

## Shariah Banking and Financial Performance of Selected Commercial Banks in Kenya

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### ABSTRACT

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*Financial performance is important among banking institutions. The ability to reinvest earnings and aggressively compete for the market share in the business environment is determined by the level of profits. In recent past, Kenyan commercial banks financial performance has declined due to a number of factors ranging from decline in PAT, interest capping, increased competition and rise in non-performing loans. This has created a need for income diversification where commercial banks are diversifying into shariah banking so as to attract investors with an interest in shariah compliant products and services. The main research objective was to investigate shariah compliant banking effects on the selected Kenyan commercial banks in terms of financial performance. The independent variables employed in the study were liquidity, efficiency and asset quality as determinants of financial performance of commercial bank. There are major gaps in the financial performance literature regarding shariah compliant banking. Minimal research studies have been carried on financial performance comparison between commercial and shariah compliant banks in Kenya. In order to achieve the research objectives, descriptive research approach was employed in the study. A census study was carried out; secondary data from relevant central bank data will be used. The population was the four commercial banks operating shariah banking in Kenya. Secondary data from 2013 to 2017 was obtained from the central bank website and the audited financial statements of the selected licensed commercial banks operating shariah banking in Kenya. Data analysis was achieved through use of descriptive, correlation and regression methods. Data was processed through Statistical Package for Social Science software (SPSS). Data was analyzed using descriptive and inferential analysis and presented using charts and tables. Ratio analysis and trend analysis was used in the study. The study aimed at using the framework of innovation diffusion theory to suggest a model for adoption of shariah banking in the Kenyan banking industry, modern portfolio theory to explain the importance of diversified portfolio in the Banking Sector and Agency Theory. The study found commercial banks' performance was as a result of that Shariah banking ratio then by liquidity ratio, efficiency ratio, asset ratio, and finally bank size. Bank size had a ratio of 0.0128, expense management ratio 0.0131, efficiency ratio 0.0024, Asset quality 0.0006, liquidity ratio 0.0120 and sharia banking ratio was 0.0025. It was revealed by the research that commercial banks' adoption of shariah banking positively influenced their financial performance. This research recommends that same studies to be carried out in Africa's Eastern part to compare since shariah banking' concentration is on the Asian and West Africa countries. The research recommends that commercial banks management take advantage of its existing branch networks to open shariah banking alongside its core business in tapping the potential new clientele.*

**Key Words:** *Shariah Compliant Banking Ratio, Asset Quality, Commercial Banks' Liquidity, Efficiency, Commercial Banks Performance*

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**1. Introduction**

The importance of the banking sector cannot be undermined since it is linked directly to the state's economy and supports each other for strength, status and growth. A resilient and robust financial system is the bedrock for viable economic growth. In an economy, banks are the main transmitters of resources and wealth (Shukla, 2014). Banking sector supports the financial and economic activities of a county through acceptance of deposits which help in the formation of capital and allocation of funds to borrowers as loan advances. The Banking sector in Kenya has been facing challenges recently, CBK Reports that in the year 2017 the banking sector was presented with problems that impacted the sector's performance. The banking (amendment) Act 2016, introduced interest rate capping which negatively affected the general banking industry financial performance. The negative impact of the challenges in 2017 was seen in, among other indicators, the decline in overall profit before tax (PBT) by 9.6 percent from Ksh.147.4 billion in 2016 to Ksh.133.2 billion in 2017. The adverse operating environment affected lending, with gross lending decreasing by 5 percent from 2.29 trillion Kenyan shillings in 2016 to 2.16 trillion Kenya shillings in 2017. CBK 2017 reports indicate that the staff levels in the banking sector declined by 8.29 percent<sup>2</sup> from 33,693 in December 2016 to 30,903 in December 2017. In the year 2008, the world experienced a major financial crisis which significantly reduced the relative strength of the commercial banking system. During the period financial crises globally, *Shariah* Compliant banks managed to avoid the adverse effects of the crisis, and for this reason, their financing model and position were strengthened, Husain (2005); Nouri (2009). Due to over-reliance on interest income by commercial banks, Pressure mounted on the banking industry to diversify their income streams and improve on bank profitability. Some of the Kenyan Banks have expanded through operating Islamic windows and offering *shariah*-compliant products and services (Omuodo, 2003).

The global economic crisis of 2008-2009, and the superior economic performance of IBs during the crisis brought about skepticism on the adequate functioning of the typical commercial banking system, (Hassan and Dridi,2011). Factors related IB Assets based financing and risk sharing feature helped accommodate the adverse effect on profitability in 2008-2009, in the year 2009, IB that had poor management of risk practices reported massive declines in profitability compared to CBS. IBs were able to maintain stable external ratings and satisfy the stronger demand for credit due to their higher solvency and lower leverage (Hassan and Dridi, 2011). Unlike conventional banking, *shariah* banking is based on asset-based financing and sharing risk agreements thus depositors are real assets holders with a claim to residual profits and they share the risks of the bank's investments (Pappas, Ongena, Izzeldin, & Fuertes, 2017). *Shariah* banking system is moving steadily into a number of conventional financial system. It is expanding in both nations with a majority of Muslims like the Middle East and in countries with minority Muslims such as Japan and the United Kingdom (Sole, 2017). The main distinguishing feature between *Shariah* Compliant Banks and commercial banks is the product structure. Financial products in *shariah* banking are asset-backed thus enhances the industry stability during economic distress. Debt contracts are totally forbidden this has led to critical restrictions on obtaining liquidity by *shariah* banks (Pappas, Ongena, Izzeldin, & Fuertes, 2017).

Global comparison of the financial performance of *shariah* banks to commercial banks suggest that IBs performed better while CBS in the US and Europe incurred huge losses related to the

global financial crisis 2008-2009 effects. This led to the skepticism on the adequate functioning of the commercial banks (Hassan and Dridi, 2011). Concerning profitability as measured by ROE and the overall productivity measured by income/ expenditure ratio, Shariah banks performed better than conventional banks using the ratios mentioned, (Alrawashedh et al, 2014). A study carried out in Malaysia on total factor productivity, and efficiency change in commercial banks found out that *Shariah* banks have higher rates in deposit growth, investments equity and assets. The IBS in Malaysia also had better asset quality, better credit performance and better capitalized, when compared to commercial banks, IBS had low risk generally, since the excess liquidity and investment in securities was held by the government. (Abdul-Majida et al., 2011). The second largest continent is Africa with a population of 1.2 billion and this makes up for 15% of the total world population. The Muslim community in the continent Africa make half of the population, thus, there is an excellent potential for growth of Shariah banking and finance in the region. The *shariah* banking industry is thriving in the African continent such that countries with small Muslim population like Kenya, Mauritius, Ethiopia, Tanzania, and South Africa are offering *Shariah* Compliant banking to its citizens (Alharbi, 2015).

In 1963 *Shariah* banking came into existence in Egypt, in 1970 *shariah* banking was introduced to a number of the conventional financial system in Arabic and Asian countries and a number of fully-fledged banks introduced across the globe (Usman and Khan, 2012). The number of Shariah-compliant financial institutions is more than 300, and they are spread in over fifty-one countries. Shariah banking sector has experienced tremendous growth rates of 10% to 15% per annum during the last decade, and this trend is expected to grow (Sole, 2007). The demand for ethical products and socially responsible services is snowballing leading to commercial banks increasingly becoming interested in the market of Shariah-compliant financial products by diversifying their portfolio (Alharbi, 2015). *Shariah*-compliant bank partners with its depositors by investing client's deposits in productive direct investment, unlike commercial bank which borrows and lends funds in its operations (Suleiman, 2001). Commercial banking principle is based on interest while *shariah* banking the policy is based on the prohibition of interest in performing their operations as financial intermediaries. The relationship of partnership and financial trust between the borrower, lender, and intermediary is created through the Shariah PLS principle (Yudistira, 2003). *Shariah* Compliant banks compared with commercial banks seek equitably resource distribution. Islamic Faith guides the operations of *Shariah*-compliant bank and should operate within the boundaries of *Shariah Law*. Four principles regulate *Shariah*-compliant banking operations (Suleiman, 2001). The avoidance of *gharar* (speculation in economic activities), the absence of *riba* (prohibition of interest) transactions, *zakat* (*shariah tax*) and *haram* Prohibition (goods and services forbidden) in Islam (Ali, Khan, & Saleh, 2016): (Usman, & Khan, 2012).

Some of the products offered by shariah-compliant banking include *Ijarah*, *Murabaha*, *Musharaka*, *Istisna*, and *Salam*. *Mudaraba* is the trade, where depositors agree to invest their money based on PLS contract with the bank, diminishing *musharaka* (Declining partnership) is used in the financing of real estate projects. *Murabaha* (cost-plus sale contract) where the bank provides funding by purchasing an asset at a predetermined profit margin on behalf of the for the customer. *Ijara* refers to lease agreement which permits the investor to retain the property title until the termination of contract. *Istisna* is a financing instrument where the item is manufactured according to the customer specifications, profit margin is calculated in addition to the cost of manufacturing the product. *Salam* is defined as a contract involving spot payment mainly used to finance agricultural products profit is made by spot prices discounting (Usman, & Khan, 2012). Kenyan banking sector comprises both *shariah* and commercial banks, Barclays bank became the first Kenyan bank to launch Islamic banking products through La

Riba account an interest-free bank account in December 21st, 2005. Under CAP 488 of the Banking Act, CBK authorized First community bank to be the first compliant shariah banking in Kenya, and it started its operations in June 2008. In the same year, Gulf African Bank opened its doors and became the second fully shariah-compliant bank in Kenya, Talam (2014). Several conventional banks have started offering Islamic banking services. These include Chase bank (*Iman*), National Bank (*Amanah*), Standard Chartered (*Saadiq*) and KCB (*Sahil*).

Financial performance assessment of banks reveals the general health of a country's economy, (Haque and Sharma, 2011). Banks financial performance guides outcome analysis of policies, performance, efficiency and effectiveness of the firm in economic terms. This reflects in the bank's profit earning, return on investment and return on assets. It also emphasizes how a bank is effectively utilizing its financial and other resources to make a profit. Financial performance evaluation is a subjective measure to assess firm's usage of assets from its core business operations and generation of revenues (Pinto, Hawaldar, Rahiman & Sarea, 2017). There are many different measures of a bank's performance in literature. Among these performance measures, ROA and ROE were two of the most popular ratios used for accessing the bank performance, Jie (2014). ROA is expressed as profit after tax (PAT) to total asset, and the ratio indicates the banks' ability to convert the bank asset into earnings. A higher ROA value exhibited the higher the firm's capability. The key measure for evaluating the managerial efficiency is the ROA ratio, (Samad and Hassan, 2000): (Samad, 2004); (Kader and Luther 2007). ROE is expressed as profit after tax (PBT) to equity capital, and the ratio proves bankability in profit generation from the investments contributed by the shareholders. If ROE is high, it, therefore, indicates higher financial performance.

Some studies have been done in Malaysia in comparing the bank's financial performance of *Shariah* and commercial banks (Rosly and Bakar 2003) & (Samad and Hassan, 2000). The findings showed differences in risk management practices and liquidity on the financial performance of both *shariah* and commercial banks. Using Pakistan banks as a unit of analysis, (Mahmood, 2005) in differentiating the financial performance of *shariah* bank with that of the commercial bank, found that in the majority of the financial ratios *shariah* banks out-performed the commercial banks during the period 2000-2004. (Samad, 2004) analyzed the comparative financial performance of *shariah* banks versus commercial banks (1991-2001) in Bahrain. The research findings indicated no notable difference in respect to profitability and liquidity between *shariah* compliant banks and commercial banks. When examining the income and the financial statements of a sample determinant of Islamic Banks' performance in the Middle East, He focused specifically on the link between banks characteristics and profitability. Research finding revealed that the measure of profitability is an increasing function of the capital and loan ratios (Bashir, 2000 & 2001).

### 1.3 Commercial banks in Kenya

The growth of the financial sector in Kenya emerged during the pre-colonial era, at that time financing international trade along India, South Africa and Europe axis was the main specialization of the pioneering banks in the country. There was a major variation in the banking industry landscape which was marked by the entrance of wholly domestic banks in 1968 (CBK, 2010). Co-operative Bank of Kenya was the first local wholly owned bank, and the first wholly owned government bank was the National bank, in the same year. In 1971 the banking industry witnessed the merger of the National and Grindlays Bank which formed Kenya Commercial Bank, with 60% majority stake owned by the Kenyan Government. The Kenyan banking sector continued to grow after the nation's Independence, due to the country's growth in respect to economic success (the Republic of Kenya, 1986). In modern-day Kenya, the financial sector consists of CBK as the core regulator of the banking and financial industry.



The Kenyan banking sector comprises of Banking Institutions, Islamic Banks, and foreign banks representative offices, Credit Reference Bureaus, Microfinance Banks, foreign exchange bureaus and money remittance providers. The sector contributes about 4% to GDP currently and provides assets equivalent to about 40 % of GDP (CBK, 2017). As at 31 December 2017, Kenyan banking industry included CBK as the primary regulatory authority. The bank organizations are 43 that is commercial banks (42) and one mortgage finance company, foreign banks representatives (9,) Microfinance Banks (13), Credit Reference (3) Bureaus, Money Remittance Providers (19), non-operating bank holding companies (8) 73 foreign exchange bureaus (93). The government of Kenya had majority ownership in 3 institutions, while the rest of the 40 banks are privately owned (CBK Bank Supervision report, 2017).

## 2. Statement of problem

Commercial banks play a critical function in the development and stabilization of a country economic growth and health. Commercial banks are intermediary in the nature of their core business, by taking in funds from a depositor and then lending them out to a borrower. Commercial banks play an outstanding role in wealth creation, the creation of jobs and diversification of risk. Many crises have faced commercial banks in Kenya. According to CBK report (2000) the total number of banking institutions reduced by 10% during the year 2000 to 60 from 67 in 1999. This has further reduced to 43 banks due to mergers, bank liquidation, and closures. On the other hand, between 2008 and 2014, Assets maintained and controlled by Islamic funds grew at an annual growth of 13.5 percent between 2008 and 2014 and exceeded US60 Billion as of 2014, World Bank report (2017). As of December 2017, the Kenyan banking sector registered a decline in performance with the subdued economic activities. The industry reported a decrease in profit after tax by 9.6 % during the year 2017. A decline in asset quality was reported, with the NPLs ratio increasing to 12.3 % in December 2017 from 9.3 % in December 2016. CBK is closely monitoring the financial Institutions that experienced deterioration in asset quality during the year (CBK, 2017).

The financial crisis of 2008-2009, and the reported superior economic performance of IBs during the economic catastrophe have brought about skepticism on the adequate functioning of the commercial banking system (Hassan & Dridi, 2011). *Shariah*-compliant banking global perspective has achieved great attention customers practicing the Islam faith, Ali and Chin-Hong, (2015). This is due to the superior *shariah* compliant banks' financial performance in the financial crisis and the resultant decline in the economic performance of conventional (Hamid and Masood, 2011). There is a variety of Islamic banking products in countries such as the Middle East and Asia for clients who desire *shariah* compliant services and products (Newell and Osmadi, 2009). These products include *Istisna*, *Ijarah*, *Salam*, *Murabaha*, and *Musharakah*. Majority of countries across the globe are embarking on the dual banking system due to the rapid growth of *shariah* compliant banking system as an alternative banking system to the predominant and powerful commercial banking system. Over the last decade, *Shariah* banking sector has experienced growth rates of 10% to 15 % per and this trend is expected to grow. Islamic finance and banking are still uncharted territories for most practitioners and policymakers despite the rapid growth and its expansion into the conventional banking system. The literature regarding the financial performance of *shariah*-compliant banking and finance has significant gaps. Very few researchers have been done on the comparative analysis on bank level performance between *shariah* compliant and commercial banking, especially on profitability and efficiency using different sample selection and research methodologies. *Shariah* banking will further increase its penetration on conventional systems according to emerging trends in the financial sector. Therefore, it is of crucial importance for policymakers

and practitioners to be familiar on the emerging trends, process and the implications for financial supervision (Sole, 2007)

### 3. Objectives of the Study

The general aim was to establish how financial performance of selected Kenya commercial banks is affected by *shariah*-compliant banking.

Specific objectives were:

- i. Determine the how selected commercial banks' profitability is impacted by shariah compliant banking ratio.
- ii. Examine the relationship between the profitability of the selected commercial banks and asset quality in Kenya
- iii. Explore the selected Kenyan commercial banks' liquidity and profitability relationship
- iv. Analyze the selected Kenyan commercial banks' profitability and efficiency relationship.

### 4. Theoretical Literature

Several theories explain the diversification in commercial banking to improve its profitability. The research will be guided by Innovation diffusion theory, Modern portfolio, and Agency theory. The three theories are discussed in detailed to explain how profitability of commercial banks operating Islamic windows is affected by shariah banking adoption

#### 4.1 Innovation Diffusion Theory

Rodgers in 1962 developed the Innovation diffusion theory; the theory explains how, why and at what rate, innovative technologies and ideas diffuse in a social system. New beliefs, practices or objects can be perceived as an innovation by another unit of adoption (Rogers,2003). Relative advantage, compatibility, observability, complexity, and trial-ability are the main characteristics of innovations according to Rodger, and this explains why commercial banking are adopting *shariah* banking in their operations as the most important explanation of the rate of innovation adoption. *Shariah* banking and financial products are competitive in the market and contribute to the massive profits this explains why *Shariah* banking system is moving steadily into a number of the conventional financial system, Sole (2017). The perspective of Islamic banking has achieved global attention, *Shariah* banking products like *Istisna*, *Ijarah*, *Salam*, *Murabaha*, and *Musharakah*. are available in the Middle East, Asia and part of the Africa continent, Usman, A., & Khan, M. K. (2012). In Kenya, for instance, Barclays bank Introduced La Riba Vehicle financing and Finance products to attract the Muslim community and investors, Talam (2014). Other banks in Kenya have followed suit in offering Shariah banking, and they include National Bank, Standard Chartered, Kenya Commercial bank, and Chase Bank.

#### 4.2 Modern portfolio theory

Markowitz was the main proponent of Modern portfolio theory (MPT) in in the year 1952; The theory contributes to investment analysis framework. The Theory enables financial advisors to select, implement and develop an investment portfolio that is solely based on maximization of expected returns of portfolios and minimization of risks linked with investments (Fabozzi, Gupta, & Markowitz, 2002). Modern portfolio theory (MPT) highlights the importance of risk diversification and elaborates how efficient portfolios could be constructed by diversifying non-systemic risk. Bank income diversification can result in substantial profit margins, but new threats are also introduced to financial institutions (DeYoung and Roland, 2001). Global economic crises brought about significant setbacks that affected banks worldwide resulting from portfolios with risky investments features, Martinez, R. (2015). This led to a significant

number of banks reaction to favoring investments associated with low risks, but these decisions have also adversely affected investments plans in potentially high-performance assets thus profit reduction has significantly limited diversification (Martinez, 2015). The ability of a bank to re-invest low cost of capital into fresh investments play a significant role in promoting diversification ventures (Choi, and Kotrozo, 2006). On the other hand, Banks efforts to diversify income may result in financial performance decline due to increased volatility in earnings (DeYoung and Roland, 2001). MPT focuses on the ability of diversification in risk reduction usefully emphasizes the ability but disregard some essential factors. The theoretical analysis is static since it observes that investors are mainly concerned risks associated with wealth in only one period ahead, (Fabozzi, Gupta, & Markowitz, 2002). MPT also makes assumptions regarding investors and markets, e.g. Normal distributions use to model returns and the omission of taxes and transaction costs. These assumptions compromise the MPT to some degree (Omisore, et al, 2011).

### 4.3 Agency theory

Developed by Mitnick (1971) and Ross (1973) independently and later worked roughly simultaneous. The theory was further developed by William and Jensen, in 1976. Agency theory (principal-agent relationship) describes contracts that permits the principal to engage an agent with expertise to undertake services on their behalf; decision making is also delegated to the agents, Shamsuddin and Ismail (2013). In banking and financial institutions where managers obtain economic benefits directly or indirectly at the expense of wealth maximization will automatically result into agency problem with the shareholders, (Banchit, Boulanouar, Wellalage, & Abidin, 2013). When there is a mismatch between the goals and interests of the principles and agents, then conflict arises. Shariah Compliant banks managers are mandated to work under *Shariah* rules and regulations while focusing on meeting the needs of the shareholders. Agency theory suggests segregation of control from ownership, and that professional managers to independently manage a financial institution on behalf of the shareholders (Kiel & Nicholson, 2003). Conflicts in the principal-agent relationship arise from contracting, transaction, moral hazard and information costs. The agency theory elaborates the core problems in hierarchical interactions among managers and investors in the implementation and application of policy. The theory also focuses on issues that arise when listed banks stakeholders have conflicting perspectives and when both the principals and agents have different preferences, attitude, and appetite towards risk and returns (Shamsuddin, & Ismail, 2013). Relations and Operations in *Shariah*-compliant banks varies among its depositors and investors. Shariah bank investors and depositors are mainly concerned about how their money is re-invested in accordance to *shariah* principles (Chapra and Ahmed , 2002). In commercial banks, agency problems emerge when managers digress from their obligation of maximizing the wealth of shareholders. There is a probable source of agency problems in shariah banking, that is whether product and transactions should conform to *Shariah* requirements, for example in *mudarabah* (PLS contracts). *Shariah*-compliant banks operations propose that *shariah* principles underlying the contracts lead to different agency relations (Safieddine, 2009). Principal-agent conflicts result to lower profitability and performance of Islamic banks, principal-agent conflicts are much more inherent in the shariah bank (Banchit et al, 2013).

## 5. Empirical Literature Review

This section will discuss the Financial Performance determinants of the banks; relevant literature will be reviewed relevant to the effect of *shariah* banking on the financial performance of banking institutions.

Quality of assets has been considered as a determinant factor in the performance of commercial banks since it reveals how the banks perform in both advances and placements. Asset quality

reveals the degree of financial capability and risk level of assets within a bank. Asset quality has major importance on banks profitability. Asset quality in banks relates to loan quality offered by banks and NPL measures the quality of loans which is made up of loans in arrears and current loans, (Kadioglu et al, 2017). Asset quality deterioration in bank affects banks financial performance and operating efficiency as well as the financial health of the financial system in which operates. It is imperative that banks implement prudent management to credit risk, safeguard assets and secure the interests of shareholders (Achou, and Tenguh, 2008). Asset quality is measured in terms of capital adequacy. In measuring banks potentiality to solvency, the ratio of capital to risk-weighted (RWA) is employed and the ratio is expected to be at least 8 percent. The weighting of assets should be in accordance with the associated risk and should factor elimination of asset impairment in assets. Lower asset quality is contributed by the high level of nonperforming loans held by banks thus higher asset quality is achieved by low levels in nonperforming loans, Basel III (Committee supervision of the banking sector).

In their study on the determinants of Islamic banking profitability (Hassan, & Bashir, 2003). Observed that Commercial banks had higher provision for loan loss in relation to the total loans held in Islamic Banks when compared in terms of asset quality ratios. Hassan & Bashir stated that banks with better financial performance are more likely to restrain their credit risk, they show a tendency to have a lower ratio on provision for loan loss. The loan portfolio in Islamic banks was of better quality when compared to commercial banks in their study. There was an outstanding difference when comparing the impaired loan over total loans ratio, the research findings concluded that *shariah*-compliant banks have better assets quality compared to commercial banks (Hassan & Bashir, 2003). The research done by (Bhattarai, 2016), (Akbaş, 2012), (Duraj and Moci, 2015), (Ongore and Kusa, 2013) concluded that lower asset quality (NPL) adversely affects the profitability of banks. There was no correlation between NPL and ROE in the studies conducted by (Samırkaş, Evcı, and Ergün, 2014), (Güneş, 2015) and (Adebisi and Matthew, 2015) studies didn't show any correlation between NPL and ROE; Positive relationship was found between NPL and ROE in the research carried out by (Bhattarai, 2016), (Afiriyie and Akotey, 2013) and In his study, (Buchory, 2015) found a positive correlation between NPL and ROE.

Global liquidity standards were introduced to provide sound liquidity risk management by Basel III Committee. The Basel rules provide the framework practices and policies guidance in managing liquidity risk by banks. The liquidity coverage ratio (LCR) mandates banks to hold quality and adequate liquid assets to withstand a stressed thirty-day funding scenario. To address liquidity mismatches, the net stable funding ratio (NSR) is the structural ratio used in the long term to address the crisis. The liquidity framework consists of monitoring metrics enable analyzing and identification of trends in liquidity risk management at both the bank and global system level, Basel III. Liquidity risk management is a mandatory requirement for all banks, Liquidity levels should be managed and monitored effectively. There exists a close relationship between working capital and Liquidity is very closely related to working capital (Iqbal, 2012). Liquidity in commercial banks Is determined by their capacity to meet obligations when they fall due and fund new assets. Liquidity the critical indicator in the assessment of financial stability, one bank liquidity inadequacy can cause a systemic crisis in the whole banking industry due to the interconnections in the bank operations, Basel III. The average liquidity ratio was at 43.7% as at December 2017 compared to 40.3% reported as at December 2016 according to CBK bank supervision report (2017).

Research carried out in Indonesia on liquidity risk management of Islamic banks (Ismal, 2010), recommended the formulation of policies aimed at improving liquidity risk management. Both commercial and Islamic Banks face the risk that has a likelihood to affect their operations and financial performance. It is therefore imperative that banks should have strong policies



regarding the management of liquidity risk management and liability board committee. Due to *Shariah* principles and values being followed by *shariah* compliant banks, they can minimize the liquidity risk at significant levels (Ismal, 2010). Maintaining quality and sufficient liquid assets to cover liquidity is irrelevant to *shariah* banking as profit and loss transactions reduces the overall risk faced by banks (Jaara, 2017). *Shariah* banking is based on interest prohibition and PLS transactions are conducted with strict conformance to *Shariah* laws. *Shariah* banks are less exposed to financial risks with proper implementation of PLS transactions.

Capital is an essential internal determinant of bank profitability. All banks in Kenya have been mandated to build up their core capital to 1 Billion Kenya Shillings as at December 2012 from the original capital requirements in the year 2008 of 250 Million Kenya shillings, this is a mandatory requirement introduced by Central Bank of Kenya, CBK (Bank supervision reports). The Justification of the increased capital requirement is that the additional capital is important for the stability of the banking industry, and this will result to reduction of cost in the economies of scale which will result into significant low lending rates in the market. The minimum capital requirement will also ensure reasonable absorption of losses by banks before being declared bankrupt (Gudmundsson, Ngoka-Kisinguh & Odongo, 2013). Basel regulations introduced capital adequacy ratios in the banking industry worldwide. Capital adequacy ratio (CAR) measures the level of capital banks need to hold in relation to the total risk-weighted assets (RWA). CAR ratio is one of the crucial ratios for banks, as a key indicator of solvency, it buffers against the enormous losses that threatens the existence of the bank. Due to the nature of their operations, banks are highly leveraged financial institutions, thus it's prudent to maintain sufficient capital to cover the risk-weighted asset. CAR is a crucial predictor of bank failure especially during an economic crisis, and to reduce the probability of failure, Banks might employ strategies to boost their capital over time (Parashar, 2010).

Majority of banks across the globe had an accumulated excessive leverage on/off balance sheet before the global financial crisis of 2008, this was followed by gradual and progressive erosion of the level and quality of capital base held by banks. The consequence of the affected level of capital and quality resulted to the inability of banks to absorb the credit and systemic trading losses. Banks also couldn't manage with financial re-intermediation of the massive off-balance sheet exposure gradually accumulated in the banking financial system (Gudmundsson, Ngoka-Kisinguh and Odongo, 2013). Bank regulators worldwide made fundamental reforms to the global prudential framework for the banking industry worldwide with the aim of strengthening capital requirements, improving financial stability and creating a robust banking sector (Naceur, and Kandil, 2009); BIS, (2009); Financial Service Authority, (2009). Various research studies have been conducted on capital adequacy of a bank and financial institutions. Highly capitalized banks have a low probability of falling into bankruptcy and are more profitable due to low funding costs (A.breu, 2002). There was a definite link between capital adequacy and banks profit (Farati, 2012). A significant difference was observed in loan loss reserve ratio to gross loans (Hosen, 2007), There is a definite link between the profitability of banks to core asset ratio (Mathuva, 2009).

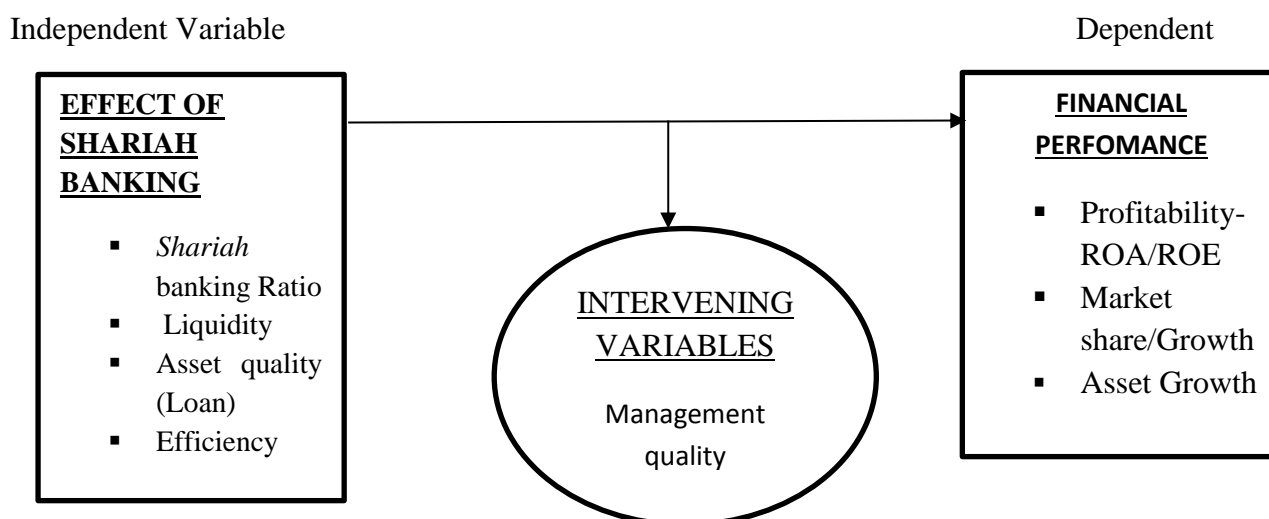
Management is the primary variable that underlies the success of a bank and financial institution. Competency and expertise in making the strategic vision and subjective judgments is a crucial quality required from all bank managers (Jie, 2014). Measuring management evaluation is unpredictable and tough to measure (Golin, 2001). The ratio of Operating expenses /total assets and operating costs/net operating income are the mainly used ratios in measuring management efficiency. The operating costs /net operating income ratio indicate the level of operating costs paid from the total bank's income, it provides important information on management efficiency and the costs incurred relative to the generated revenue (Jie, 2014)

Operational cost inefficiency result into low profitability in commercial banks in Kenya (Olweny, 2011). The operating expenses/assets ratio show expenses in relation to bank size.

In a study done in Bahrain in comparing commercial and *Shariah*-compliant banks financial performance. It was found out that no notable difference in management efficiency of the two banks in relation to Operating efficiency, asset utilization, and cost to income ratio and staff costs to income (Iqbal, 2012)

## 6. Conceptual Framework

Shariah banking ratio, liquidity, asset quality, efficiency and management quality were used to conceptualize the independent variables. The research investigated the influence of independent variables on selected Kenyan commercial banks' financial performance. The research will aim to measure the financial performance in terms of returns from assets, equity returns, liquidity, market share, and asset growth. As such, the conceptual framework of the study will be as follows:



**Figure 1: Conceptual Framework**

Source: (Author, 2018)

## 7. Research Methodology

The descriptive research design was employed in the research this is since it aided in constructing a problem for a more precise investigation. Descriptive Research design suggests linkages that exist between variables through observation of existing phenomena and researching through available data in order to identify plausible relationships (Kothari, 2004). The aspect of causality of the study variables was established through collected information and data use for testing cause and effect relationship. The main aim of the research will be to establish the effects of shariah-compliant banking on the financial performance of the selected commercial banks operating shariah banking and the empirical evidence that assist in achieving the research objective thus quantitative research approach will be used to address the research questions.

The population will be 5 commercial banks operating shariah Banking. The justification for this population was because the study only considered commercial banks operating shariah banking in Kenya. The 2 Fully fledged Kenyan shariah banks that is the First community bank and Gulf African Bank were eliminated since the study focused on banks offering both commercial and shariah compliant banking, the study focus was based on the effect of

operating *shariah*-compliant banking on selected Kenyan commercial banks' financial performance.

To achieve the research study objectives, Secondary panel data were used. Data on Liquidity, asset quality, efficiency, and management quality for the period 2013 to 2017 was obtained from the CBK Bank supervision reports and selected bank final audited financial and income statements. Data collection form on *Shariah* banking contribution to the bank's revenue will be presented together with an introduction letter by the researcher to the selected commercial banks. See Appendix 1.

Regression analysis method was used to explain how independent variables changes relate to the profitability variable changes. The equation representing the ROA was be expressed as:

$$Y_{it} = f(BS_{it}, AQ_{it}, ER_{it}, LR_{it}, MR_{it}, SBit)$$

Y = (ROA); BS = bank size; AQ = Asset quality; ER = efficiency ratio LR =Bank liquidity ratio; MR = management expense ratio and X6=shariah banking income ratio.

$Y_{it}$  (ROA) = (Net Income (loss) / Total assets) at time t for bank i

BS<sub>it</sub> = bank size = (Total assets + Equity Capital +Revenues) at time t for bank i

AQ<sub>it</sub> = asset quality= (Total loans/total Deposits) at time t for bank i

ER<sub>it</sub> = efficiency ratio= (total operating expenses/total income) at time t for bank i

BR<sub>it</sub> = bank liquidity ratio = (loans/ deposits) at time t for bank i

MR<sub>it</sub>= management expenses ratio = (operating expenses / total assets) at time t for bank i

SBit = *Shariah* Banking ratio = (Income from *shariah* products/Total income) at time t for bank i

The equation representing the ROE will be expressed as follows:

$$Y = \alpha + \beta_1 BS_{it} + \beta_2 AQ_{it} + \beta_3 ER_{it} + \beta_4 LR_{it} + \beta_5 MR_{it} + \beta_6 SBit + \epsilon$$

Y (ROE) = (Net income (loss)/Equity)

BS = bank size, AQ = asset quality; ER = efficiency ratio; LR =bank liquidity ratio; MR = management expense ratio while SB = Shariah Banking ratio.

$\epsilon$  denotes error term, i is the bank, t is the time and  $\beta$  is the coefficient of independent variable while  $\alpha$  is the constant.

Data were presented by Coefficients, charts, tables, and graphs mean, standard deviation, frequencies, and percentages.

## 8. Data Analysis Results

Having carried out the descriptive statistics, this research employed inferential statistics so as to draw conclusions and recommendations. Multi-regression analysis was performed to identify the nature of the dependent and independent variables' relationship.

**Table 1: Correlation Table**

	Shariah Banking Ratio	Asset quality	Liquidity ratio	Efficiency Ratio	Expense Management Ratio	Bank Size

<b>Financial performance</b>	0.854	0.618	0.061	0.095	-0.706	0.831
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Source: Researcher (2019)

The research aimed to explore the financial performance, shariah banking ratio, Bank size expense management ratio, efficiency ratio, liquidity, asset quality of selected Kenyan banks relationship. Correlation analysis was undertaken to show the significance, and the strength of association of the coefficients. The results in table 1 reveal a high and a positive correlation 0.854 between bank financial performance and shariah banking ratio. A positive correlation of 0.618 was established between asset quality ratios and financial performance of the selected banks as indicated in the Table 1. In analyzing the relation between financial performance & liquidity, this research found a 0.061 degree of correlation and a further 0.095 positive degree of correlation between financial performance and bank efficiency. The results indicate that bank performance and expense management ratio were negatively and significantly correlated with a correlation of -0.706. It was further established that banks' financial performance and bank size were positively and significantly related with a correlation of 0.831. The study results reveal an increasing association between shariah banking ratio, asset quality, efficiency ratio, liquidity ratio, bank size and banks financial performance. Reduction in bank profitability is experienced by a unit expense management ratio increment.

The regression model was summarized in table 2.

**Table 2: Regression Model summary**

Model	R	R Square	Adjusted R Square	Std Error of the estimate
1	.8001 <sup>2</sup>	.6401	.346	0.0122

(A) Dependent variable: Bank Financial performance (Profitability).

(B) Predictors (constant): asset ratio, shariah banking ratio, bank size, expense management ratio, efficiency ratio and liquidity ratio.

Source: Researcher (2019)

The regression model results are indicated in table 2 presents the fitness of model utilized in explaining the study variables. Asset quality, Shariah banking ratio, bank efficiency, liquidity and Bank size were found to be satisfactory variables in explaining profitability of the selected commercial banks in Kenya. This is supported by the R square (coefficient of determination) of 64.01%. Coefficient of determination interprets the dependent variable variance that can be explained by independent variable changes. This implies that Shariah banking ratio, Bank size, Asset quality ratio, bank efficiency ratio and liquidity Ratio explains the 64.01% variations in the dependent variables which is profitability of the selected commercial banks. Other dynamics not conducted in the study account for the 35.99% discrepancy in the reliant variable. The study findings imply that the regression model used in linking the relationship of the variables was indeed satisfactory

ANOVA measures the statistical difference in more than two independent Variables and involves computations providing information on the inconsistency degree within a regression model



**Table 3: ANOVA Table**

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	1.330	1	0.304	2.73	0.003 <sup>a</sup>
Residual	6.805	3	0.364	2.63	
Total	8.135	4			

Source: Researcher (2019)

Significance testing using the p-value (probability value) in statistics stipulates the degree of relationship of the independent variable on the dependent variable. The model will be significant in explaining the degree of relationship when the significance value is less than the critical value (P-value) which is statistically set at 0.05. The F value yields a statistic for testing the hypothesis that all  $\beta \neq 0$  against the null hypothesis that  $\beta = 0$ . Further, the study results implied that the independent variables were efficient in predicting financial performance of the selected commercial banks. This prediction was further supported by an F statistic of 2.73 and the reported p value (0.003) which was below 0.005 significance level (conventional probability). Thus, the study results reveal that the model was analytically significant in forecasting how bank size, expense management ratio, efficiency ratio, liquidity ratio, asset ratio and shariah banking ratio influence selected Kenyan commercial banks financial performance.

Table 4 presents a multiple regression coefficient for all the variables used in the study.

**Table 4: Multiple Regression Coefficient**

Model	Un standardized Coefficients		Standardized coefficients	T	Sig
Variable	$\beta$	Std Error	Beta	B	
Constant	3.701	0.837		3.41	0.000
BSit	0.442	0.782	0.114	1.47	0.0128
AQit	0.618	0.384	0.218	1.84	0.0006
ERit	0.643	0.670	0.148	5.56	0.0024
LRit	0.734	0.894	0.180	7.84	0.0120
MRit	0.560	0.640	0.173	1.38	0.0131
SBit	0.809	0.445	0.326	2.32	0.0025

Source: Researcher (2019)

From the regression equation:

$$Y = \alpha + \beta_1 \text{BSit} + \beta_2 \text{AQit} + \beta_3 \text{ERit} + \beta_4 \text{LRit} + \beta_5 \text{MRit} + \beta_6 \text{SBit} + \epsilon.$$

The coefficients can be substituted as follows;  $Y = 3.701 + 0.442 \text{BSit} + 0.618 \text{AQit} + 0.643 \text{ERit} + 0.734 \text{LRit} + 0.560 \text{MRit} + 0.809 \text{SBit} + \epsilon$ ; Where Y represents the commercial bank financial performance, BS, AQ, ER, LR, MR, SB represents bank size, asset quality ratio, expense management ratio, efficiency ratio, liquidity ratio and shariah banking ratio. Utilizing the equation issued, financial performance (Y) will be represented by a value of 3.701. The statistics illustrates that a unit increase in the size of the bank result to a 0.442 unit increase in the bank's financial performance. A 0.618 unit increment in the financial performance will be experienced by a unit increment in asset quality. From the formulae, 0.643 a unit improvement in the bank's financial performance results from a unit increment in efficiency ratio and a further 0.734-unit improvement in financial performance will be experienced from liquidity

ratio unit increment. Financial performance will be affected negatively by expense management ratio. This is because a negative financial performance 0.560-unit change results from expense management ratio increment. The data indicates that shariah banking ratio unit increment result to a corresponding upward change of 0.809 unit in financial performance of the selected banks. Based on data analysis, efficiency management ratio contribute the lowest followed by liquidity ration and shariah banking ratio being the highest. At 5% significance level and 95% confidence level, Bank size was at 0.0128 level of significance, liquidity ratio 0.0120, efficiency ratio 0.0024, expense management ratio 0.0131 and Shariah banking (SB) ratio 0.0025.

## 9. Conclusions

The profitability measures analysis indicated that the selected commercial banks are profitable in terms of ROA and ROE measures. In determining the impact of shariah compliant banking on the profitability of the selected Kenya commercial banks. The finding of the study indicated that adopting Shariah compliant banking by commercial banks had a positively influence on the profitability of the commercial banks in Kenya. The positive relationship further indicates that shariah compliant products contribute to profitability through attracting potential clients. Thus, the financial health and stability of the commercial banks has been enhanced through the introduction shariah compliant banking in conjunction with their core business. Secondly, the study concluded that asset quality of the shariah compliant services had positively influenced selected commercial banks financial performance. Asset quality ratios revealed how the selected banks performed in placements and advancements. The study findings indicate a relative stability growth in asset quality ratios in financial performance of the selected commercial banks. Credit risk monitoring and management enables banks to safeguard its assets and secure the interests of shareholders.

Thirdly, the study identified a weak positive correlation between liquidity and profitability of the selected commercial banks in Kenya. Over a span of five years, the selected banks showed an increasing trend in liquidity ratios leading to the conclusion that liquidity ratio positively affects the financial performance of the banks in Kenya. The study finally concluded that bank size has a significant effect on fiscal outcome of commercial banks. The findings revealed a steady increase of bank size of the selected commercial banks over a span of 5 years and a proportional increment in banks performance under the same duration. Banks should consider diversifying the portfolios in shariah banking in to benefit from economies of scale. High levels of profitability is enjoyed by large banks due to economies of scale.

## 10. Recommendations

The study established a negative effect on the financial performance of the selected banks by the expense management ratio. This research recommends that bank management should place more emphasis on cost efficiency in ensuring attainment of optimal expense level in banks. In strategizing towards cost efficiency banks should strategize their efforts in monitoring and controlling costs. The study has established a positive correlation between financial performance of the selected commercial banks and liquidity ratio. The research recommends that for banks to continue achieving sound liquidity position they should obtain liquidity protection from central bank by increasing pre-positioned assets that can be used as collateral in crisis period. Banks in Kenya should cooperate to establish a robust Islamic financial market in order to control liquidity risk and improve liquidity management of their respective banks.

Based on the research findings, the study recommends that more emphasis should be placed on improving operational efficiency thereby improving banks fiscal performance. For banks to be efficient then it is essential to maintain the efficiency ratio as low as possible by generating

higher revenues with low expenses. In the light of the research study's findings, the study recommends that banks further develop strategies on maintaining non-performing loans (NPL) low. This can be achieved by closely monitoring and controlling risk arising from their loan portfolio, keeping track of the loan status and analyzing NPL trend to gross loan ratio as a proxy of asset quality. Generally, high profitability and large economies of scale is enjoyed by large banks due to their ability to significantly reduce cost of raising capital. The study has established a positive correlation between bank size and the selected Kenyan commercial banks' financial performance. The research therefore recommends that banks ought to be encouraged to enhance growth through diversification strategies in innovative products such as *Murabaha*, *Musharaka*, *Ijara* and other innovative services provided that the growth is supported by adequate liquidity and capitalization.

Implementation of dual banking in Kenya would require reframing of banking laws, restructuring of the economic system and reshaping the society according to dictates that support commercial banks operating shariah compliant banking. Financing under profit and loss sharing agreement requires a conducive environment that promotes ethics, integrity and values of the society it seeks to serve. The banking system generally should develop a risk bearing instruments that provides investors and shareholders a sufficient degree of profitability, security and liquidity. Majority of the countries presently operate shariah banking with fixed exchange rates that are subject to liquidity shocks. When Commercial banks lack appropriate processes, capacities and tools to offset the liquidity shocks, they can be transmitted to the financial system and therefore greatly impact financial and economic cycles. The conduct of monetary policy can be interfered with by the government cash management whenever public treasuries


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