailing market price due to inadequate strength in the market, which could in turn lead to a liquidity crisis (Charles, et al., 2012).

2.5 Causes of Liquidity Crisis and Zambia Analysis

There are different causative agents that might be related to the occurrence of liquidity crisis in an economy and thus, in its banking industry. On the one hand, shifts in bank capital can be linked to changes in the liquidity crisis. As pointed out by Moussa (2015), lower bank capital in terms of long-term assets might lead to higher liquidity. On the other hand, lower bank capital causes a reduction in the deposits, which in turn lowers the bank's liquidity. This is as a result of crowding out deposits as investors' funds, as well as deposits shift sides to turn into bank capital.

The liquidity might remain low for a long time because investments on bank capital cannot be easily converted back into cash. More so, they cannot be withdrawn in an easy way, which might in turn contribute towards lower liquidity in the short term. From a different point of view, Konovalova and Zarembo (2015) argue that liquidity is mainly influenced by the size of the banking institution. In this context, they argue that large-sized banking entities do not have preference for liquidity whereas small-sized ones need to check on their liquidity regularly.

Such happens because large-sized banks have an easier approach to enhance their liquidity when need be because they can easily seek external financing from the central bank and other large banks. Small-sized banks do not have an easy way when it comes to seeking external financing either from the small or the large banks (Diamond & Rajan, 2001). Acharya (2006) further explained that large-sized banks usually undertake excessive risk by investing in overly risky assets and advancing massive loans to borrowers.

As these banks increase their overall loan portfolio relative to their capital investment, their non-performing loans will then grow, which will in turn lower their liquidity levels. On the other hand, in instances where banks maintain high liquidity levels, they will most likely meet high opportunity costs, which will then result in lower profitability levels. Saxegaard (2006) also supports this argument emphasizing that holding high liquidity levels raises the solvency risk of the banks and thus, the opportunity costs involved.

The occurrence of the 2007-2008 Global Financial Crisis is a clear indication that liquidity risk is real and the occurrence of liquidity crisis might lead to adverse impact on the economy as argued by Charles, Florian, and Marie (2012). However, the corrective measures taken by the respective economies and financial institutions were different. As such liquidity crises impact economies in different ways, with the economies in question coming up with a wide variety of measures to deal with their situations.

However, it is believed that liquidity crises are difficult to avoid in developing economies such as Zambia (Bank of Zambia, 2014). As such economies are growing there is increased demand for funds by both households and firms. Subsequently, they might seek to acquire such funds from the existing financial institutions, including the commercial banks. From this point of view, a major part of the total assets that are owned by the commercial banks will be made up of loans, as well as advances. In addition, the high levels of advances and loans in the commercial banks represent high levels of liquidity within the respective economies (Saxegaard, 2006).

It is clear that as more households and firms seek funds from the banks for investment in various developing sectors of the economy, there is a growth in the volume of investments that have been supported through risk-weighted assets. According to Bookstaber (2000), such a situation would expose commercial banks and other financial entities to higher levels of financial risk. Ultimately, the commercial banks will be faced with the risk of inadequate cash reserves to meet the demands of their customers and other stakeholders, especially in terms of supporting deposit withdrawals and settling the entities' financial obligations as and when they fall due. The increasing levels of investments in developing economies thus lead to high levels of liquidity risk, which in turn points out to major challenges in dealing with the liquidity crisis (Konovalova & Zarembo, 2015). The occurrence of a liquidity crisis in Zambia could lead to a variety of impacts on the banking industry and the overall economy as well.

Zambia is an African country that has gained its wealth mostly from exporting copper. It was a colony of Britain until 1964 when it gained independence (Bank of Zambia, 2018). In 1964, Zambia only had two commercial banks. Now, Zambia has a total of 18 commercial banks (Bank of Zambia, 2018). According to a World Bank Report of 2017 a liquidity crisis in Zambia was last experienced between 2015 and 2018 (World Bank, 2016). The liquidity crisis was related to the Global Financial Crisis that mainly affected the overall world between 2007 and 2008. Zambia was under a lot of strain during this period and this seemed to affect most sectors of the economy.

The commercial bank system was one of the major sectors of the economy that was most impacted by this crisis. By the end of 2017 an economic growth of only 4% was recorded (World Bank, 2016). Besides this, Zambia was affected by the global economic crunch of 2008 whose delayed effect came a decade after. During this period, prices of goods and services across the economy rose. Subsequently, interest rates were high and the required reserve ratio for commercial banks went up (Bank of Zambia, 2009a). This was a clear indication that the country was facing a liquidity crisis as money was hard to come by, with lots of difficulty faced to move assets into cash (Bank of Zambia, 2009a).

2.6 Theories of Liquidity Management

A better understanding of liquidity management has been achieved through research into the theories of effective liquidity management. Central banks and other regulatory authorities across the globe use four main theories of liquidity management so as to successfully control and mitigate the risk of having a financial crisis that could impact their economies negatively. These theories include:

I. The Shiftability Theory

The shiftability theory provides an approach through which banks can manage their liquidity through the shifting of assets (Eakins, 2008). In instances of low liquidity, banks can sell some of its assets. The approach started to be used at a time in history when short-term commercial lending turned less effective because it could not mature as and when needed, especially due to changing business cycles. Through the shiftability approach, banks are able to shift their earning assets to other financial institutions in exchange for cash. Ultimately, non-liquid assets are turned

into such a state that they can improve the liquidity of the firm. However, Eakins (2008) notes that this theory has a limitation in that, in times of a crisis, it might be ineffective because the effectiveness of the assets to achieve liquidity goes away because there is no market. For instance, there will be little room to convert assets in an instance where all banks are in a crisis.

II. The Real Bills Doctrine

It refers to an approach where currency is issued in cash in exchange for a short-term debt and at a discount (Eakins, 2008). The doctrine does not consider that limiting banking institutions to issued money that has been sufficiently backed by assets of an equal value might lead to inflation (Bookstaber, 2000). However, proponents of the doctrine propose that it could result in excessive money supply in the economy, which might in turn lead to inflation.

As argued by this doctrine, liquidity can be enhanced by supporting transactions between banks and existing business entities leading to the issuance of money that later circulates into the economy. As a result of the application of this approach, commercial banks can purchase and subsequently hold real bills while issuing cash (Bookstaber, 2000). It has been argued that this theory can be applied by central banks in economies to manage money supply and ultimately the liquidity of commercial banks.

III. The Anticipated Income Theory

The theory was developed by H.V. Prochnow and it argued that maintaining cash, as well as near-cash assets helps in forgoing income opportunity and helps in enhancing liquidity in such a situation where an economy is under crisis (Konovalova & Zarembo, 2015).

As such, banks should use short-term loans where the interest and principal payments can be done on installment basis. As such, installment cash flows can be used by banking institutions as a means of achieving consistent liquidity. To achieve this, banks should use bonds as collateral for short-term loans and they will later collect funds by selling the bonds in case of a liquidity crisis (Eakins, 2008).

IV. The Liabilities Management Theory

The approach given by this theory states that commercial banks should not lend loans that are self-liquidating so that they can maintain liquid assets because they have the ability to borrow reserve money from the existing money markets as and when they require such funds (Eakins, 2008).

As such, they can hold liquidated reserves by holding additional debts against themselves through the use of other resources. Such other resources might include certificates of deposit, loans from central banks and other banks, as well as ploughed back profits from their own operations (Bookstaber, 2000). Ultimately, banks are able to enhance their liquidity through such other sources.

These theories together with the *Zambian Banking Act, Banking and Financial Services Act* and other regulations in Zambia pertaining to commercial banks are the researcher's main focus in this context.

2.7 Literature Gap

The researcher noted that no specific research has been conducted in Zambia pertaining to the impact of liquidity crisis and how it can be avoided. This research will therefore be very significant and useful to the Central Bank of Zambia. Recently, academic literature relating to liquidity and liquidity risk has been increasing (Diamond & Rajan, 2001). On the contrary, practitioners in the field of finance have been questioning such late arrival of the topics to the academic discussion.

This is because most of the traditional academics have preferred to view the world from the point of view of frictionless and perfect markets. As argued by Acharya (2006), such an approach is traditional and is becoming transparent recently due to the increasing availability and accessibility of information, especially relating to such finance matters as access to financial market financing and trading of securities.

Consequently, Acharya (2006) argues that more detailed research into the issue of liquidity and subsequently liquidity risk analysis is timely. Furthermore, the increasing integration of the global markets has made exposed financial systems to market volatility as they are impacted by more factors than in the past. This leads to a higher risk of liquidity crisis in one economy

that might lead to a chain of impacts across the globe. As such the issue of liquidity is fit for examination as to the main causes, its impacts on markets and economies, and the ultimate control measures.

In prior research, it was argued that in the process of conducting liquidity risk management, banking institutions usually deal with liquidity surplus or deficit (Konovalova & Zarembo, 2015). Both of these situations are not desirable for the banking institutions, as well as for the general economy. Such is because liquidity deficits result in unforeseen cash shortages that might need to be corrected, while liquidity surpluses result in lower asset returns. From this point of view, it is clear that the existing body of knowledge needs to be expanded to ensure that it covers a situation where both of these aspects are covered and controlled, leading to better measures to control the adverse impact of a liquidity crisis.

Currently, sustainable and enhanced economic growth remains a top priority for the government of Zambia. A developed and sufficiently stable financial sector will play a critical role in facilitating such economic growth. Additionally, extending financial services, especially those provided by commercial banks, to all the sectors in the economy through a stable and developed commercial bank system will also act as a strong tool to enhance economic growth.

As such, research on liquidity and the achievement of effective liquidity management will come in handy for the achievement of better policies to ensure a strong banking system (Saxegaard, 2006). The research will thus seek to fill the existing information gap by focusing more on the role of the Bank of Zambia in the prevention of a liquidity crisis and the control of the impact of such a crisis on the country's banking industry and thus, the economy.

2.8 Chapter Summary

This chapter gave a review of the landmark and classical literature existing on the topic of the study. It also gave a history of the banking system in Zambia. The next chapter, Chapter 3 will present the methodology used in the research process.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The chapter will review the process that will be followed in conducting the research. As such, it gives a step by step guide to the achievement of the answers to the research questions. It will also look at the tools and techniques used to collect the data.

3.2 Methodology

The aim of the study is to analyze a liquidity crisis and its impact on a developing country like Zambia through a case study of The Bank of Zambia. The period under review is between 2008 and 2009 when the world went through a global liquidity crisis. It is believed that during this period, there was a global liquidity crisis which affected global finances throughout the banking sectors. This crisis may have been caused by a rapid financial innovation that lead to rapid booms which can cause liquidity crises (Crotty, 2009).

An inferential research design was thought to be more appropriate for this purpose because it conveys as economically and meaningfully as possible the information provided by the numbers about a population or events or objects (Phillips and Tomson, 1967).

The inferential research design was chosen because the data was to be in a form that is inferential. This will allow the researcher to use both qualitative and quantitative information about a particular group of observations for drawing more general conclusions for generalizing beyond the descriptive data at hand.

Data collection in an inferential research design is done in a natural setting and the subjects remain in a natural setting and not subjected to unpleasant conditions making them cooperate much more easily and readily (Polit and Hunger, 1983).

Another reason for choosing such a research design was because the aim is to portray accurately the characteristics of person's situations or groups and the frequency with which certain phenomena occur or happen (Polit and Hunger, 1983).

3.3 Research setting

The study was conducted at The Bank of Zambia premises while some information was collected from interaction with employees of some commercial banks and other financial institutions.

3.4 Research Strategy Overview

In this study, the researcher specifically looks at the role that the Bank of Zambia has played in ensuring that commercial banks operate in a way that enables transactions of buying and selling to take place easily and to avoid possible liquidity crises. The research will establish information on this through a process of planning the methods to use and the subsequent data collection methods. Both primary and secondary data will be collected in this research study with each one of them playing a unique role in contributing to the findings of the research.

The researcher will gather secondary data from books, journals, newspapers, reports from the Bank of Zambia, the Banking and Services Act and other laws and regulations governing banking in Zambia and the role of the central bank in enhancing liquidity of commercial banks (Lee, 2008). Subsequently, the research will employ both qualitative and quantitative approaches. More specifically, the quantitative research follows an explanatory research design where the collected quantitative data is analyzed through the use of statistical tools, including correlation models to determine the significance of the provided parameters.

3.5 The Data

Majority of the data collected in this study was sourced from annual publications of the Bank of Zambia, as well as the audited financial reports of the commercial banks concerned. All the audited financial statements of the commercial banks over the whole study period have been obtained from the Bank of Zambia, which is the country's central bank and thus, has the responsibility of maintaining all the audited financial statements and reports of the commercial banks that are operating in the country as it regulates and oversees their performance and activities. Data was collected using a self-administered questionnaire because it was the most appropriate given the time limitation. The information collected was fairly consistent and easy to process.

This method of data collection has the following advantages:

1. Saves time
2. Can be administered by one person
3. Has the ability to collect more information at one go
4. Gives wider access to the sample
5. Saves costs i.e. very little observation required

Despite the above, the researcher was also aware and able to mitigate the following disadvantages:

1. Misunderstanding the questionnaire
2. Incomplete answers
3. Poor response
4. Ensure completeness
5. Establish rapport
6. Confidentiality promise

3.6 Data Collection

Researchers use various methods to collect data. The method used for this particular research was the Survey method of research. In this context, it involved the use of questionnaires and interviews to collect data. In this context, the method entailed questioning individuals on different topics and subsequently describing the different responses. This method of collecting primary data was used in this study to test concepts while reflecting the attitudes of the participants towards the occurrences during the liquidity crisis period. The researcher involved the respondents directly in providing a descriptive outlook of the information provided in the questionnaires.

Open-ended questions in the questionnaires were used and they enabled the researcher to engage the respondents in the form of interviews. The method was used because most of the questions regarded the description of statistics that the researcher had already collected from such sources as audited commercial bank reports and financial statements, as well as reports by the central bank.

In addition, the survey method was critical in testing the hypotheses concerning the different attitudes that banking institutions had during the liquidity crisis and the way participants in this sector viewed the events at the time (Bank of Zambia, 2009a). Furthermore, this method considers a representative sample and therefore deemed to be very direct and easy to get required results. Despite this major advantage, the researcher will take care to ensure that ethics are followed in the collection of data to avoid getting ambiguous results, respondents answers kept confidential and used for research purposes only (Lee, 2008).

3.7 Data Collection and Processing

Data was collected in the months of December 2018 to February 2019 when the questionnaire was ready. The raw information was analyzed through a loading frame and values assigned to each coding. Coding sheets were developed and the information cross classified. Tallying was done and data coded according to the tables.

3.8 Sampling Frame and Sample Size

The target population was the staff at Bank of Zambia in the Bank Supervision Department. A sample of 12 staff was selected out of a staff compliment of 21 based in the department stated above which dealt with the subject in question.

The sample size was convenient for the study give the time limitations to complete the study. Limited finances were also another challenge as well as the time consuming data collection instrument it would pose if the size of the sample was big.

Permission to use the questionnaire was sought from individual subjects and Purposive sample technique was employed to choose the subjects. Purposive Sampling Technique has been defined as a “type of non-probability sampling method in which the researcher selects subjects for the study based on personal judgement about which ones will be most representative” (Polit and Hunger, 1983). Such a selection was easy and quick in time to complete the study.

The subject in the sample were however expected to meet the following criteria:

1. They must be staff of Bank of Zambia
2. The must have worked in the bank supervision department for more than 10 years.
3. Must have worked at least 5 years in a commercial bank

3.9 Chapter Summary

The chapter gives an overview of the method that will be used in conducting the research. It also gives a justification of the respective research strategies to be used. Additionally, it gives details about the sampling, as well as the data collection methods. The next chapter, Chapter 4, covers the Findings and Analysis that will deal with analyzing, interpreting, and presenting the data collected.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter will present and discuss the finding of the research taking into consideration the liquidity crisis and its effect on the economy as well as the banking industry and how the effect can be controlled.

4.2 Data Analysis Methods

The research adopted a qualitative method of data analysis. Collection of data will be done using quantitative data collection and analysis. Open-ended questionnaires will be used in the collection of data from the field which will represent primary data for the research (Bridgeman, 1992, p.260). Open-ended questions will be proffered for this research because they will give the respondents room for explanation of their answers (Lee, 2008, p.12).

The descriptive answers provided through the questionnaires will contain information that will be summarized into tables for ease of understanding by the researcher (Saunders, Philip & Thornhill, 2016, p.120). The answers will also cover the impact of global and local liquidity crisis on the banking sector and ultimately the overall Zambian economy will be examined. Efficiency and effective parameters will be used to measure the results.

.4.3 Findings

This chapter will discuss the findings of the research variables and how they affect Zambia's economic status.

4.3.1 Zambian Banking Industry

For about twenty years until the year 1990, Zambia exerted too much control over the government-owned businesses in addition to strict administrative control. The industries for this control included financial markets and the banking industry (Brownbridge, 1996, p.34).

The introduction of intervention strategies combined with a sudden collapse of exterior trade pushed the country into an economic decline.in 1990, reforms to uplift the markets were put in place especially in the banking sector but yielded no fruits. Strategies applied included the releasing of loans by the state-owned banks to uplift development in the country, monetary

controls specifically interest rate controlling administrative controls which did not solve the existing issues (Brownbridge, 1996, p.40). This according to Baldini, et al (2015), was contributed by the worse poor trade, increased risk premium as well as reduced appetite of internal banks (150).

4.3.2 Effect of the Crisis

The market share of the Zambian banking sector was viewed in terms of the allocation of assets, loans, as well as deposits of the different commercial banks as depicted in Table 1 below.

Table 1: Allocation of assets, loans, and bank deposits, 2007 and 2008 in % of the total

Form of Ownership	2007			2008		
	Assets	Loans	Deposits	Assets	Loans	Deposits
Foreign bank subsidiaries	63.8	65.2	60.2	61.1	68.3	62.5
Joint venture banks	20.6	16.5	23.8	19	23.1	24.7
Local banks	15.6	18.3	16	12	16.3	17.2

Source: Bank of Zambia (2008)

From the table above, the subsidiaries of the foreign banks in the Zambian economy dominate the overall banking sector's market share when considering the assets, deposits, as well as the loans. Additionally, the data depicts that the local banks have the lowest portion of the market share of the economy's banking sector.

In the period of 2007-2008, the financial performance, as well as the condition of the banking sector was considered to be relative. Although the respondents considered the banks to be performing sufficiently well, the findings showed that a flat performance in the past years (Bank of Zambia, 2009). An assessment of the bank performance data collected was as depicted in Table 2 below. The bank performance as per each of the indicators is rated on a scale of 1-4 ranked as unsatisfactory, fair, satisfactory, and strong.

Table 2: Evaluation of Bank Performance, 2007-2008

Performance Indicator	Capital Adequacy		Asset Adequacy		Earnings		Liquidity	
	2007	2008	2007	2008	2007	2008	2007	2008
	Strong					√		
Satisfactory	√						√	
Fair			√					
Unsatisfactory		√		√		√		√

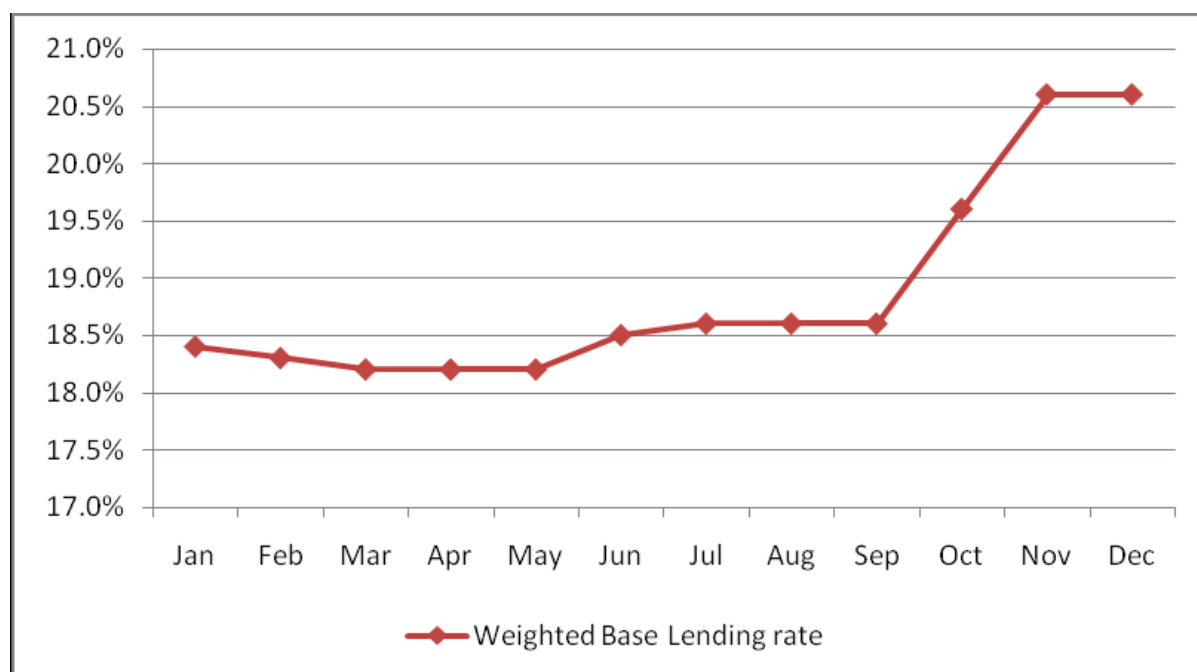
Source: Bank of Zambia (2008)

Although capital adequacy in the banking sector was considered satisfactory in 2007, it was observed that it was mainly unsatisfactory in 2008 following the global liquidity crisis. Asset adequacy was considered fair and thus, not as per expectations of the shareholders because the economy was still under the initial stages of development (Books table, 2000, p.22). However, the adequacy of assets in most of the banks was considered to be unsatisfactory for the period following the onset of the liquidity crisis within the economy.

This was seen through the earnings, as well as the liquidity of the banking sector, which were considered to be unsatisfactory for the period indicated by 2008 and later. The earnings had been considered strong during 2007, especially given the crisis periods when the banking sector was not yet well developed. The banks had been making good earnings when considering their sizes and level of operations (Bank of Zambia, 2008). These revelations show that the liquidity crisis led to an overall unsatisfactory bank performance for the Zambian banking sector.

The liquidity crisis also had a noticeable impact on the country's credit market, which in turn affected the lending capability of the banking sector. Figure 1 depicts the trend formed by the base lending rate across the year 2008. On the one hand, the lending rates in the country showed a declining trend throughout the first quarter of the year. However, it gradually increased across the second, as well as the third quarter, while increasing rapidly throughout the fourth quarter. The trend formed by the weighted lending rate affected the country's lending in Zambia (Bank of Zambia, 2008).

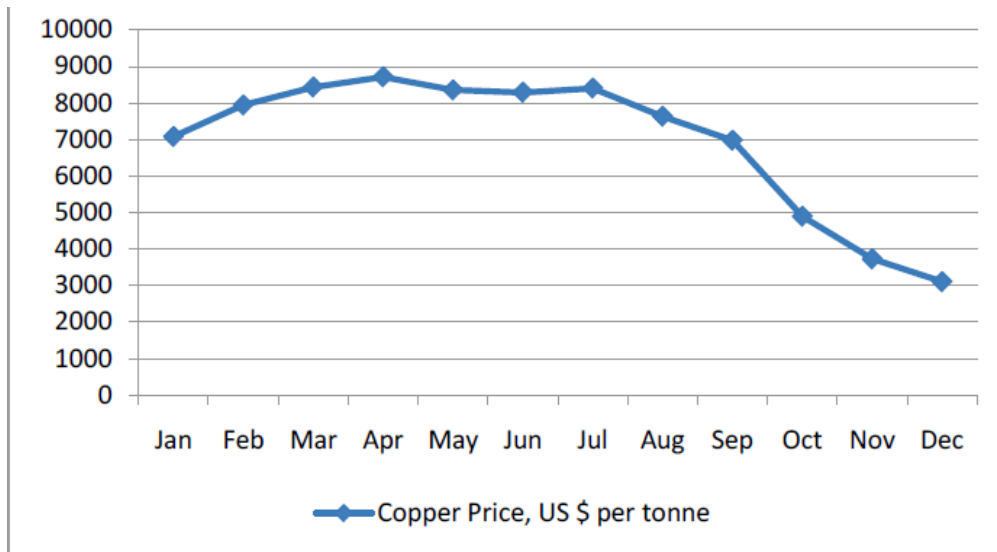
Figure 1: Monthly base lending rate (in %), 2008



Source: Bank of Zambia (2008)

By the fourth quarter of the year 2008, there was a sharply negative impact of the financial crisis on the exchange rate. During the period of the crisis, copper prices were experiencing a deep fall, which in turn led to the rapid depreciation of the kwacha. The decline in the copper prices is shown in Figure 2 on the next page.

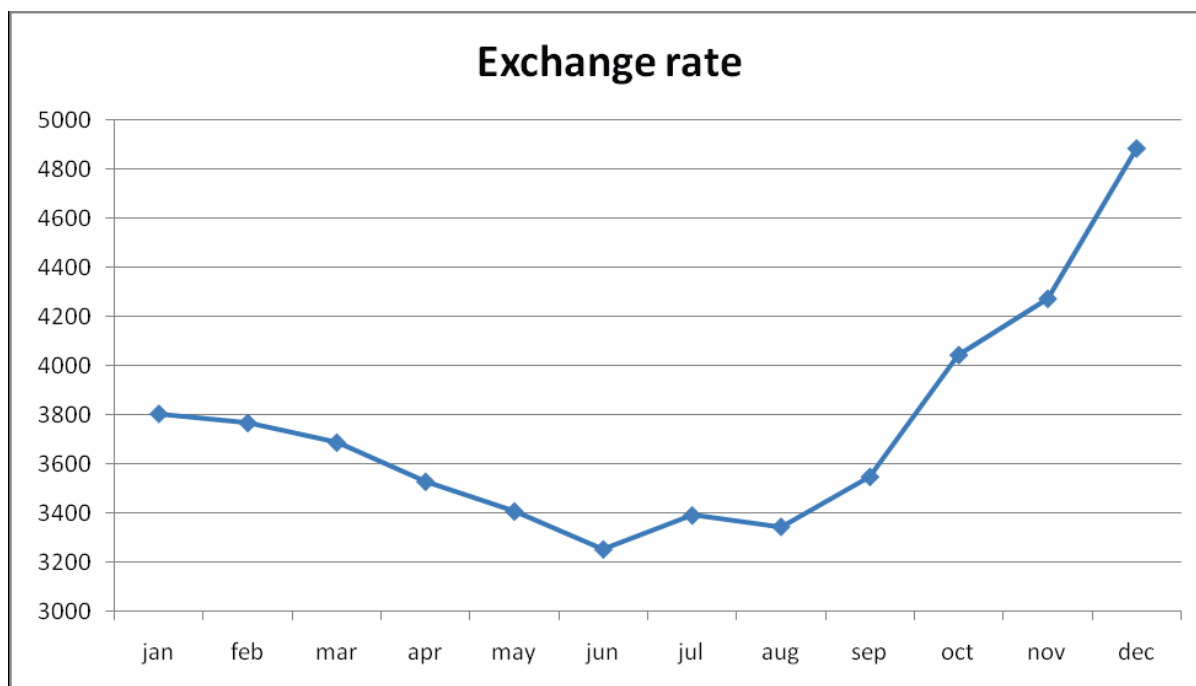
Figure 2: Copper prices trend (US\$/Tonne), 2008



Source: Bank of Zambia (2008)

As depicted in Figure 2, the kwacha had a slow appreciation from the start of 2008 up to June, after which the rates depreciated gradually. Furthermore, prior to the beginning of 2008, especially in 2007, the currency was depreciating gradually as more firms and households in the economy were affected by the crisis.

Figure 3: Exchange rate trend (K/US\$), 2008



Source: Bank of Zambia (2008)

Furthermore, the financial crisis led to a slowdown in economic growth and an increase in poverty levels. It, in turn, affected the current flow between the banks and the households and firms (Musokotwane, 2009, p.25). The economy was performing well prior to 2007, as well as across the first two quarters of 2008. However, as the sudden decline in the value of copper during the financial crisis came, the initial effects of the crisis were experienced with the local authorities and financial institutions sounding an alarm that the economy was going off target (Bank of Zambia, 2014).

In 2008, the Ministry of Finance and National Planning (MoFNP) had projected that economic growth in 2009 would be 7%. However, these projections were revised to 5% when the finance and planning ministries considered the continuing effect of the financial crisis (MoFNP, 2009 p.10).

The liquidity crisis greatly affected the internal market as well as the country's banking sector, leading to an increase in the country's external debt, thus affecting the banking sector in different ways. The period of the crisis had rising interest rates that made households and firms to borrow less (Musokotwane, 2009, p.25). In addition, the number of loan defaulters in the banking sector increased significantly. As a result, debt levels were accumulating in the domestic banking and non-financial institutions as the default rates rose thus leading to

limitation of loans by the private banking sector to the borrowers (Musokotwane, 2009, p.24). As such, the domestic debt of the overall economy was growing. Furthermore, the government was borrowing more from foreign economies and financial institution. This increased the government's debt burden of the Zambian nation. For instance, in 2008, the domestic debt by the government increased by 2.5% as compared to that of 2007 (Bank of Zambia, 2008).

4.3.3 Countermeasures

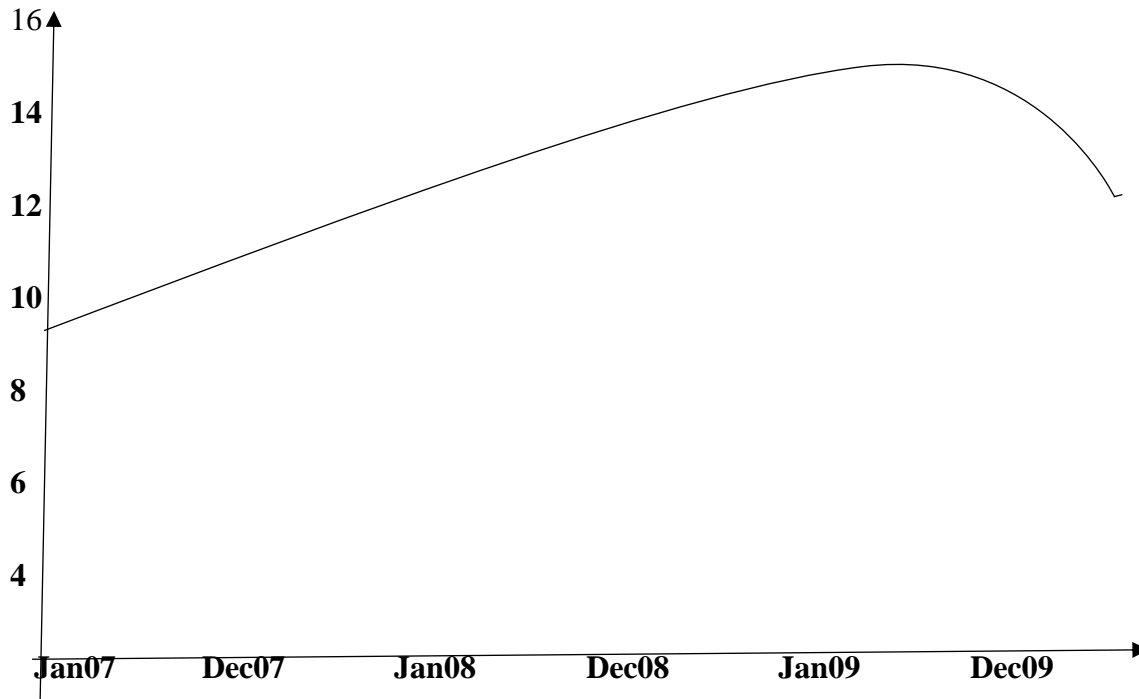
During the crisis, policymakers projected the challenging times would last for a short period. In the private sector, especially in businesses, most people had the belief that the situation was becoming worse with time and that it would proceed that way in the foreseeable future. This prompted the government of Zambia to enact measures to counteract the crisis through the central bank of the country (Bank of Zambia, 2008).

The private sector proposed some of the responses to the country's problem. However, the government did not take into consideration the recommendations (Bank of Zambia, 2008). The only apparent government response was through the monetary and fiscal policies, as well as the exchange rate policies. The government's response was mainly channeled towards the immediate impact of the crisis, especially those affecting the mining sector (Bank of Zambia, 2014). For instance, it encouraged mining firms not to fire employees or close down their mining plants due to losses (Bank of Zambia, 2014). Stakeholders in the mining unit held a workshop at the beginning of 2009 and came up with recommended solutions, but the government could not adhere to them (MoFNP, 2009, p.3). The government through the central bank adopted an expansionary fiscal policy so as to stimulate the economy, which included budgetary increment during and after the crisis. To fund the expansionary budget, the government also needed to expand its domestic borrowing (Ministry of Finance and National Planning, 2009, p.5). In addition, the government continued to aim at applying a prudent monetary policy so that it could decrease inflation.

Through the application of a market-determined and flexible exchange rate, the government was able to develop a dynamic economy that could survive the duel of the crisis (Musokotwane, 2009, p.26). The Bank of Zambia pursued the strategy of expanding the supply of foreign exchange to the economy with the aim of controlling the volatility in the market's currency exchange rates. For example, in 2008 the Bank of Zambia realized \$127.5 million as net sales to the bank market with the aim of dampening the exchange rates (Bank of Zambia, 2009).

Many economists opposed the idea because it could lead to the depletion of the foreign exchange reserves, especially if the crisis persisted and the central bank extended the application of the policy (Bank of Zambia, 2008).

INFLATION RATE 2007-2009



The graph indicates the pricing index for the year 2007 to 2009. The inflation rate abruptly rose between the year 2007 and 2009. This brought a great effect on the Zambian economy. This was fueled by an increase in commodity price which affected largely the high demand products on the market. In the year 2009, inflation rates started recovering due to a decrease in basic consumer products (Mukulwamutiyo, 2016, p.45).

The government also made a variety of concessions aimed at the mining industry to complement the macroeconomic policies. These concessions were aimed at enhancing the firms' profitability while reducing the cost of production. They included abolishing windfall tax, as well as enhancing 100% capital allowance with the aim of encouraging more investment. The government also reduced customs duty on oil and tariffs on mining products (Deloof, 2003, p.575).

4.4 Discussion of Findings

In light of the developing nature of the Zambian economy, it can be deduced that its banking and non-banking sectors were underdeveloped at the time of the crisis. This led to some level of vulnerability of the banking system as a result of the global financial crisis. The vulnerability was further influenced by the fact that the system did not have any exchange and price controls, which in turn made it challenging for banking and non-banking institutions to control the prices and exchange rates of some of the assets in the system (Basel Committee, 2010, p.4).

Another form of vulnerability that led to an increased risk in the banking system was the absence of restrictions and controls on credit allocation and interest rates. Given the point that the economic system allowed free entry of investors sectors of the economy, coupled with full repatriation of dividends from financial assets and attached assets, the overall Zambian economy and its sectors were exposed to the high risk of external economic shocks. Subsequently, the global financial crisis that emanated from foreign economies had ease of spreading to the Zambian economy.

The increasing rate of vulnerability in the economy's commercial banking sector contributed to the occurrence of the liquidity crisis that came with the events of the 2007-2008 global financial crisis (Mueller, 2017, p. 33). From another point of view, the foreign subsidiaries in the banking sector had the largest share of the commercial banks in the overall Zambian sector, with the domestic banks owning the smallest part of the market share. Consequently, the local commercial bank's little control over the total assets, loans, as well as deposits within the banking sector, left the banking sector in the hands of foreign entities (Deloof, 2003, p. 580).

In addition, in instances where the state owned a large stake in the banking sector's market share, the foreign bank partners were bigger shareholders, which in turn gave them their control over aspects key factors like loans and deposits and the attached decision-making power thereof. As a result, the central bank reduced control over the occurrences in the banking sector, especially in relation to the assets, loans, as well as deposits that were in circulation (Basel Committee, 2010, p.6).

From this point of view, the Bank of Zambia had limited control over the occurrences leading to the liquidity crisis that faced the banking sector in 2007-2008. The limited control over the

majority of foreign shareholders in the banking sector by the central bank is a common phenomenon in most developing economies including Zambia. Subsequently, the Bank of Zambia did not have the capacity to monitor and control the events in the banking sector because the decision-making power in a bigger portion of the banking sector was held by foreign subsidiary banks.

This worsened the effect liquidity crisis where the assets held by the banking industry were dwindling (Bank of Zambia, 2008). The Bank of Zambia thus might need to enhance its capacity to monitor, control, as well as manage changes in the assets, loans, as well as deposits and their flow within the economy.

The liquidity crisis led to devastating effect on bank performance, especially in terms of capital and asset adequacy, earnings, as well as liquidity, with most of the stakeholders considering the overall situation to be unsatisfactory (Economics Association of Zambia , 2009, p. 7). The regulatory capital of the banks prior to the global crisis was improving leading to increase capital levels.

Since the banks' operations were uninterrupted, a rise in capital levels could be attributed to growth in retained earnings and paid-up capital. The capital of the banks, however, declined between 2007 and 2008 (Bank of Zambia, 2008). Due to the liquidity crisis, the facing the country led to higher-risk assets that mainly constituted of leases and long-term loans, especially to the private sector. Given that the high-risk assets bought by the banks could not be sold due to the crisis, it led to a decline in their quality. Subsequently, due to the liquidity crisis, non-performing loans increased with advances reducing (Economics Association of Zambia, 2009, p.5). From another point of view, there was a growing level of default cases on loans, which in turn reduced commercial bank's interest as well as non-interest income (Economics Association of Zambia, 2009, p.6).

The liquidity crisis that impacted the banking sector led to sporadic trends in the lending rates of banks. The country's financial sector of the developing economy is increasingly supported by external sources of debt and equity finance, coupled by the bank deposits. These sources were adversely impacted by the financial crisis. During the period prior to the occurrence of the crisis, financial and non-financial institutions had increased their lending both for individuals and businesses, especially the small and medium-sized enterprises (SMEs) (Bank of Zambia, 2009a).

With the occurrence of the liquidity crisis and its effect especially on the economy's copper industry, many of the households and firms had reduced the ability to service loans. This was likely to cause a rise in the cases of default, as well as the subsequent increase in the cost and risk of lending by the banking institutions. Banks were thus, becoming more cautious when lending to their customers, especially in the SMEs and copper industry. The rise in the lending rates in the fourth quarter of the year 2008 can be attributed to all these factors.

Being the main source of the economy's income, copper prices had a direct relationship with the local currency's exchange rates. The declining trend of the price of copper negatively affected the projections of investors. As a result, some of the investors during the period were influenced to move their investment funds to different investment sectors. Some of them even opted to shift their investment to other foreign economies where they could get better returns lower risks (Bank of Zambia, 2014).

From another point of view, there was declining foreign exchange earnings from the copper sector, which was as a result of the falling copper prices. The uncertainty resulting from the economic crisis led to further increments in portfolio outflows, as well as reductions in portfolio inflows by foreign investors (Bank of Zambia, 2009a). Ultimately, the transaction rate in the foreign exchange market decreased, which in turn led to devastating effect on the diversification of the overall export sector of the economy. The depreciation of the currency exchange rate projected the profitability levels of Non-Traditional Exports (NTEs).

However, the occurrence of the financial crisis led to two main impacts on the diversification process in the country. On the one hand, it encouraged NTEs by enhancing their profitability levels through the highly depreciated currency (Konovalova, & Zarembo, 2015, p.120).

However, the financial crisis negatively impacted the demand for such exports due to the lower prices. As such, the overall export market was devastated, which in turn forced many of the households and firms dealing with the export products to cut down their production and instead direct their business to the domestic market, where consumers also had low purchasing power as a result of the crisis (Bank of Zambia, 2009a). This also added to the reduction in the deposits made to the banking sector thus, leading to a reverse effect on the success and stability of the industry.

The crisis affected many sectors of the economy, including tourism, mining, agriculture, as well as the manufacturing sectors (Bank of Zambia, 2009a). The most devastating effect was on the economy's mining industry in which the declining prices of copper and decreasing overall profitability of the firms and households involved led to less contribution to the overall growth of the economy and the eradication of poverty.

From another point of view, the declining economic growth in the country further led to the loss of confidence of foreign investors to make their investments in the economy (rates (Diamond & Rajan, 2001, p.290). All these factors contributed to the negative effect on the banking sector as there was less flow of funds in the economy, especially between the banking institutions and the main sectors of the economy (Bank of Zambia, 2009a).

Distribution of assets, loans, and deposits for commercial banks 2005-2007

A subsidiary of foreign banks	2005 Assets	2005 Loans	2005 deposits	2007 assets	2007 Loans	2007 Deposits
Nature of ownership	61.7	72.7	58.6	63.8	65.2	60.2
Banks with state participation	25.6	15.1	29.3	20.6	16.5	23.8
Domestic banks	12.7	12.2	12.1	15.6	18.3	16

Source: box 2006: 2008

The table above shows the distribution of assets, loans, and deposits between the year 2005 and 2007 among the domestic banks, state-owned banks and other nature of ownership. The data shows a decrease in the year 2005, nature of ownership in assets was high than in 2007 but the loan and deposits decreased from the year 2005 to 2007.

For a bank with state shares, assets ownership, and deposits went down with a bigger margin with only the assets ownership going up (Konovalova & Zarembo, 2015, p.109-110). Domestic ownership in the country increased in all areas from assets, deposits to loans. The effect of a

larger increase in domestic ownership limited the loan accessibility to the public (Bank of Zambia, 2009).

The liquidity crisis also had an impact on the domestic as well as external debt, with such effect being reflected in the banking sector in different ways. In the period of the crisis, the domestic debt of the economy was mainly affected by the rising interest rates (Diamond & Rajan, 2001, p.287, Keynes, 2006, p.56). Due to the rising interest rates, households and firms were borrowing less, the already existing debtors defaulting on the highly costly loans (Keynes, 2006, p.45). As a result, the debt levels were accumulating high profits in the domestic banking and non-financial institutions as the default rates rose and firms reduced loan availability to borrowers (Bank of Zambia, 2009a). From this point of view, the domestic debt of the overall economy was growing

From another point of view, the government was borrowing more from foreign economies and financial institutions, which in turn led to a rising external debt for the overall economy (Charles, Florian & Marie, 2012, p.23).

Some of the banking institutions were also accessing debt from foreign financial and non-financial institutions which culminated into the increasing debt amounts for households, firms and the inevitable the country at large. This ultimately crippled the operations of the financial system especially the banking sector (Williams, 2010, p.40).

The duration and ultimate resolution of the financial crisis were ultimately dependent on the effectiveness of the strategies taken to address the crisis. Zambia's prospects as a commodity exporter were highly dependent on the proceeds from the copper mining industry. As such, Zambia through its central bank ought to adopt optimal policy measures to control and face the crisis. One of the ways of controlling the crisis prudently would be through a limited expansionary policy.

This will constrain the budget deficit to a level not exceeding 3% of the economy's long-term GDP. Furthermore, the policy should be aimed at investments in such sectors education, and health, transport infrastructure. The budget should thus not be impacted adversely by the reduction in the revenues earned by the mining sector (Moussa, 2015, p.51). The domestic borrowing levels by the government should also be maintained at limited levels.

In relation to credit control policy, the central bank will limit the credit levels of commercial banks which in turn will reduce the amount of money in the public thus reducing the inflation rates to less than 10% (Charles, Florian, & Marie, 2012, p.12). Credit control is optimal for the reduction of inflation pressures in most developing economies (Moussa, 2015, p.250). For the case of Zambia, the inflation rate had grown to 16.6% as of 2008 (Bank of Zambia, 2009). The central bank lending can also be used in reducing the inflation rate.

This can be done through the increase the commercial bank reserves which will reduce their lending rate to the public thus reducing the excess money in the public (Charles, Florian & Marie, 2012, p.54). This will reduce the inflation rate in the country. On the contrary, the monetary policy applied should not be used at the cost of slower economic growth (Bank of Zambia, 2009).

The central bank could use the exchange rate policy to control the effect of the financial crisis on the economy of the country. The policy of flexible and market-determined exchange rates needed to be used in Zambia, especially with sporadic interventions by the central bank. The policy was critical for economic diversification and could help in the adoption of more structural policies to reduce the problem of volatility of the exchange rates in the economy.

The government can also apply structural policies to enhance growth so as to prevent the spreading of the crisis and ultimately controlling it. The central bank plays a key role in advising the government on such structural policies which include diversification of the economy to prevent total dependence on one product (Bookstabler, 2000, p.10). This will ensure consistent economic activities thus, supporting financial transactions including those supporting the banking industry (Books table, 2000, p.18).

Ultimately, the government will need to improve the business climate, especially through the reduction of the cost of doing business and ensuring that there is adequate and efficient infrastructure to support service delivery (Eakins, 2008, p.34). The above-mentioned measures should be reinforced by the central bank through the commercial banks in the country.

4.5 Chapter Summary

The chapter gave an overview of the findings made during this research study. It also provided the process used in analyzing the data to come up with concrete findings. The next section gives the recommendations of the study and the conclusions.

CHAPTER 5: RECOMMENDATION AND CONCLUSION

5.1 Introduction

The chapter is aimed at giving a summary of the research findings and the conclusions. It is through these findings and conclusions that the level of the achievement of the research objectives can be determined. It also gives some of the recommendations that can be adopted to prevent liquidity crises in the future.

5.2 Summary of Research Findings

The Zambian banking sector is still relatively underdeveloped considering its limited financial intermediation. As at the time of the occurrence of the 2007-2008 global financial crisis, the commercial banking sector did not have exchange and price controls. The system also allowed free entry of foreign investors, leading to a major stake of the industry being controlled by foreign investors. The allocation of the banking industry's assets, loans, and deposits is in such a way that foreign bank subsidiaries and joint banking ventures take the largest stake.

It leads to the high risk of the Zambian local commercial banks to the exposure of external economic crises, which in turn enabled the recent global economic crisis to find its way into the economy. The resultant liquidity crisis led to unsatisfactory bank performance to most of the stakeholders due to reduced capital and asset adequacy, as well as the profitability and liquidity in the involved banking institutions. The liquidity crisis also led to a reduction in the base lending rates across the banking industry.

The crisis also led to the depreciation of the Zambian currency with the exchange rates being sporadic. Such in turn affected economic growth leading to lower prices for exports, especially copper thus, largely impacting the economy. It also led to the shrinking of the source of income to many of the households, which in turn culminated to higher poverty levels further shrinking the amount of money available for banking purposes.

In response to these impacts, the central bank played a critical role as the government's banker. An expansionary fiscal policy was undertaken to stimulate the economy. The fiscal policy also involved the use of market-determined and flexible currency exchange rates. The government, through the central bank applied a monetary policy by reducing the inflation rates.

5.3 Practical Implications of Findings and Recommendations

The monetary and fiscal policies had a significant impact on economic diversification. However, the policies should not be applied at the expense of slower economic growth. It is recommended that the government should come up with structural policies that could lead to the diversification of the economy, while avoiding overdependence on one sector.

The research showed that in Zambia policies were mostly being applied to stabilize the mining industry. In more recent news, the investment policy direction for Zambia is slowly moving to agriculture to boost the economic growth. In the year 2017, Government at all levels committed to reforming the Farmer Input Support Program (FISP) by implementing it through the electronic voucher system throughout the entire country (Chapoto & Chisanga, 2017).

It is also recommended that the central bank should seek the partnership of the private sector in the development of policies to adopt in preventing the occurrence of a liquidity crisis in the future. To do this, the central bank can conduct surveys that can help bring out the challenges being faced in the market by commercial banks and financial institutions.

The central bank should also collaborate with international banks to make available information and integration for research especially in their department for research.

It is further recommended that future studies could focus on the consolidation of the research area coverage where, for instance, developing economies can be evaluated together. This comes about due to limitations that were found during this research.

5.4 Limitations of the Study

The main limitation of this study was the limited availability of information relating specifically to the impact of the 2008 global economic crisis on the Zambian economy. Further, due to the fact that most commercial banks in Zambia are owned by foreign investors, some key information that could have helped in this research could not be accessed easily.

5.5 Chapter Summary

The chapter gave a summary of the study's findings, conclusions, as well as recommendations that were guided by the research objectives. All the research objectives were answered and the

conclusions made. The study concluded that a liquidity crisis leads to devastating impacts on the banking sector and economy as a whole, with the central bank taking the central role of making policies to mitigate it.

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7.0 Appendices

7.1 Appendix A

7.1.1 Survey Questionnaire

1. What are some of the factors that can be attributed to the relatively underdeveloped
Zambian banking sector? (Tick any number of these suggested alternatives)

- (a) Poor saving and investment habits
- (b) Many rigid government policies
- (c) High levels of poverty
- (d) Financial exclusion of many potential savers
- (e) High levels of taxes in the country

Any other specify:

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2. As the banker to the government, which role does the Bank of Zambia play in case of
the occurrence of a liquidity crisis?

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3. On the onset of the 2007-2008 Global Financial Crisis, what was the perspective of the central bank and the main policymakers towards the welfare of the economy?

- (a) Optimistic
- (b) Pessimistic
- (c) Neutral
- (d) Any other specify:

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4. Did the forecasts of the central bank point to a looming economic crisis?

- (a) YES
- (b) NO

5. What was the impact of the falling copper prices on the overall performance of the banking sector?

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6. What actions were taken by the government to stimulate the economy and the banking industry during the crisis?

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7. Were the corrective policies effective for the resolution of the crisis that faced households, firms, and the overall economy?

(a) YES (b) NO

8. Do you have any recommendations as to the strategies that can be used to mitigate liquidity crises in the future?

Specify:.....
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9. Would you say that the central bank should be solely involved in making decisions on micro- and macro-economic dynamics in the economy?

(a) YES (b) NO

Specify:.....
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10. Do you think the private sector has a role to play in the prevention of liquidity crises in the economy in the future?

- (a) YES
- (b) NO

Specify:.....
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7.2 Appendix B

7.2.1 Student Introductory Letter

