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ABSTRACT

The purpose of this study was to examine the effect of Central Bank of Kenya regulations on the financial performance of Microfinance banks. The study employed a descriptive design. The target population of this study was the 13 Microfinance banks licensed by the Central Bank of Kenya as at 31st December 2016. A census study was conducted where all the 82 staff working in the Risk, Compliance and Finance departments of all Microfinance banks in Kenya were included in the sample. The study relied on both primary and secondary data. Data was analyzed by aid of Statistical Package for Social Sciences (SPSS). The study revealed that capital adequacy affects the financial performance of Microfinance banks greatly and deduced that the core capital/ total risk weighted assets (TRWA) ratio of 10% and total capital/ total risk weighted assets (TRWA) ratio of 12% are high and the capital requirement of Kshs. 60 million for nationwide Microfinance banks was high and Kshs. 20 million for community Microfinance banks was moderate. The study also found that statutory requirements affect the financial performance of Microfinance banks greatly where it deduced that liquidity ratio of 20% is high for Microfinance banks in Kenya and led to reduced financial performance. The study further showed that operational requirements affect the financial performance of the Microfinance banks greatly. The study finally indicated that financial reporting requirements affect the financial performance of Microfinance banks greatly. The study concluded that statutory requirements had the greatest effect on the financial performance of Microfinance banks in Kenya, followed by capital adequacy, then operational requirements while financial reporting requirements had the least effect on the financial performance of Microfinance banks in Kenya. The study recommended that in order to facilitate favorable financial performance of MFBs, the institutions should prudently manage their liquidity, minimum capital requirements should be set based on the institutions risk appetite and the institutions should explore strategies to improve their operational efficiency.

Key Words: Capital Adequacy Requirements, Statutory Requirements, Operational Requirements, Financial Reporting, Financial Performance of Micro Finance Banks

INTRODUCTION

Microfinance institutions (MFIs) play a vital role in the economic development of many developing countries (Hartungi, 2007). However, MFIs face many challenges including the lack of proper regulatory environment in most of the countries. Despite the lack of proper regulatory environment for MFIs in many countries, the tremendous growth of the sector in the last decade has led to increased demand for regulation, which is critical for the enhancement of the financial performance of the institutions (Cull, Demirg-Kunt, & Morduch, 2011). Regulation enhances the sustainability of Microfinance banks since it requires formal ownership and governance structures, that are vital for continued sustainability to be defined (Mersland, 2008). The management of Microfinance banks are also constantly monitored through regular reporting and disclosure requirements (Christen, Lyman, & Rosenberg, 2003). Regulation and supervision also ensure that Microfinance banks are run prudently and cases of the poor losing money through fraud or incompetence are minimized (Kimando, Kihoro, & Njogu, 2012).

Regulation for Microfinance institutions can either be prudential or non-prudential. Microfinance institutions which accept deposits from consumers are governed by prudential regulation. Prudential regulation is aimed at protecting the financial system as a whole, as well as protecting the safety of small deposits in individual institutions. Prudential regulation includes regulation of capital adequacy and liquidity of Microfinance institutions. Prudential regulation also covers other issues for Microfinance institutions such as risk-management, governance, operations, financial reporting, large exposures limits, loan-loss provisions among others. Prudential regulations also specify performance indicators to be adhered to, hence the public builds trust on the regulated institutions and are willing to save with them (Christen et al., 2003). Microfinance

institutions involved in lending-only activities are subjected to non – prudential regulation (Hubka & Zaidi, 2005).

Globally, in an effort to protect depositors, many governments have introduced Microfinance legislations and regulations (Cull, Demirg-Kunt, & Morduch, 2009). However, different countries have adopted different models for the regulation of Microfinance banks. Microfinance institutions can either be regulated under the existing banking law regulation, through a special law regulation or be self-regulated (Haq, Hoque, & Pathan, 2008; Staschen, 2003). Countries are also at different levels of development in Microfinance legislation. In the European union, the legal framework for MFIs in member states, ranges from dedicated legislation for microfinance provision to specific provisions on micro lending in the law regulating the banking or NGO sector. For example, in Romania and France, the legal framework contains specific rules relating to microcredit and non-banking institutions. Italy has legislation for the creation of non-bank microfinance institutions, while Spain has no specific microfinance law (European Microfinance Network, 2012).

In the East African region, deposit taking Microfinance institutions are licensed and supervised by Central banks. In Rwanda, the National Bank of Rwanda (BNR) is mandated to regulate and supervise Microfinance Institutions. Microfinance institutions include Savings and Credit Co-operatives (SACCOs) and limited companies that operate microfinance activities (Micro Finanza Rating, 2015; Republic of Rwanda, 2013). In Burundi, microfinance institutions are regulated and supervised by the Bank of the Republic of Burundi (BRB) (BRB, 2012).

In Kenya, although the microfinance sector is one of the most vibrant in Sub-Saharan Africa with diversity of institutional forms and good

infrastructure to serve the poor, microfinance activities were not regulated until the enactment of Microfinance Act of 2006, and later the Microfinance (Deposit Taking Institutions) Regulations, 2008. The Microfinance Act of 2006 which came into effect on 2nd May 2008, paved way for the licensing of Microfinance banks, which were previously referred to as Deposit Taking Microfinance Institutions (DTMIs). The Act authorizes the Central Bank of Kenya (CBK) to license, regulate, and supervise the activities of Microfinance banks in Kenya (Wanjiru, 2012, Republic of Kenya, 2006).

Statement of the Problem

The regulatory framework for microfinance banks in Kenya is stringent leading to sub-optimal financial performance. The regulatory framework which include the Microfinance Act, 2006 and the Microfinance (Deposit Taking Institutions) Regulations, 2008 was designed to promote the performance and sustainability of Microfinance banks, however, it has been regarded as stringent by Microfinance practitioners (FSD, 2012). Majority of Microfinance banks in Kenya have made losses since the first institution was licensed by the Central Bank in 2009. Most of the licensed Microfinance banks have recorded negative profit growth (Ali, 2015; Otieno, Nyagol, & Onditi, 2016). In 2010, one out of the two licensed Microfinance banks made losses (CBK, 2011). In 2011, three out of the six licensed Microfinance banks made losses (CBK, 2012). In 2012, one out of the six licensed Microfinance banks made losses while in 2013, four out of the nine licensed institutions made losses (CBK,2013; CBK, 2014). In 2014, two out of the nine licensed institutions made losses, while in 2015 six out of the twelve licensed institutions made losses (CBK, 2015; CBK, 2016). Between 2010 and 2016, out of the thirteen institutions licensed, only two did not make any losses.

The regulatory framework requires Microfinance banks to adhere to stringent capital, statutory, operational and financial reporting requirements. In regard to capital, Microfinance banks are required to maintain Core Capital to Total Risk Weighted Assets (TRWA) and Total Capital to TRWA ratios of 10% and 12% respectively. On statutory requirements, the institutions are required to maintain a liquidity ratio of 20% at all times (Republic of Kenya, 2006; Republic of Kenya, 2008a). Bad regulation can stifle Microfinance institutions to the point of rendering them out of business while good regulations can enhance their performance. Complying with the regulations can be costly for the institutions thus hurting their performance (Debapratim, Trilochan, & Biswajit, 2014). When Microfinance banks make losses or minimal profits because of costly and stringent regulations, investors are discouraged from venturing into the sector which has been identified as critical in the realization of the financial sector goals under Vision 2030 (Republic of Kenya, 2007). Many non - regulated Microfinance institutions are also discouraged from seeking to be regulated (Ndambu, 2011).

Studies carried out around the globe on the effect of regulations on financial performance have concentrated on commercial banks whose regulatory requirements are different from those of Microfinance banks. Such studies include King'ang'ai, Kigabo, Kihonge and Kibachia (2016) on the relationship between regulation and financial performance of commercial banks in Rwanda; and Aymen (2013) on the impact of capital on the financial performance of banks in Tunisia. Studies on Microfinance globally such as by Adeyemi (2008) and Nzaro, Njanike, & Jaravani (2013) have concentrated on general factors affecting their financial performance with some excluding regulation. In Kenya, studies by Ali and Okibo (2015), Mabeya, Nyakundi and Abuga (2016) and

Mwando (2013) on the effect of regulations on financial performance were carried out on commercial banks, while studies by Biwott, Asienga, Oketch and Mutai (2015) and Otieno, Okengo, Ojera and Mamati (2013) were conducted on Savings and Credit Co-operative Societies (Saccos).

Studies on the effect of regulation on the financial performance of Microfinance banks in Kenya have focused on a few aspects of the regulatory framework. For example, Otieno et al (2016) studied the effect of liquidity on financial performance of Microfinance banks. Factors such as capital, statutory and financial reporting requirements and their effect on financial performance have not been adequately covered. How the Central Bank of Kenya's regulatory framework affects the financial performance of Microfinance banks is therefore, not well covered. Therefore, the study seeks to fill this existing gap by investigating the effect of Central Bank of Kenya regulations on the financial performance of Microfinance Banks.

Objectives of the Study

The general objective of the study was to investigate the effect of Central Bank of Kenya regulations on the financial performance of Microfinance banks in Kenya. The specific objectives were:-

- To determine the effect of capital adequacy regulatory requirements on the financial performance of Microfinance banks in Kenya.
- To establish the effect of statutory requirements on the financial performance of Microfinance banks in Kenya.
- To determine the effect of operational requirements on the financial performance of Microfinance banks in Kenya.

- To assess the effect of financial reporting requirements on the financial performance of Microfinance banks in Kenya.

LITERATURE REVIEW

Theoretical Review

Public Interest Theory of Regulation

The public interest theory was first developed by Pigou (1938). The public interest theory proposes that government regulation is a response to public demands for government to rectify situations of market failure through imperfect competition, market disequilibria, missing markets or market outcomes that are undesirable for social reasons (Hertog, 2002). The public interest theory of regulation assumes that market outcome represents a failure, and the markets do not have the ability to fix the problem itself, that the governments have the ability to fix the failure so that the optimal efficient outcome will be achieved and that the benefits will outweigh the additional costs created by the intervention. The public interest theory also assumes that the regulatory regime achieve economic efficiency (Hertog, 2002; Shleifer, 2005).

The public interest theory of regulation also postulates that governments have to institute regulations since all individuals, including public servants, are driven by self-interest (Hantke-Domas, 2003). The theory has been used as a prescription of what governments should do, and as a description of what they actually do, and has been used to justify much of the growth in public ownership and regulation over the twentieth century (Shleifer, 2005). The public interest theory of regulation is critical in the exposition of why governments play a critical role in regulation and has been cited in studies by Mabeya et al., (2016) and Otieno et al., (2013). The above theory influenced the general objective of the study on the

effect of Central Bank of Kenya regulations on financial performance of Microfinance banks.

Regulatory Capture Theory

The regulatory capture theory is associated with Stigler (1971) and Posner (1974). The regulatory capture theory provides a contrary perspective of regulation and argues that although regulation is often introduced to protect the public, the regulatory mechanisms are often subsequently controlled so as to protect the interests of particular self-interested groups within the society. The theory as advanced by Posner (1974) postulates that in the course of time, regulation will come to serve the interests of the branch of industry involved. Regulatory capture occurs where, due to industry control of information, the effect of repeated interactions and career opportunities, the regulator comes to serve the interests of the regulated (Posner, 1974). This can be through direct subsidies, entry restrictions or tariffs, controls on substitutes, or price fixing (Stigler, 1971).

Regulatory capture could occur, for example, where an agency was established to conduct occupational regulation for quality reasons and became captured by that same profession to achieve benefits for incumbents through entry restriction (Guerin, 2002). Regulatory capture, cautions that regulation of an industry may result from the effort of incumbents to create and extract rents and to prevent entry by new competitors (Stigler, 1971). Regulatory capture in microfinance could occur where, established MFI networks may promote regulation to prevent entry by future competitors or limit their access to donor funds and socially responsible equity investments (McIntosh & Widyck, 2005). The theory is critical in explaining the interactions between regulators and interested groups such as Microfinance banks and has been cited in studies on regulation such as Mabeya et al., (2016) and Korutaro (2013).

The Buffer Theory of Capital Adequacy

The buffer theory by Calem and Rob (1996) postulates that a bank approaching the regulatory minimum capital ratio may have an incentive to boost capital and reduce risk in order to avoid the regulatory costs triggered by a breach of capital requirements. The theory is anchored on the volatility of capital adequacy ratio as well as reliability and dependability on capital for long term planning. Banks face the danger of erosion of their capital base if they are unable to mobilize sufficient deposits. In that case, the bank may be endangered by the volatility of capital adequacy ratio. Hence, the theory postulates that banks may prefer to hold a 'buffer' of excess capital to reduce the probability of falling under the legal capital requirements, especially if their capital adequacy ratio is very volatile. The capital buffer is the excess capital a bank holds above the minimum capital required. This is to hedge against prolonged undercapitalization and avoid sanctions and possible closure by the regulatory authorities which consider breach of the capital requirements as a major infringement of banking legislation (Tochukwu, 2016).

According to Milne and Whalley (2001), regulations are developed targeting the creation of adequate capital buffers. Regulations are designed to reduce the procyclical nature of lending by promoting the creation of counter cyclical buffers (Khrawish, 2011; Ochei, 2013). The capital buffer theory proposes that banks with low capital buffers attempt to rebuild an appropriate capital buffer by raising capital and banks with high capital buffers attempt to maintain their capital buffer. More capital tends to absorb adverse shocks and thus reduces the likelihood of failure. Banks raise capital when portfolio risk goes up in order to keep up their capital buffer. Poorly capitalized banks may be tempted to take more risk in the hope that higher

expected returns will help them to increase their capital (Ochei, 2013). Therefore, the relationship between capital adequacy and profitability can either be positive or negative depending on the risk taking behavior of the institution. The theory is relevant in explaining the relationship between capital adequacy and financial performance. The theory has been cited mostly in studies on capital adequacy of banks such as Karanja and Nasikeu (2016), Kariuki and Wafula (2016), Ochei (2013), Sheefeni (2016) and Tochukwu (2016).

The Shiftability Theory of Liquidity

The shiftability theory of bank liquidity was propounded by Moulton (1918). The shiftability theory of liquidity holds that banks can shield themselves against massive deposit withdrawals by holding credit instruments for which there is a ready secondary market as a form of liquidity reserve. Among the liquidity reserves are commercial paper, prime banker's acceptances and treasury bills. The instruments are marketable because of their short-terms to maturity and capital certainty. Thus holding liquid assets with a ready market enables commercial banks to minimize vulnerability to liquidity risk which affect financial performance (Sheefeni, 2016). The theory postulates that a bank's liquidity is maintained if it holds assets that could be shifted or sold to other lenders or investors for cash. The theory contends that a bank's liquidity could be enhanced if it always has assets to sell and provided the Central bank and the discount market are ready to purchase the asset offered for discount.

The theory recognizes that shiftability, marketability or transferability of a bank's assets is a basis for ensuring liquidity. The theory further holds that highly marketable security held by a bank is an excellent source of liquidity (Ibe, 2013). The theory also argues that commercial banks capital absorbs risk and expands banks' risk – bearing

capacity (Okpala, 2013; Thadden, 2004). The risk absorption proposition predicts that higher capital ratios are positively related to liquidity levels and enhances the ability of banks to create liquidity. Theory has been identified as relevant in studies on bank liquidity and financial performance by Ibe (2013), Muriithi and Waweru (2017), Musembi, Ali and Kingi (2016) and Sheefeni (2016). The theory is thus relevant in the determination of the appropriate capital adequacy and liquidity which determine the risk-bearing capacity which has a direct bearing on financial performance.

The Classical Theory of the Firm

The classical theory of the firm began with the emergence of economic science in the 18th century, which took as its main reference the study of Adam Smith on the origins of the wealth of nations (Boaventura, Silva, & Bandeira-de-Mello, 2012). During the 20th century, studies, such as that of Coase (1937) on transaction costs, enriched and developed the theory of the firm. This theory asserts that a firm is a "black box" operated so as to meet the relevant marginal conditions with respect to inputs and outputs, thereby maximizing profits (Kantarelis, 2007). The theory of the firm establishes profit maximization as its goal. The assumption was made that firms, or owners of firms, would set the marginal cost (MC) of production, that is; the cost of the last unit of production, to equal the marginal revenue (MR), that is; the revenue received from selling that last unit of production. Mathematically this gives a maximum amount of profit, if profit is defined as total revenue minus total costs (Crossan, 2005).

However, profit maximization requires a more specific definition, such as if it is accounting or economic and short or long term, among other characteristics. Jensen (2001) clarifies that, for economists, the objective of the firm should be to seek maximization of the long-term market value,

resulting from the ability to generate cash over time. Maximizing the company's value maximizes the shareholder's wealth. The theory is relevant to the study since it explains profitability, the independent variable and a commonly used measure of financial performance.

Conceptual Framework

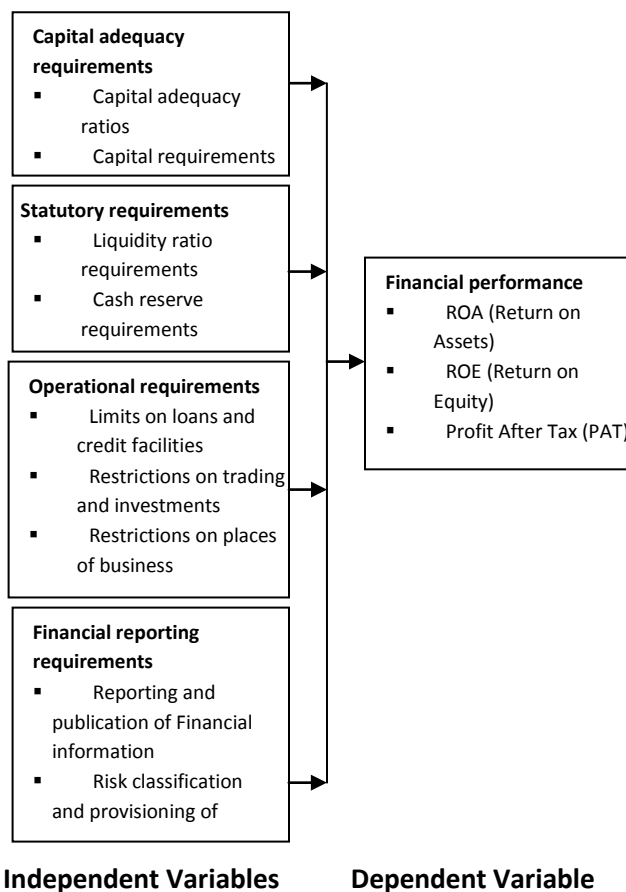


Figure 1: Conceptual framework

Capital adequacy requirements and Financial Performance

Capital adequacy requirements could either be inform of capital adequacy ratio (CAR) or minimum amount of capital to be maintained by a Microfinance bank (Staschen, 2003). In 1988, the first Basel Capital Accord was published, recommending a risk-weighted capital adequacy

ratio (CAR) of 8% for all internationally active banks. Since then, the ratio has gained worldwide acceptance as the minimum standard for all financial institutions. Capital adequacy ratio (CAR) protects depositors as MFIs grow in size and expand their risk profile (Haq et al., 2008).

It is generally recommended that stricter capital adequacy requirements be imposed for Microfinance banks than for traditional banks. Different countries have set different capital adequacy ratios for MFIs, over the years (Staschen, 2003). However, the majority of MFIs in most countries must maintain CAR at minimum of 8% of risk weighted assets (Haq et al., 2008). In Kenya, the minimum ratio's for core capital to TRWA's and total capital to TRWA's are 10% and 12% respectively (Republic of Kenya, 2006). For minimal capital, each country also sets a minimum capital for the institutions depending on whether it's a deposit taking or a credit only institution (Staschen, 2003). In Kenya, Microfinance banks are required to hold core capital of at least sixty million Kenya shillings per year for nationwide Microfinance banks and twenty million shillings for community Microfinance banks (Republic of Kenya, 2006).

According to Christen and Rosenberg (2000) regulations such as those on capital adequacy, should not impose disproportionate costs to Microfinance banks, which may lead to poor financial performance. Meagher (2002) argue that high minimum capital requirements have an impact on Microfinance performance. However, the debate is on how much capital is enough. Beckmann (2007) argue that high capital leads to low profits since banks with a high capital ratio are risk-averse. However Gavila and Santabarbara (2009) argues that, although capital is expensive in terms of expected return, highly capitalized banks face lower cost of bankruptcy.

Very large capital requirements may reduce investment opportunities which negatively impact performance. However, to prevent bank failures and protect the interests of depositors, it is necessary to require banks to maintain high levels of capital adequacy (Aymen, 2013). According to Mathuva (2009), core capital can contribute to the profitability of a bank, since capital enables the bank to collect more deposits, lend more to the public, thus earn higher revenues and thus make higher profits. Thus well capitalized banks should be profitable than lowly capitalized banks. The argument also applies to Microfinance banks that, well capitalized institutions and high capital ratios should lead to better performance.

Statutory Requirements and Financial Performance

In Kenya, the Microfinance Act require every Microfinance bank to maintain a minimum holding of liquid assets of twenty per cent of its deposit liabilities (Republic of Kenya, 2008a). The levels of liquidity do affect profitability to a certain extent. Liquid assets are associated with lower rates of return or none at all and thus too many liquid assets would lead to lower profitability (Belydah & Ondigo, 2016). According to Christian and Rosenberg (2000), high liquidity requirements by Central banks can affect the financial performance of Microfinance banks.

Microfinance banks need ample supply of cash to not only meet withdrawal and credit extension needs, but also to withstand various types of liquidity shocks. Simultaneously, holding too much cash, leads to over-liquidity for which firms may pay a cost thus affecting their financial performance (Valdemar, Encinas, & Imperio, 2007). Many countries require banks to maintain reserves, held as cash in the bank's vault or by the central bank, equal to a percentage of deposits or certain types of deposits (CGAP, 2012). Mishkin (2016) argues that increase in reserve ratios by monetary authorities

leads banks to contract their loans, leading to reduced financial performance. CBK since the beginning of 2015 requires Microfinance banks to maintain at CBK at least 3% of their deposits on a daily basis and on a monthly basis, on average 5.25% of the total deposits. According to Christian and Rosenberg (2000), capital adequacy and cash reserve requirements for Microfinance institution's imposed by Central banks in a number of countries has led to credit constraints in the microfinance sector because a major portion of their liquidity is held up in these reserves, thus affecting their financial performance.

Cash reserves increase the cost of deposit-raised capital. Given the below-market rate or the zero rate often paid on these reserves, such a requirement can squeeze out small depositors by raising the minimum deposit size that banks or MFIs can handle profitably. Reserve requirements restrict the proportion of deposits available for on-lending; with less credit to disperse thus affecting microfinance banks financial performance (CGAP, 2012).

Operational Requirements and Financial Performance

Regulations put in place by regulators to reduce the overall risk of Microfinance institutions include limits on loan size, restrictions on loans to insiders and restrictions on credit to certain sectors. The main rationale for limiting loan sizes is to contain risk concentration. A few large loans that turn bad can pose great risk to the soundness of an MFI (Staschen, 2003). However, the restrictions may hinder Microfinance banks from lending large loans thus lose out on business. Thus regulation of credit risks such as limits on the maximum amount that MFIs can lend to a single person or microenterprise can affect the microfinance institutions performance (Chance, 2011).

Regulators stipulate the maximum loan size, expressed as a percentage rate of capital or as an absolute amount (Staschen, 2003). In Kenya, Microfinance banks are not allowed to extend loans exceeding five percent of their core capital to a single borrower; while any single insider or associate cannot borrow more than two percent of the institutions core capital. The aggregate amount of microfinance loans should be equivalent to or more than seventy percent of their total loan portfolio, while large exposure loans are not supposed to be more than thirty percent of the institutions total loan portfolio (Republic of Kenya, 2008a).

The prohibition in certain countries for MFIs to provide financial services beyond microcredit is a barrier to the expansion of microfinance. MFIs should have the possibility to engage in a wider scope of financial services, including savings deposits, insurance, mortgages and mobile banking. Deposits are particularly important for MFIs to reach financial sustainability and enhance performance (Hubka & Zaidi, 2005). In Kenya, the Microfinance Regulations prohibits Microfinance banks from acquiring or holding, directly or indirectly, any part of the share capital or have a beneficial interest in any financial, commercial, agricultural, industrial or other undertaking, where the value of their interest exceeds twenty five percent in aggregate of the institution's core capital (Republic of Kenya, 2008a). Microfinance banks in Kenya are also not allowed to engage in trust operations, investing in enterprise capital, wholesale or retail trade, underwriting or placement of securities or purchase or acquisition of any land except as may be reasonably necessary for the purpose of expanding microfinance business (Republic of Kenya, 2006).

Banking regulations often dictate requirements for branches such as security standards, working hours or limitations on location. When applied to

microfinance, these rules can interfere with innovations that reduce costs, thus impacting on the MFIs performance (Christen & Rosenberg, 2000). In Kenya, the Microfinance regulations require Microfinance bank to seek written approval from the Central bank prior to the opening, closing or relocating a place of business. Branches have to comply with stringent security requirements including fire-proof safes, closed-circuit cameras and security personnel (FSD, 2012, Republic of Kenya, 2008a).

Requirements related to branches such as security requirements like armed guards, vaults or infrastructure rules could make it too costly for MFIs to open branches in poor, remote, or sparsely populated areas (CGAP, 2012). Costly restrictions on places of business may impede financial performance. Hirschland (2003) asserts that Microfinance banks which focus on development of physical infrastructure leads to high operating costs and resultantly prospective borrowers to the larger extent cannot be served, because major portion of their budget is utilized for their operational setup. It may eventually lead to decline in performance due to lost business.

Financial reporting requirements and Financial Performance

According to CGAP (2012), reporting to a supervisory authority can add substantially to the administrative costs of financial intermediaries. Different countries have different reporting requirements for Microfinance banks (Meagher, 2002). Hubka and Zaidi (2005) argue that reporting requirements should be simpler for depository MFIs than for conventional retail banking operations, due to the nature of their operations. Some arguments have also been advanced for fairly stringent reporting systems for MFIs, given the relatively undiversified nature of their loan portfolios, and the potential for rapid deterioration of loans. Reporting

requirements may be varied. For example, the Central bank may require external audit and for MFIs to publish their financial accounts in local newspapers. Other disclosure requirements require MFIs to report their loan loss provision, loan loss reserve and write offs (Haq et al., 2008).

According Meagher (2002) reporting could either be monthly, biweekly, or weekly. The Central Bank of Kenya, under the Microfinance regulations require Microfinance banks to report liquidity information, twice a month. Microfinance banks are also required to prepare and submit to CBK audited financial statements within three months after the end of each financial year. Microfinance banks are required to publish audited financial statements in a newspaper of nationwide circulation at the end of the financial year. The institutions are also required to prepare un-audited monthly financial statement and submit to the CBK within fifteen days after the end of each month (Republic of Kenya, 2008a). According to Hubka and Zaidi (2005), the requirements for prudential reporting may place unnecessary financial burdens on MFIs, inform of information and communications infrastructure and staffing leading to subdued performance.

Classification of loans and the specification of provisioning are also important regulatory requirements. Staschen (2003) argue that provisioning requirements for Microfinance banks should be more conservative than for traditional banks, as microloans have more frequent payment installments than traditional loans. Meagher (2002) and Conroy and McGuire (2000) have also argued for careful monitoring and rapid provisioning of Microfinance loans than commercial loans. The provisioning requirements vary considerably among countries (Staschen, 2003). In many countries, a general provision on the whole outstanding loan portfolio has to be made, while special provisions

are made depending on the number of days payments are overdue.

In Kenya, Microfinance banks are required to classify loans and advances as prescribed by the CBK as per the number of days payment is overdue. Loans are therefore classified as either normal, substandard, watch, doubtful or loss. For normal loans the rate for provisioning is 1%, for watch loans the rate is 5%, for substandard loans the rate is 25%, for doubtful loans the rate is 75%, while for loans classified as loss the rate is 100% (Republic of Kenya, 2008a). According to Cavallo and Majnoni (2002) provision for doubtful loans reduces the net profit of banks and consequently reduces the amount of dividends paid to shareholders.

Financial Performance

Financial performance refers to the degree to which financial objectivities are being or has been accomplished (Ravinder & Anitha, 2013). According to Adabenege and Yahaya (2015) financial performance is the process of measuring the results of firm's policies and operations in monetary terms. It is used to measure firms overall financial health over a given period of time. There are a number of financial performance measures, however, there is little consensus about which instrument to apply. According to Hoque et al., (2012), financial performance measures can be divided into two major types: one, accounting-based measures such as Return on Assets (ROA), Return on Equity (ROE) or Return on Sales and two, market-based measures such as the Tobin's Q ratio.

Tomuleasa and Cocris (2014) argue that bank performance is expressed by three representative indicators, namely ROA, ROI and Net Interest Margin (NIM). However, the choice of the financial performance measure depends on the objective of the measure. According to Ceylan, Emre and Asl (2008) and Ross, Westerfield and Jaffe (2010), the

most common measure of bank performance is profitability. Bank profitability is the net after-tax income, profit after tax (PAT) or net earnings of a bank (Gwaya & Mungai, 2015). The two main measures of bank profitability are the Return on a bank's assets (ROA) and Return on Equity (ROE). Thus, financial performance in this study will be conceptualized in terms of Return on Assets (ROA), Return on Equity (ROE) and Profit after tax (PAT).

ROA indicates how capable the management of the bank has been in converting the institution's assets into net earnings (Sunday, Turyahebwa, Byamukama, & Novembrieta, 2013). ROA also gauges the operating and financial performance of the firm (Klapper & Love, 2002). ROA is calculated by dividing a company's annual earnings by its total assets. ROE is the amount of net income returned as a percentage of shareholders equity. ROE measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is calculated by dividing Net Income by Shareholder's Equity. Studies by Albertazzi and Gambacorta (2009), Athanasoglou, Brissimis and Delis (2008), Dietrich and Wanzenried (2011), Mahoney and Roberts (2007) and Pasiouras and Kosmidou (2007) have considered at least one of the mentioned variables. In Kenya, ROA and ROE has been used in many studies as a measure of financial performance such as by Gwaya and Mungai (2015), Muriithi and Waweru (2017), Ongore and Kusa (2013) and Otieno et al., (2016).

Good bank performance rewards shareholders with sufficient return for their investment, while poor banking performance has a negative repercussion on economic growth and development and can lead to runs, failures and crises (Ongore & Kusa, 2013). This applies equally to Microfinance banks.

Empirical Literature Review

Capital Adequacy Requirements

Kariuki and Wafula (2016) studied the relationship between capital adequacy and financial performance of deposit taking saving and credit co-operative societies in Kenya as at 31st December 2014 using a sample of 103 Deposit taking Sacco's. The study used three proxy ratios to measure financial performance namely; return on assets (ROA), return on equity (ROE) and net interest margin (NIM). Capital adequacy was measured using two ratios namely; core capital to total assets and core capital to total deposits. The results revealed that there exists positive significant relationship between financial performance and capital adequacy ratios, indicating that as the amount of capital held increases, financial performance is enhanced.

Karanja and Nasieku (2016) conducted a study on the effect of capital on the financial performance of Commercial Banks in Kenya between 2010 and 2014. The specific objectives of the study were to determine the effect of core capital, subordinate capital and risk weighted capital on the financial performance of commercial banks in Kenya. The study concluded that the level of core capital and subordinate capital positively affects the financial performance of the commercial banks in Kenya. Onoyere (2014) in a study conducted in Nigeria concluded that some of the major challenges for Microfinance banks include poor capitalization and restrictive regulatory and supervisory procedures. It was established that the low capital base and the isolated mode of operation had hindered any meaningful contributions to statutory requirements. It was established that low capital base of microfinance banks hinder the ability of the institutions to meet the demand for their clients, thus affecting their performance.

Aymen (2013) examined the impact of capital on the financial performance of banks in Tunisia. The study used a static panel to study empirically the

relationship between capital and financial performance by approximating the capital by the ratio of equity/total assets and financial performance by three measures, that is ROA (Return on assets), ROE (Return on equity) and NIM (net interest margin). Through a sample of 19 banks in Tunisia over the period of 2000-2009, he found that the relationship between capital and financial performance as measured by ROA, ROE and NIM was positive. But only the relationship between capital and ROA was statistically significant.

Statutory Requirements

Otieno et al., (2016) undertook a study to establish the relationship between liquidity risk management and financial performance of Microfinance banks in Kenya. The independent variables were financial gap ratio and capital adequacy ratio while financial performance was measured by ROA and ROE. Longitudinal research design utilizing panel data covering the period from 2011 to 2015 was used with the target population comprising the 12 licensed Microfinance banks. Purposive sampling was used to obtain a sample of 6 MFBs. The findings revealed a moderate correlation and a significant positive relationship between both financial gap ratio and capital adequacy ratio and the financial performance measures.

Muriithi and Waweru (2017) also examined the effect of liquidity risk on financial performance of commercial banks in Kenya, between 2005 and 2014 for all the 43 registered commercial banks. Liquidity risk was measured by liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) while financial performance was measured by return on equity (ROE). The findings established that NSFR is negatively associated with bank profitability while LCR does not significantly influence the financial performance of commercial banks in Kenya. However, the overall effect was that liquidity risk has a negative effect on financial performance.

A study conducted by Odunga, Nyangweso and Nkobe (2013) on the effect of liquidity and capital adequacy on the operating efficiency of commercial banks in Kenya, concluded that operational efficiency ratio, liquid assets to short-term liabilities ratio and total capital ratio positively and significantly affect a bank's operating efficiency. Kahuthu, Muturi and Kiweu (2015) undertook a study to ascertain if liquidity and credit management had any impact on the financial performance of deposit taking SACCOs in Kenya. To ascertain whether the two variables had any role, the study examined the beta coefficients before establishment of prudential regulations for SACCO's in Kenya in 2010 and the beta coefficients after 2010. The findings established that liquidity and credit management had great impact on SACCO's financial performance.

Biwott et al., (2015) conducted a study to investigate the effect of government regulation on performance of small Saccos in Nairobi City County, Kenya. The study sought to determine the effect of regulation requirements, that is statutory deposit requirements, management qualification requirements, and membership regulation requirements on the performance of small Saccos. The main finding of the study was that implementation of government regulations had improved performance of the Saccos. The study also established that statutory deposit regulations positively affect Sacco liquidity. In conclusion the regulation has positive effect on the performance of Saccos in Nairobi County, Kenya.

Operational Requirements

Mwando (2013) conducted a study to establish the contributions of agency banking regulations on the financial performance of the commercial banks in Kenya. This study adopted a descriptive survey. The study found that operational requirements on agency banking had a positive influence on the

financial performance of commercial banks in Kenya. A study on Microfinance operations in Nigeria by Clementina and Gabriel (2015), concluded that the mode of operation for Microfinance banks in Nigeria leads to high operating costs leading to poor financial performance.

Wangai, Bosire and Gathogo (2014) undertook a study to establish the effect of non-performing loans on financial performance of microfinance banks (MFBs) in Kenya. The study was conducted for microfinance banks in Nakuru town, Kenya. The independent variable was credit risk while the dependent variable was financial performance. The study established that credit risk significantly affected financial performance of MFBs in Nakuru town, while credit risk negated MFBs' financial performance.

A study on Microfinance bank operations in Nigeria by Clementina and Gabriel (2015), concluded that costly operational requirements such as office and branch networks hinders their financial performance.

Financial Reporting Requirements

Ali and Okibo (2015) conducted a study on the effect of prudential regulations on the financial performance of Commercial banks operating in Kisii County, Kenya. The study focused on the effect of risk classification and provisioning of assets, capital adequacy regulation and liquidity management on the financial performance of commercial banks operating in Kisii County, Kenya. The study findings showed a strong and positive correlation between risk classification, capital adequacy, liquidity management and financial performance of commercial banks operating in Kisii County, Kenya.

Mabeya et al., (2016) studied the effect of implementation of prudential guidelines on the

profitability of Commercial Banks in Kenya, with focus in Kisii County. The study used descriptive survey to study 20 commercial banks located in Kisii, Kenya. The study established that loan loss prudential guidelines, risk management, corporate governance and consumer protection very highly affects the profitability of commercial banks in Kenya. Using a sample of 4,392 banks in German over the period 1994-2011, a study by Domikowsky, Bornemann, Duellmann, & Pfingsten (2014) established that increased loan loss provision during downturns in the economy may reduce banks' regulatory capital and induce cuts in lending by banks. They concluded that this may amplify the swings of the business cycle and decrease financial stability, which is undesirable.

A study by Clementina and Gabriel (2015) in Nigeria, indicated that Microfinance bank requirements such as engagement of external auditors and filling of monthly returns leads to increased operational costs which hampers financial performance.

Financial Performance

Belydah and Ondigo (2016) carried out a study on the determinants of financial performance of Deposit-Taking Microfinance Institutions (now referred to as Microfinance banks) and Co-operative Societies registered with the Sacco Societies Regulatory Authority (SASRA) in Kenya between 2009 - 2011. The study found a positive relationship between profit ratio and interest income ratio, non- interest income ratio, asset quality ratio and financing ratio. The other finding from the results was that there was negative relationship between profit ratio, non- interest expense ratio and liquidity ratio.

Kimando et al., (2012) undertook a study on the factors influencing the sustainability of Microfinance institutions in Murang'a Municipality in Kenya. They concluded that the government

policies related to MFIs such as the law that covers the microfinance in Kenya, and the supervision of the microfinance institutions influences the success and the sustainability of the microfinance institutions. Mairura and Okatch (2015) conducted a study on the factors affecting profitability in Microfinance Institutions for selected institutions in Nairobi. The objectives of the study were to establish the extent to which debt collection process, central bank regulations and credit vetting affect the profitability of MFIs. From the findings of the study, it was established that debt collection process and Central bank regulations affect the profitability of MFIs.

Gichinga and Tsuma (2016) undertook a study to identify the factors that influence the financial performance of commercial banks in Kenya. The factors which were analyzed are capital adequacy, liquidity, credit risk, interest rate and inflation rates. The study concluded that change in capital requirements affects the financial performance of commercial banks because funds that were to be lent out to earn interest income are put up as capital thus denying commercial banks revenue.

Ongore and Kusa (2013) also conducted a study to establish the determinants of financial performance of commercial banks in Kenya. The independent variables were bank specific factors such as capital adequacy, asset quality, management efficiency, liquidity management; and macroeconomic variables including GDP growth rate and inflation rate. The dependent variables representing performance were Return on assets (ROA), Return on Equity (ROE) and Net interest Margin (NIM). The findings showed that bank specific factors significantly affect the performance of commercial banks in Kenya, except for the liquidity variable. However, the overall effect of macroeconomic variables was inconclusive at 5% significance level.

Otieno et al., (2013), carried out a study to assess the effect of government's financial regulations on the financial performance in SACCOs in Kisii Central, Kenya. The study adopted descriptive research design and purposive sampling method. The study established that there was a positive but weak significant relationship between the level of financial performance and the government financial regulations, because only 26.2% of the variations in the financial performance could be explained by the implementation of government financial regulations.

RESEARCH METHODOLOGY

A descriptive research design determines and reports the way things are (Mugenda & Mugenda, 2003), and is concerned with why and how a variable produces change in another (Cooper & Schindler, 2003). A descriptive study was chosen because it enabled generalization of the findings to the population. The population of the study was the 13 Microfinance banks licensed by the Central Bank of Kenya as at 31st December 2016. The target population was the staff working in the Risk, Compliance and Finance departments of the 13 Microfinance banks licensed in Kenya as at 31st December 2016. Thus the target population was 82 respondents. The research relied on primary and secondary data. The data collection instruments used were a questionnaire which was designed using the variables identified as important for meeting the study objectives. The multivariate regression model used was of the form:-

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where Y is the financial performance of Microfinance banks in Kenya, β_0 is the intercept, β_1 , β_2 , β_3 , β_4 were regression coefficients, X_1 was capital adequacy, X_2 was statutory requirements, X_3 was operational requirements, X_4 was financial reporting requirements, while e represented the

error margin for other variables that may not have been captured.

RESEARCH FINDINGS

Effect of Capital Adequacy Requirements on Financial Performance

The study sought to determine the effect of capital adequacy regulatory requirements on the financial performance of Microfinance banks in Kenya.

The respondents were asked to indicate their opinion on whether capital adequacy affected the financial performance of their Microfinance bank. Their responses were as shown in table 1.

Table 1: Whether Capital Adequacy Affect Financial performance

| | Frequency | Percent |
|--------------|-----------|------------|
| Yes | 49 | 80.3 |
| No | 12 | 19.7 |
| Total | 61 | 100 |

Majority of the respondents indicated that capital adequacy affected the financial performance of their Microfinance bank as shown by 80.3% while 19.7% of the respondents indicated that capital adequacy didn't affect the financial performance of their Microfinance bank. This implied that capital adequacy affected the financial performance of their Microfinance bank. This agreed with Gichinga

and Tsuma (2016) who noted that capital adequacy affects financial performance.

The respondents who indicated that capital adequacy affects the financial performance of their Microfinance bank were again asked to state the extent to which capital adequacy affects the financial performance of their Microfinance bank. Their responses were as shown in table 2.

Table 2: Extent of Capital Adequacy Effect on Financial Performance

| | Frequency | Percent |
|-------------------|-----------|------------|
| Moderate extent | 15 | 30.6 |
| Great extent | 31 | 63.3 |
| Very great extent | 3 | 6.1 |
| Total | 49 | 100 |

From the findings the respondents indicated that capital adequacy affected the financial performance of the Microfinance bank greatly as shown by 63.3%, moderately as shown by 30.6% and very greatly as shown by 6.1%. This showed that capital adequacy affected the financial performance of their Microfinance bank greatly. This correlates with

the Gichinga and Tsuma (2016) who noted that capital adequacy affects financial performance.

The respondents were further asked to rate various aspects of capital adequacy currently imposed by the Central Bank of Kenya. Their responses were as shown in table 3.

Table 3: Rating of Aspects of Capital Adequacy

| | Mean | Std Dev. |
|--------------------------------|------|----------|
| Capital Adequacy Ratios | | |

| | | |
|---|-------|-------|
| Core capital/ Total Risk Weighted Assets (TRWA) ratio of 10% | 4.123 | 0.820 |
| Total capital/ Total Risk Weighted Assets (TRWA) ratio of 12% | 3.611 | 0.820 |
| Deposit Liabilities/ Total Risk Weighted Assets (TRWA) ratio of 8% | 3.131 | 0.872 |
| Capital Requirements | | |
| Minimum capital of Kshs. 60 million for Nationwide Microfinance banks | 4.267 | 0.611 |
| Minimum capital of Kshs. 20 million for Community Microfinance banks | 2.951 | 0.917 |

From the findings on capital adequacy ratios, the respondents rated core capital/ total risk weighted assets (TRWA) ratio of 10% as shown by a mean of 4.123 and total capital/ total risk weighted assets (TRWA) ratio of 12% as shown by a mean of 3.611 as high. They rated deposit liabilities/ total risk weighted assets (TRWA) ratio of 8% as moderate as shown by a mean of 3.131. These findings were in line with Haq *et al.* (2008) who noted that majority of MFIs in most countries must maintain CAR at minimum of 8% of risk weighted assets.

On capital requirements, the respondents rated minimum capital of Kshs. 60 million for nationwide

Microfinance banks as shown by a mean of 4.267 as high, and rated minimum capital of Kshs. 20 million for community Microfinance banks as shown by a mean of 2.951 as moderate. These findings agreed with Meagher (2002) who argue that high minimum capital requirements have an impact on Microfinance performance.

Effect of Aspects of Capital Adequacy

The respondents were further asked to indicate the effect of various aspects of capital adequacy on the financial performance of Microfinance banks in Kenya. Their responses were as shown 4.

Table 4: Effect of Aspects of Capital Adequacy

| | Mean | Std Dev. |
|--|-------|----------|
| Capital Adequacy Ratios | | |
| The ratio of Core capital/ Total Risk Weighted Assets (TRWA) of 10% leads to reduced financial performance | 4.213 | 0.985 |
| The ratio of Total capital/ Total Risk Weighted Assets (TRWA) of 12% leads to reduced financial performance | 3.115 | 0.802 |
| The ratio of Deposit Liabilities/ Total Risk Weighted Assets (TRWA) of 8% leads to reduced financial performance | 3.864 | 0.713 |
| Capital Requirements | | |
| The minimum capital requirement of Kshs. 60 million for Nationwide Microfinance banks leads to reduced financial performance | 3.721 | 0.867 |
| The minimum capital requirement of Kshs. 20 million for Community Microfinance banks leads to reduced financial performance | 2.574 | 0.939 |

From the findings on capital adequacy ratios, the respondents agreed that the ratio of core capital/ total risk weighted assets (TRWA) of 10% leads to reduced financial performance as illustrated by a mean of 4.213 and that the ratio of deposit liabilities/ total risk weighted assets (TRWA) of 8% leads to reduced financial performance as

illustrated by a mean of 3.864. The respondents were however neutral that the ratio of total capital/ total risk weighted assets (TRWA) of 12% leads to reduced financial performance as illustrated by a mean of 3.115. This corresponds to Meagher (2002) who argue that high minimum capital requirements have an impact on Microfinance performance.

On capital requirements, the respondents agreed that the minimum capital requirement of Kshs. 60 million for nationwide Microfinance banks leads to reduced financial performance as shown by a mean of 3.7213 and were neutral that the minimum capital requirement of Kshs. 20 million for community Microfinance banks leads to reduced financial performance as shown by a mean of 2.5738. These findings are in line with Beckmann (2007) who argues that high capital leads to low profits since banks with a high capital ratio are risk-averse.

Effect of Statutory Requirements on Financial Performance

The study sought to establish the effect of statutory requirements on the financial performance of Microfinance banks in Kenya.

The respondents were asked to indicate whether statutory requirements affect the financial performance of Microfinance banks in Kenya. Their responses were as shown in table 5.

Table 5: Whether Statutory Requirements Affect the Financial Performance

| | Frequency | Percent |
|--------------|-----------|--------------|
| Yes | 55 | 90.2 |
| No | 6 | 9.8 |
| Total | 61 | 100.0 |

From the results, majority of the respondents indicated that statutory requirements affect the financial performance of their Microfinance bank as shown by 90.2% while 9.8% of the respondents indicated that statutory requirements doesn't affect the financial performance of their Microfinance bank. This shows that statutory requirements affect the financial performance of their Microfinance bank.

The respondents who indicated that statutory requirements affects the financial performance of their Microfinance bank were further asked to indicate the extent to which statutory requirements affects the financial performance of their Microfinance bank. Their responses were as shown in table 6.

Table 6: Extent of Statutory Requirements Effect on Financial Performance

| | Frequency | Percent |
|-------------------|-----------|--------------|
| Low extent | 3 | 5.5 |
| Moderate extent | 16 | 29.1 |
| Great extent | 30 | 54.5 |
| Very great extent | 6 | 10.9 |
| Total | 55 | 100.0 |

From the outcomes, 54.5% of the respondents indicated that statutory requirements affect the financial performance of their Microfinance bank to a great extent, 29.1% indicated moderate extent, 10.9% indicated very great extent and 5.5% indicated that statutory requirements affects the financial performance of their Microfinance bank to

a low extent. This shows that statutory requirements affect the financial performance of their Microfinance bank greatly. These are in line with Christian and Rosenberg (2000) who noted that capital adequacy and cash reserve requirements for Microfinance institution's imposed by Central banks in a number of countries

has led to credit constraints in the microfinance sector because a major portion of their liquidity is held up in these reserves, thus affecting their financial performance.

The researcher asked the respondents to rate various statutory requirements currently imposed on Microfinance banks (MFBs) by the Central Bank of Kenya (CBK). Their responses were as presented in table 7.

Table 7: Rating of Various Statutory Requirements

| | Mean | Std dev. |
|------------------------|-------|----------|
| Liquidity ratio of 20% | 4.189 | 0.647 |
| Cash reserve ratio | 3.656 | 0.655 |

The respondents rated liquidity ratio of 20% as shown by a mean of 4.189 and cash reserve ratio as shown by a mean of 3.656 as high. This is in line with Kahuthu et al (2015) who noted that levels of liquidity do affect financial performance to a certain extent. Liquid assets are associated with lower rates of return or none at all and thus too many liquid assets would lead to lower profitability.

Effect of various Aspects of Statutory Requirements

The respondents were asked to indicate their level of agreement with the effect of various aspects of statutory requirements on the financial performance of Microfinance banks in Kenya. Table 8 showed their responses.

Table 8: Effect of various Aspects of Statutory Requirements

| | Mean | Std Dev. |
|--|-------|----------|
| <u>Liquidity Ratio requirements</u> | | |
| The current liquidity ratio of 20% for Microfinance banks in Kenya leads to reduced financial performance | 4.175 | 0.901 |
| High liquidity ratio requirements for Microfinance banks in Kenya, leads to reduced financial performance | 3.407 | 0.869 |
| <u>Cash reserve ratio requirements</u> | | |
| The current cash reserve ratio for Microfinance banks in Kenya leads to reduced financial performance | 3.557 | 0.975 |
| High cash reserve ratio requirements for Microfinance banks in Kenya leads to reduced amount of loanable funds thus leading to reduced financial performance | 3.853 | 0.853 |

The respondents agreed that the current liquidity ratio of 20% for Microfinance banks in Kenya leads to reduced financial performance as expressed by a mean of 4.175 and were neutral that high liquidity ratio requirements for Microfinance banks in Kenya, leads to reduced financial performance as shown by a mean of 3.407. These agree with Kahuthu et al (2015) who noted that levels of liquidity do affect financial performance to a certain extent.

The respondents also agreed that high cash reserve ratio requirements for Microfinance banks in Kenya leads to reduced amount of loanable funds thus leading to reduced financial performance as shown by a mean of 3.853 and that the current cash reserve ratio for Microfinance banks in Kenya leads to reduced financial performance as shown by a mean of 3.557. On the respondent's opinion on other statutory requirements that affect the

financial performance of Microfinance banks, they indicated withholding taxes on fixed deposits, mandatory statutory meetings and the requirement to have fully fledged separate risk and audit functions. These findings agree with Mishkin (2016) who notes that increase in reserve ratios by monetary authorities leads banks to contract their loans, thus affecting their financial performance.

Effect of Operational Requirements on Financial Performance

The study sought to determine the effect of operational requirements on the financial performance of Microfinance banks in Kenya.

The respondents were asked to indicate their opinion on whether operational requirements affects the financial performance of their Microfinance bank. Their responses were as shown in table 9.

Table 9: Whether Operational Requirements Affect Financial performance

| | Frequency | Percent |
|--------------|-----------|------------|
| Yes | 58 | 95.1 |
| No | 3 | 4.9 |
| Total | 61 | 100 |

The findings shows that 95.1% of the respondents indicated that operational requirements affects the financial performance of their Microfinance bank, while 4.9% indicated that operational requirements does not affect the financial performance of their Microfinance bank. This reveals that operational requirements affect the financial performance of Microfinance banks.

The respondents who indicated that operational requirements affects the financial performance of their Microfinance banks were again asked to indicate the extent to which operational requirements affects the financial performance of the Microfinance banks. Their responses were as shown in Table 10.

Table 10: Extent of effect of Operational Requirements

| | Frequency | Percent |
|-----------------|-----------|------------|
| Moderate extent | 34 | 58.6 |
| Great extent | 24 | 41.4 |
| Total | 58 | 100 |

From the findings, the respondents indicated that operational requirements affects the financial performance of the Microfinance bank to a moderate extent as shown by 58.6% and greatly as shown by 41.4%. This shows that operational requirements affect the financial performance of the Microfinance banks moderately. This is in line with Clementina and Gabriel (2015), who concluded

that operational requirements for Microfinance banks leads to high operating costs leading to poor financial performance.

The respondents were further asked to indicate their opinion on the effect of various aspects of operational requirements imposed on Microfinance banks by CBK on financial performance. Their responses were as shown in table 11.

Table 11: Aspects of Operational Requirements Imposed on MFBs

| | Mean | Std Dev. |
|--|---|----------|
| <u>Limits on loans and credit facilities</u> | | |
| The requirement that Microfinance banks should not extend loans exceeding 5% of their core capital to a single borrower leads to reduced financial performance | 4.049 | 0.973 |
| Requirements that large exposure loans are maintained at a maximum of 30% of an institutions core capital affect Microfinance banks financial performance negatively | 3.921 | 0.996 |
| The requirement that the aggregate amount of microfinance loans should be equivalent to or more than 70% of a Microfinance bank's total loan portfolio leads to reduced financial performance | 3.710 | 0.821 |
| The current number of loan products permissible by the Central Bank of Kenya is too narrow and thus leads to reduced financial performance | 2.689 | 0.987 |
| <u>Restrictions on trading and investments</u> | | |
| Prohibition to engage trust operations leads to reduced financial performance | 3.180 | 0.897 |
| Prohibition to engage investing in enterprise capital leads to reduced financial performance | 3.830 | 0.747 |
| Prohibition to engage wholesale or retail trade leads to reduced financial performance | 3.180 | 0.672 |
| Prohibition to engage underwriting or placement of securities leads to reduced financial performance | 4.326 | 0.908 |
| Prohibition to engage purchasing or otherwise acquiring any land except for expansion of microfinance business leads to reduced financial performance | 4.230 | 0.570 |
| The requirement that Microfinance banks should not acquire or hold, directly or indirectly, any part of share capital in any financial, commercial, agricultural, industrial or other undertaking, where the value of the institution's interest exceeds 25% in the aggregate of the institution's core capital leads to reduced financial performance | 4.226 | 0.372 |
| <u>Restrictions on places of business</u> | | |
| Use of armed security or guards leads to reduced financial performance | 4.344 | 0.911 |
| Establishment of well secured vaults leads to reduced financial performance | 2.592 | 0.827 |
| Establishment of strong rooms and alarm systems leads to reduced financial performance | 3.590 | 0.786 |
| Long term lease agreements for premises leads to reduced financial performance | 3.885 | 0.666 |
| County government licensing requirements leads to reduced financial performance | 2.344 | 0.911 |
| The requirement that Microfinance banks strictly adhere to the approved working hours leads to reduced financial performance | 4.125 | 0.781 |
| Regarding limits on loans and credit facilities, the respondents agreed that the requirement for | Microfinance banks not to extend loans exceeding 5% of their core capital to a single borrower leads to | |

reduced financial performance as shown by a mean of 4.049, the requirement that large exposure loans are maintained at a maximum of 30% of an institutions core capital affect Microfinance banks financial performance negatively as shown by a mean of 3.921 and that the requirement that the aggregate amount of microfinance loans should be equivalent to or more than 70% of a Microfinance bank's total loan portfolio leads to reduced financial performance as shown by a mean of 3.710. However, they were neutral on the fact that the current number of loan products permissible by the Central Bank of Kenya is too narrow and thus lead to reduced financial performance as shown by a mean of 2.689. These findings correlate with Chance (2011) who notes that regulation of credit risks such as limits on the maximum amount that MFIs can lend to a single person or microenterprise can affect the microfinance institutions performance.

Further, concerning restrictions on trading and investments, the respondents agreed on the fact that, the requirement that Microfinance banks should not acquire or hold, directly or indirectly, any part of share capital in any financial, commercial, agricultural, industrial or other undertaking, where the value of the institution's interest exceeds 25% in the aggregate of the institution's core capital leads to reduced financial performance as expressed by a mean score of 4.226. The respondents also agreed that prohibition to engage in underwriting or placement of securities as expressed by a mean score of 4.326, prohibition to engage in the purchase or acquisition of any land except for expansion of microfinance business as expressed by a mean score of 4.230 and prohibition to invest in enterprise capital as expressed by a mean score of 3.830 leads to reduced financial performance. However the respondents were neutral on the fact that prohibition to engage in trust operations and the

prohibition to engage in wholesale or retail trade leads to reduced financial performance as expressed by mean scores of 3.180 for each. These findings were in agreement with Chance (2011) who notes that regulation of credit risks can affect the microfinance institutions performance.

Finally, regarding restrictions on places of business, the respondents agreed that use of armed security or guards leads to reduced financial performance as shown by a mean of 4.344, that the requirement that Microfinance banks strictly adhere to the approved working hours leads to reduced financial performance as shown by a mean of 4.125, that long term lease agreements for premises leads to reduced financial performance as shown by a mean of 3.885 and that establishment of strong rooms and alarm systems leads to reduced financial performance as shown by a mean of 3.590. The respondents were however neutral that establishment of well secured vaults leads to reduced financial performance as shown by a mean of 2.592 and disagreed that county government licensing requirements leads to reduced financial performance as shown by a mean of 2.344. On the respondent's opinion on other operational requirements that affect the financial performance of the Microfinance bank, they indicated long process of closing a non-performing branch, seeking approval for every branch opened and strict KYC and AML standards. These findings correspond to Hirschland (2003) who asserts that Microfinance banks which focus on development of physical infrastructure leads to high operating costs and resultantly prospective borrowers to the larger extent cannot be served, because major portion of their budget is utilized for their operational setup, leading to reduced financial performance.

Effect of Financial Reporting Requirements on Financial Performance

The study further sought to assess the effect of financial reporting requirements on the financial performance of Microfinance banks in Kenya.

The respondents were asked to indicate whether financial reporting requirements affect the financial performance of Microfinance banks in Kenya. Their responses were as shown in Table 12.

Table 12: Whether Financial Reporting Requirements Affect Financial Performance

| | Frequency | Percent |
|--------------|-----------|--------------|
| Yes | 39 | 63.9 |
| No | 22 | 36.1 |
| Total | 61 | 100.0 |

From the results, majority of the respondents indicated that financial reporting requirements affect the financial performance of their Microfinance bank as shown by 63.9% while 36.1% of the respondents indicated that financial reporting requirements does not affect the financial performance of their Microfinance bank. This shows that financial reporting requirements affect the financial performance of their Microfinance bank.

The respondents who indicated that financial reporting requirements affects the financial performance of their Microfinance bank were further asked to indicate the extent to which financial reporting requirements affects the financial performance of their Microfinance bank. Their responses were as shown in table 13.

Table 13: Extent of Financial Reporting Requirements Effect on Financial Performance

| | Frequency | Percent |
|-----------------|-----------|--------------|
| Low extent | 6 | 15.4 |
| Moderate extent | 24 | 61.5 |
| Great extent | 9 | 23.1 |
| Total | 39 | 100.0 |

From the findings, 61.5% of the respondents indicated that financial reporting requirements affect the financial performance of their Microfinance bank to a moderate extent, 23.1% indicated great extent and 15.4% indicated that financial reporting requirements affects the financial performance of their Microfinance bank to a low extent. This shows that financial reporting requirements affect the financial performance of the Microfinance banks moderately. These are in line with Hubka and Zaidi (2005) who argue that reporting requirements should be simpler for

depository MFIs than for conventional retail banking operations, due to the nature of their operations.

Aspects of Financial Reporting Imposed on Microfinance Banks

The respondents were further asked to state their opinion on the effect of aspects of financial reporting currently imposed on Microfinance banks by the Central Bank of Kenya (CBK) on the financial performance of Microfinance banks. Table 14 shows their responses.

Table 14: Aspects of Financial Reporting Imposed on Microfinance Banks

| | Mean | Std Dev. |
|--|-------|----------|
| <u>Financial Reporting and Publication of Financial information</u> | | |
| Daily financial reporting leads to reduced financial performance | 4.246 | 0.888 |
| Monthly financial reporting leads to reduced financial performance | 3.148 | 0.654 |
| Quarterly financial reporting leads to reduced financial performance | 2.349 | 0.498 |
| Yearly financial reporting leads to reduced financial performance | 2.049 | 0.498 |
| Financial reporting is costly thus affect Microfinance bank's financial performance negatively | 4.344 | 0.911 |
| The information technology (IT) infrastructure required for financial reporting places unnecessary financial burdens on Microfinance banks thus reducing their financial performance | 3.897 | 0.872 |
| <u>Risk classification and provisioning of loans</u> | | |
| The risk classification for Microfinance banks leads to reduced financial performance | 3.902 | 0.889 |
| The provisioning rates are very high for Microfinance banks leads to reduced financial performance | 3.607 | 0.715 |

On financial reporting and publication of financial information, the respondents agreed that financial reporting is costly thus affect Microfinance bank's financial performance negatively as shown by a mean score of 4.344, that daily financial reporting leads to reduced financial performance as shown by a mean score of 4.246 and that the information technology (IT) infrastructure required for financial reporting places unnecessary financial burdens on Microfinance banks thus reducing their financial performance as shown by a mean score of 3.897. The respondents were however neutral that monthly financial reporting leads to reduced financial performance as shown by a mean score of 3.148 and disagreed that quarterly financial reporting leads to reduced financial performance as shown by a mean score of 2.349 and that yearly financial reporting leads to reduced financial performance as shown by a mean score of 2.049. These findings are in line with Hubka and Zaidi (2005) who suggest that the requirements for prudential reporting may place unnecessary financial burdens on MFIs, in form of information and communications infrastructure and staffing leading to subdued performance.

Further, on risk classification and provisioning of loans, the respondents agreed that the risk classification for Microfinance banks leads to reduced financial performance as expressed by a mean of 3.902 and that the provisioning rates are very high for Microfinance banks leading to reduced financial performance as expressed by a mean of 3.607. On the respondents' opinion on other financial reporting regulatory factors that affect the financial performance of the Microfinance bank, they indicated loan impairment, total large exposure loan limit and mandatory financial approvals. These findings are in agreement with Ali and Okibo (2015) who showed that risk classification can affect financial performance.

Financial Performance

The respondents were requested to indicate their own opinion on whether the current Central Bank of Kenya Regulatory framework affected the Financial Performance of Microfinance bank for the period 2010 – 2016 and their responses were as shown in table 15.

Table 15: Whether CBK Regulatory framework Affect Financial Performance

| | Frequency | Percent |
|--------------|-----------|--------------|
| Yes | 49 | 80.3 |
| No | 12 | 19.7 |
| Total | 61 | 100.0 |

From the results, majority of the respondents indicated that the current Central Bank of Kenya Regulatory framework affected the Financial Performance of Microfinance bank for the period 2010 – 2016 as shown by 80.3% while 19.7% indicated that the current Central Bank of Kenya regulatory framework did not affect the financial performance of Microfinance bank for the period 2010 – 2016. This is in line with Mairura and Okatch (2015) who noted that Central bank regulations affect the financial performance of selected

Microfinance institutions in Nairobi. Adeyemi (2008) in a study carried out in Nigeria also identified regulatory issues as a factor affecting financial performance for microfinance institutions.

The respondents who indicated yes were further asked to tell the extent to which current Central Bank of Kenya regulatory framework affected the Financial Performance of Microfinance bank for the period 2010 – 2016. Their responses were as shown in table 16.

Table 16: Extent of CBK Regulatory framework Effect on Financial Performance

| | Frequency | Percent |
|-----------------|-----------|--------------|
| Low extent | 6 | 12.2 |
| Moderate extent | 12 | 24.5 |
| Great extent | 31 | 63.3 |
| Total | 49 | 100.0 |

From the findings, 63.3% of the respondents indicated that the current Central Bank of Kenya regulatory framework affected the financial performance of Microfinance banks for the period 2010 – 2016 to a great extent, 24.5% indicated moderate extent and 12.2% indicated that current Central Bank of Kenya regulatory framework affected the financial performance of Microfinance banks for the period 2010 – 2016 to a low extent. This shows that current Central Bank of Kenya regulatory framework affected the financial performance of Microfinance banks for the period 2010 – 2016 to a great extent. This agree with Mairura and Okatch (2015) who noted that Central bank regulations affect the financial performance of Microfinance institutions.

The respondents were asked to indicate their institutions Net profit after taxes between 2010 and 2016. The respondents indicated that profit after taxes decreased between 2010 and 2011 but increased between 2013 and 2015. This indicated that the net profit had been fluctuating over the years between 2010 and 2016. The total assets and total shareholders' equity had been approximately constant. This corresponds to Ongore and Kusa (2013) who argue that good bank performance rewarded shareholders with sufficient return for their investment, while poor banking performance had a negative repercussion. The study respondents indicated that total assets and total shareholders' equity had been steadily increasing between 2010 and 2015 while profit after taxes had been approximately constant. This agreed with Belydah and Ondigo (2016) on their study on the determinants of financial performance.

Net Profit after Taxes between 2010 and 2016

The study respondents indicated that total assets and total shareholders' equity had been steadily increasing between 2010 and 2015 although there was a decrease between 2015 and 2016. The profit after taxes had been approximately constant. This corresponded to Ongore and Kusa (2013) who argue that good bank performance rewards shareholders with sufficient return for their investment, while poor banking performance had a negative repercussion.

The respondents indicated that the profit after taxes had decreasing and increasing over the period between 2010 and 2016 although in 2011 and 2015 it was negative. On the same note total assets and total shareholders' equity had been fluctuating over the same period. This correlated to Ongore and Kusa (2013) who argue that good bank performance rewards shareholders with sufficient return for their investment, while poor banking performance has a negative repercussion.

The respondents indicated that total assets and total shareholders' equity increased steadily between 2011 and 2015 but decreased in 2016 while profit after taxes was approximately constant between 2012 and 2016. Hubka and Zaidi (2005) suggest that the requirements for prudential reporting may place unnecessary financial burdens on MFI leading to subdued performance.

The respondents indicated that total assets and total shareholders' equity increased steadily

between 2011 and 2015 but decreased in 2016 while profit after taxes was approximately fluctuating between 2012 and 2016. These findings agreed with Meagher (2002) who argue that high minimum capital requirements have an impact on Microfinance performance.

The respondents indicated that total assets increased between 2012 and 2014 but decreased in 2015 and total shareholders' equity increased steadily between 2012 and 2013 but decreased between 2013 and 2016 while profit after taxes was constantly negative between 2012 and 2016. This concurs with Hirschland (2003) who asserts that Microfinance banks which focus on development of physical infrastructure leads to high operating costs leading to reduced financial performance.

Institutions Return on Assets (ROA) between 2010 and 2016

The respondents were also asked to indicate their institutions Return on Assets (ROA) between 2010 and 2016. Their responses were as shown in table 17.

Table 17: Institutions Return on Assets (ROA) between 2010 and 2016

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2,016 |
|-----------------|--------|-------|-------|--------|--------|---------|---------|
| KENYA WOMEN MFB | 1.20% | 1.80% | 0.80% | 1.80% | 1.80% | 1.20% | 0.70% |
| FAULU MFB | -2.80% | 0.00% | 0.80% | 1.30% | 2.00% | 0.50% | 0.20% |
| RAFIKI MFB | 0.00% | -3% | 0% | 0% | 0% | 0% | -4% |
| SMEP MFB | 0.00% | 1.30% | 2.40% | 0.20% | -4.10% | 0.00% | -5.00% |
| CARITAS MFB | 0% | 0% | 0% | 0% | 0% | -32.30% | -12.90% |
| SUMAC MFB | 0 | 0 | 0 | -3.60% | 1.00% | 1.20% | 1.70% |
| U&I | 0 | 0 | 0 | 1.3% | 1.5% | 3.8% | 2.0% |

| | | | | | | | |
|-------------|---|---------|--------|---------|---------|---------|---------|
| REMU MFB | 0 | -10.50% | -3.90% | -1.80% | 0.80% | -3.80% | -3.30% |
| UWEZO MFB | 0 | -13.60% | -2.60% | -1.90% | 0.60% | 0.10% | 1.90% |
| DARAJA MFB | 0 | 0 | 0 | 0 | 0 | -54.20% | -15.60% |
| MAISHA MFB | 0 | 0 | 0 | 0 | 0 | 0 | -18.10% |
| CENTURY MFB | 0 | 0 | 0 | -16.50% | -14.70% | -26.90% | -18.20% |
| CHOICE | 0 | 0 | 0 | 0 | 0 | -37.7% | -28.7% |

From the findings in table 17, the respondents indicated that Return on Assets (ROA) between 2010 and 2016 for Kenya Women MFB had been fluctuating over the period between 2010 and 2016 and for Faulu MFB was negative in 2010 and positive for the rest of the years. The Return on Assets (ROA) between 2010 and 2016 for Rafiki MFB, Smep MFB, Caritas MFB and Sumac MFB had been changing both positively and negatively over the same period. The study also showed that Return on Assets (ROA) between 2010 and 2016 for Remu

MFB and Uwezo MFB was both negative in 2011, 2012 and 2013. The study further showed Return on Assets (ROA) for Century MFB was negative for years 2013 to 2016.

Institutions Return on Equity (ROE) between 2010 and 2016

The respondents were further asked to indicate their institutions Return on Equity (ROE) between 2010 and 2016. Their responses were as shown in table 18.

Table 18: Institutions Return on Equity (ROE) between 2010 and 2016

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2,016 |
|-----------------|--------|--------|-------|--------|--------|---------|---------|
| KENYA WOMEN MFB | 11.7% | 15.7% | 7.5% | 13.5% | 10.3% | 8.4% | 4.7% |
| FAULU MFB | -23.3% | 0.4% | 9.4% | 20.7% | 10.6% | 2.7% | 1.0% |
| RAFIKI MFB | 0.0% | -11% | 4% | 2% | 2% | 3% | -40% |
| SMEP MFB | 0% | 10.3% | 8.7% | 0.9% | -17.5% | -0.2% | -25.1% |
| CARITAS MFB | 0% | 0% | 0% | 0% | 0% | -68.2% | -27.3% |
| U&I | 0 | 0 | 0 | 2.2% | 2.4% | 6.5% | 5.9% |
| SUMAC MFB | 0 | 0 | 0 | -6.0% | 2.1% | 3.4% | 5.7% |
| REMU MFB | 0 | -13.0% | -6.9% | -4.5% | 1.4% | -7.7% | -6.5% |
| UWEZO MFB | 0 | -17.0% | -3.6% | -3.0% | 1.2% | 0.1% | 2.2% |
| DARAJA MFB | 0 | 0 | 0 | 0 | 0 | -67.2% | -34.1% |
| MAISHA MFB | 0 | 0 | 0 | 0 | 0 | 0 | -34.8% |
| CENTURY MFB | 0 | 0 | 0 | -30.0% | -44.7% | -100.0% | -132.3% |
| CHOICE | 0 | 0 | 0 | 0 | 0 | -50.9% | -76.1% |

The respondents indicated that Return on Equity (ROE) for all the institutions have been fluctuating over the period between 2010 and 2016. The study

findings also showed that return on Equity (ROE) for Kenya Women MFB was positive all through. The study further showed Return on Equity (ROE) for Century MFB was negative for years 2013 to 2016.

Pearson Correlation Analysis

Table 19: Correlation Matrix

| | | Financial Performance | Capital Adequacy | Statutory requirements | Operational requirements | Financial reporting requirements |
|----------------------------------|---------------------|-----------------------|------------------|------------------------|--------------------------|----------------------------------|
| Financial Performance | Pearson Correlation | 1 | | | | |
| | Sig. (2-tailed) | . | | | | |
| Capital adequacy | Pearson Correlation | .796 | 1 | | | |
| | Sig. (2-tailed) | .023 | . | | | |
| Statutory requirements | Pearson Correlation | .911 | .513 | 1 | | |
| | Sig. (2-tailed) | .017 | .026 | . | | |
| Operational requirements | Pearson Correlation | .752 | .423 | .327 | 1 | |
| | Sig. (2-tailed) | .028 | .012 | .018 | . | |
| Financial reporting requirements | Pearson Correlation | .734 | .533 | .520 | .431 | 1 |
| | Sig. (2-tailed) | .042 | .009 | .002 | .014 | . |

The study computed into single variables per factor by obtaining the averages of capital adequacy, statutory requirements, operational requirements and financial reporting requirements. Pearson's correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. The table above indicated the correlation matrix between the factors (capital adequacy, statutory requirements, operational requirements and financial reporting requirements) and financial performance of Microfinance banks in Kenya.

As per the table there is a positive relationship between financial performance of Microfinance banks in Kenya and capital adequacy as shown by coefficient of 0.796, a positive relationship between financial performance of Microfinance banks in Kenya and statutory requirements as shown by

coefficient of 0.911, a positive relationship between financial performance of Microfinance banks in Kenya and operational requirements as expressed by coefficient of 0.752, a positive relationship between financial performance of Microfinance banks in Kenya and financial reporting requirements as illustrated by a coefficient of 0.734. This shows all the regulatory variables were significant in determining the financial performance of Microfinance banks in Kenya. This is in line with Mairura and Okatch (2015) who noted that Central bank regulations affect the financial performance of Microfinance institutions.

Regression Results

The study sought to investigate the effect of Central Bank of Kenya regulations on the financial performance of Microfinance banks.

Table 20: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1 | 0.841 | 0.707 | 0.686 | 0.144 |

As per the Table 20, the R² was used to establish the predictive power of the study model and it was found to be 0.707 implying that 70.7% of the variations on the financial performance of Microfinance banks are explained by statutory requirements, financial reporting requirements, capital adequacy as well as operational requirements.

Table 21: ANOVA results

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|--------------|----------------|-----------|-------------|--------|-------|
| 1 | Regression | 2.946 | 4 | 0.737 | 33.834 | 0.000 |
| | Residual | 1.219 | 56 | 0.022 | | |
| | Total | 4.165 | 60 | | | |

The probability value of 0.000 indicates that the regression relationship was highly significant in predicting how statutory requirements, financial reporting requirements, capital adequacy as well as operational requirements affected financial

performance of Microfinance banks in Kenya. The F calculated at 5 percent level of significance was 33.834, and since F calculated is greater than the F critical (value =2.5252), this shows that the overall model was significant.

Table 22: Coefficients of Determination

| | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|----------------------------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | | |
| (Constant) | 0.731 | 0.239 | | 3.059 | 0.003 |
| Capital adequacy | 0.732 | 0.129 | 0.832 | 5.674 | 0.000 |
| Statutory requirements | 0.867 | 0.305 | 0.368 | 2.843 | 0.006 |
| Operational requirements | 0.712 | 0.222 | 0.462 | 3.207 | 0.002 |
| Financial reporting requirements | 0.703 | 0.287 | 0.386 | 2.449 | 0.017 |

The established model for the study was:

$$Y = 0.731 + 0.732 X_1 + 0.867 X_2 + 0.712 X_3 + 0.703 X_4$$

The regression equation above established that taking all factors into account (capital adequacy, statutory requirements, operational requirements and financial reporting requirements) constant at zero, the influence of financial performance of Microfinance banks in Kenya was 0.731.

CONCLUSIONS AND RECOMMENDATIONS

Capital Adequacy and Financial Performance

The study found that capital adequacy affects the financial performance of Microfinance banks greatly. From the findings on capital adequacy ratios, the core capital/ total risk weighted assets (TRWA) ratio of 10% and total capital/ total risk weighted assets (TRWA) ratio of 12% were rated high while deposit liabilities/ total risk weighted assets (TRWA) ratio of 8% was rated as moderate. On capital requirements, the minimum capital of

Kshs. 60 million for nationwide Microfinance banks was rated high while minimum capital of Kshs. 20 million for community Microfinance banks were rated as moderate. From the findings on capital adequacy ratios, the study found that the ratio of core capital/ total risk weighted assets (TRWA) of 10% leads to reduced financial performance and that the ratio of deposit liabilities/ total risk weighted assets (TRWA) of 8% leads to reduced financial performance. On capital requirements, the study found that the minimum capital requirement of Kshs. 60 million for nationwide Microfinance banks leads to reduced financial performance.

Statutory Requirements and Financial Performance

The study found that statutory requirements affect the financial performance of Microfinance banks greatly. The study found that liquidity ratio of 20% and cash reserve ratio is high. The findings shows that the current liquidity ratio of 20% for Microfinance banks in Kenya leads to reduced financial performance. The findings also revealed

that high cash reserve ratio requirements for Microfinance banks in Kenya lead to reduced amount of loanable funds thus leading to reduced financial performance. Other statutory requirements that affect the financial performance of the Microfinance banks were found to be withholding taxes on fixed deposits, mandatory statutory meetings and the requirement to have fully fledged separate risk and audit functions.

Operational Requirements and Financial Performance

The study also found that operational requirements affect the financial performance of Microfinance banks greatly. The study findings revealed that the requirement that Microfinance banks should not extend loans exceeding 5% of their core capital to a single borrower leads to reduced financial performance, the requirements that large exposure loans are maintained at a maximum of 30% of an institutions core capital affect Microfinance banks financial performance negatively and that the requirement that the aggregate amount of microfinance loans advanced should be equivalent to or more than 70% of a Microfinance bank's total loan portfolio leads to reduced financial performance. The study results further showed that the requirement that Microfinance banks should not acquire or hold, directly or indirectly, any part of share capital in any financial, commercial, agricultural, industrial or other undertaking, where the value of the institution's interest exceeds 25% in the aggregate of the institution's core capital leads to reduced financial performance. The study also revealed that prohibition to engage in underwriting or placement of securities, prohibition to engage in purchase or acquisition of any land except for expansion of microfinance business and prohibition to invest in enterprise capital leads to reduced financial performance. Other operational requirements that affect the financial performance

of the Microfinance bank, were found to be the long process of closing a non-performing branch, seeking approval for every branch opened and the strict KYC and AML standards.

Financial Reporting Requirements and Financial Performance

The study revealed that financial reporting requirements affect the financial performance of Microfinance banks greatly. On financial reporting and publication of financial information, the study found that financial reporting is costly thus affect Microfinance bank's financial performance negatively, that daily financial reporting leads to reduced financial performance and that the information technology (IT) infrastructure required for financial reporting place unnecessary financial burdens on Microfinance banks thus reducing their financial performance. The study also found that quarterly financial reporting does not lead to reduced financial performance and that yearly financial reporting does not lead to reduced financial performance. Further on risk classification and provisioning of loans, the study found that the risk classification for Microfinance banks leads to reduced financial performance and that the provisioning rates are very high for Microfinance banks leading to reduced financial performance. Other regulatory factors that affect the financial performance of the Microfinance bank were loan impairment, total large exposure loan limit and mandatory financial approvals.

Conclusions

The study concluded that capital adequacy affects the financial performance of Microfinance banks greatly. In this case, the study deduced that the core capital/ total risk weighted assets (TRWA) ratio of 10% and total capital/ total risk weighted assets (TRWA) ratio of 12% are high; and the capital of Kshs. 60 million for nationwide Microfinance banks

is high while minimum capital of Kshs. 20 million for community Microfinance banks is moderate. The study deduced that the ratio of core capital/ total risk weighted assets (TRWA) of 10% lead to reduced financial performance and that the ratio of deposit liabilities/ total risk weighted assets (TRWA) of 8% leads to reduced financial performance.

The study also concluded that statutory requirements affect the financial performance of their Microfinance bank greatly. The study deduced that liquidity ratio of 20% for Microfinance banks in Kenya is high and leads to reduced financial performance. The study revealed that high cash reserve ratio requirements for Microfinance banks in Kenya leads to reduced amount of loanable funds thus leading to reduced financial performance.

The study concluded that operational requirements affect the financial performance of the Microfinance banks greatly. The study findings revealed that the requirement that Microfinance banks should not extend loans exceeding 5% of their core capital to a single borrower leads to reduced financial performance. The requirement that large exposure loans are maintained at a maximum of 30% of an institutions core capital also affects Microfinance banks financial performance negatively. The study results further showed that prohibition to engage in underwriting or placement of securities, prohibition to engage in purchase of land except for microfinance business and prohibition to invest in enterprise capital leads to reduced financial performance. However, the prohibition to engage in trust operations, wholesale or retail trade does not lead to reduced financial performance.

The study also concluded that financial reporting requirements affect the financial performance of Microfinance banks greatly. In this case, the study deduced that financial reporting is costly thus affect Microfinance bank's financial performance

negatively, that daily financial reporting leads to reduced financial performance and that the information technology (IT) infrastructure required for financial reporting places unnecessary financial burdens on Microfinance banks thus reducing their financial performance.

Recommendations

In regard to capital adequacy, the study recommends that in order to enhance the financial performance for Microfinance banks, strategies should be put in place to ensure that the capital requirements for national Microfinance banks are set at a minimum amount that all institutions can meet without financial constraints. The government and the Central Bank of Kenya should set minimum capital depending on the risk appetite of the individual Microfinance banks.

In regard to statutory requirements, the study recommends that more investments should be undertaken in establishing more MFBs networks such as affordable channels for liquidity transmission among the institutions which is associated with positive financial performance. Government should ensure that key macroeconomic variables are geared towards growth and in favour of MFBs which are critical to the economy. The study also recommends Microfinance banks to prudently manage their liquidity positions based on anticipated business cycles in different product segments. Thus Microfinance banks should pay attention to their liquidity needs. As the theory purports, highly marketable assets may be also help in enhancing liquidity. Modalities should be explored to enable MFBs to access funds from the Central bank on favourable terms during periods of liquidity constraints.

Concerning operational requirements, the study recommends that MFBs should emphasize on

operational efficiency to stimulate their financial performance. Operational efficiency contributes to increased financial growth and performance. Strategies should be set aside to improve the operational efficiency of Microfinance banks by application of modern technology and innovative operational strategies that enhance financial performance of MFBS. The Central Bank of Kenya should also consider scrapping some of the operational requirements which are costly to MFBS to enhance their financial performance.

On financial reporting requirements, the study recommends that since Information and Communication Technology (ICT) can be a source of competitive advantage, Microfinance banks should strategize on how to build robust Information Technology (IT) infrastructure to support their financial reporting capabilities. Leveraging on IT infrastructure can enable Microfinance banks manage their operational costs thus enhancing their financial performance.

REFERENCES

- Adabenege, Y. O., & Yahaya, L. (2015). Empirical examination of the financial performance of Islamic banking in Nigeria: A Case study approach, *International Journal of Accounting Research*, 2 (7), 1-13.
- Adeyemi, K. S. (2008). Institutional reforms for efficient Microfinance operations in Nigeria. Central Bank of Nigeria. *Bullion*, 32(1), 26-34.
- Albertazzi, U., & Gambacorta, L. (2009). Bank profitability and the business cycle, *Journal of Financial Stability*, 5, 393 - 409.
- Ali, A. E. (2015). The regulatory and supervision framework of Microfinance in Kenya. *International Journal of Social Science Studies*, 3 (5), 123 -130.
- Ali, G. R., & Okibo, W. B. (2015). Effects of Central Bank of Kenya prudential regulations on financial performance of Commercial banks Operating in Kisii County. *International Journal of Social Sciences Management and Entrepreneurship*, 2(1), 262-273.
- Arain, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC medical research methodology*, 10(1), 67.

Areas for Further Study

Since the study focused on the effect of Central Bank of Kenya regulations on the financial performance of Microfinance banks in Kenya, further studies can be conducted with a focus on other organizations for example commercial banks in order to establish any significant patterns or differences for comparison and generalization of findings.

Since the study findings indicated that capital adequacy requirements, statutory requirements, operational requirements and financial reporting requirements account for 70.7% of the variation in financial performance for Microfinance banks, this implied that 29.3% is explained by other factors not considered by the study. A study can be conducted to establish other regulatory factors affecting the financial performance of Microfinance banks in Kenya.

Arun, T., & Murinde, V. (2010). *Microfinance Regulation and Social Protection*. European report of development. Paper presented during the conference on experiences and lessons from social protection programs across the developing world: what role for EU, Paris, France. Retrieved from erd.eui.eu.

Asian Development Bank. (2011). *Evaluation approach: Special evaluation study on ADB's Microfinance development strategy 2000*. Retrieved from <https://www.adb.org>.

Athanasoglou, P., Brissimis, S., & Delis, M. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability, *Journal of International Financial Markets, Institutions and Money*, 18 (2), 121 - 136.

Atikus. (2014). *Microfinance report 2014*. Retrieved from <https://static1.squarespace.com>.

Aymen, B.M. (2013). Impact of capital on financial performance of banks: The case of Tunisia. *Banks and Bank Systems*, 8(4), 47-54.

Arsyad, L. (2005). An assessment of performance and sustainability of Microfinance Institutions: A case study of village credit institutions in Gianyar, Bali, Indonesia. *Gadjah Mada International Journal of Business*, 8 (2), 247-273.

Beckmann, H. (2007). The removal of mortgage market constraints and the implications for Econometric Modelling of UK House Prices, *Oxford Bulletin*, 25, 52.

Belydah, O. K., & Ondigo, H. (2016). Determinants of financial performance of Deposit-Taking Microfinance institutions and Co-operative societies that have front office service activities registered with SASRA, *International Journal of Finance And Accounting*, 1 (3), 118- 138.

Biwott, K., Asienga, I., Oketch, F, M., & Mutai, R. (2015). Government regulation and performance of small saccos in Nairobi City County, Kenya. *European Journal of Economics and Management sciences*, 1, 41-53.

Boaventura, J, M., Silva, R, S., & Bandeira-de-Mello, R. (2012). Corporate Financial Performance and Corporate Social Performance: Methodological development and the theoretical contribution of empirical studies, *Revista Contabilidade & Financas, São Paulo*, 23 (60), 232-245.

BRB. (2012). *Burundi National Financial Inclusion Survey 2012*. Bank of the Republic of Burundi. Retrieved from <https://www.brb.bi>.

Brouwers, D., Chongo, B., Millinga, A., & Fraser, F. (2014). *Microfinance regulatory and Policy assessment in SADC: Case study of Namibia, Tanzania and Zambia*. Retrieved from <http://www.finmark.org.za>.

Burns, N., & Grove, S.K. (2003). *Understanding nursing research* (3rd ed.). Philadelphia: Saunders Company.

Calem, P. S., & Rob, R. (1996). The impact of capital-based regulation on bank risk-taking: A dynamic model. Board of Governors of the Federal Reserve System, *Finance and Economics Discussion Series*, 96 (12), 36.

Cavallo, M., & Majnoni, G. (2002). *Do banks provision for bad loans in good times? Empirical evidence and policy implications*. Retrieved from <http://citeseerx.ist.psu.edu>

Central Bank of Kenya. (2017). *Bank Supervision Annual Report 2016*. Nairobi: Central Bank of Kenya.

Central Bank of Kenya. (2016). *Bank Supervision Annual Report 2015*. Nairobi: Central Bank of Kenya.

Central Bank of Kenya. (2015). *Bank Supervision Annual Report 2014*. Nairobi: Central Bank of Kenya.

Central Bank of Kenya. (2014). *Bank Supervision Annual Report 2013*. Nairobi: Central Bank of Kenya.

Central Bank of Kenya. (2013). *Bank Supervision Annual Report 2012*. Nairobi. Central Bank of Kenya.

Central Bank of Kenya. (2012). *Bank Supervision Annual Report 2011*. Nairobi. Central Bank of Kenya.

Central Bank of Kenya. (2011). *Bank Supervision Annual Report 2010*. Nairobi. Central Bank of Kenya.

Ceylan, O., Emre, O., & Asl, D. (2008). *The impact of internet-banking on bank profitability- The case of Turkey*. Oxford Business & Economics Conference Program ISBN: 978-0-9742114-7-3.

CGAP. (2012). *A Guide to regulation and supervision of Microfinance: Consensus guidelines*. Washington DC: CGAP/World Bank.

CGAP. (2009). *Overview of Microfinance-related legal and policy reform in Sub-Saharan Africa*. Washington DC: CGAP.

Chance, C. (2011). *Key issues in Microfinance legislation and regulation*. Retrieved from <https://onlineservices.cliffordchance.com>.

Cheng, F., & Wang, W. (2012). Research on the relationship among government regulations, strategy preference and manufacturing performance. *Journal of Service Science and Management*, 5, 37-43. Retrieved from <http://dx.doi.org/10.4236/jssm.2012.51005>.

Christen, R.P., Lyman, T.R., & Rosenberg, R. (2003). *Microfinance consensus guidelines: Guiding principles on regulation and supervision of microfinance*. Washington D.C: CGAP.

Christen, R. P., & Rosenberg, R. (2000). *The rush to regulate: Legal frameworks for Microfinance* (Occasional Paper No. 4). Washington, DC: CGAP.

Clementina, K., & Gabriel, I. (2015). Microfinance banks operations in Nigeria, constraints and suggested solutions: An Evaluation, *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1, 2.

Conroy, J., & McGuire, P. (2000). *The role of Central banks in Microfinance in Asia and the Pacific: Overview*. Manila: Asian Development Bank.

Cooper, D., & Schindler, P. S. (2003). *Business research methods* (8th ed.). New Delhi: Tata McGraw – Hill Publishing Co.

Coase, R. H. (1937). The nature of the firm. *Economica*, 4 (16), 386-405.

Creswell, J. (2009). *Qualitative inquiry and research design*. Thousand Oaks, CA: Sage.

Crossan, K. (2005). The theory of the firm and alternative theories of firm behaviour: A critique, *International Journal of Applied Institutional Governance*, 1(1), 1-13.

Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2011). Does regulatory supervision curtail? Microfinance profitability and outreach? *World Development*, 39(6): 949-965.

Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. *Journal of Economic Perspectives*, 23(1), 167-192.

[Debapratim](#), P., Trilochan, T., & Biswajit, D. (2014). The Impact of regulations on Microfinance industry: A Strategic Perspective, *IUP Journal of Business Strategy*, 11 (3).

Dietrich, A., & Wanzenried, G. (2011). Determinants of bank profitability before and during the crisis: Evidence from Switzerland, *Journal of International Financial Markets, Institutions and Money*, 21(3), 307-327.

Domikowsky, C., Bornemann, S., Duellmann, K., & Pfingsten, A. (2014). *Loan loss provisioning and procyclicality: Evidence from an expected loss model* (Discussion Paper 39), Frankfurt: Deutsche Bundesbank.

European Microfinance Network. (2012). *A Collection of case studies on the legal and regulatory framework for Microfinance provision*. European Microfinance Network. Retrieved from <http://microfinancegateway.org>.

FSD. (2012). *Transforming Microfinance in Kenya: The experience of Faulu Kenya and Kenya Women Finance Trust*. Retrieved from <http://www.fsdkenya.org>.

Gavila, S., & Santabarbara, D. (2009). *What explains the low profitability in Chinese banks?* Retrieved from <http://ssrn.com>

Gichinga, L., & Tsuma, M. W. (2016). Factors influencing financial performance of Commercial banks in Kenya: A case study of National bank of Kenya coast region. *The International Journal of Business and Management*, 4 (4), 64 - 69.

Guerin, K. (2002). *Subsidiarity: Implications for New Zealand*. New Zealand Treasury, (Working Paper 02/03). Retrieved from <http://www.treasury.govt.nz>.

Gwaya, O. J., & Mungai, J. N. (2015). The effect of mergers and acquisitions on financial performance of banks: A survey of Commercial banks in Kenya. *International Journal of Innovative Research & Development*, 4 (8), 101 – 113.

Hantke-Domas, M. (2003). The public interest theory of regulation: non-existence or misinterpretation? *European Journal of Law and Economics*, 15(2), 165-194.

Haq, M., Hoque, M., & Pathan, S. (2008). Regulation of Microfinance institutions in Asia: A comparative analysis. *International review of business research papers*, (4)4, 421-450.

Hartungi, R. (2007). Understanding the success factors of microfinance institution in a developing country. *International Journal of Social Economics*, 34(6), 388-401.

Hertog, J. D. (2002). *General theories of regulation: Encyclopedia of law and economics*. Cheltenham, UK: Edward Edgar Publishing.

Hirchland, M. (2003). Serving small depositors: Overcoming the obstacles, recognizing the tradeoffs. *Microbanking bulletin*, 3-8. Retrieved from microfinancegateway.org.

Hoque, M.Z., Islam, M, R., & Ahmed, H. (2012). *Corporate governance and bank performance: The Case of Bangladesh*. Retrieved from <http://www.academia.edu>.

Hubka, A., & Zaidi, R. (2005). *Impact of government regulation on Microfinance: Improving the investment climate for growth and poverty reduction*. World Development report. Retrieved from <http://www.worldbank.org>.

Ibe, S. O. (2013). The impact of liquidity management on the profitability of banks in Nigeria. *Journal of Finance and Bank Management*, 1(1), 37-48.

Jensen, M. (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of Applied Corporate Finance*, 14 (3), 8-21.

Kahuthu, D. G., Muturi, W., & Kiweu, M. (2015). The Impact of credit management and

liquidity on financial performance of Deposit Taking Savings and Credit Co-operatives in Kenya, *Research Journal of Finance and Accounting*, 6 (14), 180 – 197.

Kantarelis, D. (2007). *Theories of the firm* (4th ed.). Geneva Switzerland: Inderscience publishers.

Karanja, J. S., & Nasieku, T. (2016). Effect of capital on the financial performance of Commercial banks in Kenya. *Asian Journal of Business and Management*, 4 (5), 221-238.

Kariuki, P.W., & Wafula, F.O. (2016). Capital adequacy and financial performance of Deposit

Taking Saving and Credit Co-operative Societies in Kenya, *The International Journal of Business & Management*, 4 (9), 20 – 25.

Khrawish, A. (2011). Determinants of Commercial banks performance: Evidence from Jordan. *International Research Journal of Finance and Economics*, 81,148-159.

Kimando, L. N., Kihoro, J. M., & Njogu G. W. (2012). Factors Influencing the sustainability of Micro-Finance institutions in Murang'a Municipality. *International Journal of Business and Commerce*, (1)10, 21-45.

King'ang'ai, P. M., Kigabo, T., Kihonge, E., & Kibachia, J. (2016). Effect of agency banking on financial performance of Commercial banks in Rwanda. A study of four Commercial banks in Rwanda. *European Journal of Business and Social Sciences*, 5(1),181- 201.

Klapper, L., & Love, I. (2002). *Corporate governance, investor protection, and performance in emerging markets*. Washington, D.C: World Bank.

Korutaro, B. (2013). Effect of business regulation on investment in emerging market economies. *Review of Development Finance*, 3(1), 41-50.

Kothari, C.R. (2004). *Research Methodology, Methods and Techniques*. Delhi: New Age International Publishers.

Kombo, K., & Tromp, A. (2006). *Proposal and Thesis Writing*, Nairobi: Pauline's Publications Africa.

Lavrakas, P. (2008). *Encyclopedia of Survey Research Methods*. Los Angeles: Sage Publications.

Mabeya, K. O., Nyakundi, W. A., & Abuga, M. V. (2016). Effects of implementation of the Central Bank of Kenya prudential guidelines on profitability of Commercial Banks in Kenya: A Survey of Commercial Banks in Kisii County. *International Journal of Social sciences and Information technology*, 2 (3), 296 - 318.

Mahoney, L., & Roberts, R. (2007). Corporate social performance, financial performance and institutional ownership in Canadian firms, *Accounting Forum*, 31, 233 - 253.

- Mairura, V., & Okatch, B. (2015). Factors affecting profitability in Microfinance Institutions: A case study of selected Microfinance institutions in Nairobi. *International Journal of Innovative Social Sciences and Humanities Research*, 3(2), 118-126.
- Mathuva, D.M. (2009). Capital adequacy, cost income ratio and the performance of commercial banks: The Kenyan Scenario. *The International journal of applied economics and Finance*, 3(2), 35-47.
- McIntosh, C., & Widyck, B. (2005). Competition and Microfinance. *Journal of Developmen Economics*, 78, 271-98.
- Meagher, P. (2002). *Microfinance regulation in developing countries: A comparative review of current practice*. IRIS Centre Research, University of Maryland. Retrieved from <https://www.microfinancegateway.org>.
- Mersland, R. (2008). *Corporate governance and ownership in microfinance organizations*. Retrieved from https://brage.bibsys.no/xmlui/bitstream/id/85467/Mersland_Ph_d_2009.pdf.
- Micro Finanza Rating. (2015). *Assessment of the Rwandan microfinance sector performance*.
- Milan, Italy: Micro Finanza Rating.
- Milne, A., & Whalley, A. E. (2001). Bank capital and incentives for risk-taking, *Cass Business School Research Paper*. Retrieved from <http://dx.doi.org/10.2139/ssrn.303176>.
- Mishkin, F. S. (2016). *The Economics of Money, Banking, and Financial Markets*. Boston: Person.
- Mohammed, A. D., & Hassan, Z. (2009). Microfinance in Nigeria and the prospects of introducing and islamic version in the light of selected muslim Countries' experience. *Review of Islamic Economics*, 13(1), 115-174.
- Moulton, H.G. (1918). *Commercial banking and capital formation: Journal of Political Economy*, 26(5), 484 – 508.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods. Quantitative and qualitative approaches*. Nairobi: African Centre for Technology Studies (Acts) Press.
- Muriithi, J. G., & Waweru, K. M. (2017). Liquidity risk and financial performance of commercial banks. *International Journal of Economics and Finance*, 9 (3), 256-265.
- Musembi, D., Ali, A., & Kingi, W. (2016). Effect of liquidity risk determinants on the financial performance of commercial banks listed at the Nairobi Securities Exchange (NSE). *Imperial Journal of interdisciplinary research*, 2(11), 2142 -2154.
- Mwando, S. (2013). Contribution of agency banking on financial performance of Commercial banks in Kenya. *Journal of Economics and Sustainable Development*, 4(20), 26-34.

Ndambu, J. (2011). Does regulation increase microfinance performance in Sub-Saharan Africa? Frankfurt School of Finance and Management. *Technical Note*, 3, 1-11.

Nzaro, R., Njanike, K., & Jaravani, E. (2013). The Impact of regulation policy on products and service delivery of Micro-Finance Institutions: A Case of Zimbabwe. *Global advanced Research Journal of Management and Business studies*, 2(9), 429-438.

Ochei, A. I. (2013). Capital adequacy, management and performance in the Nigerian commercial banks. *African Journal of Business Management*, 7(30), 2938-50.

Odunga R., Nyangweso, P., & Nkobe, D. K. (2013). Liquidity, capital adequacy and operating efficiency of Commercial banks in Kenya. *Research Journal of Finance and Accounting*, 4 (8), 76-80.

Okpala, K. (2013). Consolidation and business valuation of Nigerian banks: What consequences on liquidity level. *International Journal of Business and Social Science*, 4 (12), 312-320.

Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of Commercial banks in Kenya. *International Journal of Economics and Financial Issues*, 3 (1), 237-252.

Otieno, S., Nyagol, M., & Onditi, A. (2016). Relationship between credit risk management and financial performance: Empirical evidence from microfinance banks in Kenya. *Research Journal of Finance and Accounting*. 7(6), 116 -142.

Otieno, S., Okengo, B. O., Ojera, P., & Mamati, F. (2013). An assessment of effect of government financial regulations on financial performance in Savings and Credit Co-operative Societies (SACCOs): A study of SACCOs in Kisii Central, Kenya. *International Journal of Business and Social Science*. 4 (3), 196 - 207.

Onoyere, I. A. (2014). An Investigation of activities of Microfinance Banks as a veritable tool for deducing poverty and unemployment in developing economies. The evidence from Nigeria. *Mediterranean Journal of Social Sciences*, 5 (6), 99-107.

Pasiouras, F., & Kosmidou, K. (2007). Factors influencing the profitability of domestic and foreign commercial banks in the European Union, *Research in International Business and Finance*, 21(2), 222 – 237.

Pigou, A. (1938). *The economics of welfare*. London: Macmillan.

Posner, R. (1974). Theories of economic regulation. *Bell Journal of Economics and Management Science*, (5), 335-358.

Ravinder, D., & Anitha, M. (2013). Financial Analysis – A Study, *IOSR Journal of Economics and Finance*, 2(3), 10-22.

- Republic of Rwanda. (2013). *National Microfinance Policy Implementation Strategy 2013-2017: A Roadmap to Financial Inclusion*. Retrieved from <http://www.minecofin.gov.rw>.
- Republic of Kenya. (2013). *Kenya Gazette Supplement no. 169 (Acts No.41): The Microfinance (Amendment) Act, 2013*. Nairobi: Government Printer.
- Republic of Kenya. (2008a). *Legal notice no. 58: The microfinance (deposit -taking microfinance institutions) regulations, 2008*. Nairobi: Government Printer.
- Republic of Kenya. (2008b). *The Microfinance (Categorization of Deposit-Taking Microfinance Institutions) Regulations, 2008*. Nairobi: Government Printer.
- Republic of Kenya. (2007). *Kenya Vision 2030*. Retrieved from <http://www.vision2030.go.ke>.
- Republic of Kenya (2006). *The Microfinance Act, 2006*. Nairobi: Government Printer.
- Ross, S., Westerfield, R., & Jaffe, J. (2010). *Corporate Finance*. New York: McGraw-Hill.
- Sekaran, U. (2010). *Research methods for Business: A skill building approach* (4th ed.). New York, (NY): John Wiley & Sons.
- Sheefeni, J.P. (2016). Impact of Bank –Specific determinants on Commercial bank’s liquidity in Namibia. *Business, Management and Economics Research*, 2(8), 155-162.
- Shleifer, A. (2005). Understanding regulation. *European Financial management*, 11(4), 435 – 451.
- Staschen, S. (2003). *Regulatory requirements for microfinance. A comparison of legal frameworks in 11 countries worldwide*. Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- Sunday, A., Turyahebwa, A., Byamukama, E., & Novembrieta, S. (2013). Financial performance in the selected Microfinance institutions in Uganda. *International Journal of Engineering Research & Technology*, 2(2), 1-11.
- Stigler, G. (1971). The economic theory of regulation. *Bell Journal of Economics and Management Science*, 2, 3–21.
- Thadden, V. E. (2004). Bank capital adequacy regulation under the New basel 1 Accord. *Journal of Financial Intermediation*, 13(2), 90 -95.
- Tochukwu, O. R. (2016). Capital adequacy and risk management: A study of the Nigerian banking sector. *International Journal of Innovative Science, Engineering & Technology*, 3(7), 342 - 354.
- Tomuleasa, I., & Cocris, V. (2014). Measuring the financial performance of the European systemically important banks. *Financial Studies*, 4. Retrieved from <http://www.Fs.lcfm.Ro>.

Valdemar, D.C., Encinas, R, A., & Imperio, M.D. (2007). *Microfinance activities in the Philippines: Financial reporting and disclosure requirements: Operational and regulatory challenges of the Microfinance industry in the Philippines* (IDLO MF Working Paper 2). Retrieved from <http://www.microfinancegateway.org>.

Wangai, D.K., Bosire, N., & Gathogo, G. (2014). Impact of non- performing loans on financial performance of Microfinance banks in Kenya: A Survey of Microfinance banks in Nakuru town. *International Journal of Science and Research*, 3(10), 2073-2078.

Wanjiru, M. C. (2012). *Effect of financial regulation on Financial Performance of Deposit-Taking Microfinance institutions in Kenya*. Retrieved from <http://www.researchkenya.or.ke>.