COMPARATIVE ANALYSIS OF FINANCIAL PERFORMANCE OF ISLAMIC AND CONVENTIONAL BANKS IN KENYA

BY
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UNITED STATES INTERNATIONAL UNIVERSITY-
AFRICA

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Project Submitted to the Chandaria School of Business in Partial Fulfillment of the Requirements for the Degree of Masters of Business Administration (MBA)

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STUDENT DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University-Africa in Nairobi for academic credit.

Signed: __________________________ Date: __________________________
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This project has been presented for examination with my approval as the appointed Supervisor.

Signed: __________________________ Date: __________________________
Dr. Francis Gatumo

Signed: __________________________ Date: __________________________
Dean, Chandaria School of Business
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ABSTRACT

The purpose of this study was to evaluate and compare the performance of Islamic banks and conventional banks in Kenya. The research was guided by the following research questions: Does Islamic banking enhance the financial performance of commercial banks in Kenya? Does conventional banking enhance the financial performance of commercial banks in Kenya? And how does Islamic and conventional banking financial performance compare in Kenya?

The study employed descriptive research design which allows the researcher to collect in-depth information about the population that is being studied. The target population for this study was the 43 commercial banks in Kenya. This study used convenient sampling, a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in the study. Convenient sampling was used to ensure that the banks sampled have the data for the analysis. The study employed checklist as the main data collection tool. The data collected was subjected to further review to ascertain correctness and applicability in addressing the research questions. Data was collected before entered into Statistical Package for Social Science (SPSS) which also aided in the data analysis. CAMEL framework was used to measure, analyze and contrast the financial performance of the two types of banking categories.

The study has established the performance of Islamic and conventional banks using capital adequacy, asset quality, management quality, earnings quality, and liquidity. The study also presented a paired t-test was suitable in contrasting the performance of the two banking categories. Capital adequacy was measured using capital to risk weighted assets ratio and the results of the paired t-test was found to be significant with a p-value of 0.019, conventional banks had performed better in terms of capital adequacy for the period. Asset quality was measured using net non-performing assets ratio to gauge the quality of the loan book of the two banking categories. The study found that the net NPA ratio of the banks was very low which was impressive and the paired t-test results indicated the asset quality of the two banking categories was not significant with a p-value of 0.235. The study also sought to establish the management quality of Islamic and conventional banks. Operating expenses to total assets ratio was utilized to measures the efficiency of bank’s management in asset use. Conventional banks had a better performance in management quality as indicated by the results of the paired t-test, a p-value of 0.001 which was significant.
Similarly earnings quality was measured using return on assets ratio and the study found that both banking categories performed poorly in this component recording average ROAs less than the average industry rate of 1.0% - 1.9% set by the Central Bank of Kenya. The paired t-test result indicated a p-value of 0.854, therefore, there was no significant difference in the earnings quality of the banks. This study also established the liquidity performances of the two banking categories and it was found that both Islamic banks and conventional banks were strongest in this component recording liquidity ratios that were way higher than the statutory requirement of 20% and there was no statistically significant difference in the liquidity performance of the banks as indicated by the p-value of 0.54. The study concluded that there was no significant difference in the overall financial performance of Islamic banks and conventional banks for the period. The results of the paired t-test from the analysis of the composite CAMEL ratios were not significant as indicated by the p-value of 0.86.

The study recommends both Islamic and conventional banks adopt decisive performance improvement measures targeting earnings quality in which they performed poorly. Managers of the two banking categories should strive to improve current return on assets ratio which is a key determinant of a bank’s financial health. Islamic banks should also come up with new ways to differentiate their financial products from that of conventional banks who have ventured into providing Islamic windows for their clients.

The study also recommends the government to provide necessary support and encouragement to Islamic banks for them to operate and expand in Kenya as they provide vital financial intermediation to many households and institutions. To investors and depositors, the study highly recommends both types of banking for financial intermediation services as there is no significant difference in their performance. The study recommends a further research on the impact of intellectual capital on the performance of Islamic and conventional banks.
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DEDICATION

I dedicate this work to my beloved uncles Shurie Mumin and Abdille Mumin, my Aunt Fawziya Mire, my parents Halima Ali and Muse Mumin, my siblings and the rest of my family members for their continuous support throughout my studies. May Allah bless you abundantly.
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LIST OF ABBREVIATIONS

**CAMEL**: Capital Adequacy, Asset Quality, Management Quality, Earnings Quality, Liquidity

**CAR**: Capital Adequacy Ratio

**CBs**: Conventional Banks

**IBs**: Islamic Banks

**MENA**: Middle East and North Africa Region

**NPA**: Non-performing Assets

**ROA**: Return on Assets
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

The Financial industry is essential for economic growth and industrialization via channeling funds, providing sound financial systems and markets, proper investor’s treatment, and efficient and maximized resource utilization (Raza, Farhan, & Akram, 2011). The banking sector is viewed as a major source of financing for most businesses. The general assumption which lays the foundation for much of the debate and research on financial performance is that an increase in financial performance will lead to an improvement in the overall performance and operations of an organization. In the field of finance and management, financial performance and measurement research is well developed. It can be argued that the institution size, asset management, and operational efficiency are the three variables financial institutions can change to enhance financial performance. There are few published studies to examine the impact of the above mentioned variables on the performance of commercial banks (Tarawneh, 2006).

Barra and Zotti (2018) argue that the 2008 and 2009 financial crisis triggered researchers to examine the performance of financial institutions/banks in different market structures as a determinant of financial stability and there are numerous reasons currently enhancing this assertion. Firstly, at the center of the 2008 financial crisis were financial intermediaries. Secondly, the instability of the financial system, connected to non-performing loans, increased during the final years of the crisis, particularly for fragile euro area countries, including Spain, Italy, Portugal, Greece, Cyprus and Slovenia, giving priority to the introduction of new interventions and regulatory tools. Thirdly, banks’ performance is an important factor that could hugely affect the phases of financial stability.

The banking sector is a major financial service sector that impacts economic growth and development. To a large extent, the stability and growth of any economy depends on its banking sector’s stability. It functions as intermediary linking surplus and deficit units; provides funds for most productive uses and thereby contributes to economic development. Conventional interest based banking prevails across the world. Islamic banking follows Islamic Sharia as the basis of operation (Siraj & Pillai, 2012).

Worldwide the Banking sector acts as the corner stone of modern trade and economic development and as a major source of finance for the economy, commercial banks play an
important role in the distribution of a country’s economic resources. They channel funds from depositors to investors continuously. Banks can link surplus units with deficit units, if they generate the revenue needed to cover the running costs they incur on a daily basis. In other words, banks need to be profitable for sustainable intermediation function. Other than the traditional intermediation function, the financial performance of commercial banks has a critical ramifications for countries’ economic growth. Good financial performance of banks rewards shareholders for their investment through positive returns. This, in turn, encourages further investments and leads to economic growth. Faulty banking, on the other hand, may lead to bank failures and crises that adversely affects economic growth. (Ongore & Kuse, 2013).

The financial industry of Kenya is driven by commercial banks. In countries where banks constitute large portion of the financial sector, any failure of banks has a huge implication on the country’s economic growth. This can be attributed to the fact that any bankruptcy that could happen in the sector has a rippling effect that can lead to bank runs, crises and bring overall financial crisis and economic tribulations. In Kenya, a number of banks report losses despite their overall impressive performance (Oloo, 2011). Kenya has both conventional and Islamic banks that offer different services to clients. In total, there are 49 licensed commercial banks.

Islamic banking attributes to a banking system or enterprise that is persistent with Islamic laws and principles (Sharia). The practical applications of these principles must conform to Islamic laws and help develop Islamic economies. Islamic law prohibits the earning of interest on lending money, therefore, Islamic banks must not accept or pay interest during their daily business. (Uddin, Ahsan, & Haque, 2017). The thrust of Islamic banking is founded on the desire to submit to the Divine Instructions on all transactions, particularly those involving exchange of money for money. Sharia based Islamic banking does only prohibit riba but also all other unjust practices in commerce. Riba is but one of the major undesirable elements of an economic transaction, the others being Gharar (risk or uncertainty) and Qimar (speculation). While elimination of these objectionable aspects in a transaction is indeed a critical aim of Islamic banking, it is by no means its ultimate objective. According to some, usury or excessive and exploitative charging of interest; while according to others, interest per se is forbidden by the Qur'an (Moin, 2008).
Khan (2011) found that fourteen hundred years ago, Arab merchants frequently lent money with the intention to earn more money in the shape of interest. It was usual practice to find people desperate to borrow money. Those merchants lent money to them, charged higher interest and made fortune out of the misery of the borrowers. The debtor and even debtor’s children then spent their whole life in paying back their loan. However the debt never got paid back in full because every time an extra amount was added to the previous amount as a penalty for late payment and hence suffering of the poor continued.

The first formal antecedent of modern Islamic banking can be traced to the Bayt al-Mal, which dispensed pensions for needy citizens and disabled war veterans. During the medieval period, it acted as the ‘State Bank’ of the Muslim community. Established as a special department of the central secretariat of the state bureaucracy, it was supervised and directed by a government official called khazin al-mal or sahib al-makhzin, and at the provincial level by a treasurer, the khazin or amin. The public treasury of the Bayt al-Mal operated as both agricultural credit bank and commercial bank. Merchants could borrow from this treasury in one region to buy goods and, upon selling in another province, repay the debt at the Bayt al-Mal, whereupon the sum would be credited to the account of the province from which the money had been drawn (Roy, 1991).

Ansari and Rehman (2011) the concept of Islamic banking was accelerated in 1940’s. By 1970’s this concept reached to its climax particularly in middle east and generally in all over the Islamic world. With the passage of time all the Muslim countries made Islamic banks a major tool to their economy. In no time this concept flourished in Africa, North America, Asia and Europe as well. At the moment, in almost 70 countries, about 300 Islamic financial institutions are working efficiently with capital investments worth $500-800 billion. Aggarwal & Yousef (2000) the market share of Islamic Banks has grown from around two percent in the 1970s to around fifteen percent in the 1990s. The growth of Islamic banking in short period of time has surprised everyone including western financial experts and analysts.

According to Kenyan Bankers Association (2013), in Kenya, there are fully-fledged Islamic banks that solely offer Shari’a-compliant products; and main stream banks that provide products that are tailored to be in compliance with Islamic law. Examples of such banks targeting lower income and special customers are Jamii Bora Bank, which has carved a niche for itself not only by tailoring its banking services mainly to low-income customers but by also venturing into mortgage financing for low income housing, and two fully-
fledged Islamic banks; First Community Bank and Gulf African Bank, that have succeeded in bringing Sharia-compliant banking services to Kenya (as cited in Aden, 2014).

Islamic banks in Kenya account for one per cent of gross assets in the banking sector, as indicated by the Central Bank of Kenya (CBK). Gulf African Bank and First Community Bank, the two Islamic banks currently operating in Kenya, have a combined loan portfolio of Ksh4.9 billion, customer deposits of Ksh7.5 billion and 27,270 deposit accounts. The banks appeal not just to Kenya’s Muslim population but also to non-Muslims who are looking for an alternative to conventional banking. Islamic banking is based on the principles of the Sharia, which prohibits the collection or payment of interest on money loaned and imposes the sharing of profit and loss. (Abubakar, 2013). Today, Islamic banks are rapidly growing side by side with the conventional banking system in Kenya. In 2017, the Central Bank of Kenya has granted license to the Dubai Islamic Bank, one of the first Islamic banks in the Gulf Cooperation bring the number of Islamic banks operating in Kenya to three.

According to Parashar and Vinkatesh (2010) conventional banks follow the age old convention of interest-based mobilization of funds and lending. The charged interest reflects the price of credit and signifies the opportunity cost of capital. Thus, conventional banking is based on debtor-creditor relationship between depositor and the bank, on the one hand, and borrower and bank, on the other.

Conventional banking utilizes a combination of debt and equity in financing projects. A fixed percentage of interest is expected from the debt finance. The Islamic banking system which is based on the tenets of Islamic law (Shari'a) prescribes equity participation in investment. A distinctive feature of Islamic finance is that it does not allow the creation of debt through direct lending and borrowing of money or other financial assets. Debts can only be created through the sale or lease of real assets through lease based financing schemes. The asset which is leased or sold must be real (building, property, or any other physical infrastructure) and the debt cannot be sold or transferred to someone else (Ryu, Piao, & Nami, 2012).

Zakti and Mohamed (2018) examined the performance of Islamic and conventional banks in Indonesia in terms of asset quality, stability, and efficiency. They found that Islamic banks had better asset quality than conventional banks. Islamic banks have lower levels of loan-loss provisions and non-performing loans. Islamic banks appear to have greater
stability than conventional banks, as indicated by their higher Z-scores. However, Islamic banks generate lower returns than conventional banks.

Moin (2008) compared the financial performance of first Islamic bank in Pakistan with a group of 5 conventional banks for a period of 2003-2007. He found that Islamic bank is less profitable, less risky and also less efficient compared to Conventional banks. However, there is no significant difference in liquidity between the two sets of banks.

Wahid and Dar (2016) analyzed the financial stability between a conventional and Islamic bank in Malaysian framework. They analyzed 17 Islamic and 21 conventional banks and time frame for this study was from 2004 to 2013. The researcher used such as Z score, equity to total asset, non-performing loan (NPL), the cost to income ratio (CIR), Return on equity, net loan to a total asset for measuring of financial stability. They determined that Islamic banks in term of large were less stable as compared with conventional banks in term of large in Malaysian and an Islamic bank in term of small was more stable as compared with the conventional bank in term of small.

1.2 Problem Statement

Sehrish et al (2012) argued that banks as financial institutions play an important role in the development of an economy hence their financial performance are of concern to decision makers such as investors, borrowers and savers. A country’s economic growth basically depends on the financial institutions especially banking sector of that country. Kenya has a mixed banking system both conventional banks and Islamic banks (interest free).

The recent subprime crisis exposed the fragility of the banking sector and the conventional banking system was blamed for being the origin of this crisis. Particularly, Smolo and Mirakhor (2010) refer to the arguments of several scholars on the fragility of the system dominated by interest-bearing debt contracts. At the same time, a number of academicians and experts state that Islamic banks (IBs) have not much suffered from the global financial crisis as conventional banks (CBs) had (Yilmas, 2009). This belief has increased the attention of academicians on the investigation of the Islamic banking system in recent years. Despite the increasing debate on this issue and rapid growth of IBs mainly in Muslim countries, there are relatively few empirical studies that analyze the financial performance of IBs versus CBs (as cited in Mobarek & Kalonov, 2014).

Khan, Khan, and Tahir (2017) analyzed the financial performance of 5 IBs and 19 CBs in Pakistan and revealed that Islamic banks are relatively better in profitability, efficiency,
risk and liquidity management, while conventional banks are superior in asset quality. Parashar and Venkatesh (2010) compared the performance of CBs and IBs during the global crisis, Islamic banks suffered more in terms of capital ratio, leverage and return on average equity, while conventional banks exhibited a poor financial performance in return on average assets and liquidity.

Comparative studies on financial performance of Islamic and conventional banks are limited both globally and locally. Therefore, this study sought to fill the research gap especially locally by answering the research question “Is there any significant difference between Islamic banks’ financial performance and the conventional banks financial performance in Kenya?”

1.3 Purpose of the Study

The purpose of this study was to carry out a comparative study of the financial performance of Islamic banks vs. conventional banks in Kenya.

1.4 Research Questions

1.4.1 Does Islamic banking enhance financial performance of commercial banks in Kenya?
1.4.2 Does conventional banking enhance financial performance of commercial banks in Kenya?
1.4.3 How does financial performances of Islamic and conventional banks compare in Kenya?

1.5 Importance of the Study

1.5.1 Conventional Banks

The research will benefit conventional banks in Kenya by informing them how Islamic banks differ from them when it comes to operations and performance. Conventional banks can learn one or two things from their counterparts.

1.5.2 Government

Through the Central Bank, the government promotes financial deepening and the inclusion of people from all religious groups in the Kenyan financial system. This study will inform the central bank on the importance of coming up with policies to regulate both conventional and Islamic banks and improve soundness of the Kenyan financial markets.
1.5.3 Bank Depositors

The findings will guide depositors in evaluating the performance of the Islamic banks and make informed decisions on their deposits as they are not entitled to fixed returns and the nominal values of their deposits are not guaranteed.

1.5.4 Researchers

The findings of this research will also be available and valuable to future researchers and academicians. The study will also contribute to theory on the financial performance of conventional vs. Islamic banks and would propose areas for further research that future researchers can undertake. The findings will guide depositors in evaluating the performance of the Islamic banks vs. conventional banks and make informed decisions on where to bank depending on their needs and evaluation of the two types of banks.

1.5.5 Islamic Banks

The findings of this study will help the management of Islamic banks to set appropriate policies and strategies to improve the performance of Islamic banks and at the same time compete with their traditional counterparts.

1.6 Scope of the Study

The study primarily focused on the comparative analysis of the financial performance of Islamic and conventional banks. It specifically examined the financial performance of Islamic banks vs. conventional banks using CAMEL framework for the period 2014 to 2018. The study was carried out in Nairobi (Kenya) and specifically focused on banks that are licensed by the Central Bank of Kenya. The study used convenient sampling technique, to overcome the problem of sampling banks without adequate data for the period in question.

1.7 Definition of Terms

1.7.1 Riba

The majority of Islamic scholars consider any addition given or taken above the amount borrowed or lent to be riba (Billah, 2014).
1.7.2 Shari’a

Islamic Laws that addresses matters ranging from the timing of daily prayers, fasting, and prohibitions against eating certain foods to marriage, inheritance, and commerce. Shari'a may be thought of as composed of at least two parts: revealed and non-revealed (Malkawi, 2013).

1.7.3 Financial Performance

The performance of financial institutions as an economic performance which is measured in both short and long term by a number of financial indicators and ratios. The financial indicators and ratios are in turn influenced by internal or bank-specific factors and external factors (Harker & Zenios, 1998).

1.7.4 Conventional Banks

Refers to institutions providing deposit facilities for the general public. Loans based on deposit funds provide financial support to a wide variety of business and industrial enterprises. Commercial banks accept deposits and use the proceeds to lend funds to consumers and businesses. The deposits represent a liability of the commercial bank and a financial asset owned by the depositor. (Hassan, 2007)

1.7.5 Islamic Banks

Islamic banking attributes to a banking system or enterprise that is persistent with Islamic laws and principles (Sharia). The practical applications of these principles must conform to Islamic laws and help develop Islamic economies (Udin, Ahsan, & Haque, 2017).

1.8 Chapter Summary

The first chapter provided background information of the study discussing the history of Islamic banking and its modes of financing. The problem statement was given. The general objectives of the study, the research questions, and the justification of the study and scope of the study have also been highlighted. Chapter two of the study has provided a detailed literature review of previous research work relevant to this study. Chapter three discussed the research methodology presenting the research design, sampling design, research procedure and data collection method. Chapter four discussed the research findings using descriptive and inferential statistics. Chapter five provided a detailed summary of findings, discussions and study recommendations.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This Chapter discusses the performance evaluation and analyzes tools for determining bank performance. It also brings out various studies that have been carried out on the performance of Islamic banks and conventional banks throughout the globe and finally provides a summary of the whole chapter.

2.2 Islamic Banking and Financial Performance of Banks

The general rise in popularity of fundamental Islamic values has also been seen on the economic front in many parts of the world, with many majority Muslim countries such as the countries in the MENA region moving towards a transformation of their economic systems to align themselves more closely with the percepts and conditions of Islam. The Islamic republic of Iran and Pakistan have made the most far-reaching efforts in that direction, although this phenomenon can be observed to varying degree in most Islamic countries. More importantly, the Islamization process of these economic systems appears to be gaining traction over time. (Khan, 1986).

Islamic financial models are based on a commercial law known as “Fiqh al-mu’amalat.” The law examines questions of social justice, fairness, and equity in all transactions, fosters entrepreneurial activity, protects property rights and emphasizes transparency in contractual obligations in line with Allah’s divine law and the teachings of Prophet Mohamed. It’s centered on sharia compliant products which do not involve interest/usury, extreme levels of uncertainty and other prohibited activities. The sharia clearly permits profits but discourages predetermined fixed return amount inform of interest. Risk of loss and variability of profits are the sole determinants of return on investment in Islamic finance (Arris, 2010).

According to Salman and Nawaz (2018) Islamic banking begun with simple profit sharing accounts, Islamic savings and investment products but is now flourishing with the introduction on the market of Islamic bonds (Sukuk) and hedge funds. The main products of Islamic banks are now based on profit and loss sharing principle (Mudarabah) and partnership or joint ventures (Musharakah).
Mushārakah is essentially a partnership contract. The bank and the borrower or agent undertake to contribute jointly to the capital and management of the business venture. The share in the profit and the duration of the joint venture are agreed upon in advance. In some cases, a "self-liquidation" form of partnership can be agreed upon, in accordance with the agent's ability to pay back the principal. Loss is shared in proportion to the contribution of each party to capital, unless the agent is proven to be the cause of loss due to negligence or some wilful action. The contract may specify that the agent is wholly responsible for the management and must keep the bank informed with regular progress reports. Alternatively, the banks may be granted new rights to oversee the utilization of the funds. Under Mudaraba, all funds are contributed by the bank, and the agent is solely responsible for entrepreneurship. Profits are once again shared on some agreed-upon formula whereas the losses are entirely borne by the lenders, except for the qualification mentioned above. The agent, in case of business failure, loses his time and effort (Khan, 1987).

2.2.1 Superiority of Interest Free Banking (Islamic Banking)

On a theoretical level Khan (1986) demonstrated that an interest-free banking system is consistent with the Keynesian or Classical Macroeconomic Models. He has argued that fixed interest rates prevent adjustments to shocks resulting from profit or loss. It is this rigidity he concludes that could lead to financial instability (Zuberi, 1992).

A large number of scholarly writings on Islamic banking take the abolition of interest-based transactions as axiomatic. The advocates of Islamic banking claim that this system is superior to the traditional (Western) banking system. However, almost all of these studies are theoretical. This claim of superiority requires empirical verification. My search of the literature shows only a single empirical study by Darrat (1988) which attempts to empirically verify the superiority of Islamic banking (Yousefi, Abizadeh, & McCormick, 1997).

Darrat (1988) empirically examined the effect of interest-free banking on the stability of the financial system in Tunisia. His findings indicate that the public's demand for a non-interest monetary system has a structurally stable money demand. He also found that non-interest bearing monetary assets have a relatively stable velocity of money (Zuberi, 1992). However, Yousefi et al. (1997) argued that Tunisia has no history of Islamic banking and the assertion of relative stability of Islamic banking determined by the stability of M1 in Tunisia is suspect. Their basic premise was that to demonstrate the relative stability of
Islamic banking, a researcher would need to either: Compare the stability of alternative banking system in different countries, or the stability of alternative banking system s in the same country (e.g. the stability of pre and post-Islamic banking).

Yousefi et al. (1997) carried out a study similar to that of Darrat in Iran which produced mixed evidence partially confirming Darrat’s conclusions and partially contradicting them and concluded that a case for the superiority of interest free Islamic banking has not been made in Iran. Darrat (2000) demonstrated in his subsequent paper that the findings of Yousefi et al. (1997) was unwarranted and is apparently the outcome of serious specification errors. Correcting for these problems, the empirical evidence obtained for Iran from similar data and model structure supports the relative superiority of Islamic banks in Iran. Several studies have been done on on interest free banking and its effect on economic stability under various factors.

2.2.2 Performance of Islamic Banks

Trad, Trabelsi, and Goux (2017) investigated the possibility of Islamic banks being an alternative option to the traditional banking system and ensuring stability in times of crisis for investors. The study examined the financial soundness in terms of profitability and credit risk of 78 Islamic banks in 12 countries of the MENA region and the addition of Pakistan over the period 2004-2013. The study utilized ROA and ROE ratios to measure profitability and z-score to measure insolvency risk. The results showed that bank size and capital are the key to increased profitability and stability of Islamic banks. They also found that liquidity often positively impacts profitability and bank stability.

Bashir (2000) examined the performance of 14 Islamic Banks in the Middle-Eastern region between 1993 and 1998. To measure profitability, he used Non-Interest Margin (NIM), Before Tax Profit (BTP), Return on Assets (ROA), and Return on Equity (ROE). In addition to that he used seven supplemental measures as internal determinants of performance. The study concluded that the profitability of Islamic banks is positively related to capital and loan ratios and further contends that adequate capital ratios and loan portfolios have a huge impact on Islamic banks performance.

Hassan and Bashir (2003) later confirm the findings of Bashir (2000). They examine the determinants of Islamic Banking profitability between 1994 and 2001 for 21 countries. Their results show that Islamic Banks have a better capital asset ratio compared to conventional banks. Surprisingly, they document a negative relationship between total
assets and profitability, which amazingly means that smaller banks are more profitable. In addition, during an economic boom, bank profitability seems to improve because there are fewer nonperforming loans. Inflation, on the other hand, does not have any effect on Islamic bank profitability.

In the same vein, Haron (2004) analyzed the effects of internal and external variables on the profitability of Islamic Banks. He found that liquidity, funds deposited into current accounts, total capital and reserves, and the percentage of profit-sharing between bank and depositors positively influence the profitability of Islamic Banks. The results also show that interest rates, inflation and size have significant positive impact on the profits of Islamic Banks.

Wasai, Rahman, and Khan (2017) evaluated the soundness of five fully fledged Islamic banks in Pakistan for the period 2008 to 2015. The study utilized capital adequacy, Asset quality, Management ability, Earnings ability and liquidity ratios of the 5 selected banks to achieve its purpose. The results of the study show that, although Islamic banks in Pakistan have adequate capital, they have limited asset management ability and below the standard earnings ability. The study further suggests that Islamic banks have a high level of liquidity and therefore have low risk of bankruptcy.

Nur and Ahmed (2012) investigated the efficiency of the Islamic banking sector in 25 countries during the period 1992-2009 using data for 78 Islamic banks. The efficiency estimates of individual banks are evaluated using the nonparametric Data Envelopment Analysis (DEA) method. The empirical findings seem to suggest that the World Islamic banks have exhibited high pure technical efficiency. During the period of study, pure technical inefficiency was found to have greater influence in determining the total technical inefficiency. Secondly, it is suggested that further analysis of the World Islamic banking sector’s efficiency should consider specific factors relating to high-income countries’ leading the efficiency over the years compared to banks operating in middle and low-income countries. The results show a positive relationship between bank efficiency and size and profitability, while a negative relationship between bank efficiency and loans intensity and capitalization.

Norbaizura, Rosmanira, Mohd (2014) attempted to measure the efficiency, effectiveness and overall performance of 10 Islamic banks in Malaysia. The study used two-stage DEA to provide an efficient benchmarking approach in evaluating performance of Islamic banks.
in Malaysia. The overall results show average effectiveness score is more than average efficient score. We can say that Malaysian Islamic Banks were more effective rather than efficient. The results also demonstrate that the bank with better efficiency does not always mean that it has better effectiveness. There is no apparent correlation between these two indicators.

Yildirim (2015) compared the efficiencies of 17 Islamic banks operating in Turkey and Malaysia for a period between 2010 and 2014 with respect to their capital structures and their scale sizes using the input-oriented approach for technical efficiency measurement. The study concluded that nearly half of the Islamic banks operating in Malaysia have the technical efficiency. The most efficient year for the Islamic banks of Turkey was 2014. The year 2013 was the highest technical efficiency (CCR) for the Islamic banks operating in Turkey and Malaysia, while, 2011 saw the lowest technical efficiency. It was found that the Technical Efficiency Change (EFFCH) value of Islamic banks operating in Turkey and Malaysia was never recorded above 1 for any time period. It was found that the Islamic banks in Turkey and Malaysia are unlikely to reach the production limit. Efficiency levels of Islamic banks operating in Turkey and Malaysia are not always increasing. Scale inefficiency is the major reason behind the technical inefficiency of Islamic banks. Islamic banks are not operating on an optimal scale.

Alzorqan (2014) conducted a study on the relationship of liquidity risk management and financial performance of banks for 2 Islamic banks in Jordan from the period 2008-2010. ROA and ROI were used as indicator of Bank performance. Current ratio and loan to deposit were used as liquidity measures. Correlation and Regression were done to test the relationship. In correlation analysis the relation between Current ratio and ROA as well as Current ratio and ROI are found negative. The relationship between loan to deposit with ROA and ROI are found positive. Overall results indicated that there is a relationship between liquidity risk and bank performance in Jordon banks.

Ramzan and Zafar (2014) investigated the liquidity risk management of 5 Islamic banks in Pakistan from the period 2007-2011. The study utilized least square regression model in the analysis, he concludes that only asset size of the bank has statistically positive and significant relationship with liquidity risk, therefore it can be assumed that strong asset base of Islamic bank contributes towards more strengthen liquidity control. He further recommends that Islamic banks need to match liability maturities with asset maturities and
in order to prevent adverse liquidity position Islamic banks must use Murabahah contract extensively to strengthen liquidity position.

Chowdhury and Saman (2018) carried out a research on the effect of liquidity risk on the performance of Islamic banks in Bangladesh for the period 2012-2016 of 6 Islamic banks using regression analysis to find out the effect of liquidity on bank performance. They concluded that the liquidity indicators have inverse relationship with the performance of the bank and recommend further studies to ascertain the reason of this type of a result. To my knowledge few studies have been carried on the financial performance of Islamic banks in Kenya, this study will fill the void.

2.3 Conventional Banking and Financial Performance of Banks

2.3.1 Conventional Banking Model

Rajan (1998) argues that banks in continental Europe arose from the activity of money changing. The use of coins replaced the batter system during the middle ages. Money changers in Europe at that time specialized in maintaining a reserve of coins so as to make net payments to other bankers and to meet withdrawals by depositors which was the earliest concept of banking. The early banks did not make long-term loans. Instead, the early private banks allowed depositors to borrow by overdrawing their account.

Banks are commercial entities that engage in any or all of the various functions of banking (i.e., receiving, collecting, transferring, paying, lending, investing, dealing, exchanging, and servicing money and claims to money both domestically and internationally) and refers to institutions providing deposit facilities for the general public. Loans based on deposit funds provide financial support to a wide variety of business and industrial enterprises. Commercial banks accept deposits and use the proceeds to lend funds to consumers and businesses. The deposits represent a liability of the commercial bank and a financial asset owned by the depositor. (Hassan, 2007, as cited in Ibrahim, 2009).

Commercial banks have a very important role in modern economies; banks provide financial intermediation to a wide variety of individuals, businesses, and even large corporations. Through this process of financial intermediation between surplus and deficit units banks create employment opportunities, generate income to households, and help in economic advancement and social welfare. Furthermore commercial banks are manufactures of credit that allows the financing of new investment opportunities and keeps the wheels of many industries moving. Commercial banks also promote and stimulate
saving culture by offering safe custody of deposits which eliminates hoarding and unproductive use of surplus wealth (Ahmed & Hassan, 2007).

2.3.2 Performance of Conventional Banks

Fang, Lu and Su (2013) investigated the financial performance of the world’s top 200 banks after the global subprime financial crisis. The study analyzed the performance of the top commercial banks around the world using six financial dimensions: capital adequacy, asset quality, management performance, earnings, liquidity, and sensitivity. The study concluded that all commercial banks exhibited worse performance in asset quality, profitability, and growth index. They further stated that commercial banks in developed markets suffered more than banks in emerging markets causing downward pressure on capital adequacy, asset quality, and profitability. The findings of Fang, Lu, and Su (2013) is consistent with the findings of Kumbirai and Webb (2010) who investigated the liquidity, profitability, and credit quality performance of South Africa’s commercial banks during 2005 to 2009. They concluded that South African banks had falling profitability, low liquidity, and worsening credit quality due to the adverse effect of the global financial crisis.

Girginer and Uçkun (2012) carried out a similar study that contradicted the findings of Fang et al. They analyzed the financial performance of conventional banks in Turkey during the period 2005 to 2009. Turkey is classified as an emerging market, emerging markets have been heavily affected by the global crisis due to integration with the global economy through trade and capital flows. They used 14 financial ratios with respect to profitability, liquidity, active quality, and capital sufficiency to measure the bank performance. They concluded that Turkish commercial banks exhibited better performances in capital adequacy during the crisis due to tight measures and controls by the Central Bank of Turkey. The study further stated that profitability of commercial banks did not go down partly due to the perception held by the deposit savers as well as the loan users that the public banks are actually safe havens.

Roman and Sargu (2013) used CAMEL framework to assess the financial soundness of 15 commercial banks that operate in Romania for the period 2004 to 2011. The Romanian banking system has undergone through significant change in the turn of the millennium and its financial performance being essential to achieve stable and sustainable economic growth. The results highlighted that all the selected banks were well capitalized and have an increased capacity to absorb future losses, however, few banks scored lower ratings in
assets quality, management quality, earnings and profitability. In addition to that the results illustrated the strengths and flaws of the selected banks reiterating the need to strengthen the financial soundness of the Romanian banks. Ahmeti, Hoti, and Alshiqi (2014) similarly analyzed the financial performance of the banking sector in Kosovo employing CAMEL approach and by calculating return on investment. The study concluded that in the overall performance of the banks, they found no significance difference. In addition most banks had a health statement of financial position with a small level of reserves for loans.

Said and Saucier (2003) evaluated the capital adequacy, asset and management quality, earnings ability, and liquidity position of a representative sample of Japanese banks for the period 1993 to 1999 to assess the factors that led to the Japanese 1990s bank distress. They concluded that the major problem that caused the distress of the banks was not management inefficiency but very low capital adequacy and significant problems in the asset quality of the banks. The findings also indicated that the ailing banks had above average efficiency which can be attributed to survival strategy which forced them to quickly improve management.

Jha and Hui (2012) studied the financial performance of 18 commercial banks in Nepal for the period 2005-2010 using CAMEL approach. The results indicated that public banks were significantly less efficient than their private counterparts. They further concluded that return on assets were significantly influenced by capital adequacy ratio, interest expenses to total loan and net interest margin, while capital adequacy ratio had substantial impact on return on equity.

Sharma (2007) carried out a study on the financial performance of Nepal SBI bank in the period 2001 to 2006 employing CAMEL framework. The results indicated that the bank was well capitalized an in accordance with Nepal central bank directives. Furthermore the bank’s net interest margin was found to be satisfactory and had a sound liquidity position.

Prasuna (2004) examined the financial performance of 65 Indian public sector banks employing CAMEL approach. The results obtained from the analysis suggested that the CAMEL ratios of all public sector banks in India are significantly different, meaning that the overall performance of public sector banks is vastly different. The study further suggests that the banks with the least performances need to improve radically to meet the desired standards. Sangmi and Tabasamu (2010) also analyzed the performance of two major banks in Northern India, Punjab national bank and Jammu and Kashmir bank based
on their role in the financial sector of North India. By taking the annual report data from 2001 to 2005, they applied the CAMEL model to these two banks and found that both banks were financially sound and appropriate.

Lakhtaria (2013) conducted a similar study in India, a country whose banking industry is a growing at a faster pace. He analyzed the financial performance of three big traditional banks Bank of Baroda (BOB), State Bank of India (SBI) and Punjab National Bank (PNB) for the period between 2010 and 2012 and ranked them using CAMEL approach. He found that Bank of Baroda is leading in all the aspects of CAMEL followed by Punjab National Bank in Capital Adequacy, Management efficiency and Earning capacity and Bank of India in Asset Quality.

Aspal and Malhotra (2013) evaluated the financial performance of Indian public sector bank for the period 2007 to 2011. They applied CAMEL model and tests like Anova, f test and arithmetic test. The results indicated that Bank of Baroda (BOB) and Andhara Bank of India were the top performing banks in the spheres of liquidity, asset quality, management efficiency, and earning quality. United Bank of India was the lowest ranked bank and has to concentrate on improving its management efficiency, assets and earnings quality. These findings were consistent with that of Kaur, Kaur and Singh (2015) which investigated the financial performance of selected public sector banks.

Karthikeyan and Shangari (2014) examined the financial performance of State Bank Group and tried to rank the banks in terms of performance employing CAMEL approach. The study used ratios such as capital adequacy, net non-performing assets to net advances, operating profit, business per employee, and current ratio. The results showed that there was no correlation between capital adequacy ratios and net advances to total assets. It further stated that there was no correlation between ratios of management efficiency, earnings quality and liquidity.

Liu and Pariyaprasert (2014) examined the financial performance of 13 Chinese banks from 2008-2011. They used CAMEL ratios to measure the performance of the banks and their impact on the performance of the banks. The results of the study indicated that return on assets can be largely influenced by shareholders’ risk-weighted capital adequacy ratio, NPL to total loans ratio, costs to income ratio, net interest rate margins, and loans to deposits ratio. The study also showed that return on equity could be influenced by costs to income ratio, operating expenses to assets ratio and Loans to deposits ratio.
Ferrouhi (2014) analyzed major Moroccan conventional banks using CAMEL framework for the period 2001 to 2011. The results obtained from the analysis enabled him to rank the performance of the Major Moroccan financial institutions. Similarly Mulualem (2015) investigated the financial performance of 15 Ethiopian commercial banks for the period 2010 to 2014 using CAMEL framework. The study revealed that Asset Quality and Management efficiency have negative relation whereas earning and liquidity shows positive relationship with both profitability measures.

Percin and Ayan (2006) measured the efficiency of 31 commercial banks of Turkey over the 2003 to 2004 period by applying the DEA and Malmquist Productivity Index (MPI). They used two outputs and four inputs for measuring output oriented efficiency scores. They found that eleven banks were efficient under the assumption of constant returns to scale while sixteen banks remained efficient under the assumption of variable returns to scale in DEA. Meanwhile, they found that there was a significant increase in the efficiency of banking sector for the 2003 to 2004 period as MPI analysis showed.

Sangeetha and Mathew (2013) analyzed the efficiency of twenty six public commercial banks of India for the 2009 to 2011 period. They employed input oriented multi-stage DEA to measure the efficiency by utilizing two inputs and two outputs on the basis of intermediation approach. They found that only three banks (IDBI, Corporation Bank and State Bank of India) were consistently efficient over the entire period. They also found that forty to fifty percent banks were under the average efficiency scores and suggested that these three banks could be taken as reference for other banks to improve their efficiency.

Ngo (2012) analyzed the changes in performance of Vietnamese banking sector over the 1990 to 2010 period. He applied the DEA window analysis in the first stage. In the second stage, he used a Tobit model for regression analysis to find out the impact of macroeconomic variables on TE. He found that performance of banks under study decreased with the increase in their size over time. He proposed that tight monetary policy or loose fiscal policy could help improve the efficiency of Vietnamese banking sector because of the great impact of government spending and short-term interest rate on efficiency. The previous studies in this area were not compared to the performance of Islamic banks, hence the knowledge gap.
2.4 Contrast on Financial Performance of Islamic and Conventional Banks

2.4.1 Comparative Studies in MENA Region

Samad (2004) examined the performance of Bahrain’s interest-free Islamic banks and the interest-based conventional commercial banks during the post-Gulf War period with respect to profitability, liquidity risk, and credit risk. In evaluating the performance of the banks the study considered 5 Islamic banks and 15 conventional banks. Financial ratios were utilized to carry out the analysis. The comparison of financial measures expressed in terms of various financial ratios indicates that there is no major difference in profitability and liquidity between Islamic banks and conventional banks. The findings also indicate that Islamic banks as newcomers to the financial market are doing as well as conventional banks. In addition, Islamic banks are exposed to less credit risk compared to conventional banks. Their credit performance is superior to that of conventional bank.

Shawtari, Ariff, and Abdul-Razack (2019) examined the determinants of bank margins in the Yemeni banking sector for both Islamic and conventional banks for the period 1996 to 2011. The study utilizes panel data with unbalanced observations for 16 banks, of which four are Islamic banks and the remainder conventional banks. Parametric and non-parametric techniques are complemented by dummy variable regression using random effects. They found that overall bank margin in Yemen has steadily decreased during the observation period with the exception of the year 2011. The parametric and non-parametric results show that the bank margins are significantly higher for conventional banks than for Islamic banks. The results provide evidence that bank margins are related to neither types of efficiency, but are affected by capitalisation, size, the opportunity cost of the reserve and liquidity, although the impact is shaped differently for Islamic and conventional banks.

Kader, Anju, and Asarpota (2007) analyzed the performance of Islamic and conventional banks in the United Arab Emirates using five years data of Islamic and non-Islamic banks from 2000 to 2004. Liquidity ratios, profitability ratios, risk and solvency ratios were employed to measure the difference in performance. The results showed that Islamic banks compared to conventional/traditional banks in the UAE, were more profitable, less uncertain and more efficient.

Ibrahim (2016) conducted a similar study in Qatar within the period of 2010 to 2014 by analyzing how capital adequacy, liquidity and banks size affected profitability. The study used a sample of 8 banks; five conventional banks and three Islamic banks, a t-test was
employed to determine if there was any significant difference between the two bank types. The study concluded that ROA, liquidity, capital adequacy for Islamic banks have been found to be higher than that of conventional banks. In addition, bank size and liquidity were found to have a substantial impact on profitability for both types of banks.

Tabash and Hassan (2017) examined the liquidity, profitability, and solvency of Islamic vs. conventional banks in UAE between 2011 and 2014. The study has used a sample of all the fully fledged Islamic banks and 14 conventional banks in UAE. The collected data was analyzed using Microsoft Excel, Eviews version 7 and SPSS version 22. They concluded that there is a significant difference between the liquidity of Islamic banks and conventional banks; Islamic banks have maintained sound liquidity ratios throughout the period of the study. The study further concluded that there is no significant difference between Islamic banks and conventional banks performance in terms of profitability.

Ibrahim (2016) carried out a comparative study between the financial performances of Islamic vs. conventional banks in the United Arab Emirates between the years 2002 and 2006. The study used a sample of two Islamic and conventional banks based in UAE, quantitate analysis was undertaken by looking at various sets of financial ratios that are commonly used to measure the financial performance of banks. Descriptive statistical analysis was used to rank the performance, measuring the dispersion and the stability-variability of the indicators. The findings concluded that both Islamic and conventional banks performed reasonably well and there was no major difference in the performance variables examined.

Milhem and Istaiteyeh (2015) carried out a similar study in Jordan over the period 2009 and 2013 using financial ratios analysis. A sample of 13 conventional banks and three Islamic banks were considered. The results indicated that there is a significant difference in performance between the two categories of banking for the period studied. Islamic banks were less profitable, more liquid, less risky and less efficient compared to conventional banks.

Similarly Alghfais (2017) investigated the differences between Islamic and conventional banks in Saudi Arabia for the period 1988 to 2016. The study employed binary logistics regression and a sample of four Islamic banks and eight conventional banks were chosen. The results indicated that Islamic banks were more profitable, had higher capitalization,
and lower risk while conventional banks outperformed Islamic banks in efficiency and had more diversified investment portfolios.

2.4.2 Comparative Studies in South-East Asia

Samad and Hassan (2000) compared the performance of the Malaysian Islamic bank with conventional banks using financial ratios between 1984 and 1997 and concluded that Islamic bank made (statistically) significant progress on return on assets (ROA) and return on equity (ROE) during 1984-1997. The average ROA, PER and ROE during this period were 0.43, 21.5 and 8.07 respectively. They further claimed that Islamic banks were more liquid compared to the 8 conventional banks in the sample in cash deposit measure. Similarly Wasiuzzaman and Gunasegavan (2013) investigated the performance of Islamic and conventional banks in Malaysia. They found that board size, ROA and bank size of Islamic banks are comparable with conventional banks. The results also found that capital adequacy, asset quality, liquidity and operational efficiency were better for Islamic banks.

Shaista and Umadevi (2013) attempted to analyze the differences in bank characteristics of Islamic and conventional banks in Malaysia, in terms of profitability, capital adequacy, liquidity, operational efficiency and asset quality, corporate governance issues and economic conditions. The findings of the study revealed that the return on average assets, bank size and board size values of conventional banks was higher compared to Islamic banks. The other variables- operational efficiency, asset quality, liquidity, capital adequacy and board independence- were higher for Islamic banks. Significant differences between the two bank types were found for all the variables, except for profitability and board independence. All variables except for liquidity, board characteristics and type of bank, were found to be highly significant in affecting profitability. However, contrasting results were found for the independent t-tests and regression analysis. These findings are consistent to those of Almazari (2014) on Saudi and Jordanian banks as the study also reported that capital adequacy, asset quality and liquidity have significant impact on profitability.

Adnan and Ramlan (2015) also examined the profitability of Islamic and conventional banks in Malaysia for the period 2006 to 2011 using T-Test Model, Regression and Correlation. The study shows that Islamic banks are far more profitable than conventional banks and also had higher total loan to total assets. Dodoev (2018) analyzed four Islamic and four conventional banks in Malaysia for the period 2006 to 2017 the bank-specific variables such as profits, assets, loans and net interest margin were obtained from the
annual financial statements such as the balance sheets as well as income statements. In his research, capital adequacy, asset quality, management capability, earning quality, and liquidity were utilized to determine the bank’s performance. He concluded that there is no significance difference between the overall financial performance of Islamic and conventional banks based on CAMEL model.

In another study Sakti and Muhammed (2018) examined the efficiency, stability and asset quality of Islamic banks vs. conventional banks in Indonesia using a sample of 11 Islamic banks and 37 conventional banks. The study employs t-test, z-score and data envelopment analysis (DEA) to assess the business model, as well as the asset quality, stability and efficiency of both the Islamic and conventional banks. The results indicate that there are significant differences between the two Islamic banks appear to not follow the conventional business model. Secondly, Islamic banks seem to have better asset quality and to be more stable than their conventional counterparts. Furthermore the DEA results also indicate that Islamic banks are relatively more efficient than conventional banks, as shown by their higher overall efficiency, as well as technical efficiency.

Ika and Abdullah (2011) examined the financial performance of 3 Islamic banks against 6 conventional banks in Indonesia from year 2000 to 2007. Various financial ratios; profitability, liquidity, risk and solvency and efficiency ratios to determine the performance of Islamic and conventional banks. The results indicated that Islamic banks were more liquid than conventional banks and that in general, the study found no major difference between the performances of the two types of banks. These results indicate that although Indonesia is one of the largest Muslim communities in the world, their consciousness about sharia-compliant products and services is still low. Another study by Masruki, Ibrahim, Osman, and Wahab (2011) in Malaysia also supported that Islamic banks are more liquid than conventional banks.

Sukmana (2016) examined the performance of Indonesian Islamic banks vs. conventional banks utilizing Capital Adequacy Ratio (CAR), Return on Asset (ROA), Operational Cost/Operational Revenue (BOPO), Non-Performing Loan (NPL) /Non Performing Financing (NPF) and Loan Deposit Ratio (LDR)/ Financing Deposit Ratio (FDR) for the period January 2004 to July 2004. The study concluded that CAR, ROA, BOPO and NPL of conventional banks are significantly higher than that of Islamic banks but not FDR. Based on the result of capital adequacy, the findings suggest that Islamic banks need to have more capital to mitigate the risks involved.
Mettally (1997) conducted a study on the differences between the financial characteristics of Islamic banks and conventional banks. He used Logit model, Discriminant analysis and Probit model to evaluate the performance of 15 Islamic and 15 conventional banks in Indonesia. He concluded that both types of banks had similar profitability and efficiency but differed in liquidity, leverage, and credit risk.

2.4.3 Comparative Studies in Rest of the World

Faizulayev (2011) also carried a comparative study between IBs and CBs in several countries using the CAMEL framework. By utilizing regression analysis to evaluate impact of profitability determinants and ANOVA tests to measure the significance he concluded that CB are different than IBs in terms of capital adequacy, asset quality, earnings quality, liquidity quality and management quality and IBs are less liquid than CBs because they are dealing mostly with long term investment. Furthermore, he indicated that the moderating effect of bank type had a significant impact on bank performance. Conversely, in a study done by Ongore et al (2013) to study the moderating effect on the ownership structure on bank performance in Kenya, they concluded that the moderating role of ownership identify was insignificant on the profitability of banks and hence does not affect performance.

Hassan and Diridi (2010) examined the performance of Islamic banks and conventional banks during the recent financial crisis of a sample of 120 banks of which 25% were Islamic banks. Data was collected from various countries including; Bahrain, Jordan, Kuwait, Qatar, Malaysia, Saudi Arabia, UAE, and Turkey. Their results suggested that the financial crisis had impacted Islamic banks differently than conventional banks. Factors related to the unique business model of Islamic banks helped limit an adverse impact on profitability during the crisis. In addition to that Islamic banks had a higher credit and asset growth during the crisis than conventional banks. Similarly Beck, Kunt, and Merrouche (2013) examined the business models, efficiency, asset quality and stability of Islamic and conventional banks across 22 countries. They found that the business orientation of Islamic banks is significantly different from that of conventional banks, and Islamic banks are better capitalized, have higher asset quality and are less cost effective.

Kouser, Aamir, Mehvish and Azeem (2011) analyzed the financial performance of both Islamic and conventional banks in Pakistan. The study utilized CAMEL analysis; 5 Islamic and 5 conventional banks were chosen and the study assessed the financial data of 5 years between 2006 and 2010. They found that the general performance of Islamic banks was not
better than that of traditional banks but Islamic banks had a better loan loss ratio than conventional banks. They conclude that Islamic banks are not operating at the level of conventional banks in Pakistan mainly due to operational level of conventional banks. This is study is consistent with Uddin, Ahsan, Haque (2017) conducted a similar study in Bangladesh during 2010 to 2014 using a sample of 5 Islamic banks and 5 conventional banks and their findings are in agreement with that of Kauser et all as their analysis conclude that there is no significant difference between the performance of Islamic banks and conventional banks in Bangladesh using CAMEL approach. However Jaffer and Manarvi (2011) conducted a similar study in Pakistan and found that Islamic banks were superior in processing adequate capital and were in better liquidity position while conventional banks exceled in management quality and earnings ability. They further found that the asset quality of both types of banks was almost similar.

Erol, Backlagi, Aydogan, and Tunc (2014) analyzed the financial performance of four Islamic and 19 conventional banks in Turkey during the period of 2001 to 2009. Turkey is a majority Muslim but a secular country and both Islamic and conventional banks are subject to the same set of banking regulations which are based on Western traditional banking system. The study was conducted by means of logistic regression method and the CAMEL approach was utilized to assess the managerial and financial performance of banks. They concluded that Islamic banks in Turkey outperformed their counterparts in profitability and asset management while conventional banks had a better performance in sensitivity to market risk. Previous studies failed to compare the financial performance of the Islamic and conventional banks in Kenya. This study will fill the void.

2.5 Chapter Summary

This chapter has looked at the literature from different authors on the research questions. It covers sections on the financial performance of Islamic banks, financial performance of conventional banks, and contrast on financial performance of Islamic banks and conventional banks. Chapter three presented research methodology, outlining the methods used to collect the required data, research design and how data was analyzed.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research design, population, and sampling design, the data collection technique and the data analysis that will be used in comparing the financial performance of Islamic and conventional banks in Kenya. This chapter will also include the research procedure and tools that will be employed in collecting data.

3.2 Research Design

Research design refers to the plan or framework of the research process, which provides a logical order creating a link between the research questions, the empirical data to be collected, and the conclusion of the research process (Cooper & Schindler, 2014). For example, it encompasses population parameters to be examined, how to respond to research questions. It contains clear objectives obtained from research questions, specific data collection sources. It also underlines the constraints the researcher will encounter such as access to data, time, location and money, and ethical issues (Saunders, Lewis, & Thornhill, 2016).

This study’s primary goal was to compare the financial performance of Islamic banks and conventional banks in Kenya. The study clearly sought to assess whether the financial performance of the two banking categories was substantially different. Descriptive research design was used. Descriptive research design is considered to be appropriate for this research as it enables the researcher collect in depth information about the population that is being studied.

3.3 Population and Sampling Design

3.3.1 Population

The population refers to the total number of cases in a study (Saunders et al., 2011). A population is the total collection of elements about which we wish to conduct a study, while a population element is the subject on which the measurement is being taken (Mugenda & Mugenda, 2003). The population of the study comprised of the 43 Commercial banks in Kenya, 30 locally owned and 13 foreign owned (CBK, 2019). The consolidated financial statements from year 2014 to 2018 was evaluated to compare the financial performance of the two categories of banking.
3.3.2 Sampling Design

Sampling design comprises of sampling decisions made from the nature of the management question and the specific investigative questions that evolve from the research questions. These decisions are hugely affected by the needs of the research and its desired outcomes, level of risk the researcher can accept, budget, time, resource availability and culture (Cooper & Schindler, 2014).

Sampling is the process of selecting a sufficient number of elements from the population, so that a study of the sample and an understanding of its properties or characteristics would make it possible 31 for us to generalize such properties or characteristics to the population elements (Sekaran & Bougie, 2013).

The study analyses and compares the financial performance of Islamic and conventional banks and has a target population of 43 commercial banks in Kenya. The sample frame of the study consists of the tier three commercial banks and the sampling technique used is convenient sampling. Few conventional banks in Kenya provide both traditional and Islamic financing products. To compare the financial performance of the two banking categories, only banks that can either be classified as conventional or Islamic were chosen. There are only two fully fledged Islamic banks in Kenya; Gulf African Bank and First Community Bank.

3.3.2.1 Sampling Frame

A sampling frame is a master list used to define a researcher's population of interest. It gives a complete list of all the members of the population to be studied (Saunders et al.,

<table>
<thead>
<tr>
<th>Categories</th>
<th>Population</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Tier one banks</td>
<td>8</td>
<td>18.6%</td>
</tr>
<tr>
<td>Tier two banks</td>
<td>14</td>
<td>32.6%</td>
</tr>
<tr>
<td>Tier three banks</td>
<td>21</td>
<td>48.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: CBK (2019)

Table 3.1 Target Population
The sampling frame is the list of elements from which the sample is drawn, a complete and correct record of population members only (Cooper & Schindler, 2014; Collis & Hussey, 2009). The listing of all the accessible population from which we draw our sample is known as the sample frame. Banks in Kenya are mainly classified into tiers based on the asset base of the respective banks. Islamic banks are currently categorized under tier three which is the sampling frame of this study.

3.3.2.2 Sampling Technique

Sampling involves selecting some elements in the population, in order to draw conclusions about the whole population (Cooper & Schindler, 2014). According to Ryman and Bell (2011) there are various ways that a researcher can use to get a sample size this includes probability and non-probability based sampling techniques.

The sampling technique used in this study was convenient sampling and convenient sampling is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in the study. Since some Islamic banks are new, random sampling may pick banks that do not have adequate data for the analysis. To overcome the problem of sampling banks without adequate data, convenient sampling was used to ensure that the banks sampled have the data for the analysis.

3.3.2.3 Sample Size

A sample size is a representative group drawn from the entire population and a researcher makes inferences on the whole population by use of the sample (Saunders et al., 2016). According to Baxter et al. (2016), sample size to the number of items to be selected from the universe to constitute a sample. The size of the sample should neither be excessively large, nor too small. An ideal sample size is one which achieves the requirements of competence, representativeness, consistency, and suppleness.

The current number of banks in the Tier three category are 21 banks. The study used a sample of 7 banks which conforms to the 30% as recommended by Mugenda and Mugenda (2006). The sample technique used is convenient sampling to ensure that the sampled banks have the data required for the analysis and are representative. 7 banks were chosen using convenient sampling from the sampling frame: two Islamic banks, Gulf bank and First Community Bank, 5 conventional banks; Consolidated Bank, ABC Bank, Victoria Commercial, Credit Bank, and Paramount Bank.
3.4 Data Collection Method

Data collection is the means of gathering empirical evidence in order to gain insights about an area of interest (Cooper & Schindler, 2014). Data collection method depends on the research problem and type of data the researcher wants to collect. Secondary data, mainly from audited financial statements of the selected Banks, will be used in carrying out this study.

Saunders, Lewis and Thornhill (2012) state that secondary data refers to data that was originally collected for another purpose but can be further analyzed to provide different knowledge and new conclusions. The data was collected from the audited financial statements (i.e. income statement and balance sheet) of the banks for the period 2014-2018 in coordination with the selected banks and the CBK. Therefore the study exclusively used secondary data to address the proposed research questions. The study employed checklist as the main tool of data collection.

3.5 Research Procedure

Secondary data, which are audited financial statements of Islamic and conventional banks for a five-year period (2014-2018) was collected. The researcher sought permission from the Central Bank of Kenya to collect its published information on the seven banks. A checklist was then employed in gathering data from the audited financial statements. The researcher pretested and cleaned the collected data to increase validity. The collected data was subjected to further review by the researcher to ascertain correctness and applicability to addressing the research questions. Finally the researcher used Statistical Package for Social Sciences (SPSS) to analyze and present the data.

3.6 Data Analysis

Data analysis refers to the methods through which the researcher coverts raw data that has been gathered from the respondents into a meaningful information that answers the research questions of the study (Cooper & Schindler, 2014). The aim of this study was to evaluate the financial performance of Islamic and conventional banks using CAMEL ratios. Based on CAMEL model, there are five major categories of variables which are capital adequacy, asset quality, management capability, earning quality and liquidity. According to Betz, Oprica, Peltonen, and Sarlin (2013), US regulators first introduced CAMEL rating in 1979, the assessment system of Capital adequacy, Asset quality, Management quality, Earnings, Liquidity.
In 1996, the addition of measurement rating system, the sensitivity to market risk into CAMEL become CAMELS analysis. Betz et al (2013) suggested that CAMEL analysis is an internal measurement tool to assess and identify the financial soundness of banks. Hays, De Lerugo, and Gilbert (2009) also suggested that CAMEL analysis is the most common and appropriate tool in assessing the financial performance of banks. The collected data was coded and evaluated by using descriptive statistics by documenting the mean and standard deviation among the variables in the study. Inferential statistics was also used in documenting the mean differences between study variables. Data was presented in tables and figures.

3.7 Chapter Summary

This chapter presented the research methodology used for this study. The chapter covered research design, population and sampling design, data collection methods, research procedures and data analysis methods. Chapter four has given the results and findings of the study.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents analysis, results, and findings of the study as set out in the research methodology. The data were analyzed using IBM SPSS (Statistical Package for Social Sciences) version 24 software, and the findings were presented in tables and charts. Descriptive statistics, CAMEL analysis, and paired t-test were employed. The data was collected from audited financial statements for the period 2014-2018.

4.2 Islamic Banking and Financial Performance of Banks

The study used a sample of 7 banks in which two were Islamic banks; Gulf African Bank and First Community Bank. Table 4.1 below presents the annual performance of Islamic banks for the period under study. CAMEL framework which has five indicators: capital adequacy, asset quality, management efficiency, earnings quality, and liquidity was utilized to determine the performance of Islamic banks. In terms of capital adequacy Islamic banks performed poorly in 2014 and 2018 scoring 12.35% and 13.90% respectively which were below the minimum statutory requirement of 14.5%. The two Islamic banks under this study had very impressive scores for asset quality, recording negative net NPA for the year 2015 and 2016 due to them having a net non-performing loans exposure close to zero.

Management efficiency measures the ability of the bank to maximize revenues by using its assets efficiently. The lower the ratio the greater the banks’ management efficiency. The best performance for management efficiency; 7.24% was recorded in 2014 by Islamic banks and the least impressive score was 8.11% in 2016. The fourth component of the CAMEL framework is earnings quality which measures the profitability of banks and the study used ROA to determine the earnings quality of Islamic banks. The earnings quality for the two Islamic banks during the period was very low, recording the highest ROA of 1.18% in 2014 and the lowest ROA of -0.35% in 2017. The two Islamic banks performed exceptionally well in terms of liquidity compared to the other components of CAMEL framework. The highest liquidity ratio was recorded in 2017, an impressive 39.25 and the lowest was 29.10% in 2015 which is still much higher than the minimum statutory requirement of 20%.
Table 4.1: Performance of Islamic Banks

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Adequacy</td>
<td>12.35%</td>
<td>15.55%</td>
<td>16.35%</td>
<td>15.75%</td>
<td>13.90%</td>
<td>14.78%</td>
</tr>
<tr>
<td>Asset Quality</td>
<td>0.00%</td>
<td>-0.82%</td>
<td>1.33%</td>
<td>0.81%</td>
<td>1.70%</td>
<td>0.07%</td>
</tr>
<tr>
<td>Management</td>
<td>7.24%</td>
<td>8.08%</td>
<td>8.11%</td>
<td>7.50%</td>
<td>7.33%</td>
<td>7.65%</td>
</tr>
<tr>
<td>Earnings Quality</td>
<td>1.18%</td>
<td>1.45%</td>
<td>0.74%</td>
<td>-0.35%</td>
<td>0.63%</td>
<td>0.73</td>
</tr>
<tr>
<td>Liquidity</td>
<td>29.15%</td>
<td>29.10%</td>
<td>32.60%</td>
<td>39.25%</td>
<td>36.90%</td>
<td>33.40%</td>
</tr>
</tbody>
</table>

4.3 Conventional Banking and Financial Performance of Banks

The study sought to analyze the performance of 5 conventional banks and the results were presented in table 4.2. The conventional banks studied were well capitalized for the period with the highest capital adequacy ratio for the period standing at 19.92% in 2016 and the lowest recorded was 16.30% in 2018 which is higher than regulatory requirement. Similarly asset quality measured by net NPA was impressive for the period with net NPA standing at 0.61%, 0.82%, and 0.83% in 2015, 2014, and 2017 respectively.

In terms of management quality, conventional banks utilized their assets efficiently to generate revenues and the best score of 6.25% was recorded in 2014 and similar percentage was maintained through 2018. Earnings quality. The earnings quality measured by ROA for the 5 conventional banks under this study were very low. In four years out of the five years the study covered, the banks recorded ROA less than 1%. The average highest liquidity ratio of the five conventional banks studied stood at 37.40 in 2014 and the lowest recorded was 26.64%. The average annual liquidity ratio for the 5 banks was greater than the minimum requirement of 20%.
Table 4.2: Performance of Conventional Banks

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Adequacy</td>
<td>18.03%</td>
<td>16.84%</td>
<td>19.92%</td>
<td>17.66%</td>
<td>16.30%</td>
<td>17.75%</td>
</tr>
<tr>
<td>Asset Quality</td>
<td>0.82%</td>
<td>0.61%</td>
<td>1.05%</td>
<td>0.83%</td>
<td>1.94%</td>
<td>1.05%</td>
</tr>
<tr>
<td>Management</td>
<td>6.25%</td>
<td>7.04%</td>
<td>6.72%</td>
<td>6.73%</td>
<td>6.48%</td>
<td>6.65%</td>
</tr>
<tr>
<td>Earnings Quality</td>
<td>0.64%</td>
<td>1.16%</td>
<td>0.78%</td>
<td>0.55%</td>
<td>0.27%</td>
<td>0.68%</td>
</tr>
<tr>
<td>Liquidity</td>
<td>37.40%</td>
<td>26.64%</td>
<td>31.03%</td>
<td>31.65%</td>
<td>31.30%</td>
<td>31.60%</td>
</tr>
</tbody>
</table>

4.4 Contrast on Financial Performance of Islamic and Conventional Banks

4.4.1 Capital Adequacy

Table 4.3 presents useful descriptive output for the capital adequacy of Islamic banks vs. conventional banks. Islamic banks had a lower CAR mean of 14.8 compared to conventional banks with a CAR of 17.74 for the period of the study with a mean difference of 2.92. The minimum CAR ratio of Islamic banks for the period stood at 12.40% while conventional banks had a minimum CAR of 16.30 while the maximum CAR value recorded were 16.40 and 19.90 for Islamic and conventional banks respectively. Both Islamic banks and conventional banks have met the minimum statutory requirement of maintaining 14.5% of total capital to total adjusted assets.
Table 4.3 Bank’s Capital Adequacy Ratio (2014-2018)

<table>
<thead>
<tr>
<th></th>
<th>CAR of IBs (%)</th>
<th>CAR of CBs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>14.8200</td>
<td>17.7400</td>
</tr>
<tr>
<td>Median</td>
<td>15.6000</td>
<td>17.7000</td>
</tr>
<tr>
<td>Mode</td>
<td>12.40(^a)</td>
<td>16.30(^a)</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.64073</td>
<td>1.38672</td>
</tr>
<tr>
<td>Minimum</td>
<td>12.40</td>
<td>16.30</td>
</tr>
<tr>
<td>Maximum</td>
<td>16.40</td>
<td>19.90</td>
</tr>
</tbody>
</table>

Figure 4.1 is a chart representation of the average annual performances of the two banking categories for the five years. Conventional banks recorded a higher average capital adequacy ratio for the entire period analyzed.

Figure 4.1: Annual CAR of IBs vs. CBs
4.4.2 Asset Quality

Asset quality is another element of CAMEL which measures the bank’s strength. Banks are required to maintain a quality bank assets that are critical to the profitability of the bank. Asset quality is measured by NPA ratio expressed as net non-performing assets to advances. A higher NPA signals a deteriorating asset quality of banks thereby impacting profitability and capital adequacy ratio. The lower the NPA ratio, the higher the quality of bank’s assets and the better the financial performance.

Table 4.4 presents the descriptive values of asset quality of Islamic and conventional banks for the period under study. Islamic banks scored a lower NPA of 0.4 compared to that of conventional banks which stood at 1.05, a mean difference of 0.65. The lowest NPA ratio was -1.33 for Islamic banks and 0.61 for conventional banks while the highest values were 1.70 and 1.94 respectively for Islamic and conventional banks.

**Table 4.4 Descriptive Statistics of NPA Ratio of Islamic Banks vs. Conventional Banks**

<table>
<thead>
<tr>
<th></th>
<th>NPA Ratio of IBs (%)</th>
<th>NPA Ratio of Conventional Banks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.4000</td>
<td>1.0500</td>
</tr>
<tr>
<td>Median</td>
<td>0.8100</td>
<td>0.8300</td>
</tr>
<tr>
<td>Mode</td>
<td>-1.33&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.61&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.13879</td>
<td>0.52130</td>
</tr>
<tr>
<td>Minimum</td>
<td>-1.33</td>
<td>0.61</td>
</tr>
<tr>
<td>Maximum</td>
<td>1.70</td>
<td>1.94</td>
</tr>
</tbody>
</table>

Figure 4.2 is a graphical representation of the net NPA of Islamic banks and conventional banks. Islamic banks recorded a better net NPA in 2014, 2017, and 2018 which was lower than that of conventional banks. On the other hand conventional banks had a better performance in 2015 and 2016 recording a negative net NPA.
4.4.3 Management Quality

Operating expenses to total assets ratio which measures the efficiency levels of banks in daily operations was utilized in this study. The lower the ratio, the higher the efficiency of the banks’ management. Table 4.5 shows the average operating expenses to total assets of Islamic and conventional banks are 7.65 and 6.64 respectively with a mean difference of 1. Therefore conventional banks outperformed Islamic banks in management quality as they have lower operating expense to total assets ratio.

**Table 4.5 Descriptive Statistics of Management Quality of IBs vs. CBs**

<table>
<thead>
<tr>
<th></th>
<th>Total Operating Expense/ Total Assets Ratio of IBs (%)</th>
<th>Total Operating Expense to Total Assets Ratio of Conventional Banks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>7.6520</td>
<td>6.6440</td>
</tr>
<tr>
<td>Median</td>
<td>7.5000</td>
<td>6.7200</td>
</tr>
<tr>
<td>Mode</td>
<td>7.24&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.25&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.41517</td>
<td>0.29670</td>
</tr>
<tr>
<td>Minimum</td>
<td>7.24</td>
<td>6.25</td>
</tr>
<tr>
<td>Maximum</td>
<td>8.11</td>
<td>7.04</td>
</tr>
</tbody>
</table>
4.4.4 Earnings Quality

This study employed return on assets (ROA) ratio. Return on assets ratio shows the effectiveness of the bank in maximizing resource uses in order to generate profits. The higher the ratio, the higher the performance of the bank.

Table 4.6 provides the descriptive statistics for the earnings quality of Islamic and conventional banks for the period under study. The ROA value of Islamic banks and Conventional banks are 0.73 and 0.68 respectively with a mean difference of 0.05 signaling a slight better performance for Islamic banks. The lowest ROA ratio of Islamic banks for the period was -0.35 while that of conventional banks was 0.27.

Table 4.6 Descriptive Statistics of Earning Quality of IBs vs. CBs

<table>
<thead>
<tr>
<th></th>
<th>Return on Assets Ratio of Islamic Banks (%)</th>
<th>Return on Assets Ratio of Conventional Banks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.7300</td>
<td>.6800</td>
</tr>
<tr>
<td>Median</td>
<td>.7400</td>
<td>.6400</td>
</tr>
<tr>
<td>Mode</td>
<td>-.35\textsuperscript{a}</td>
<td>.27\textsuperscript{a}</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.68873</td>
<td>.32673</td>
</tr>
<tr>
<td>Minimum</td>
<td>-.35</td>
<td>.27</td>
</tr>
<tr>
<td>Maximum</td>
<td>1.45</td>
<td>1.16</td>
</tr>
</tbody>
</table>

4.4.5 Liquidity

Liquidity is the last and an important ratio of the CAMEL framework. Liquidity ratio is a key indicator of a banks’ ability to absorb unexpected shocks. Banks are required to handle liquidity issues in prudent manner to avoid experiencing liquidity risk. Current asset ratio was employed to asses both Islamic banks and conventional banks in this study. The minimum statutory liquidity ratio of banks in Kenya is 20%. The higher the ratio the higher the banks’ financial performance.
From table 4.7, the average current asset ratio of Islamic banks and conventional banks stands at 33.4 and 31.6 respectively which is greater than the minimum statutory requirement of 20%. Therefore Islamic banks slightly performed better in liquidity management than conventional banks.

Table 4.7: Descriptive Statistics of Liquidity Ratio of IBs vs. CBs

<table>
<thead>
<tr>
<th></th>
<th>Liquidity Ratio IBs (%)</th>
<th>Liquidity Ratio of Conventional Banks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>33.4000</td>
<td>31.6040</td>
</tr>
<tr>
<td>Median</td>
<td>32.6000</td>
<td>31.3000</td>
</tr>
<tr>
<td>Mode</td>
<td>29.10⁸</td>
<td>26.64⁸</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>4.57343</td>
<td>3.82946</td>
</tr>
<tr>
<td>Minimum</td>
<td>29.10</td>
<td>26.64</td>
</tr>
<tr>
<td>Maximum</td>
<td>39.25</td>
<td>37.40</td>
</tr>
</tbody>
</table>

4.4.6 Overall Financial Performance

To examine the overall financial performance of Islamic and conventional banking systems in Kenya for the period 2014 to 2018, average ratios of capital adequacy, asset quality, management efficiency, earnings quality and liquidity ratios were calculated. Table 4.8, the composite ratio shows that the overall financial performance of conventional banks is higher than that of Islamic banks.

Table 4.8: Overall Financial Performance

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Bank</th>
<th>Capital Adequacy</th>
<th>Asset Quality</th>
<th>Management Quality</th>
<th>Earnings Quality</th>
<th>Liquidity</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IBs</td>
<td>14.82%</td>
<td>0.40%</td>
<td>7.65%</td>
<td>0.73%</td>
<td>33.40%</td>
<td>11.40%</td>
</tr>
<tr>
<td></td>
<td>CBs</td>
<td>17.74%</td>
<td>1.05%</td>
<td>6.64%</td>
<td>0.68%</td>
<td>31.60%</td>
<td>11.54%</td>
</tr>
</tbody>
</table>
Figure 4.3 below is a graphical representation of the overall financial performance of Islamic and conventional banks. Islamic banks outperformed conventional banks in management quality, asset quality and liquidity while conventional banks were better in capital adequacy and earnings quality.

![Composite Financial Performance](image)

**Figure 4.3: Annual Overall Performance of IBs and CBs**

4.5 Inferential Statistics

4.5.1 Islamic Banking and Financial Performance of Banks

4.5.1.1 Capital Adequacy

Table 4.9 illustrates a one sample t-test of the capital adequacy of Islamic banks, the mean difference between Islamic banks CAR and banks is 1.72. The p-value is 0.78 which is greater than the significance level of 0.05. There is no statistically significant difference between Islamic bank’s CAR and CAR of commercial banks.
Table 4.9: T-test of CAR of IBs

<table>
<thead>
<tr>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 16.5</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>CAR IBs</td>
</tr>
</tbody>
</table>

4.5.1.2 Asset Quality

From table 4.10, the mean difference between Islamic bank’s net NPA and commercial banks is 5.42 and the p-value is 0.001 which is statistically significant.

Table 4.10: T-test of Asset Quality of IBs

<table>
<thead>
<tr>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 5.5</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>Net NPA of IBs</td>
</tr>
</tbody>
</table>

4.5.1.3 Management Quality

Table 4.11 illustrates a one sample t-test of the management quality of Islamic banks, the mean difference is 1.15. The p-value is 0.03 which is less than the significance level of
There is statistically significant difference between Islamic bank’s management quality and that of commercial banks.

**Table 4.11 T-test of the Management Quality of IBs**

<table>
<thead>
<tr>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 6.5</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>Management IBs</td>
</tr>
</tbody>
</table>

4.5.1.4 Earnings Quality

From table 4.12, the mean difference between Islamic bank’s ROA and commercial banks is 0.67 and the p-value is 0.95 which is statistically not significant.

**Table 4.12: T-test of ROA of IBs**

<table>
<thead>
<tr>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 1.4</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>ROA of IBs</td>
</tr>
</tbody>
</table>
4.5.1.5 Liquidity

From table 4.13, the mean difference between Islamic banks’ liquidity and commercial banks is 0.60 and the p-value is 0.784 which is statistically not significant.

Table 4.13: T-test of Liquidity of IBs

<table>
<thead>
<tr>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.293</td>
<td>4</td>
<td>0.784</td>
<td>-0.60000</td>
<td>-6.2787</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.0787</td>
</tr>
</tbody>
</table>

4.5.2 Conventional Banking and Financial Performance of Banks

4.5.2.1 Capital Adequacy

Table 4.14 illustrates a one sample t-test of the capital adequacy of conventional banks, the mean difference between conventional banks’ CAR and banks is 1.25. The p-value is 0.115 which is greater than the significance level of 0.05. There is no statistically significant difference between conventional banks’ CAR and CAR of commercial banks.

Table 4.14: CAR of CBs

<table>
<thead>
<tr>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 16.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.011</td>
<td>4</td>
<td>0.115</td>
<td>1.25000</td>
<td>-0.4756</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.9756</td>
</tr>
</tbody>
</table>

41
### 4.5.2.2 Asset Quality

From table 4.15, the mean difference between conventional bank’s net NPA and commercial banks is 4.45 and the p-value is 0.001 which is statistically significant.

**Table 4.15: Net NPA of CBs**

<table>
<thead>
<tr>
<th>Test Value</th>
<th>NPA CBs</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5</td>
<td>-19.08</td>
<td>4</td>
<td>.001</td>
<td>-4.45000</td>
<td>-5.0973</td>
<td>-3.8027</td>
</tr>
</tbody>
</table>

### 4.5.2.3 Management Quality

From table 4.16, the p-value of the management quality of the 5 conventional banks is 0.339 which is greater than the significance level of 0.05 and is not statistically significant.

**Table 4.16: Management Quality of CBs**

<table>
<thead>
<tr>
<th>Test Value</th>
<th>CBs</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5</td>
<td>1.085</td>
<td>4</td>
<td>.339</td>
<td>.14400</td>
<td>-.2244</td>
<td>.5124</td>
</tr>
</tbody>
</table>
4.5.2.4 Earnings Quality

From table 4.17, the mean difference between conventional banks’ banks ROA and commercial banks is 0.72 and the p-value is 0.008 which is statistically significant.

Table 4.17: ROA of CBs

<table>
<thead>
<tr>
<th></th>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 1.4</td>
<td></td>
</tr>
<tr>
<td>t</td>
<td>Df</td>
</tr>
<tr>
<td>ROA CBs</td>
<td>4</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.008</td>
</tr>
<tr>
<td>Mean Difference</td>
<td>-.72000</td>
</tr>
<tr>
<td>95% Confidence Interval of</td>
<td></td>
</tr>
<tr>
<td>the Difference</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>-1.1257</td>
</tr>
<tr>
<td>Upper</td>
<td>-.3143</td>
</tr>
</tbody>
</table>

4.5.2.5 Liquidity

From table 4.18, the mean difference between conventional banks’ liquidity and commercial banks is 2.39 and the p-value is 0.234 which is statistically not significant.

Table 4.18: Liquidity of CBs

<table>
<thead>
<tr>
<th></th>
<th>One-Sample Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 34</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>Df</td>
</tr>
<tr>
<td>Liquidity CBs</td>
<td>4</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.234</td>
</tr>
<tr>
<td>Mean Difference</td>
<td>-2.39600</td>
</tr>
<tr>
<td>95% Confidence Interval of</td>
<td></td>
</tr>
<tr>
<td>the Difference</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>-7.1509</td>
</tr>
<tr>
<td>Upper</td>
<td>2.3589</td>
</tr>
</tbody>
</table>
4.5.3 Contrast on the Financial Performance of Islamic Banks and Conventional Banks

4.5.3.1 Capital Adequacy

Table 4.19 illustrates that the sample t-value -3.803 and the p-value is 0.019. Since the p-value is less than the significance level of 0.05, it can be concluded that there is a statistically significant difference between the capital adequacy of Islamic banks and conventional banks.

Table 4.19: Paired t-test sample statistics of CAR

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1 CAR of IBs and CBs</td>
<td>-2.92</td>
<td>1.71668</td>
<td>0.76772</td>
<td>-5.051</td>
<td>-0.7884</td>
<td>-3.80</td>
<td>4</td>
<td>0.019</td>
</tr>
</tbody>
</table>

4.5.3.2 Asset Quality

From table 4.20, the t-value is -1.398 and a p-value of 0.235. Since the t-value is less than the lower limit of the 95% confidence interval and the p-value is greater than the significance level of 0.05, which is not statistically significant.
Table 4.20: Paired t-test of net NPA of IBs vs. CBs

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>Pair 1</td>
<td>NPA Ratio of IBs (%) - NPA Ratio of CBs (%)</td>
<td>-0.65</td>
<td>1.04</td>
<td>0.465</td>
</tr>
</tbody>
</table>

4.5.3.3 Management Quality

Table 4.21 emphasizes that the sample t-value is 9.423 while the p-value is 0.001. Since the p-value is less than 0.05, highlighting that there is a significant difference between the management efficiency of Islamic banks and conventional banks.

Table 4.21: Paired t-test on Management Quality of IBs and CBs

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
</tr>
<tr>
<td>Pair 1</td>
<td>Management quality of IBs and CBs (%)</td>
<td>1.00</td>
<td>0.23</td>
</tr>
</tbody>
</table>
4.5.3.4 Earnings Quality

From table 4.22, the t-value is 0.196 and the p-value is 0.854. Since the p-value is greater than significance level of 0.05, there is no significant difference in earning quality of Islamic and conventional banks in Kenya for the period 2014 to 2018.

Table 4.22: Paired T-test for ROA of IBs vs. CBs

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
</tr>
<tr>
<td>ROA of IBs (%) - ROA of CBs (%)</td>
<td>0.05</td>
<td>0.571</td>
<td>0.255</td>
<td>-0.659</td>
</tr>
</tbody>
</table>

4.5.3.5 Liquidity

Table 4.23 presents the results of the paired t-test. The t-value is 0.657 and the p-value is 0.547. The p-value of 0.547 is greater than 0.05 which is not statistically significant.

Table 4.23: Paired t-test of Liquidity Ration of IBS vs. CBs

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
</tr>
<tr>
<td>Pair 1 Liquidity of IBs (%) - Liquidity of CBs (%)</td>
<td>1.79</td>
<td>6.11496</td>
<td>2.7346</td>
<td>-5.7967</td>
</tr>
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</table>
4.5.3.6 Overall Financial Performance

From table 4.24, the sample t-value is -0.175 while the p-value is 0.869 which is greater than 0.05 and is not statistically significant.

Table 4.24 Paired t-test of Composite CAMEL Ratio

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall financial performance of IBs (%) - Overall financial performance of CBs (%)</td>
<td>-0.142</td>
<td>1.810</td>
<td>0.8096</td>
<td>-2.389</td>
<td>2.1059</td>
<td>-0.17</td>
<td>4</td>
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</tbody>
</table>

4.6 Chapter Summary

The chapter provided the findings of the study based on the performance of Islamic banks, conventional banks, and the contrast on the performance of Islamic and conventional banks. Chapter five has provided a detailed information on the discussion, conclusions, and recommendations of the study on each research question.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, discussion, conclusions, and recommendations of this research based on the research questions of the study. The section will then cover the discussion on the findings, where the thematic association is made between the main findings of this study and the past literature on the comparative performance of Islamic banks and conventional banks. The chapter will then draw the main conclusions from the study and provides recommendations.

5.2 Summary of the Study

The purpose of this study was to compare the financial performance of Islamic banks and conventional banks in Kenya. The study’s research questions were: Does Islamic banking enhance financial performance of commercial banks in Kenya? Does conventional banking enhance financial performance of commercial banks in Kenya? How does financial performance of Islamic and conventional banking compare in Kenya?

The study utilized a descriptive research design to study the research problem. The target population of this study consisted of all the 43 commercial banks of Kenya. The sampling frame of this study was made up of the 21 banks in the tier three category of the Kenya commercial banks. The study used convenient sampling technique which was the most appropriate technique for this study to select 7 banks from the sampling frame. The researcher selected 2 Islamic banks; Gulf African Bank and First Community Bank and 5 conventional banks; Consolidated Bank, Paramount Bank, Victoria Commercial, ABC Bank, and Credit Bank which had the necessary information to investigate the study problem. This study primarily employed secondary data which was collected from the financial statements of the banks for 5 years period (2014-2018).

CAMEL framework which has five indicators; capital adequacy, asset quality, management quality, earnings quality and liquidity was employed. The analysis of the collected quantitative data was carried out using SPSS version 24 employing descriptive and inferential statistics and the presentation was done by the use of various measures of central tendency and frequency distribution. The information was displayed in the form of tables, figures and in prose-form. The study also used paired t-test to investigate if there was any
statistically significant difference between the financial performance of the two Islamic and five conventional banks.

The study findings indicated that the performance of the two Islamic banks in the study fluctuated throughout the period. They showed good performance in capital adequacy, asset quality and liquidity ratios and have met the requirements. The findings also suggested that the asset and management quality of Islamic banks was significantly different from the industry averages while the capital adequacy, earnings quality and liquidity were not statistically different as indicated by the sample t-test.

The study findings also indicated that the five conventional banks in the study had a varied performance throughout the period. The capital adequacy, management quality, and liquidity ratio of the banks was satisfactory. However, the study found that the conventional banks poorly performed in asset and earnings quality variables. The study also found that the average assets and earnings quality of the five conventional banks were significantly different from industry averages while capital adequacy, management quality and liquidity were not statistically significant.

The results of the findings of the contrast of the overall financial performance of Islamic and conventional banks in the study indicated that conventional banks performed better than Islamic banks in capital adequacy and management quality while Islamic banks were better of in asset quality, liquidity and earnings quality. The findings further suggest that there was no statistically significant difference in the overall financial performance of the two banking categories as indicated by the paired t-test results.

5.3 Discussion

5.3.1 Islamic Banking and Financial Performance of Banks

The study sought to measure the performance of Islamic banks for the period 2014 to 2018, as discussed earlier CAMEL rating system is applied in this study. The study found that the capital adequacy of Islamic banks was fluctuating throughout the period, the average capital adequacy ratio for the study period stood at 14.75% which is slightly higher than the minimum statutory requirement of 14.5%. Gulf African Bank had the highest average annual return CAR of 16.6% which means Gulf African Bank is well capitalized. On the other hand, the second Islamic bank in this study, First Community Bank recorded a lower average CAR of 13%. According to Christopoulos, Mylonakis and Diktapanidis (2011)
capital adequacy helps to determine the bank’s capacity to meet with obligations on time and cover risks such as operational risk and credit risk.

The asset quality ratio of a bank shows how much of the bank’s assets are loaned and is primarily used to assess the value of loans and the creditworthiness of banks (Dodoev, 2018). Banks are generally concerned about the quality of their assets due to its very vital role in generating profits for banks. Islamic banks had lower asset quality ratio which shows higher performance, Gulf African Bank and First Community Bank had an annual asset quality ratio of 0.37% and -0.23%, indicates a well performing loan book. These findings agree with Masod and Aktan (2017) argument that Islamic banks have lower asset quality ratio due to them having a small amount of non-performing assets which solidifies the creditworthiness of Islamic banks.

The measurement of management efficiency of banks is qualitative in nature which makes it difficult to evaluate the performance of banks’ management. Ahmed (2009) argued that the quality of services provided by banks has direct relationship with the financial performance of banks. Total operating expenses to total assets was used to measure the management efficiency of Islamic banks. Gulf African bank had an average annual ratio of 7.11% compared to first community bank which recorded an average of 8.19, the lower the ratio the better the performance. Thus Gulf African Bank’s management is utilizing the assets under its control efficiently to generate profits.

The two Islamic banks earnings quality were measured using ROA, a critical ratio for measuring financial performance. According to Kharawish (2011) return on assets expresses the ability of a bank to generate health net income from organizational resources. Gulf African Bank had the highest annual average ROA of 1.54% while First Community had annual average return on assets of -0.09%. According to the CBK evaluation, a mean ROA of 2.6% reflects satisfactory performance. The average ROA of the two Islamic banks was below the industry average meaning that Islamic banks are not maximizing the use of their assets to generate a health net income. The liquidity ratio of both Gulf African Bank and First Community Bank was impressive recording an annual average of 34.62% and 32.18% respectively which is greater than the minimum requirement of 20%. This confirms Aikacli (2008), and Kamau (2009) findings that Kenyan banks are highly liquid which can be attributed to the bank’s thoroughness in screening loan applicants and in the process avoiding lending to risky borrowers and instead invest in comparatively risk free assets such as government bonds and treasury bills.
Bank regulators are concerned about the availability of enough capital base to deal with uncertain situations and reduce the risk for lenders and depositors, asset management to generate more interest income than interest expenditure, efficient management of bank’s assets, satisfactory return on shareholders’ equity, and better liquidity position to meet short-term and long-term obligations. According to Lopez (2008) a bank is performing well enough to comply with financial laws and regulations if it’s able to manage at least three of the CAMEL variables. The Islamic banks under this study have fulfilled this criteria.

5.3.2 Conventional Banking and Financial Performance of Banks

The study sought to establish the performance of conventional banks in Kenya for the period 2014 to 2018 and a sample of 5 banks were chosen. CAMEL framework was the tool used to measure the performance of the banks for the period under study. The Central Bank of Kenya has set a minimum capital adequacy ratio of 14.5%. Credit Bank, ABC Bank, Victoria Commercial and Paramount Universal have met the criteria while Consolidated Bank had an average CAR of 6.88% for the period which is below the set criteria. Overall CAR of the 5 conventional banks for the period stood at 17.75% which is higher than the industry average. The five analyzed banks are small banks that are classified as tier three banks and small banks have a higher mean CAR than large and medium banks. These findings agree with Tom (2012) who contended that small banks have a higher CAR which can be explained by the less complex loan products with a relatively low risk weights than that of large banks they issue to borrowers.

A key aspect of a bank’s risk is the quality of its assets as the main function of a bank involves extending loans to borrowers. Credit bank had the highest net NPA ratio of 3.8 while the overall net NPA mean of the 5 banks stood at 2.42% which reflects a health loan book. According to Levine (2008) Asset quality heavily dictates the performance of commercial banks as it improves interest income and at the same time reduces the cost burden of bad debts. The five analyzed banks have adopted stringent asset quality measures to increase their loan quality. The five analyzed banks have adopted stringent asset quality measures to increase their loan quality.

The management quality of banking institutions is determined by the decisions made by top level executives which ensures the smooth running of the bank’s operations and minimizes risks. The management quality ratio of conventional banks for the period stood at 6.48%, a satisfactory performance. Management quality measurement of banks is
qualitative in nature and there is no marked difference for management quality across the bank tiers.

Earnings quality ensures the profitability of a bank and determines its sustainability and future earnings growth. According to Apostolos, John, and Pavlov (2011) earnings quality is a significant variable in a bank’s performance, strong net income along with a strong earning profile determines the bank’s ability to generate income consistently. Of the 5 banks analyzed Consolidated Bank had the lowest average ROA of -1.80% and Victoria Commercial had the highest ROA of 2.53%. The average ROA for the 5 banks throughout the study period stood at 0.27% which is much lower than the average industry ROA of 2.6%. The result confirms the argument of Tom (2012) that the average ROA of small banks in tier three category is much lower than that of medium sized and large banks which can be attributed to market share in terms of asset base, customer deposits, and the number of branches a bank operates.

The last variable of CAMEL framework, liquidity was used to analyze the performance of the five conventional banks for the study period. The results show that the five banks had an average liquidity of 31.30%, a satisfactory performance which implies that the banks are able to meet with their short term liabilities. According to Fredrick, Jeremiah, and Onsomu (2018) liquidity performance and bank failure are positively related which suggests that an increase in liquidity risk will increase the likelihood of bank failure.

### 5.3.3 Contrast on the Performance of Islamic and Conventional Banks

The study sought to establish if the performance of Islamic banks was different from that of conventional banks between 2014 and 2018. Conventional banks outperformed Islamic banks in capital adequacy averaging a CAR of 17.74% compared to the 14.75% recorded by Islamic banks. The paired t-test result; a sample p-value of 0.019 which is less than the critical p-value of 0.05 also indicated that there is a significant difference between the performances of the two banking categories confirming that conventional banks were more capitalized than Islamic banks during the study period.

The asset quality ratio was much higher for Islamic banks during the study period. Islamic banks averaged an asset quality ratio of 0.4 while conventional banks recorded a mean of 1.05 which suggests that these two banking categories do not fall in the same risk class. However, the results of the paired t-test indicated that the asset quality ratio of Islamic banks was not statistically significant from that of conventional banks as the p-value of
0.235 was greater than the critical p-value. The five conventional banks performed better in management quality than the two Islamic banks in the study.

Total operating expenses to total assets ratio was used to measure management quality and the lower the ratio the better the performance. The management quality ratio of conventional banks stood at 6.64 for the entire period compared to the 7.65 recorded by Islamic banks. The p-value of 0.001 was significant and conventional banks were statistically different and more efficient in utilizing their assets and managing their expenses as compared to Islamic banks.

Earnings quality of the banks was measured using return on assets ratio. The average ROA for the period was 0.73 and 0.68 for Islamic banks and conventional banks respectively. The paired t-test result yielded a p-value of 0.854 which was greater than the significant level of 0.05 thus there was no statistically significant difference in the earnings quality of Islamic banks and conventional banks for the period. Liquidity was measured using current assets ratio, Kenyan banks are expected to meet a minimum statutory requirement of 20%. Islamic banks recorded a higher liquidity ratio of 33.4% for the period while conventional banks had a liquidity ratio of 31.6%. The results of the paired t-test suggested that there was no difference in the performance of the two banking categories in terms of liquidity as indicated by a p-value of 0.547.

The results also established that there was no significant difference in the overall financial performance of Islamic and conventional banks for the period. The paired t-test for the composited CAMEL ratios yielded a p-value of 0.869 which was not statistically significant. These findings agree with Jamal (2017) argument that there was no significant difference between the financial performances of the two banking categories in Kenya.

5.4 Conclusions

5.4.1 Islamic Banking and Financial Performance of Banks

Analysis of the consolidated financial statements of the two Islamic banks in the previous chapter show that the performance of Islamic banks varied throughout the study period. The study concludes that Islamic banks are showing good progress, and the analysis carried out reflects a satisfactory performance in capital adequacy, asset quality, and liquidity ratio.
5.4.2 Conventional Banking and Financial Performance of Banks

The analysis of the five conventional banks from 2014 to 2018 indicates that capital adequacy, asset quality, management quality, and liquidity performance of the conventional banks was satisfactory. The findings also indicate that the banks should strive to increase their ROA and optimize the use of assets under their disposal.

5.4.3 Contrast between the Financial Performance of Islamic and Conventional Banks

The five components of the CAMEL model were utilized and compared individually with a paired independent t-test to investigate whether there is a significant difference in the financial performance of Islamic and conventional banks in Kenya. In this study, the results from the paired t-test of the composite CAMEL ratios indicate that there is no significant difference between the performance of Islamic and conventional banks in Kenya for the period 2014 to 2018.

5.5 Recommendations

5.5.1 Recommendation for Improvement

5.5.1.1 Islamic Banking and Financial Performance of Banks

Islamic banks in Kenya are engaged in fierce competition with conventional banks which they are ill prepared. Many conventional banks in Kenya have diversified their operations, adopting Islamic product windows which are Sharia compliant and in the process Islamic banks have lost their competitive edge which is providing uniquely differentiated Sharia compliant products. The study recommends that for Islamic banks to compete with conventional banks and achieve sustainability, the government should provide support and encourage Islamic banks to operate and expand in Kenya as they play a key role in financial intermediation and provide a much needed service to the large Muslim population in Kenya. Furthermore, Islamic banks should adopt decisive performance improvement measures targeting earnings quality in which they performed poorly throughout the study period.

5.5.1.2 Conventional Banking and Financial Performance of Banks

Based on the findings, the study recommends that management of conventional banks should come up with tactical measures to increase asset and earnings quality. The outcome of the analysis show that conventional banks performed poorly in earnings quality as they had an average ROA less than the industry average. The study recommends that
management of conventional banks should make good choices when allocating their assets to and create more income and improve the bank’s earning potential.

5.5.1.2 Contrast on the Performance of Islamic and Conventional Banks

Both Islamic and conventional banks have a lot of room for improvement in terms of financial performance. The study recommends to the banks to constantly adopt new technologies to improve efficiency. Furthermore, the government should provide conducive environment for the banks to engage in a healthy competition. The study also recommends both banking categories to depositors, investors, and other players in the industry as there is no significant difference in their performance.

5.5.2 Recommendation for Further Research

The study has only covered a very short period and a further study in the same area is recommended with extended period of time for more accurate comparison. A study on the impact of intellectual capital on performance of both Islamic and conventional banks in Kenya is also an area of interest and is recommended for research.
REFERENCES


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# APPENDICES

## Appendix I: Checklist

<table>
<thead>
<tr>
<th>Company/Year</th>
<th>Variable</th>
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<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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<td>13.5%</td>
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<td>7.90%</td>
<td>5.10%</td>
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<td>Management</td>
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<td>-----------</td>
<td>-----------</td>
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<td>Victoria Commercial Ltd</td>
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<td>ABC Bank PLC</td>
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<th>Liquidity 2</th>
<th>Liquidity 3</th>
<th>Liquidity 4</th>
<th>Liquidity 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria Commercial Ltd</td>
<td>47.20%</td>
<td>40.90%</td>
<td>43.00%</td>
<td>42.00%</td>
<td>56.60%</td>
</tr>
<tr>
<td>Credit Bank LTD</td>
<td>33.51%</td>
<td>32.10%</td>
<td>26.52%</td>
<td>20.50%</td>
<td>31.50%</td>
</tr>
<tr>
<td>ABC Bank PLC</td>
<td>33.01%</td>
<td>33.95%</td>
<td>27.13%</td>
<td>21.40%</td>
<td>30.60%</td>
</tr>
</tbody>
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<tr>
<th>Bank Name</th>
<th>Capital Adequacy 1</th>
<th>Capital Adequacy 2</th>
<th>Capital Adequacy 3</th>
<th>Capital Adequacy 4</th>
<th>Capital Adequacy 5</th>
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</thead>
<tbody>
<tr>
<td>Victoria Commercial Ltd</td>
<td>21.10%</td>
<td>22.70%</td>
<td>25.50%</td>
<td>19.30%</td>
<td>19.20%</td>
</tr>
<tr>
<td>Credit Bank LTD</td>
<td>14.50%</td>
<td>15.90%</td>
<td>22.80%</td>
<td>14.90%</td>
<td>17.20%</td>
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<tr>
<td>ABC Bank PLC</td>
<td>16.41%</td>
<td>15.10%</td>
<td>16.00%</td>
<td>16.50%</td>
<td>17.23%</td>
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<th>Bank Name</th>
<th>Asset Quality 1</th>
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<th>Asset Quality 3</th>
<th>Asset Quality 4</th>
<th>Asset Quality 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria Commercial Ltd</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>3.08%</td>
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<tr>
<td>Credit Bank LTD</td>
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<td>0.95%</td>
<td>2.72%</td>
<td>2.76%</td>
<td>4.10%</td>
</tr>
<tr>
<td>ABC Bank PLC</td>
<td>1.20%</td>
<td>0.00%</td>
<td>2.52%</td>
<td>5.61%</td>
<td>4.10%</td>
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<tr>
<th>Bank Name</th>
<th>Management 1</th>
<th>Management 2</th>
<th>Management 3</th>
<th>Management 4</th>
<th>Management 5</th>
<th>Earnings 1</th>
<th>Earnings 2</th>
<th>Earnings 3</th>
<th>Earnings 4</th>
<th>Earnings 5</th>
<th>Liquidity 1</th>
<th>Liquidity 2</th>
<th>Liquidity 3</th>
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<th>Liquidity 5</th>
</tr>
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<tbody>
<tr>
<td>Victoria Commercial Ltd</td>
<td>2.43%</td>
<td>2.38%</td>
<td>2.92%</td>
<td>2.71%</td>
<td>2.38%</td>
<td>-0.97%</td>
<td>-0.56%</td>
<td>0.92%</td>
<td>3.57%</td>
<td>2.69%</td>
<td>31.50%</td>
<td>20.50%</td>
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</tr>
<tr>
<td>Credit Bank LTD</td>
<td>7.69%</td>
<td>8.12%</td>
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<td>9.67%</td>
<td>8.76%</td>
<td>-0.97%</td>
<td>-0.56%</td>
<td>0.92%</td>
<td>3.03%</td>
<td>4.10%</td>
<td>32.20%</td>
<td>16.50%</td>
<td>32.70%</td>
<td>29.60%</td>
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</tr>
<tr>
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<td>5.63%</td>
<td>5.78%</td>
<td>5.61%</td>
<td>6.29%</td>
<td>0.97%</td>
<td>0.71%</td>
<td>0.71%</td>
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<td>30.60%</td>
<td>21.40%</td>
<td>27.13%</td>
<td>33.95%</td>
<td>33.01%</td>
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