EFFECT OF MORTGAGE FINANCING ON PROFITABILITY OF ISLAMIC BANKS IN KENYA

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A THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN FINANCE AND INVESTMENT OF KENYA METHODIST UNIVERSITY

AUGUST 2019

DECLARATION

I declare that this research thesis is my original work and has not been presented in any other University.

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DEDICATION

I dedicate this work to my lovely parents Mr. Rashid Sheikh and Mrs.Habiba, beloved brothers Mohamed, Feisal, Abdifatah, lovely wife Ismahan Abdi and my best friend Mohamed Abdullahi.

ACKNOWLEDGEMENT

I am grateful to God the Almighty for this far I have come in pursuit of this important academic journey. Without Him my wisdom is worthless and before Him I shall always observe my prayers. I would also like to express my profound thanks to Mrs. Elizabeth Were and Mr. Bernard Baimwera, for patiently supervising my research work and for their invaluable guidance throughout this undertaking. I am deeply grateful for their perceptive direction and encouragement during their supervision.

I wholeheartedly appreciate the opportunity accorded to me by the Kenya Methodist University School of Business to pursue my academic dream. My sincere appreciation also goes to the entire Kenya Methodist University teaching fraternity for their dedication to shape me to become a better student during my studies. Finally, my profound gratitude is extended to all the respondents and everyone else who encouraged and helped me to successfully complete this thesis.

ABSTRACT

The growth of Islamic banking has been on a steady increase hence currently a force to reckon with in the financial market. This banking subsector is presently competing for market share with conventional banks. The purpose of this study was to assess the effect of mortgage financing on profitability of Islamic banks in Kenya. Specifically, the study sought to establish the effect of interest-free mortgage financing on Profitability Islamic banks, to explore how collateral requirements influence profitability in Islamic banks, and to examine the effect of mortgage credit on profitability in Islamic banks. This study adopted the descriptive research design and sampled 45 respondents by Census survey technique. Data was collected by use of a structured questionnaire and analyzed both by descriptive and inferential statistics. On the correlation analysis to determine the relationship between interest free mortgage financing and profitability of Islamic banks in Kenya the findings indicated a significant correlation ($r = 0.637$, $p < 0.05$). The findings indicated that that interest free mortgage financing had a positive and statistically significant influence on profitability of Islamic banks in Kenya. On collateral the correlation analysis yielded a Pearson's product correlation ($r = 0.607$, $p < 0.05$) indicating that a strong and positive relationship existed between collateral and profitability in Islamic banking. On mortgage the findings yielded a Pearson's product moment coefficient of correlation ($r = 0.575$, $p < 0.05$) suggesting that a strong and positive relationship existed between the two variables. The study established that there was a positive correlation between mortgage credit and profitability in Islamic banks. The R square was 0.609 indicating that 60.9% of variance in profitability in Islamic banking could be explained by interest free mortgage financing, collateral and mortgage credit. Based on the findings it was recommended that in order to address Interest free mortgage financing in Islamic banks further studies on Islamic banking should be carried out. On collateral further analysis should be carried out on factors that influence collateral and how this can be expanded to address more clients. On Mortgage Credit it was recommended that Banks should make efforts to ensure that mortgage credit is easily available.

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LIST OF ABBREVIATIONS AND ACRONYMS

CBK   Central Bank of Kenya

FCB   First Community Bank

GAB   Gulf African Bank

GoK   Government of Kenya

IFIs   Islamic Financial Institutions

IMF   International Monetary Fund

SPPS   Statistical Packages for Social Scientists

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Given their ability to control money supply and circulation, the banking sector is a critical player in economic prosperity of any nation. This is in addition to their position to foster liquidity and effective operation of the commercial systems in all sectors (Kamau & Oluoch, 2016). One of the important subsectors in the banking industry is the Islamic banking. This represents a financial infrastructure which operates within the Islamic law, otherwise known as Shariah law. In this sense, the Islamic law outlaws charging of interests or fees – riba – for loans advanced to clients. According to Mugambi (2012), in contrast with conservative banking institutions, Islamic financial institutions do not view interests as their main source of income. Instead, the banks' source of income mainly comes from profit and risk sharing. Yet, like the conservative banking subsector in Kenya, Islamic banks are regulated by the Central bank of Kenya (CBK) (Government of Kenya [GoK], 2015).

Over time, there has been an expansion of Islamic banking not only in terms of many branches, but also in terms of the products offered (Chisti, 2012). Regarding its presence in the global financial market, the Islamic banking subsector has been felt in many parts of the world such that in some countries especially in the Far East and in the horn of Africa the financial market is dominated by Islamic banking institutions (Christiano, Rostagno & Motto, 2010). According to Demirhan (2014), Islamic banking is developing at the proportion of ten to fifteen per cent per annum and boasts an asset value of more than 1 trillion US dollars globally. Studies have further indicated that in terms of its credit market share in the global banking arena, especially in the Muslim countries, it is estimated that this has risen from about two

per cent from the last quarter of 1970 to approximately fifteen per cent as it stands currently (Chisti, 2012).

Kenya could slowly be emerging as the Islamic finance country in the East African region, with two fully-fledged Islamic banks – Gulf African Bank (GAB) and the First Community Bank (FCB) – having been licensed to operate (Ehab, 2011). Based on the bank's profile, as the largest Islamic bank in Kenya, FCB opened its doors to customers almost ten years ago, boasting of 18 branches countrywide today. Equally spreading its presence very fast is GCB which has 14 branches nationally at the moment. The Islamic banking has attracted both Muslim and non-Muslim clientele interested in alternatives to conservative banking services.

According to a recent survey by the IMF, contrary to the conventional banks which are largely debt-based and allow risk transfers, Islamic banks are asset-based and centers on risk-sharing (Hussain & Fayyaz, 2015). The IMF survey further indicated that the Islamic banking model does not allow practice financial investments likely to trigger global financial crisis such as toxic assets, offshoots, and conventional financial institution securities. In this sense, Islamic financial institutions are viewed as having the interests of their customers at hear where everything possible must be done to ensure that every customer is treated in a fair manner when it comes to borrowing and repaying of the loan. Furthermore, the main idea is to ensure that the principle of riba is adhered to where any interest charged on a loan is viewed as some form of exploitation.

1.1.1 Mortgage Financing

According to Bienert and Brunauer (2006), mortgage financing is a loan that is secured by placing collateral of identified real estate property and the borrower is

expected to pay back with prearranged set of repayments. The loan is therefore intended for the purchase or construction of a house by either individuals or corporates. According to Ikpefan (2013), a mortgage enables individuals who or companies which may not have enough money to purchase or construct houses. Imbierowicz (2011) further argues that mortgage financing is an integral component of real property business.

Commercial banks are now actively involved in mortgage financing, a domain previously dominated by mortgage financing companies (Erbas & Walley, 2005). Notable impact of mortgage financing on consumers is quality housing and alleviation of poverty while on the other hand the banks make long-term profits through mortgage transactions as mortgage loans are usually long-term loans spanning 10-30 years' period of repayment (Tse, 2012; Dolde, 2006). As a vital line of business for the banking sector, most commercial banks deal in mortgage financing so as to boost their financial revenues (Bienert, 2006. However, according to the World Bank (2011), for mortgage financing to thrive in any economy, availability of land for housing and the market for property sales remain very critical ingredients.

1.1.2 Islamic Banking in Kenya

According to the central bank of Kenya (CBK), Islamic banks in Kenya account for about 1% of gross assets in the country's banking sector. With a customer deposits of close to Kshs7.5 billion, 27,270 deposit accounts and a combined loan portfolio of Kshs 4.9 billion (CBK, 2017).

Appealing to both Muslim and non-Muslim populations, Islamic banking operates on the principle of Shariah law, which forbids the collection or payment of interest on money loaned but instead imposes the sharing of profit and loss amongst its

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membership (CBK, 2012). Both licensed in 2007 to fully operate as Shariah-compliant banks in the country, the two banks currently boasts of a significant presence in the Kenyan banking business. As a boost to this banking subsector, several other ordinary banks are now offering Islamic banking services. In light of the global financial crisis, Islamic banking is fast attracting attention. Yet, given the Islamic banks' unconventional products, it is still unclear how this affects their profitability.

The advent of Islamic banking in Egypt in 1963 marked the beginning of what is now a formidable subsector in the banking industry in Africa today. By 1970s, a number of fully-fledged Islamic banks had been established, especially in Arabic and Asian countries (Aggarwal & Yousaf, 2000). This growth attests to the fact that the effect of Islamic banking in the financial market cannot be overemphasized; just like the case of conventional banking.

Islamic banking subscribes to the teachings of Islamic law – Shariah – that shuns paying and receiving riba, avoids Gharar, and invests in profit-sharing ventures. The scheme also rejects the idea of investing in business considered unethical and impermissible. However, scholars and researchers are still struggling to understand if and how Islamic banks achieve their goals.

The financial industry generally provides financial services to its customers. However, in the Islamic banking subsector, most of these services are expected to be provided without much of interest. According to Saunders, Lewis and Thornhill (2011), interest-based financial services are prohibited in the Islamic banking. This notion is based on the Islamic religion's original principles and the ethical implications of some of the teachings of Islam. Therefore, it is common to find the

Muslim community seeking interest-free financial institutions where transactions are not pegged on interests. Saunders et al., (2011) further asserts that more than one and a half million Muslims globally do not participate in interest-based banking systems because of the proscription of interests in Islamic law, otherwise known as Shariah. Muslim believers argue that regulations are clearly laid down by God through Prophet Mohammed that all business transactions must be free from interest (riba) (Saunders et al., 2011).

Since the inception of Islamic banking, studies indicate that the subsector has not been without challenges (Yudistira, 2003; Sufian, 2007). Yet, studies have claimed that Islamic banks can stay afloat even within a traditional banking environment in which Profit-and-Loss Sharing (PLS) modes of financing are not the norm (Sarkar, 1999).

1.2 Statement of the Problem

The role of mortgage financing by commercial banks in economic development and expansion is not in doubt. Yet, as a product of Shariah-compliant financial institution, the impact of this product in the profitability of banks still remains unclear. Whereas there is plenty literature in terms of books and journals that have been written on operations regarding Islamic banks in general, it is not clear how the banks may be accruing benefits from such long-term impact products such as mortgage financing.

Naturally, banks mitigate risks through collaterals. Similarly, banking institutions charge interests on their loan products as a way of increasing their revenues. This would be the same case for mortgage financing, especially given that it is a long-term loan. Mortgage credit means that the bank's money is held up by the customer hence likely to affect its profit margins unless a reasonable interest is charged. However, the banking institutions that subscribe to the Shariah law prohibit loaning out money with

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interest in their consideration. In other words, Islamic banks negate the principle of 'Riba', which literary means interest. But, it should clearly be noted that Islamic banking institutions, which operate on the principle of sharing profit-loss and risk-sharing with their customers, believe that this is the best way to treat their customers. Although some financial experts have argued that this is a dangerous foundation upon which to transact money, especially by profit-oriented organizations, others have demonstrated that it is possible to operate banking services without charging interest and still remain sustainable in the market. But it nonetheless remains unclear how such institutions can make a profit and sustain their operations, especially if viewed with respect to mortgage financing. It is against the above arguments that this study examined the effect of mortgage financing on profitability of Islamic banks in Kenya, with a specific focus on such institutions in Nairobi City.

1.3 Main Objective of the Study

The main objective of this research was to examine the effect of mortgage financing on profitability of Islamic banks in Kenya.

1.4 Objectives of the Study

This study addressed the following research objectives:

i. To determine the effect of interest free mortgage financing on profitability of Islamic banks in Kenya.

ii. To examine the influence of collateral on profitability of Islamic banks in Kenya.

iii. To examine the influence of mortgage credit on profitability of Islamic banks in Kenya.

1.5 Research Questions

i. What is the effect interest free mortgage financing on profitability in Islamic banks in Kenya?

ii. To what extent does collateral requirement influence profitability in Islamic banks in Kenya?

iii. How do mortgage credits influence profitability in Islamic banks in Kenya?

1.6 Justification of the Study

The study will be important to the bank management in identifying banking system weaknesses in an effort to improve on service delivery and offer more satisfaction to customers. The study will also be important to other stakeholders in the banking industry as it will provide insights into how Shariah-compliant banks in Kenya sustain mortgage financing, and the challenges and/or opportunities that are encountered.

In addition, the study will inform policymakers in the formulation of relevant and effective policies aimed at streamlining the Islamic banking system. The study will benefit future researchers and academicians, as it points out on gaps in literature that future scholars can explore.

1.7 Limitations of the Study

There was some challenge in collection of data as some of the respondents had a busy work schedule. To overcome this, the researcher made proper prior arrangements and booked appointments where possible. The respondents were also properly sensitized on the purpose and value of the study. The researcher also exercised utmost patience in order to fit within the time schedules of the respondents, and made callbacks where possible.

Some respondents were not cooperative when it came to giving relevant and correct information. This was due to fear of leaking critical internal information to outsiders and fear of future reprisals from the banks' top management. To address this limitation, the researcher assured the respondents that information collected would be for the purposes of the study only and that this would not be disclosed to any other parties.

1.8 Delimitation of the Study

This research aimed at establishing the effect of mortgage financing on productivity of Islamic financial institutions in Kenya. It targeted top management staff of the banks, focusing on individuals working in various departments of two commercial banks that provide Islamic banking products in the country. The study specifically focused on interest rates, collateral requirement, and risks as predictors of profitability in Islamic banking. The study was carried out for approximately 20 weeks.

1.9 Assumptions of the Study

In the study, it was assumed that the respondents would be willing enough to give the pertinent information. This supposition disregarded the fact that most of the respondents had busy schedules. The researcher also assumed that selected respondents would be willing to offer responses as sought by the researcher. The researcher also assumed that there would be enough capitals planned to enable the collection of data, and that the information that was collected would be a representation of the whole population, for inference.

Most of these assumptions were proven right, with the collected information for instance being credible enough to help in answering the research question. Also, although majority of the respondents were available and willing to participate in the

study, there were a few who at first were reluctant to answer the questions freely. The researcher took time to explain to them the intention of the study; which later convinced them to participate and give the right data.

1.10 Definition of Terms

Mortgage financing: is a loan in which property or real estate is used as collateral and the lender receives money which he/she pays back for an agreed period of time.

Interest-free mortgage: is a mortgage loan provided by a lender that does not require interest to be paid on it.

Collateral: is the commitment the borrower is willing to make, and pay, to secure a loan or credit. This is intended to reduce the risks taken by the lender and increases the chances of the borrower of being granted the loan.

Mortgage risks: is the probability of loss coming from a financier's letdown to repay principal or interest according to the terms of a mortgage loan.

Credit risks: is the risk of default on a loan/debt that may arise from a borrower failing to make required payments.

Gharar: One of three essential proscriptions in Islamic finance.

Halal: All transaction, activities, contracts and professions that are permissible and lawful by the Quran.

Ijara: this is a form of business arrangement where the bank procures an item and then lets it to a customer for a given period of time. All the conditions of lease are entered and agreed by both the bank and the customer before the agreement is struck. This is usually exercised by Islamic banks where the bank becomes the custodian of the item throughout the lease period until such a time that the contract expires.

Islamic banking: this is a form of banking institution that subscribes to the principles of Islamic teachings where all the operations are based on the Shariah laws. In this sense the bank is viewed as not operating within the rules and regulations governing conventional banks. Islamic banking is basically founded on the principle of free interest where customers are not expected to pay back any extra amount on top of the principal amount advanced in form of loan. In addition to prohibition of charging interest on loans, Islamic banks are expected to strictly operate within ethical practices where no any form of exploitation of the customer is encouraged. Generally, Islamic banking is founded on Shariah law, with no expectation of interest (riba) on loans advanced by the banks.

Murabaha: this is an arrangement where there is buying and reselling of goods and services where the customer does not necessarily procure a loan and repay it with interest. Under this arrangement, the bank buys an item for the customer and later releases the same to the client based on agreed terms such as the period within which to clear the payment. The payment is usually made in installments, without a lot of interest but with a small profit margin.

Musharakah: (loss sharing, profit and joint venture) Musharakah implies a collaborative venture where two or more individuals enter into a business transaction with the aim of sharing profit and loss that is likely to accrue. What differentiates a Musharakah arrangement from the conventional banking arrangement is the fact that losses must be shared proportionately between the lender and the borrower based on the amount of investments, but the turnover is usually shared out based on a mutual understanding between the parties in the pact.

The two main forms of Musharakah are:

Permanent Musharakah: this is an arrangement where an Islamic financial institution invests in a business venture and obtains investment returns based on the prevailing circumstances such as the amount of profit accrued and the market share. Since the period of the contract is usually unspecified, the investment is viewed as long term hence likely to eventually accrue good returns.

Diminishing Musharakah: this allows impartial partaking in profits sharing where this is done on a pro rata basis, and provides an opportunity for the financial institution to eventually reassigning asset ownership to the participants. The contract allows for payment exceeding the bank's proportion in the business arrangement.

Riba: Refers to interest, which is not allowed in Islamic Law.

Shari'ah: Islamic jurisprudence. A product that satisfies requirements of the Islamic law is considered "Shari'ah compliant".

Zakat: means sanctification, cleansing, upturn and enhancing of good will. In Shari'ah, it is a responsibility pertaining to finances paid for a particular category and specific purpose.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section explores scholarly works that focus on areas of Islamic banking and orthodox banking in mortgage financing. In the present chapter, theories that underpin Islamic banking are reviewed. Empirical studies are then reviewed in comparison between Islamic and conventional mortgage financing.

2.1.1 The Concept of Islamic Banking

The advent of Islamic banking in Egypt in 1963 marked the beginning of what is now a formidable subsector in the banking industry in Africa today. By 1970s, there were numerous fully-fledged unorthodox financial institutions otherwise known as Islamic banks, especially domiciled in Arabic and Asian countries. The number has since tremendously grown, with such institutions currently operational in over 60 economies around the world. These countries are furthermore boasting an asset base of more than 167 US billion dollars and an annual growth rate of 10-15 per cent (Aggarwal & Yousaf 2000). This tremendous growth attests to the enormous and widespread effect of Islamic banking in the fiscal market meaning that the contribution of such institution cannot be overemphasized; just like the case of conventional investments.

Unorthodox financial businesses associated with the Muslim community and principles globally subscribe to Shariah law, an Islamic rule that prohibits paying and receiving of riba or interest in the business transaction. They also discourage and often avoids Gharar such that the investments are firmly grounded on the principle of profit-and-loss-sharing between the lander and the customer. The scheme also rejects the idea of investing in business considered unethical and impermissible. However,

scholars and researchers are still struggling to understand if and how Islamic banks achieve their goals.

The financial industry generally provides financial services to its customers. However, in the Islamic banking subsector, most of these services are expected to be provided without much of interest. According to Saunders et al. (2011), interest-based financial services are not tolerated in unconventional banking models premised on the principle of Shariah. This notion is based on the Islamic religion's original principles and the ethical implications of some of the teachings of Islam. Therefore, it is common to find the Muslim community seeking interest-free financial institutions where transactions are not pegged on interests. Saunders et al. (2011) further asserts that more than one and a half million Muslims globally do not participate in interest-based banking systems because of the proscription of interests in Islamic law, otherwise known as Shariah. Muslim believers argue that regulations are clearly laid down by God through Prophet Mohammed that all business transactions must be free from interest (riba) (Saunders et al., 2011).

According to Yudistira (2003) and Sufian (2007), there is every indication that unconventional financial businesses operating on the principle of Shariah law have continued to face numerous challenges. This is despite the claim by some scholars and researchers that unorthodox banking institutions can still thrive in a market environment where naturally financial bodies are dependent on profits accrued in form of interests to survive in the market (Sarkar, 1999). Yet, Sarkar (1999) further contends that unconventional banks usually operate within different circumstances and therefore need to put in place specific and clear rules and regulations that should help them stay afloat in the market.

2. 2 Theoretical Review

This research is founded on the Chapra model and theory of Interest in Islamic banking and loss and profit sharing theory.

2.2.1 Theory of Interest

Propagated by Qureshi (1946), the theory of interest focused on the banking services as a social contract which is within the domain of the government, just like public health, education and other key services for human existence. According to Qureshi, the aspect of social contract is founded on the fact that unconventional banks do not usually levy interest on their loans advanced to the customers, and therefore this meant that there was some sort of partnership between the bank and the business people (Qureshi, 1946). The partnership made it possible for the banks to share losses, if any, with their clientele. This theory did not mention any profit-sharing.

Based on the theory of interest, some controversy arose especially with regard to the idea of Mudaraba, which, based on Shariah law, argued for banking with no interests in mind (Uzair, 1982). Yet, the insinuation that banking organizations should operate devoid of interests where they use their own securities sparked more contradictions. The reasoning behind this argument is that without charging interest this meant that the financiers have to dig into their own share capital and the savings of customers in order to meet their lending obligations; a fact that some financial analysts tend to oppose on the basis that continuity of the bank cannot be assured under such circumstances.

2.2.2 Chapra Model of Islamic Banking

The Chapra theory of banking was advanced by Chapra (1982), and founded on the tenets of the *mudaraba*. The main argument behind this model was based on the

assumption that purchasing power of parties to financial transaction agreements was founded on credit advancement. Furthermore, the argument is advanced that if justice and equity is seen to be served then every time the bank accrues any interest this should be bequeathed to the government. This model was interested in equity financing espoused by private financial institutions where profit making often seems to be the overriding aim for their operations. Emphasis was laid on medium-sized banks which did not wield so much power or were too small to be economical.

The Chapra model of banking further outlawed riba (interest), maintaining that it was essential for the Islamic banks to emphasize on the common customer's interests, without singling out group or individual preferences (Chapra, 1985). According to this model, Islamic banks were viewed on the basis of a middle ground between conventional banks in the mainstream financing market and small banking institutions where the shift focuses more on the interest of the customers as opposed to those of the financiers. This was as opposed to orthodox banks which depended heavily on collaterals as a way for mitigating risks. .

This theory further envisioned a scenario where, given that there is no emphasis on profit and loss making in unconventional banking otherwise called Islamic banking, the relationship between the customer and the financial was more enhanced than in the case of conventional banking. Essentially, due to the ban on interest in the Islamic banking, the question of mortgage financing needed a different approach if it had to make much sense to the customers and the public in general. This is due to the fact that there was no possibility of resorting for any assistance from the exchequer in the event that there were any suspected bad deeds by either of the parties involved in the financial agreement. According to Chapra (1985), there were always other ways of raising money by the banking institutions without necessarily turning to the central

bank for assistance whenever they felt that their existence was threatened. This suggestion negated the craving for interests by banks as almost the only sure way of making an extra coin. Whether these arguments have helped the Islamic banking subsector to grow in Kenya, it remains to be seen.

2.2.3 Profit and Loss Sharing (PLS) Theory

This model focuses on the core foundation of Islamic banking. Furthermore, the model is founded on the tenets of mudarabah as well as masharakah as central pillars of the Islamic banking subsector. In respect to mudarabah, the Islamic banks accept funds from savers under arrangements of risk-sharing. The commercial banks then either directly saves these funds in ventures that are profitable or spreads them to businesspersons on arrangements of risk-sharing. Regarding the code of Musharakah banking, depositors' funds are invested in joint ventures by the Islamic bank with the entrepreneur (client) and lets the customer to run all the undertakings of a musharakah business. In this sense, the financier and the client share the proceeds as agreed; whether it is a profit or loss.

Under ideal circumstances, an unorthodox banking institution operating on a profit and loss sharing principle caters for the risk capital which is usually managed by proficient bankers tasked with making day to day strategic and important decisions. Saleh (1986) enlists one financier responsibility and three rights under the fundamental of Mudaraba. These include guaranteeing that the borrowing customer complies with the terms of limited liability, sharing profits, and the contract.

2.3 Empirical Literature

The focus of this study was to examine how mortgage financing influences productivity of Islamic banking institutions in Kenya. Specifically, the core discussion of the study centered on the effect of interest-free mortgage financing, the effect of collateral requirements, and mortgage credit.

2.3.1 Interest free mortgage Financing

The existence of Islamic banking is majorly defined by the Shariah principle where the borrower, the lender and the guarantor respect one another on the basis of mutual trust existing amongst them. Yudistira (2003) affirms that the idea that the three parties can equally share in any profit or loss that may occur following their pact makes it easier for this relationship to flourish. In this regard, Islamic commercial business model aims at subscribing to teachings of Holy Qur'an, which is basically in conflict with idea of charging interest on loans or gaining profit from commercial investments. This way, the customs of Islamic religion as governed by Shariah law forms the foundation for the unconventional banking institution. On the basis of these principles, the banking organization may be viewed as 'fair' and 'free', with the primary objective of exercising fairness to its members (Fauzi & Idris, 2013). This basic freedom though, is restricted to those transactions that are in tandem with the principles of *Riba and Gharar (*Tobias & Adam, 2010).

Contrary to the way conventional bank operate where there is no direct close interaction between the customer and the bank, Islamic banks aspire to inculcate the ideas partnership where the client is viewed as equal shareholder in the transaction. This partnership is demonstrated when involving the customer's deposits in the bank's other financial investments where this is viewed as the bank investing on

behalf of the client. This is in contrast with the orthodox banking sector where the relationship between the borrower and the lender is not based on close attachment rather than on strictly set business rules. Besides the mode of lending which basically contravenes the situation in conservative banking industry, the governing structure in the Islamic banking is such that the Islamic financial institutions must be guided by the principles enshrined in their Holy Book, the Quran. According to Suleiman (2001), the banks must also strive to stay true to the aspirations of all the followers of Islam by ensuring that there is always provision of acceptable products based on fairness, justice and equity.

Despite the subtle similarities that are likely to be existing in both conventional and unorthodox banking organizations when it comes to the kind of common financial services being offered and the fact that both sides play a crucial part in the country's economic developments, there are notable differences between the two models. Dar and Presley (2010) contend that, unlike non-Islamic banks, Islamic banks have the obligation to be guided by the principles of the Quran, especially as expressed through Shariah laws. This includes avoiding exploitative contracts that may involve payment of interest by the customers on procured loans. To this extent, riba or interest is viewed as unfair since it encourages foreseeable risky or speculative business ventures. In this way, according to Feisal (2010), Islamic banks will be seen to be exercising just and equitable distribution of resources.

According to Guyo and Adan (2013), apart from sticking to the principles of sharing in the profit, running joint ventures, and leasing among other nonconventional practices by Islamic banking institutions, above all, Islamic banking is guided by high standing and cross-cutting moral values as provided by Shariah (Islamic law). Shamim (2013) further notes that Islamic banking is founded on four cardinal guiding

principles meant to regulate and direct their investment processes. This means that the banks must not charge interest (riba), they must not be involved in speculative economic ventures (Gharar), they must operate under Islamic tax (zakat), and they must desist from engaging in investment activities that contravene the teachings of Islamic religion (Haram). These sentiments are corroborated by Kent (2013), who argued that Islamic banking should avoid interest charging and speculative transactions for the common good of the customer.

Despite these arguments, it remains unclear how Islamic banking remain afloat in a very competitive financial market. This is especially based on the fact that conventionally banks make money through interest levies on loans advanced or customers' accounts (Yudistira, 2003). Furthermore, according to Wang'ombe, Muturi and Ngugi (2016), argue that in most countries Islamic banks are regulated by the Central Bank hence not given any preferential treatment.

In a study among the Swiss banks between the period 2003 to 2013, Dietrich and Wunderlin (2015) assessed the main determinants of margins of mortgage loans. 8,120 mortgage loans were considered with fixed interest rates and it was established that macroeconomic factors including GDP growth, interest rates and inflation and loan specific factors have a significant influence on mortgage loan margins.

Ngumo (2016) explored how interest rates affect the financial performance of mortgage firms in Kenya. A survey research design was adopted in the study and all organizations registered for mortgage financing as of 31st December 2011 were targeted which totaled 33. Secondary data sources were used in the study from the Central Bank of Kenya and CMA library and multiple linear regression analysis was employed in the analysis of data performed at 95% confidence level. It was

established in the study that the amount of mortgage loans advanced has a statistically significant effect on positive financial performance. It was recommended in the study that interest rates on the mortgage have to be charged appropriately by mortgage firms in Kenya as the cost of mortgage borrowing is raised by unproductive interest rate policy, which lowers financial performance as it negate its demand.

Okelo (2013) examined counter strategies to the alterations in interest rates by financial institutions in the Kenyan mortgage industry by use of secondary data acquired from extant periodicals by the Central Bank of Kenya as well such companies. It was established in the study that for most institutions, particularly ones in the mortgage industry, interest rate is a major concern and essentially had a direct effect on the institution's strategies. Mortgage interest rates were found to be increasing generally over the period of study. Attrition and default rates were the most affected by increased interest rates compared to reputation, market share and profitability. On the other hand, reduced interest rates had substantial effect on profitability and the loan book according to the study findings.

Waithaka (2017) found in his study that compared to her counterparts in Sub–Saharan Africa, Kenya has, owing to high interest rates charged by the banks, trailed behind in the mortgage market. The real estate lending in the Kenyan mortgage market is controlled by 5 major players, which control 71 percent. These include CFC Stanbic bank, Housing Finance Company of Kenya, Co-operative Bank of Kenya KCB group and Stan Chart Ltd. As Waithaka (2017) found, owing to constant rising speculative prices, it has been a deterrent for middle class income earners to acquire mortgage loans leading to the creation of a hulking mortgage market causing high demand for housing units and deficit in supply.

Uhomoibhi (2018) set out to assess the impact of interest rate on commercial banks' financial performance. It was found out in the study established that interest rate is not only substantial but also has a positive effect on financial performance. This finding was in tandem with the finding by Karkra and Ameyaw (2017). Additionally, a study undertaken by Pasiouras and Kosmidou (2017) on the determinants of financial performance of foreign and domestic commercial banks in the European Union indicated a positive association.

Mang'era (2014) on the other hand assessed the linkage between mortgage financing rate and profitability of financial institutions offering mortgage employing secondary data collected tools. It was found in the study that used inferential and descriptive methods that a strong positive relationship exists between earnings and bank size. On the other hand, interest rates, liquidity, credit risk and expenses management indicated no significant effect on profitability.

In a separate study conducted by Okang'a, (2015) the objective was to, using a causal study design, determine how interest rates in mortgage financing influenced the growth of mortgage financing. The study sampled 30 listed commercial banks that registered and offering mortgage financing between years 2008 to 2012. Secondary data was collected and applied to determine mortgage lending as well as profitability for the period 2008-2012. Using SPSS Version 20, the study used multiple regression models to examine data. It was found in the study that mortgage financing affects performance positively and significantly.

2.3.2 Collateral Requirements

According to Agao (2014), collateral generally refers to assets given to the borrower by the lender, in a display of obligation towards loan repayment. Kioko (2014) further

states that acts as a contractual agreement revolving around a specified asset. However, due to weak legal and regulatory framework especially in developing economies, this arrangement often becomes difficult to implement. Be it as it may, Mwangi (2013) argues that in more than 90% bank loan cases, it was mandatory for the lender to present collateral before processing and approval of the loan. According to Wahome (2010), the higher the amount of loan, the higher the value of the contract due to the high risks involved. Although there were varied opinions regarding collateral requirements in the Islamic banking, generally the findings of this study were in agreement with revelations by past studies.

For instance, according to Wahome (2010), due to weak legal and regulatory framework especially in developing economies, this arrangement often becomes difficult to implement. Nonetheless, Mwangi (2013) argues that in more than 90% bank loan cases, it was mandatory for the lender to present collateral before processing and approval of the loan.

Collaterals are common in both conventional and Islamic banking lending transactions (Mwangi, 2013). However, the level of collateral is dependent on the level of risks involved in lending. Unlike in the conventional banking subsector which is thought to require smaller collaterals since some of the risks are covered by the interest charged on loans, it is theorized that Islamic banks require higher collaterals. This is usually informed by the fact that their loans are interest-free where they discourage payment of *riba* (Agao, 2014).

According to Lipunga (2014) despite collateral giving the lender some confidence, it has the limitation of killing competition especially if it is over-relied upon. Beck, Cull, & Fuchs (2010) further note that in relation to borrowing, Islamic banking

becomes unattractive due to the large amount of collaterals needed. This fact lends credence to why it is important to further understand the role of collaterals in determining profitability in Islamic banking. There are several forms of collateral admissible by the banks when lending. These may include personal guarantors, receivables, and fixed deposit accounts among others (Sharma & Gounder, 2012).

Titman, Tompaidis and Tsyplakov (2017) explored the factors that influence mortgage margins between 2005 to 2015. 26,000 individual mortgage loans were considered and it was discovered that high profit margins are obtained from riskier mortgages record. Owing to poor performance of mortgages, and higher default rate strict lending conditions including collateral requirements are instituted by lenders. Riskier collaterals moreover trigger for short repayment periods, higher interest rates and higher initial payment. Moreover, the study established positive correlations between credit spreads and loan to value per lender because lenders concentrate on high or low risk mortgages. As more loans are advanced by mortgage firms, the terms and conditions of loans are tightened owing to higher default rate and past poor performance on existing loans.

Koetter and Poghosyan (2018) studied German mortgage financial institutions with a view to find out the relationship between bank distress and real estate markets over the period 2007 to 2016. The study highlighted that the value of collateral grows the real estate property prices of which ultimately leads to reduction in commercial banks' profitability level. There moreover exists substantial positive association between banks' profitability distress and the price proportion to rent. The study further found that banks' profitability distress is further affected by segmentation of the real estate market.

Gatuhu (2013) studied the effect of credit management on profitability among commercial banks in Kenya. The study findings indicate a strong and positive association between collection policy and credit risk control; and collateral requirement and financial performance of MFIs. The study deduced that credit risk control, client appraisal, and collection policy affect financial performance of commercial banks.

In a similar study, Achou and Tenguh (2018) sought to explore the effect of collateral requirement on the performance of bank and found that collateral requirement has a significant effect on financial institutions performance. Good performance is obtained from good credit risk management. Thus, it is imperative for commercial banks to safeguard institutional assets by practicing practical credit risk management with a view to protect the investor's interests.

In another study Soke Fun Ho and Yusoff (2017) investigated the type and nature of credit risk management strategies adopted by selected financial institutions in Malaysia. The study established that most banks' and other institutions' loss emanate from absolute default due to the incapability of clienteles to meet requirements in relation to trading, lending, settlement, and other financial transactions. The study found that collateral risk emanates from a commercial bank's dealing with corporate institutions, individuals, sovereign entities and/or financial activities.

Credit risk management was also studied by Mekasha (2016) in relation to investigating its impact performance among Commercial Banks in Ethiopian. 10 years panel data was used in the study from the sampled commercial banks for the study to scrutinize the association between loan provision and ROA and, total assets and non-

performing loans. It was revealed in the study that there is a substantial affiliation between credit risk management bank performance.

Kithinji (2015) has explored how commercial banks' financial performance in Kenya affects credit risk management. Data was collected for the period 2004 to 2008 on the level of non-performing loans, amount of credit and profits. It was revealed in the study findings that the wholesale of commercial banks' the profits are not affected by the nonperforming loans and amount of credit and thus suggesting that other than nonperforming loans and credit there exist other variables impacting impact on profits.

Al-Khouri (2014) has studied the effect of overall banking environment and bank's specific risk features on the performance of 43 commercial banks over the period 1998-2008 and serving in 6 of the Gulf Cooperation Council countries. The used the fixed effect regression analysis of which revealed that capital risk, liquidity risk and credit risk are the main determinants that influence bank performance when financial performance is measured by ROA while when measured by ROE, liquidity risk IS the only risk that affects financial performance.

Kargi (2016) has appraised the impact of loan appraisal on the financial performance of Nigerian banks. Credit risk and financial ratios as measures of financial performance were collected from accounts of sampled banks and the annual reports from 2004-2008 and analyzed using regression techniques, correlation and descriptive. The findings exposed a statistically significant effect of credit risk management on the profitability of Nigerian banks. The study deduced that banks financial performance is contrariwise affected by nonperforming loans, levels of loans

and advances, and deposits hence exposing them to great distress and risk of illiquidity.

Credit risk efficiency was studied over the period 2005-2008 by Chen and Pan (2012) acquiring sample from 34 Taiwanese commercial banks. Data Envelopment Analysis (DEA) was employed in the study that used financial ratios to assess credit risk. The credit risk indicators used included credit risk cost efficiency, credit risk technical efficiency and credit risk allocative efficiency. The findings showed that only one commercial bank is effective in all types of efficacies across the evaluated periods. The DEA results overall showed comparatively low average efficacy levels.

Fredrick (2012) has assessed how commercial banks' financial performance in Kenya is affected by credit risk management. CAMEL model was used in the study as a credit risk management proxy. The study established a strong effect of CAMEL on commercial banks' financial performance. In another study, Paudel (2012) assessed the effect of credit risk management on commercial banks' financial performance in Nepal sampling 31 banks over a period of eleven years (2001-2011). The data analysis methods used in the study were multiple regressions, correlation and descriptive. In the study, financial performance was indicated by ROA. The independent variables used included: capital adequacy ratio, cost per loan assets and default rate. The study established that all the variables have an inverse effect on the financial performance of commercial banks.

Abiola and Olausi (2014) have assessed the effect of credit risk management on the commercial banks' performance in Nigeria. It was indicated in financial reports of seven commercial banks over a 7 year period from 2005 to 2011. For model estimation, the panel regression model was adopted. In the model, both ROE and ROA were adopted as the indicators of performance while capital adequacy ratio

(CAR) and non-performing loans (NPL) were used to indicate credit risk management. It was revealed in the study that the profitability of commercial banks is significantly affected by credit risk management in Nigeria.

Alshatti (2015) has assessed how financial performance is impacted by the impact credit risk management among Jordanian commercial banks over the period 2005-2013. In the study, credit interest/credit facilities ratio, capital adequacy ratio, leverage ratio provision non-performing gross/loans ratio and for net/loss facilities ratio were used as independent variables. Profitability in the study was measured by ROE and ROA. It was concluded in the study that among the Jordanian commercial banks, financial performance is significantly affected by all the credit risk management variables.

Kodithuwakku (2015) has assessed how in Sri Lanka, commercial banks' performance is affected by credit risk management. In the study, both secondary and primary data were used. While ROA was used as the indicator of performance, credit risk was indicated by loan provision to total loan, loan provision to total assets, loan provision to non-performing loans and non-performing loans/ total loans. The study findings showed that profitability is significantly affected by provisions and non-performing loans.

Pyle (2017) studied commercial bank risk management and found that commercial banks and other financial institutions ought to meet forthcoming risk measurement and regulatory requirements for capital. Satisfying policy requirements is however not the sole or most significant reason for developing a scientific, effective management of risk system. Managers need consistent risk controls to channel capital to activities with the greatest reward/risk ratios. They need approximation of the size of probable

losses to stay within limits forced by willingly available liquidity by regulators, creditors and customers. They need apparatuses to create incentives and monitor positions for prudent risk taking by divisions and individuals.

Naceur and Omran (2018) assessed the effect of concentration, institutional and financial development, and bank regulations on commercial banks' financial performance and margin in Middle Eastern and North Africa countries from 1989-2005. The study established that bank capitalization and credit risk have significant and positive impact on commercial banks' cost efficiency, financial performance, and net interest margin. Felix and Claudine (2018) have examined the association between credit risk management and bank performance. It can be deduced from their findings that ROA and ROE both measuring financial performance were contrariwise related to the ratio of total loan of financial institutions to non-performing loan thereby leading to a deterioration in financial performance.

According to Hempel and Simomson (2019), a major credit risk indicator is non-performing loans and therefore credit risk exposure can be lowered by commercial banks by reducing it. Many researchers have over the years tried to examine the effect of credit risk on banks financial performance and if nonperforming loans really play a major role in reducing financial performance.

Achou and Tenguh (2018) assessed a project which assessed the effect of profitability and CRM. The study findings displayed that there exists a considerable association between credit risk management and bank performance. Better commercial bank performance is as a result of effective credit risk management. This indicates that it is of vibrant implication that prudent credit risk management is practiced by banks

practice with a view to protect commercial banks' assets and shareholders' investments.

Similar ideas were shared by Njanike (2019) after his study in Zimbabwe between 2017 and 2018. The study examined the level at which commercial banks fail if CRM is abandoned. The study found that higher rate of commercial bank crisis is connected with failure to address credit risk. It was suggested in the study that commercial banks should review their credit policies and mainstream credit scoring as well as put in place a corporate governance practices that are prudent.

Kithinji (2015) sought to assess the effect of CRM on the financial performance of commercial banks in Kenya. The study concentrated on the profit accumulated, level of nonperforming loans and total loans for a period of five years. The study found that neither of the two factors had an impact on commercial banks' financial performance. The implication from the finding is that compared to other factors, commercial banks' financial performance, is not significantly affected by credit giving and nonperforming loans. It would therefore be prudent for Commercial banks to pay deep focus to other issues as opposed to the level of nonperforming loans and loans.

Kargi (2011) assessed how the financial performance of Nigerian commercial banks is impacted upon by credit risk. Data on financial performance ratios and credit risk was collected over the period, 2004 to 2008. The assessment of this data involved regression, correlation and descriptive techniques. The outcome was that financial performance is significantly affected by CRM among commercial banks in Nigeria. It was also shown in the study that liquidity and profitability are negatively affected by an increase in nonperforming loans. Epure and Lafuente (2012) examined the effect of risk on the profitability of commercial banks in the banking industry of Costa-Rica

over the period 1998-2007. The study findings showed that profitability has an opposite affiliation with nonperforming loans while capital adequacy is positively related with performance.

In their study, Boahene (2012) applied regression analysis (both random and fixed effect models) in studying the relationship between profitability and credit risk of some selected commercial banks in Ghana. It was found that the credit risk determinants are positively related bank financial performance. This is of the implication that commercial banks in Ghana record high profitability regardless of the enormous credit risk exposure.

In a different study, Kolapo (2012) adopted panel data analysis in assessing how credit risk affects commercial banks' performance, using ROA as an indicator of financial performance. The outcome of the study was that a rise in loan losses provision or nonperforming loans leads to a reduction in financial performance while a rise in total loan and leads to an increase in financial performance.

Gizaw (2013) investigated the effect of credit risk on the financial performance of Ethiopian commercial banks. The study used secondary data sampling 8 commercial banks over a 12 year period. The study used STATA software to compute the panel data regression model and descriptive statics. The finding was that credit risk indicators; capital adequacy, loan loss provisions and nonperforming loans have a significant effect on the financial performance of Ethiopian commercial banks.

Alalade (2014) investigated the effect of credit risk managing and financial performance of commercial banks in Lagos state. The study tested the research hypothesis and analyzed relative to how significantly commercial banks' profitability is affected by credit risk. The study obtained data through the use of closed-ended

questionnaires. The study further used correlation coefficient to determine whether or not profitability was significantly affected by credit risk management. The outcome of the study was that profit is reduced by credit risk and thus credit risk management ought to be of great significance to commercial banks' management in Lagos state.

2.3.3 Mortgage Credit

Following the uncertain course of interest rates, commercial banks continue to face a lot of challenges in managing their interest rate exposures. The magnitude of credit risks however, depends on the level of the institution's asset base, liabilities and off-balance-sheet positions (Kohn, 2010). According to Hull (2010), credit risk refers to unexpected events which may lead to loss in profits, losses in value of assets, or incurring of additional expenses in order to undertake a specific transaction. Usually, credit risk occurs when counterparties fail to repay the interest and the loan's principal amount in time, as specified in the contract (Murphy, 2008). Yet, banks are known for their basic characteristic of pursuing profits under acceptably measurable risks (Koch & MacDonald, 2010). Henderson (2011) further argues that credit risk manifests whenever there is a loss in value following a debtor's non-payment of a loan in terms of either the principal or interest, or both.

With the ever-increasing competitive nature experienced today in the banking industry, many banks try to be creative in order to be more competitive and stay ahead of their peers (Bettis, 2009). Often, more customers with low creditworthiness may pose a big liability to the bank hence the need for banks to institute good lending policies and efficient credit analysis to reduce risks (Buzzell & Spasovski, 2014). Although competition results into banks creating lax lending rules for the sake of attracting more customers, this move is not always good for the banks. Chernykh and

Theodossiou (2011) warn that banks should be careful so that they do not lend to credit unworthy clients. This is the case lest they fail to cut their market niche due to careless lending policies.

Gianfranco and Federica (2007) contend that under the Islamic mortgage financing, the banks tend to procure items on behalf of the purchasers before selling them at reasonable prices with the intention of making a small profit. Under such arrangements, the buyers are allowed to repay the bank in installments hence giving them easy time during the loan repayment period. A critical look at this scenario would appear like the bank is charging interest in an indirect manner. Even though, under this circumstance it is not easy to reveal the profits made by the bank hence difficult to institute extra charges as a result of delay in repayment. In Islamic banking, collaterals are usually required where assets must be registered under the buyer's name in an arrangement known as *Murabahah*.

According to Ighbal and Mirakhor (2007), risks in Islamic banking can be classified into four categories. These can be viewed in terms of monetary, trade, capital, and control risks. Furthermore, this category can be subcategorized into credit risks, market risks, and equity investment risks. While these kinds of risks are common in Islamic banking subsector, the traditional banks are only vulnerable to credit risk and market risk (Hassan, Sirajo, Andrea, Ashraf, 2018). There are also business risks which are associated with marketing activities and the environment of the business itself. Macroeconomic legal or policy regulatory frameworks and the financial sector infrastructural foundations are also critical in determining the directions of the risks in terms of the magnitude and the frequency with which they risks are experienced. According to Greuning and Igbal (2008), Islamic financial institutions are usually prone to regular business risks just like the conventional banking sector. Things such

as payment systems and auditing experts must be put in place if these challenges are to be minimized in a considerable manner.

In a study by Abedifar, Philip and Amine (2013), various types of risks are identified and explained where it is explicitly explained how to differentiate Islamic banking institutions from the conventional banking institutions. The study relied on data from Islamic Cooperation member countries where 24 of the member countries were used. The findings of the study indicated that small Islamic banks stood lower credit risks than the conventional banks. This meant that the larger Islamic banks had higher default risks where insolvency risk was higher. However, in another study by Beck et al (2013) where a sample of banks from 141 countries were used running from the year 1995-2007, these differences were not noted. Similarly, in a study by Pappas et al (2014) which sampled 20 economies around the world for the period running from 1999-2010, the findings indicated that Islamic banks had lower default rates in comparison with the conservative banking institutions.

Furthermore, Saeed and Marwaan (2016) carried out a study where banking institutions from 7 economies were used in the sample for the period running from 2002-2010. The findings of the study revealed that the credit default rates for the Islamic banks were reported to be inversely related to turnover proficiency for the Islamic banks. However, the opposite was the case with conventional financial institutions.

With regard to the risks associated with the types of contracts used by Islamic banks in taking deposits and providing financial services to their customers, the main risks involved here were credit and equity risks. This means that all parties involved in a transaction stand equal chances of sharing profits or losses as per the agreement

entered in the transaction. In this sense, Islamic banks are exposed as having greater potential risks than conventional banks. In trading-based financing, Islamic banking institutions are exposed to Shariah, credit, and market risks. This kind of financing contributes the highest share of the total financing in Islamic banks. The model is based on buy-and-sell-back or cost-plus contracts. In this sense, the Islamic banks act as the seller while customers are the consumers of the products. Studies have also indicated that specific risks in the Islamic banking are associated with various loss-bearing methods and non-profit-sharing of financing. For instance, based on Salam, Islamic banks are exposed to both loan and products price risks. In the case of Ijarah, Islamic banks endure all the risks until when the lease period expires. This means that, like in the case of conventional banks, Islamic banks cannot transfer ownership in lease contracts until the contract period is over.

Risk management in any banking institution is the hallmark of its success. Having sound risk management principles means that the institution is able to mitigate all possible losses hence enhancing its viability and presence in the market. This further means that effective risk management practices would directly or indirectly increase chances of the banks' profitability and guarantee their prosperity. The reverse would be jeopardizing the banks' survival. According to Hussain and Fayyaz, (2015), Islamic banks must institute effective risk management mechanisms if they intend to survive in the market.

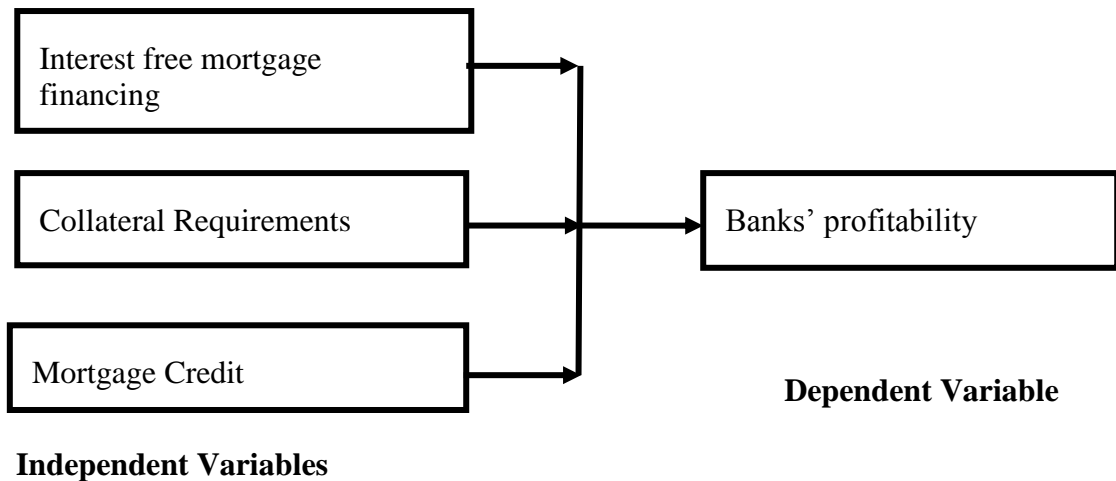Tsatsaronis and Zhu (2004) studied the determinants of housing price shifts using cross country data. The study established positive association between banks performance and mortgage credit. The study acknowledged the significance of mortgage credit on the financial performance of commercial banks in 17 countries, where the investigation found that essentials relating to mortgage finance, including

real interest rate and bank credit account for roughly one-third of the long-term variance in banks performance and house prices.

Glenn and Wayne (2007) carried out a survey on the profitability of mortgage-oriented commercial banking as influenced by the community reinvestment Act. They examined their data by use of regression analysis, where the study found that there existed a positive relationship between profitability home acquisitions and lending in lower income areas. The study also found that commercial banks present in lower-income areas and with lower-income mortgagors appear to be as cost-effective as other home purchase lenders. It was also revealed in the study that there was no convincing evidence of lower cost-effectiveness at commercial banks that concentrate in home purchase advancing to lower-income mortgagors or in lower income areas.

Muriu (2011) studied profitability of microfinance institutions in both United States and Africa. The study established that profitability also affected exclusive line of business implemented by financial institution including mortgage financing. Further, correspondingly higher deposit as a proportion of total assets was linked with improved financial performance. However, the degree of this influence was very delicate to MFI age. The host economy's institutional environment also played a major role in financial performance' profitability and that the young financial institutions undergo more from weak laws and political instability, which was consistent with relationship lending and accrual of information capital. The quality of contract implementation on overall political stability, loans and mortgages in the country influenced the degree of moral hazard that financial institutions face when making loans.

2.4 Conceptual Framework


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┌─────────────────────────┐
│ Interest free mortgage  │──────┐
│ financing               │      │
└─────────────────────────┘      │
                                 │       ┌──────────────────────┐
┌─────────────────────────┐      ├──────▶│ Banks' profitability │
│ Collateral Requirements │──────┤       └──────────────────────┘
└─────────────────────────┘      │
                                 │
┌─────────────────────────┐      │
│ Mortgage Credit         │──────┘            **Dependent Variable**
└─────────────────────────┘
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Independent Variables

Source: (Researcher, 2019)

Figure 2.1: Conceptual Framework

As illustrated in figure 2.1, this is a diagrammatic depiction of how the independent variables relate with the dependent variable. A dependent or predictor variable denotes an element for a study which is observed and measured to determine the effect of the independent variable. In this sense, the bank's profitability is the dependent variable which is presumed to be affected by various aspects such as interest rate, collaterals, and mortgage risks, as independent variables. Among other things, profitability of mortgage financing banks, like many other banks, depends on the amount of interest rate charged, the collateral requirements and mortgage credit. Islamic banks are known for interest-free mortgages but this may on the other hand increase their mortgage risks.

2.5 Operationalization of the Variables

Table 2.1 presents operationalized definitions of the variables used in the study. As summarized in the table, these relate to the profitability of mortgage financing Islamic banks.

Table 2.1 Operationalization of the Variables

Objectives	Variables Independent Variables	Indicators	Measurement Scale	Data analysis techniques	Tools of Data Analysis
1. To determine the effect of interest rate on profitability of mortgage financing Islamic banks in Kenya	Interest rate	Hidden interest Effect of principle of *Mudaraba* Perceived level of exploitation Principle of Shari'ah law Level of loan defaulting	Ordinal scale Interval scale	Descriptive & inferential statistics Content analysis	SPSS software
2. To explore the influence of collateral requirements on profitability of mortgage financing Islamic banks in Kenya	Collateral requirements	Borrower's credit history & credit worthiness Viability of the projects Financial discipline of customer Member's capital capacity Bank's discretion	Ordinal scale Interval scale	Descriptive & inferential statistics Content analysis	SPSS software

3. To examine the influence of mortgage credit on profitability of mortgage financing Islamic banks in Kenya	Mortgage credits	Asset availability Payment ability Stipulated policies	Ordinal scale Interval scale	Descriptive & inferential statistics Content analysis	SPSS software
	Dependent Variable				
	Banks' profitability	Market share Revenue growth Number of new customers Bank's surplus Bank's overall customer portfolio	Ordinal scale Interval scale	Descriptive & inferential statistics Content analysis	SPSS software

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter three describes methodology adopted by the study in order to access the sample population, and analyse collected data for answering the research objectives. This chapter comprises target population, research design, sampling technique and sample, data collection instruments and procedures and methods of data analysis as well as ethical considerations.

3.2 Research Design

Kothari (2010) states that a research design is a general blueprint representing a detailed explanation of how the data will be collected and analyzed as well as how the report will be written to meet the objective of the study. All these must be done in line with the specific research objectives.

This study used descriptive research design to address the research questions. Saunders et al (2009) appoints out that descriptive research design allows a detailed description and analysis of the study variables without influencing them. In this sense, descriptive research design acts as an outline that enables the researcher to present an accurate description and presentation of the relationship between independent and dependent variables. Furthermore, this design aides the researcher to determine the kind of relationship that exists between two or more quantifiable variables. The main aim of descriptive research is to clearly explain phenomena by identification of their components and other factors that influence interrelationships between variables.

The descriptive design was suitable for this study, investigating the association between mortgage financing and profitability of Islamic banking in Kenya. Three

independent variables (Interest Rate, Collateral Requirements & Credit Risks) were examined in order to establish how they influence the dependent variable (bank's profitability).

3.3 Target Population

A target population can be referred to as the set cases or units that the researcher is interested in (Newing, 2011). Burns and Grove (2003) further describe the population as all the essentials that satisfy the inclusion criteria in a study. In this study, employees of two fully-fledged Islamic Banks were targeted. The population of interest in these two banks consisted of employees in managerial positions from various departments, with the belief that they were best suited to give credible information to help in answering the research questions. These individuals included Business Development Managers, Operations Managers, Credit Managers and mortgage financing officers. Table 3.1 below presents a summary of the target population.

Table 3.1 Target Population

Employee Category	Frequency (N)	Proportion (%)
Business Development Managers	5	11
Operations Managers	4	9
Credit Managers	4	9
Mortgage Financing Officers	32	71
Total	**45**	**100**

Source: Research Data, (2019)

3.4 Sampling Procedure

According to Orodho (2005), a sample in research entails selected elements from a research population which was to be studied and the results thereof generalized back to the research population. In the sample, there should be similarities in all elements of the population for the study. In order to select the appropriate sample size, the researcher employed a sampling technique which was, as much as possible, devoid of bias, while considering representativeness of the selected elements. Census survey technique was used where the entire target population also forms the sample, since the number of target population is relatively small and therefore manageable.

A census method was used wherein each and every item in the target population stood a chance to be selected. Census survey technique was used with a population of 45, the sample size will be 45 respondents, making 100% of the total population. The figures are summarized in table 3.2.

Table 3.2 Sample Size

	Target Population (N)	**Sample Size (n)**
Business Development Mangers	5	5
Operations Managers	4	4
Credit Managers	4	4
Mortgage Financing Officers	32	30
Total	**45**	**45**

Source: Research Data, (2019)

3.5 Data Collection Instruments

The study relied on primary data from the respondents, and this was collected using a structured questionnaire. A questionnaire was suitable because it has the ability to gather large data hence saving time during fieldwork. Besides, a questionnaire enabled the researcher to uphold confidentiality of the respondents, especially when it was self-administered. Information collected through a questionnaire is also easier for coding (Mugenda & Mugenda, 2003).

The questionnaire was developed to capture the information according to the requirements of the study in terms of its specific objectives. It was designed to include structured, unstructured and matrix questions. According to Mugenda and Mugenda (2003), structured questions provide the respondents with an opportunity to choose responses that they think best describes their experiences in line with the study objectives.

Such a design is appropriate as the structured questions are able to elicit direct responses from the respondents and are easy to analyze. Unstructured questions are open-ended and offer the respondent with the choice of giving their detailed responses, hence enabling them to give clarifications appropriately. These types of questions are easy to frame and permit the respondent to display their feelings on the research questions hence enabling a greater deepness of response (Cooper & Schilder, 2007). The study also made use of matrix questions. This type of questions presents the respondent with an array of questions in contradiction of which they are supposed to respond based on a prearranged rating scale. The Likert scale is the most popularly used. This type of scale is used to measure values, perceptions, behavior and attitudes (Mugenda & Mugenda, 2003).

3.6 Methods of Data Collection

After getting approval from the University Department to proceed for fieldwork, the researcher headed to the field to prepare ground for actual collection of data. The respondents were sensitized beforehand, especially the top management which had to give authorization. Before proceeding for data collection, copies of the questionnaire were made before being distributed to the respondents. The blank questionnaires were self-administered to the respondents, and depending on the circumstances such as availability of the respondents and their willingness to fill the questionnaire by themselves, the questionnaires were administered by the researcher. In case of self-administered questionnaires, blank questionnaires were distributed to the respondents and then completed ones picked later as it was agreed with the respondents. Early bookings were made so as to avoid any inconveniences.

3.7 Validity and Reliability of instruments

3.7.1 Validity

Validity of an instrument depicts the extent the instrument can be able to measure and achieve its intended purpose. In this sense, the instrument subsequently licences suitable interpretation of scores. Prior to administering the questionnaires to respondents, there was necessity to validate them so as to guarantee high level of validity of the questionnaire, instrument was subjected to reviews by specialists and peers particularly the academic supervisors (Nachmias & Nachmias, 1996).

3.7.2 Reliability

Reliability demonstrates the extent to which research tool yields consistent outcome or data after recurrent trials. In order to the test the reliability of the questionnaire, it was pilot tested on ten respondents from the banks not targeted in the study. This

further ensured that at the end of field work, there was uniform data to help adequately address the objectives of the study.

In addition to using half-split test method to gauge reliability of the instrument, data from the pilot test was keyed into SPSS and thereafter Cronbach's alpha was generated. A figure of 0.7-1.0 is considered to indicate reliability of the instrument.

3.8 Data Analysis and Interpretation

Cooper and Schindler (2003) state that data analysis method involves data clean-up and rationalization. Mugenda and Mugenda (2003) intimate that the raw data collected is hard to understand unless it is analyzed, coded and cleaned. After the collection of raw data, it was sorted out and edited to sort out filled items, and the ones that could have been incorrectly responded to. The questionnaires were classified and organised as per the patterns given by the participants and their homogeneousness. The questionnaires were then coded for determinations of allocations of the greatness of what was being measured.

Quantitative data was appropriately organized and coded for analysis. Quantitative data was analyzed with the help of descriptive data analysis techniques supported by SPSS program and Excel worksheets. Descriptive statistics included frequencies and percentages, which were presented using tables and charts. The analysed data was reported and summary of findings provided as a description of the target population.

An analytical model-regression analysis was carried out to understand how the independent or predictor variables related with the dependent variable or the outcome of the study.. Regression analysis was carried out to establish the nature of the correlation amongst independent variables and the relationship between independent variables and the dependent variable. Furthermore, regression analysis helped to

explore the forms of association between predictor and dependent variables. The following model was used in the study:

$$Y = \beta_0 X_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mathcal{E}$$

Where Y = Banks' profitability

$\beta_0 X_0$ = Beta Coefficient

X_1 = Interest free mortgage financing

X_2 = Collateral requirements

X_3 = Mortgage credit

$\mathcal{E}$ = Error term

3.9 Ethical Considerations

According to Schurink (2014), one of the paramount aspects in any research study, is on the use of ethical standards in planning, collection of data and analysis, distribution and use of the results paramount. Schurink (2014) further explains that ethical practices serve the interest of not only the research study process but also everyone involved in the entire research project.

Ethical considerations comprised of confidentiality, informed consent and anonymity during the research process. During fieldwork, an introduction letter was attached (**see appendix I**) to every questionnaire, clearly explaining the purpose of the study and the kind of information the respondents were expected to provide. The research participants were informed that their involvement was voluntary and were guaranteed of privacy of the information they shared. Safe for their designations or work titles, they were not required to provide their actual names. They were not coerced in any

way into giving out information they were not comfortable revealing. They also had

the freedom to cease their participation without feeling pressured to continue. During

the entire fieldwork process, proper explanations were made about the purpose of the

study. High level of confidentiality was observed as a way of protecting the

respondents' privacy. Respondents were assured of anonymity of data where their

actual names were not to be mentioned anywhere

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The purpose of this study was to examine the effect of mortgage financing on profitability of Islamic banks in Kenya. Specifically, the study aimed to determine the effect of interest-free mortgage financing on profitability of Islamic banks in Kenya; to explore how collateral requirements affect profitability of mortgage financing Islamic banks in Kenya; and to determine the influence of mortgage credit on profitability of mortgage financing Islamic banks in Kenya. This chapter presents the findings of the study and discussion of the same, and outlines the results and discussion in line with the study objectives.

4.2 Response Rate

The response rate was as follows:

Table 4.1: Response Rate

Response	Frequency	Percentage (%)
Returned Questionnaires	40	88.9
Unreturned Questionnaires	5	11.1
Total	45	100

Source: Research Data, (2019)

As indicated in Table 4.1 40 questionnaires were dully filled and returned out of the 45 administered. This constituted a 88.9% response rate. Mugenda and Mugenda (2003) indicated that a response rate of 50% was adequate for reporting and analysis, a rate of 70% and above is excellent whereas 60% is good. Therefore the response rate was excellent for this study.

4.3 Reliability Results

Table 4.2 illustrates the reliability results as measured through the Cronbach alpha. From the findings, the Cronbach for interest free mortgage financing was 0.738, Collateral was 0.710, mortgage credit was 0.719, while profitability was 0.702.

Table 4.2 Reliability Results

Variables	Cronbach Alpha	Number of Items
Interest free mortgage Financing	0.738	5
Collateral	0.710	5
Mortgage Credit	0.719	5
Profitability	0.702	5

Source: Research Data, (2019)

This indicates that the Alpha value threshold was over 0.7. This shows that all the variables were dependable as their consistency values surpassed the prescribed verge of 0.7.

4.4 Test of Assumptions

The study proceeded to screen data with a view to check whether the obtained data was amenable to various statistical tests in the present study. These included missing value analysis, test for outliers, testing for normality, multicollinearity diagnostics, test for homogeneity of variances, test of autocorrelation and linearity diagnostics.

4.4.1 Missing Value Analysis

According to Creswell (2013), missing values are common in social research and that these values are known to affect the results of statistical analysis. The study analyzed

missing values with respect to cases and variables. The study employed the hot deck method for the missing value analysis. The missing value is obtained from a "donor questionnaire" (nearest neighbor) in the same survey. A thorough assessment of the dully filled questionnaires revealed only a few missing values randomly distributed across the data which were imputed using the hot deck method. According to Sulis and Porcu (2017), the hot deck method is a common imputation procedure to compensate for non-response in a study which involves ascribing missing values from a randomly selected similar record.

4.4.2 Outliers

An outlier is expressed as a point of data which distances itself from the model while the rest do fall within the range and seems distant from the remaining data (Cochran WG. Sampling Techniques. 3. New York: Wiley; 1977. The identification of outliers can lead to the discovery of truly unexpected knowledge in the analysis of statistics. However, these points can have a negative effect on the regression equation, skewness and kurtosis of the data. Johnson and Onwuegbuzie (2004) elaborate that an outlier can change the output that SPSS Statistics produces and reduces the accuracy of your results as well as the statistical significance of the hypothesis. Therefore, outlier detection is important for effective modelling to present the accuracy of results. The data was analyzed to detect the presence of multivariate outliers following the guidelines by Ary et al. (2010) and Johnson and Onwuegbuzie (2004). The multivariate outliers were detected using Mahalanobis distance (D^2). Table 4.3 presents the residual statistics for the D^2 test.

Table 4.3 Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	27.2209	46.3026	37.6509	2.75711	40
Std. Predicted Value	-3.783	3.138	.000	1.000	40
Standard Error of Predicted Value	.510	4.140	.998	.580	40
Adjusted Predicted Value	27.3023	62.0476	37.8187	3.63207	40
Residual	-13.34769	11.79882	.00000	4.73076	40
Std. Residual	-2.753	2.434	.000	.976	40
Stud. Residual	-2.913	2.620	-.012	1.037	40
Deleted Residual	-26.04757	13.66971	-.16772	5.63950	40
Stud. Deleted Residual	-3.029	2.701	-.012	1.053	40
Mahal. Distance	.170	75.590	4.953	8.836	40
Cook's Distance	.000	3.510	.046	.341	40
Centered Leverage Value	.002	.720	.047	.084	40

a. Dependent Variable: profitability

Source: Research Data, (2019)

A case is found to be an outlier if the probability associated with its (D^2) is 0.001 or less (Collis & Hussey, 2009). In the present study, only five statements were found to have probabilities associated with their (D^2) as 0.001 and less hence considered outliers. These were checked and corrected because they are known to affect empirical results obtained which may in turn affect practical implications of the study (Kothari, 2010).

4.4.3 Testing for Normality

Normality of distributions is assessed numerically through statistical tests particularly the Shapiro-Wilk test, Kolmogorov- Smirnov test and by examining skewness and kurtosis. According to Attua (2009), Shapiro-wilk tests is more appropriate for small sizes of less than 50 while Kolmogorov- Smirnov is used for sample sizes above two thousand. As such, in the present study, the Shapiro-Wilk test was employed to test for normality. This test establishes the extent of normality of the data by detecting existence of skewness or kurtosis or both. Shapiro-Wilk statistic ranges from zero to one with figures higher than 0.05 indicating that the data is normal (Razali & Wah, 2011).

Table 4.4: Test of Normality

	Shapiro-Wilk		
Variable	Statistic	df	Sig.
Interest free mortgage financing	.98	40	.15
Collateral	.99	40	.12
Mortgage credit	1.00	40	.78
Profitability	.99	40	.13
*. This is a lower bound of the true significance.			
a. Lilliefors Significance Correction			

Source: Research Data, (2019)

Normality was tested using the Shapiro-Wilk test and the results showed that all the variables were above 0.05 (p > 0.05) hence confirming data normality. Normality assumes that the sampling distribution of the mean is normal. As shown in Table 4.4, p-values for the Shapiro-Wilk tests were 0.15 for interest free mortgage financing,

0.12 for collateral, 0.78 for mortgage credit, and 0.13 for profitability. Since all the p-values were greater that the cutoff point of 0.05 at 95% confidence level, this confirms the hypothesis that data was collected from a population which is normally distributed.

4.4.4 Multicollinearity Diagnostics

Multicollinearity occurs when two or more independent variables are highly correlated with each other as indicated by the correlation coefficients and has a value above 7.0 (Johnson & Onwuegbuzie, 2004). However, Ary et al. (2010) argue that correlation coefficients of 6.2 and above in social sciences indicates multicollinearity. The study utilized the centering of independent variables prior to computing interaction terms to counter Multicollinearity.

Table 4.5 Multicollinearity Diagnostics

Model	Collinearity Statistics	
	Tolerance	VIF
Interest free mortgage financing	.805	1.243
Collateral	.813	1.231
Mortgage credit	.823	1.215

Source: Research Data, (2019)

As presented in Table 4.5, multicollinearity was tested through the visual inspection of correlation coefficients and Variance Inflation Factors (VIF) which revealed acceptable values which were all within the set values of -10 to 10. To further confirm that there was no Multicollinearity, tolerance values were checked and it was established that they were all below 1.0 which is the accepted standard.

4.4.5 Homogeneity of Variances

Homogeneity of variance was tested using the Levene statistic. According to Gastwirth (2009), Levene's test verified the equality of variance in the samples with the acceptable threshold of ($p > .05$). The Levene's test of homogeneity of variances is thus significant at $\alpha = 0.05$, which implies the data lack equal variances.

Table 4.6: Tests for Test of Homogeneity of Variances

Variable	Levene Statistic	df1	df2	Sig.
Interest free mortgage financing	1.295	3	40	.12
Collateral	1.895	3	40	.11
Mortgage credit	2.443	3	40	.17

a. Predictors: (Constant), Interest free mortgage financing, Collateral, Mortgage credit

b. Dependent Variable: Profitability

Source: Research Data, (2019)

From the results in Table 4.6, P-values of Levene's test of homogeneity of variances were greater than 0.05. The test therefore was not significant at $\alpha = 0.05$ confirming homogeneity. The significant values for the Lavene's test were 0.115 for interest free mortgage financing, 0.107 for collateral and 0.172 for Mortgage credit. From the results in Table 4.6, P-values of Levene's test for homogeneity of variances were all greater than 0.05. The test therefore was not significant at $\alpha = 0.05$ confirming homogeneity of variance.

4.4.6 Test of Autocorrelation

The assumption of independence of errors requires that the residuals or errors in prediction do not follow a pattern from case to case. According to Hayes, (2012), Durbin- Watson statistic is used to measure the correlation of residuals.

Table 4.7 Dubin Watson Residual Statistics

	Minimum	Maximum	Mean	Std. Dev	N
Predicted Value	26.8122	45.7995	37.6509	2.61212	40
Residual	-14.47349	9.99247	2.01000	4.81234	40
Std. Predicted Value	-4.149	3.120	.700	1.000	40
Std. Residual	-2.964	2.047	.120	.986	40

a. Dependent Variable: Profitability

Source: Research Data, (2019)

The accepted range for Durbin-Watson statistic is $1.50 - 2.50$. The inspection of Durbin- Watson statistic revealed a value of 2.01 which falls within the acceptable range. This indicates that the residuals are not correlated.

4.4.7 Linearity Diagnostics

To test for linearity, the ANOVA test was used which computes both the linear and nonlinear components of a pair of variables. According to Zhang, Fouche and Delport (2011), linearity is significant if the significance value for the linear component is below 0.05. It assumes that there is a relationship between independent and dependent variable in a given study. In this study it is assumed that interest free mortgage financing, collateral and mortgage credit have a linear relationship with profitability in order to meet the conditions for inferential analyses. In a nutshell, it implies that

these variables are key determinants of profitability. The results are presented in Table 4.8.

Table 4.8: Tests for Linearity

Variable	F	Sig.
Interest free mortgage financing	24.47	.02[a]
Collateral	10.01	.03[a]
Mortgage credit	12.47	.03[a]

a. Predictors: (Constant), Interest free mortgage financing, Collateral, Mortgage credit

b. Dependent Variable: Profitability

Source: Research Data, (2019)

The results of the ANOVA test of linearity showed all readings were below 0.05 hence confirming linear relationships (constant slope) between the predictor variables and the dependent variable.

4.5 Demographic Information

This section captures respondents' demographic information distribution of respondents by gender, age, highest level of education and duration of work. Findings are as hereby presented and analyzed.

4.5.1 Distribution of Respondents by Gender

The study sought to establish the gender of the respondents as the views of male and female respondents on mortgage financing may vary. On gender the findings are as indicated in Table 4.9.

Table 4.9: Gender of Respondents

Gender	Frequency	Percentage
Male	25	62
Female	15	38
Total	**40**	**100**

Source: Research Data, (2019)

The findings in table 4.9 indicate that majority (62%) of the respondents were male whilst (38%) respondents were female. This distribution was slightly skewed towards the males. There were more male respondents than females.

4.5.2 Distribution of Respondents by Age

Variation in age was regarded as a factor that may influence respondent's perception in regard to mortgage financing. Respondents age ranges are shown in Table 4.10.

Table 4.10 Distribution of Age of Respondents

Age Bracket of Respondents	Frequency (n)	Percentage (%)
20 - 30 years	6	15
31 - 40 years	15	38
41 - 50 years	13	32
Over- 51 years	6	15
Total	**40**	**100**

Source: Research Data, (2019)

As indicated in table 4.10, 15% of respondents were 20-30 years, 38% were between 31 to 40 years, and 32% were 41 - 50 years while 15% were Over- 51 years. Majority of respondents were therefore below 50 years old. Most of the bank employees in managerial positions were mature enough hence able to make informed decisions regarding the banks' financial transactions.

4.5.3 Distribution of Respondents by Highest Level of Education

The level of education was viewed as a factor that may affect respondents view on mortgage financing. On the highest level of education among respondents the response was as follows:

Table 4.11 Distribution of Education Level of Respondents

Education Level	Frequency (n)	Percentage (%)
Certificate	3	8
Diploma	9	23
Bachelor's degree	15	38
Masters	13	31
Total	**40**	**100**

Source: Research Data, (2019)

As indicated in table 4.11, 8% of respondents had attained certificate, 23% had diploma while 38% had attained Bachelor's degree. 31% of the respondents had masters. This designates that majority of participants had a bachelor's degree. From these figures, it can be concluded that the banks had highly qualified staffs at the management levels. This further implied that the employees were likely dependable for taking the banks in the right direction on mortgage financing matters.

4.5.4 Distribution of Respondents by Duration of Work

The length of time respondents had stayed in the organization was viewed as influencing their views on mortgage financing. On the duration respondents had been working at the bank the response was as follows:

Table 4.12 Distribution of Years of Service of Respondents

Years of Service	Frequency (n)	Percentage (%)
1-5 years	13	31
6-10 years	18	46
11-15 years	6	15
Over 15 years	3	8
Total	**40**	**100**

Source: Research Data, (2019)

Regarding the duration the respondents had served in their respective banks, 31% had worked for 1-5 years, 46% had worked for 6-10 years while 15% had worked for 11-15 years. 8% of respondents had worked for over 15 years. This indicates that most of the respondents had worked for 6-10 years. It can be inferred from the analysis that most of the respondents had worked in the banks for over 6 years and could therefore give credible information in relation to mortgage financing.

4.6 Descriptive Statistical Results

4.6.1 Interest Free mortgage Financing

The study sought to determine the respondents view on interest free mortgage financing in Islamic banks. A Likert scale of $1-5$ was used such that $1 =$ Strongly

Disagree, 2 = Disagree, whereas the scales of 3 = Neutral, 4 = Agree followed by 5 = Strongly Agree. The results are summarized in Table 4.13.

Table 4.13 Interest Free mortgage Financing

Statement	**Mean**	**Std. Deviation**
There is no hidden interest charged in mortgage financing in Islamic banking in Kenya	3.92	0.806
The principle of *Mudaraba* where risks and returns are shared by the lender (seller) and borrower (buyer) should be encouraged in mortgage financing.	3.68	0.734
The interest-free mortgage financing by Islamic banking is a good mark of elimination of exploitation by the banking sector.	3.71	0.857
Shari'ah law exercised in Islamic banking should be emulated by all banks, including conventional banking.	3.80	0.856
The principle of business partnership in lending practiced by Islamic banking should be extended to the whole banking sector.	3.67	0.839
Overall Mean	**3.76**	**1.364**

Source: Research Data, (2019)

From the findings in table 4.13, majority of the respondents with a mean of 3.92 agreed that there is no hidden interest charged in mortgage financing in Islamic banking in Kenya. Most of the respondents agreed that the principle of *Mudaraba* where risks and returns are shared by the lender (seller) and borrower (buyer) should be encouraged in mortgage financing with a mean of 3.68. Respondents agreed with a mean of 3.71 that the interest-free mortgage financing by Islamic banking is a good mark of elimination of exploitation by the banking sector. Most of the respondents with a mean of 3.80 agreed that Shari'ah law exercised in Islamic banking should be emulated by all banks, including conventional banking involved in the induction

programme. Respondents agreed with a mean of 3.67 that the principle of business partnership in lending practiced by Islamic banking should be extended to the whole banking sector

The overall mean was 3.76. This indicates that majority of the respondents were in agreement on the effectiveness of interest free mortgage financing in Islamic banks. The findings are consistent with views expressed by Yudistira (2003) affirms that the idea that the three parties can equally share in any profit or loss that may occur following their pact makes it easier for this relationship to flourish. In this regard, Islamic commercial business model aims at subscribing to teachings of Holy Qur'an, which is basically in conflict with idea of charging interest on loans or gaining profit from commercial investments. This way, the customs of Islamic religion as governed by Shariah law forms the foundation for the unconventional banking institution. On the basis of these principles, the banking organization may be viewed as 'fair' and 'free', with the primary objective of exercising fairness to its members (Fauzi & Idris, 2013). This basic freedom though, is restricted to those transactions that are in tandem with the principles of *Riba and Gharar (*Tobias & Adam, 2010).

Contrary to the way conventional bank operate where there is no direct close interaction between the customer and the bank, Islamic banks aspire to inculcate the ideas partnership where the client is viewed as equal shareholder in the transaction. This partnership is demonstrated when involving the customer's deposits in the bank's other financial investments where this is viewed as the bank investing on behalf of the client. This is in contrast with the orthodox banking sector where the relationship between the borrower and the lender is not based on close attachment rather than on strictly set business rules. Besides the mode of lending which basically contravenes the situation in conservative banking industry, the governing structure in

the Islamic banking is such that the Islamic financial institutions must be guided by the principles enshrined in their Holy Book, the Quran. According to Suleiman (2001), the banks must also strive to stay true to the aspirations of all the followers of Islam by ensuring that there is always provision of acceptable products based on fairness, justice and equity.

Despite the subtle similarities that are likely to be existing in both conventional and unorthodox banking organizations when it comes to the kind of common financial services being offered and the fact that both sides play a crucial part in the country's economic developments, there are notable differences between the two models. Accordingly, Dar and Presley (2010) contend that, unlike non-Islamic banks, Islamic banks have the obligation to be guided by the principles of the Quran, especially as expressed through Shariah laws. This includes avoiding exploitative contracts that may involve payment of interest by the customers on procured loans. To this extent, riba or interest is viewed as unfair since it encourages foreseeable risky or speculative business ventures. In this way, according to Feisal (2010), Islamic banks will be seen to be exercising just and equitable distribution of resources.

The findings are further consistent with to Guyo and Adan (2013), apart from sticking to the principles of sharing in the profit, running joint ventures, and leasing among other nonconventional practices by Islamic banking institutions, above all, Islamic banking is guided by high standing and cross-cutting moral values as provided by Shariah (Islamic law). Shamim (2013) further notes that Islamic banking is founded on four cardinal guiding principles meant to regulate and direct their investment processes. This means that the banks must not charge interest (riba), they must not be involved in speculative economic ventures (Gharar), they must operate under Islamic tax (zakat), and they must desist from engaging in investment activities that

contravene the teachings of Islamic religion (Haram). These sentiments are corroborated by Kent (2013), who argued that Islamic banking should avoid interest charging and speculative transactions for the common good of the customer. As Yudistira (2003) opine, despite these arguments, it remains unclear how Islamic banking remain afloat in a very competitive financial market. This is especially based on the fact that conventionally banks make money through interest levies on loans advanced or customers' accounts.

4.6.2 Collateral Requirements

The study sought to determine the respondents view on collateral requirements within Islamic banking. A Likert scale of $1-5$ was used such that 1 = Strongly Disagree, 2 = Disagree, whereas the scales of 3 = Neutral, 4 = Agree and 5 = Strongly Agree. The results are summarized in Table 4.14.

Table 4.14 Collateral Requirements

Statement	Mean	Std. Deviation
In Islamic banking collateral strictly depend on the borrower's credit history and credit worthiness (i.e. credit score) and the size of collateral	3.75	0.757
The Islamic banking is more interested in members' capital capacity building than in profit making.	3.81	0.837
Islamic bank gives priority to character of customer as opposed to the size of the collateral	3.57	0.806
Islamic banking gives greater emphasis on the viability of the projects.	3.61	0.708
Islamic banking uses discretion in regard to credit other than collateral	3.63	0.798
Overall Mean	**3.67**	**0.781**

Source: Research Data, (2019)

The study findings in table 4.14 indicate that most of the respondents agreed that In Islamic banking collateral strictly depend on the borrower's credit history and credit worthiness (i.e. credit score) and the size of collateral with a mean of 3.75. Respondents agreed with a mean of 3.81 that the Islamic banking is more interested in members' capital capacity building than in profit making. Most of the respondents agreed that Islamic bank gives priority to character of customer as opposed to the size of the collateral as indicated by a mean of 3.57. Respondents indicated with a mean of 3.61 that Islamic banking gives greater emphasis on the viability of the projects. Most of the respondents with a mean of 3.63 agreed that Islamic banking uses discretion in regard to credit other than collateral.

The overall mean score of 3.67 indicates that majority of the respondents were in agreement on the effectiveness of collateral requirements in Islamic banking. This findings are in consistent with views expressed by Mwangi (2013) who indicated that collaterals are common in both conventional and Islamic banking lending transactions, and therefore should be encouraged. The level of collateral is however dependent on the level of risks involved in lending. Unlike in the conventional banking subsector which is thought to require smaller collaterals since some of the risks are covered by the interest charged on loans, it is believed that Islamic banks require higher collaterals. This is usually informed by the fact that their loans are interest-free where they discourage payment of *riba* (Agao, 2014).

The findings are also consistent with Kioko (2014) further states that acts as a contractual agreement revolving around a specified asset. However, due to weak legal and regulatory framework especially in developing economies, this arrangement often becomes difficult to implement. The findings are also in agreement with Wahome (2010), due to weak legal and regulatory framework especially in developing

economies, this arrangement often becomes difficult to implement. Nonetheless, Mwangi (2013) argues that in more than 90% bank loan cases, it was mandatory for the lender to present collateral before processing and approval of the loan.

Collaterals are common in both conventional and Islamic banking lending transactions (Mwangi, 2013). However, the level of collateral is dependent on the level of risks involved in lending. Unlike in the conventional banking subsector which is thought to require smaller collaterals since some of the risks are covered by the interest charged on loans, it is theorized that Islamic banks require higher collaterals. This is usually informed by the fact that their loans are interest-free where they discourage payment of *riba* (Agao, 2014).

According to Lipunga (2014) despite collateral giving the lender some confidence, it has the limitation of killing competition especially if it is over-relied upon. Beck, et al. (2010) further note that in relation to borrowing, Islamic banking becomes unattractive due to the large amount of collaterals needed. This fact lends credence to why it is important to further understand the role of collaterals in determining profitability in Islamic banking. There are several forms of collateral admissible by the banks when lending. These may include personal guarantors, receivables, and fixed deposit accounts among others (Sharma and Gounder, 2012).

Findings also agree with Similar ideas were shared by Njanike (2019) after his study in Zimbabwe between 2017 and 2018. The study examined the level at which commercial banks fail if CRM is abandoned. The study found that higher rate of commercial bank crisis is connected with failure to address credit risk. It was suggested in the study that commercial banks should review their credit policies and

mainstream credit scoring as well as put in place a corporate governance practices that are prudent.

4.6.3 Mortgage Credit

The study sought to determine the respondents view on mortgage credits within Islamic banking. A Likert scale of 1 – 5 was used such that 1 = Strongly Disagree, 2 = Disagree, whereas the scales of 3 = Neutral, 4 = Agree and 5 = Strongly Agree. The results are summarized in Table 4.15.

Table 4.15 Mortgage Credit

Statement	Mean	Std. Deviation
In Islamic banking the level of mortgage credit depends on level of the asset availability	3.68	0.637
Before allocating any mortgage credit borrowers payment potentials are assessed	3.51	0.863
The allocation of mortgage credit has empowered many clients involved in Islamic banking	3.97	0.818
The liabilities involved in mortgage credit are assessed on an individual level before any mortgage credit is authorized	3.81	0.783
Islamic banking has effective stipulated policies that influence mortgage credit	3.70	0.901
Overall Mean	**3.73**	**0.800**

Source: Research Data, (2019)

From the research findings as indicated in table 4.9 respondent with a mean of 3.68 agreed that In Islamic banking the level of mortgage credit depends on level of the asset availability. On whether before allocating any mortgage credit borrowers payment potentials are assessed respondent agreed by the mean of 3.51.Majority of the respondents agreed to a great extent that the allocation of mortgage credit had

empowered many clients involved in Islamic banking as shown by a mean of 3.97. On whether the liabilities involved in mortgage credit are assessed on an individual level before any mortgage credit is authorized respondent agreed as shown by a mean of 3.81. On whether Islamic banking had effective stipulated policies that influence mortgage credit, respondent by a mean of 3.70 were in agreement.

The overall mean of 3.73 indicates that most respondents were in agreement with the effectiveness of mortgage credits in Islamic banking. This is in agreement with views by Bettis, (2009) who indicates that with the ever-increasing competitive nature experienced today in the banking industry, mortgage credits are useful in assisting them to be more competitive and stay ahead of their peers. The findings are further supported by Buzzell and Spasovski (2014) who found that often, more customers with low creditworthiness may pose a big liability to the bank hence the need for banks to institute good lending policies and efficient credit analysis to reduce risks. Although competition results into banks creating lax lending rules for the sake of attracting more customers, this move is not always good for the banks. Chernykh and Theodossiou (2011) warn that banks should be careful so that they do not lend to credit unworthy clients. This is the case lest they fail to cut their market niche due to careless lending policies.

Gianfranco and Federica (2007) contend that under the Islamic mortgage financing, the banks tend to procure items on behalf of the purchasers before selling them at reasonable prices with the intention of making a small profit. Under such arrangements, the buyers are allowed to repay the bank in installments hence giving them easy time during the loan repayment period. A critical look at this scenario would appear like the bank is charging interest in an indirect manner. Even though, under this circumstance it is not easy to reveal the profits made by the bank hence

difficult to institute extra charges as a result of delay in repayment. In Islamic banking, collaterals are usually required where assets must be registered under the buyer's name in an arrangement known as *Murabahah*.

According to Ighbal and Mirakhor (2007), risks in Islamic banking can be classified into four categories. These can be viewed in terms of monetary, trade, capital, and control risks. Furthermore, this category can be subcategorized into credit risks, market risks, and equity investment risks. While these kinds of risks are common in Islamic banking subsector, the traditional banks are only vulnerable to credit risk and market risk (Hassan et al, 2018). There are also business risks which are associated with marketing activities and the environment of the business itself. Macroeconomic legal or policy regulatory frameworks and the financial sector infrastructural foundations are also critical in determining the directions of the risks in terms of the magnitude and the frequency with which they risks are experienced. According to Greuning and Igbal (2008), Islamic financial institutions are usually prone to regular business risks just like the conventional banking sector. Things such as payment systems and auditing experts must be put in place if these challenges are to be minimized in a considerable manner.

The findings are also supported by Muriu (2011) who studied profitability of microfinance institutions in both United States and Africa. The study established that profitability also affected exclusive line of business implemented by financial institution including mortgage financing. Further, correspondingly higher deposit as a proportion of total assets was linked with improved financial performance. However, the degree of this influence was very delicate to MFI age. The host economy's institutional environment also played a major role in financial performance' profitability and that the young financial institutions undergo more from weak laws

and political instability, which was consistent with relationship lending and accrual of information capital. The quality of contract implementation on overall political stability, loans and mortgages in the country influenced the degree of moral hazard that financial institutions face when making loans.

4.6.4 Profitability of Islamic Banks in Kenya

The study sought to determine profitability levels within Islamic banking. A Likert scale of 1 − 5 was used such that 1 = Strongly Disagree, followed by 2 = Disagree, then 3 = Neutral, followed by 4 = Agree and 5 = Strongly Agree. The results are summarized in Table 4.16.

Table 4.16: Profitability

Statement	Mean	Std. Deviation
The bank has had an increase of its market share countrywide	3.88	0.727
It is easy to get loans in Islamic banks	3.43	0.837
The number of customers have increased over a short period	3.57	0.706
The bank has been experiencing a high revenue growth	4.00	0.708
The bank has a large asset base capable of paying its debts	3.82	0.783
Overall mean	**3.74**	0.752

Source: Research Data, (2019)

A majority of the respondents with a mean of 3.88 indicated that the bank had an increase of its market share countrywide. Respondents also agreed with a mean of 3.43 that it was easy to get loans in Islamic banks. It was further agreed with a mean of 3.57 that the number of customers had increased over a short period. A majority of respondents with a mean of 4.00 indicated that the bank has been experiencing a high

revenue growth. Respondents agreed with a mean of 3.82 that the bank had a large asset base capable of paying its debts he bank has a large asset base capable of paying its debts. An overall mean of 3.74 indicated that most respondents felt Islamic banking was profitable.

4.7 Inferential Statistical Results

Inferential statistics used in the study included the use of correlation analysis and multiple regression analysis. The use of different tests was driven by the need to corroborate results and to further query the results to find out more about the underlying patterns explaining such results.

4.7.1 Correlation Analysis

The study applied Pearson product moment correlation coefficient which is a measure of the strength of liner association between two variables. Where Pearson coefficient is less than 0.3, the correlation is weak and 0.5 implies a strong correlation

Table 4.17 Correlations Coefficient

		Interest Free Mortgage Financing	Collateral	Mortgage credit	Profitability
Interest Free mortgage financing	r	1			
	Sig.				
	N	40			
Collateral	r	.543**	1		
	Sig.	.000			
	N	40	40		
Mortgage Credit	r	.552**	.573**	1	
	Sig.	.000	.000		
	N	40	40	40	
	r	.637**	.607**	.575**	1
Profitability	Sig.	.000	.000	.000	
	N	40	40	40	40

**. Correlation is significant at the 0.05 level

Source: Research Data, (2019)

The correlation summary shown in Table 4.17 shows that the relationships between each of the predictor variables and the dependent variable were all important at the 95% confidence level. The association analysis to determine the association between interest free mortgage financing and profitability of Islamic banks in Kenya shows a significant correlation existed ($r = 0.637$, $p < 0.05$). Pearson's product moment coefficient of correlation was high suggesting that a strong relationship existed between the two variables. The study also sought to determine the relationship between collateral and profitability in Islamic banking in Kenya. The correlation analysis yielded a Pearson's correlation coefficient ($r = 0.607$, $p < 0.05$) indicating that a strong and positive association existed between the two variables. In addition, the study sought to determine the relationship between mortgage credits and

profitability of islamic banking in Kenya. The results of analysis yielded a Pearson's product moment coefficient of correlation (r = 0.575, p < 0.05) suggesting that a strong and positive relationship existed between the two variables. Hence, it is evident that all the independent variables could explain profitability in Islamic banks in Kenya on the basis of the correlation analysis. The correlation summary indicates that the relations between each of the predictor and dependent variables were substantial.

4.7.2 Multiple Regression Analysis

Multivariate regression analysis was used to assess the implication of the association between all the predictor and dependent variables joint together. This investigation was used to address the questions; how do the predictor variables affect the dependent variable collectively; to what degree does each predictor variable influence the dependent variable in such a cooperative set-up, and which are the more important factors. The results are as follows:

Table 4.18: Multiple Linear Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.783[a]	.609	.595	2.705

a. Predictors: (Constant), Interest Free mortgage Financing, Collateral, Mortgage credit

Source: Research Data, (2019)

Table 4.18 shows the coefficient of determination, which is the percentage variation determination in the dependent variable s supported by the variation in independent variables. The R square is 0.609. This indicates that 60.9% of variance in productivity in Islamic banking can be explained by interest free mortgage financing, collateral

and mortgage credit. The table shows that at an adjusted R squared of 0.595, 59.5 of the variation in financial performance is accounted for by Interest Free mortgage financing, Collateral and Mortgage credit. From the findings shown in the table 4.11 is prominent that there occurs a strong positive association between the study variables as shown by an R of 0.783.

4.7.3 Analysis of Variance

The Analysis of Variance (ANOVA) indicates how well the model fits. The data and the results were presented on table 4.19 as shown:

Table 4.19: Analysis of Variance (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	536.683	3	178.894	24.449	.001[b]
Residual	343.905	36	7.317		
Total	880.588	39			

a**. Dependent Variable: Profitability in Islamic Banking**

b. Predictors: (Constant), Interest Free mortgage Financing, Collateral, Mortgage credit

Source: Research Data, (2019)

F (24.449) statistic is the regression mean divided by the residue mean, the significant value shown by 0.001 is smaller than estimated value of 0.05 which implies that the data was significant for making conclusion that is the predictors variable; Interest Free mortgage Financing, Collateral, Mortgage credit explains the variation in the dependent variable that is profitability in Islamic banking.

Table 4.20: Regression Coefficients results

| Model | Unstandardized Coefficients | | Standardized Coefficients | | |
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.346	2.131		.632	.531
Interest Free mortgage Financing	.516	.090	.423	5.733	.000
Collateral	.426	.103	.252	4.136	.000
Mortgage credit	.404	.085	.249	4.753	.000

a. Dependent Variable: Productivity in Islamic banking

Source: Research Data, (2019)

From the data in table 4.20 the established regression equation was

$$Y = 1.346 + 0.516X_1 + 0.426X_2 + 0.404X_3$$

X_1 is interest free mortgage financing, X_2 is collateral; X_3 is mortgage credit. From the above linear regression model, all independent variables have positive coefficient. This shows that there is a positive relationship between dependent variable; productivity and independent variables; Interest Free mortgage Financing, Collateral, Mortgage credit

From the foregoing regression equation, it was discovered that holding interest free mortgage financing, collateral; and mortgage credit to a constant zero, profitability in Islamic banking would be at 1.346, a unit increase in interest free mortgage would lead to an increase in profitability by a factors of 0.516, a unit increase in collateral

would lead to an increase in profitability   factors of 0.426, and a unit increase in mortgage credit would lead to an increase in profitability   by a factor of 0.404. All the factors were significant as their P value was less than 0.05.

The regression coefficients table reveals that at 0.05 confidence level, keeping other factors constant, interest free mortgage financing does not have a significant effect on profitability (β = .516, t= 5.733, p = .000). The study thus accepts the first null hypothesis and concludes that there is a statistically significant effect of interest free mortgage financing on profitability in Islamic banks in Kenya. This is in agreement with Uhomoibhi (2018) who set out to assess the impact of interest free rates on the financial performance among Islamic commercial banks in Tunisia. The study established that interest free rates are not only substantial but also have a positive effect on financial performance.

The regression coefficients table reveals that at 0.05 confidence level, keeping other factors constant, Collateral requirement has a significant effect on profitability (β = .426, t= 4.136, p = .000). The study therefore fails to accept the second null hypothesis and concludes that there is a statistically significant effect of examine the influence of collateral on profitability in Islamic banks in Kenya. The finding agrees with Alalade *et al* (2014) who investigated the effect of collateral requirement and financial performance of commercial banks in Lagos state. The study tested the research hypothesis and analyzed relative to how significantly commercial banks' profitability is affected by collateral requirement. The study obtained data through the use of closed-ended questionnaires. The study further used correlation coefficient to determine whether or not profitability was significantly affected by credit risk management. The outcome of the study was that profit is increased by collateral

requirement and thus collateral requirement as a credit risk management practice ought to be of great significance to commercial banks' management in Lagos state.

The regression coefficients table reveals that at 0.05 confidence level, keeping other factors constant, mortgage credit has a significant effect on profitability (β = .404, t= 4.753, p = .000.011). The study therefore fails to accept the third null hypothesis and concludes that there is a statistically significant examine the influence of mortgage credit on profitability in Islamic banks in Kenya. This finding is in agreement with Tsatsaronis and Zhu (2004) who studied the determinants of housing price shifts using cross country data. The study established positive association between banks performance and mortgage credit. The study acknowledged the significance of mortgage credit on the financial performance of commercial banks in 17 countries, where the investigation found that essentials relating to mortgage finance, including real interest rate and bank credit account for roughly one-third of the long-term variance in banks performance and house prices.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a detailed summary of the major findings, the conclusions that were drawn from these findings and the recommendations made from these conclusions.

5.2 Summary of Findings

Square was 0.609 implying that 60.9 % of the changes in profitability were influenced by interest free mortgage on interest free mortgaging respondents pointed out that there was no hidden interest charged in mortgage financing in Islamic banking in Kenya. They indicated that the principle of *Mudaraba* where risks and returns are shared by the lender (seller) and borrower (buyer) should be encouraged in mortgage financing. Respondents stated that the interest-free mortgage financing by Islamic banking was a good in the elimination of exploitation by the banking sector. They felt that Shari'ah law exercised in Islamic banking should be emulated by all banks, including conventional banking. They pointed out that the principle of business partnership in lending practiced by Islamic banking should be extended to the whole banking sector. The correlation analysis to determine the relationship between interest free mortgage financing and profitability of Islamic banks in Kenya indicated a significant correlation existed ($r = 0.637$, $p < 0.05$).The Pearson's product moment coefficient of correlation was high suggesting that a strong relationship existed between the two variables. The findings indicated that that interest rate had a positive and statistically significant influence on profitability of Islamic banks in Kenya.

On collateral respondents indicated that in Islamic banking collateral strictly dependent on the borrower's credit history and credit worthiness and the size of collateral. Respondents indicated that Islamic banking was interested in members' capital capacity building than in profit making. They pointed out that Islamic banks gave priority to character of customer as opposed to the size of the collateral. Respondents indicated that Islamic banking gave greater emphasis on the viability of the projects. Respondents stated that Islamic banking used discretion in regard to credit other than collateral. The correlation analysis yielded a Pearson's product moment coefficient of correlation ($r = 0.607$, $p < 0.05$) indicating that a strong and positive relationship existed between collateral and profitability in Islamic banking. The study found out that collaterals had a positive and statistically significant influence on mortgage financing profitability of Islamic banks in Kenya.

On mortgage credit respondents pointed out that the level of mortgage credit in Islamic banking depended on level of asset availability. Respondents stated that before allocating any mortgage credit borrowers' payment potentials were assessed. Respondents indicated that the allocation of mortgage credit had empowered many clients involved in Islamic banking. They pointed out that liabilities involved in mortgage credit were assessed on an individual level before any mortgage credit was authorized. They indicated that Islamic banking had effective stipulated policies that influenced mortgage credit. The results on the correlation between mortgage credits and profitability of islamic banking in Kenya yielded a Pearson's product moment coefficient of correlation ($r = 0.575$, $p < 0.05$) suggesting that a strong and positive relationship existed between the two variables. The study established that there was a positive correlation between mortgage credit and profitability in Islamic banks.

The R square was 0.609 indicating that 60.9% of variance in productivity in Islamic banking could be explained by interest free mortgage financing, collateral and mortgage credit.

5.3 Conclusions

The purpose of the study was to determine the effect of mortgage financing on profitability of Islamic banks. Specifically the study determined the influence of interest free mortgage financing, collateral and mortgage credit on productivity in Islamic banks in Kenya. The study findings indicated that interest free mortgage financing had a positive effect on profitability of Islamic financial banks. The correlation analysis to determine the effect of interest free mortgage on profitability indicated a significant correlation existed. Pearson's correlations coefficient was higher than 0.5 suggestion a strong relationship existed between the two variables. Hence, the study concluded that interest-free mortgage financing is essential for the general growth of Islamic banks in Kenya. This is likely to minimize cases of loan defaulters caused by high interest rates. . The study sought to determine the effect of collateral on profitability. The Pearson correlation coefficient indicated a strong relationship existed between the two variables. The study established that collaterals were very critical influencers of profitability of Islamic banks. The study concluded that it would be imperative to emphasis on the role of collaterals in enhancing profitability in Islamic banks in Kenya. The study sought to determine the effect of mortgage credit on profitability. The Pearson correlations coefficient indicate a strong relationship between the two variables. The study established that the allocation of mortgage credit had empowered many clients involved in Islamic banking. Hence, there was need for Islamic banks to reinforce the mortgage credit practices. It is

evident that all the independent variables could explain the levels of profitability in Islamic banks.

5.4 Recommendation of the Study

5.4.1 Interest free mortgage Financing

The findings of the study indicated that most of the respondents were not very certain on whether the principle of *Mudaraba* where risks and returns are shared by the lender (seller) and borrower (buyer) should be encouraged in mortgage financing. This is an area that needs to be revisited further. Respondents were also not very clear on whether the principle of business partnership in lending practiced by Islamic banking should be extended to the whole banking sector. The current study therefore recommends that studies on Islamic banking should lay more emphasis on clarification of the two areas.   Furthermore, given that Shariah restrictions on investments had a very positive and statistically significant correlation with profitability the study recommends that Islamic banks in Kenya should encourage this practice so as to attract more membership and encourage them to save more.

5.4.2: Collateral

The study findings indicated that most respondents did not score highly on collateral issues related to whether Islamic banks gives priority to character of customer as opposed to the size of the collateral and if Islamic banking gives greater emphasis on the viability of the projects.

This indicates that further analysis should be carried out on factors that influence collateral and how this can be expanded to address more clients. .

5.4.3 Mortgage Credit

Although most respondents felt that mortgage credit was an essential component that influenced profitability within Islamic banking, respondents were not very certain on whether before allocating any mortgage credit borrowers payment potentials were assessed. Further research is needed to clarify how the assessment of credit mortgage is carried out. Banks should make efforts to ensure that mortgage credit is easily available. The study recommends that the government and banking stakeholders should develop effective mortgage credit policies.

5.5 Suggestions for Further Studies

The study recommends that a similar study be replicated in non-Islamic banks to determine to what extent mortgage financing affected profitability. In this study the financing, collateral and mortgage credit indicates that there are other factors constituting 39.1 % influencing profitability. A study should carried out to unearth this factors.

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Appendix I: Questionnaire

I am undertaking an academic study on **effect of mortgage financing on profitability of Islamic banking**, and you have been chosen as one of the resourceful persons to provide relevant information for this study. Please take a few of your minutes and complete this questionnaire. You do not necessarily have to write your personal details anywhere on the questionnaire.

SECTION I: RESPONDENT'S SOCIAL AND DEMOGRAPHIC INFORMATION

1) Gender: Male [ ] Female [ ]

2) Your age bracket (Tick one as appropriate)

    20 - 30 Years [ ]

    31 - 40 years [ ]

    41 - 50 years [ ]

    Over- 51 years [ ]

3) What is your highest education level? (Tick as applicable)

    Certificate [ ] Diploma [ ]

    Bachelors' degree [ ] Masters [ ]

4) Years of service/working period (Tick as applicable)

    1-5 years [ ] 6-10 years [ ]

    11-15 years [ ] Over 15 years [ ]

INTEREST-FREE MORTGAGE FINANCING

Kindly indicate the extent to which you agree or disagree with the following statements regarding interest free mortgaging finance in Islamic banks. Rate your response on a scale of five units whereby: 1= Strongly Disagree, 2= Disagree, 3= Neutral 4= Agree, and 5=Strongly Agree.

Interest Free mortgage Financing

Statement	1	2	3	4	5
There is no hidden interest charged in mortgage financing in Islamic banking in Kenya					
The principle of *Mudaraba* where risks and returns are shared by the lender (seller) and borrower (buyer) should be encouraged in mortgage financing.					
The interest-free mortgage financing by Islamic banking is a good mark of elimination of exploitation by the banking sector.					
Shari'ah law exercised in Islamic banking should be emulated by all banks, including conventional banking.					
The principle of business partnership in lending practiced by Islamic banking should be extended to the whole banking sector.					

COLLATERAL REQUIREMENTS

On a scale of 1-5 where *1= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree,* what is your opinion on the following propositions concerning collateral requirements in mortgage financing by Islamic banks in Kenya?

Statements	1	2	3	4	5
In Islamic banking collateral strictly depend on the borrower's credit history and credit worthiness (i.e. credit score) and the size of collateral					
The Islamic banking is more interested in members' capital capacity building than in profit making					
Islamic bank gives priority to character of customer as opposed to the size of the collateral.					
Islamic banking gives greater emphasis on the viability of the projects.					
Islamic banking uses discretion in regard to credit other than collateral.					

MORTGAGE CREDIT

On a scale of 1-5 where *1= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree,* what is your opinion on the following as determinants of Mortgage by Islamic banks in Kenya?

Statement	1	2	3	4	5
In Islamic banking the level of mortgage credit depends on level of the asset availability					
Before allocating any mortgage credit borrowers payment potentials are assessed					
The allocation of mortgage credit has empowered many clients involved in Islamic banking					
Islamic banking has effective stipulated policies that influence mortgage credit					
The liabilities involved in mortgage credit are assessed on an individual level before any mortgage credit is authorized					

PROFITABILITY

On a scale of 1-5 where *1= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree,* what is your opinion on the following as determinants of Profitability by Islamic banks in Kenya?

Statement	1	2	3	4	5
The bank has had an increase of its market share countrywide					
It is easy to get loans in Islamic banks					
The number of customers have increased over a short period					
The bank has been experiencing a high revenue growth					
The bank has a large asset base capable of paying its debts					

THANK YOU FOR PARTICIPATING

Appendix II: KEMU Research permit request letter

Kenya Methodist University

July 30, 2019

Executive Secretary

National Council for Science and Technology

P.O Box 30623 – 00100

<u>NAIROBI</u>

Dear Sir/ Madam,

RE: ABDULLAHI RASHID SHEIKH – MFI-3-2108-1/2013

This is to confirm that the above named is a bona fide student of Kenya Methodist University pursuing a Master of Science in Finance and Investment.

Rashid is undertaking a research study on "Effects of Mortgage financing on profitability of Islamic banks in Kenya". To successfully complete his research work, he requires relevant data in his area of study.

In this regard, we kindly request your office to issue him a research permit to enable him collect the data for his academic research work.

We thank you in advance for your cooperation.

Yours faithfully,
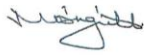
Dr. Evangeline Gichunge

Associate Dean, Research Development & Board of Postgraduate Studies

The Future is Here!

Appendix III: NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 198323

Date of Issue: 09/September/2019

RESEARCH LICENSE

This is to Certify that Mr.. ABDULLAHI SHEIKH of KENYA METHODIST UNIVERSITY, has been licensed to conduct research in Nairobi on the topic: EFFECT OF MORTGAGE FINANCING ON PROFITABILITY OF ISLAMIC BANKS IN KENYA for the period ending : 09/September/2020.

License No: NACOSTI/P/19/973

198323

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION

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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

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