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Volume 5, Issue 2, Article 40

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Vol. 5, Iss. 2, pp 930 - 953, April 30, 2018. www.strategicjournals.com, ©strategic Journals

SELECTED INTERNAL FACTORS AFFECTING FINANCIAL PERFORMANCE OF COMMERCIAL BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE IN KENYA

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Accepted: April 25, 2018

ABSTRACT

In all economies, including Kenya, banking industry plays an important role as economic stimulus and distribution of growth in the economy. Commercial banks channel funds from depositors to investors and in the process link fundamental economic players of a country. Due to its role, numerous studies have been done on various banking fields. Be that as it may, there is a dearth of studies investigating the impact of deposits, loans, income diversification and financial leverage in financial performance of listed banks in Kenya. To this effect, this study sought to fill in the gap by studying the effects of the specific internal factors on performance of the listed commercial banks. Using cost of deposit, asset quality, Herfndahl Hirschmann Index (HHI) and debit ratio as proxies of the respective internal factor and return on equity as the measure of the bank performance, the main objective was the establish the significance relationship between these factors and bank performance. The study was based on pecking order, trade off, modern portfolio, Modigliani and Miller theories. Descriptive research design was incorporated involving 10 commercial banks listed in Nairobi Securities Exchange (NSE) over a period of study stretching from 2007 to 2016. Random effects panel regression model was used in the analysis. The findings are expected to inform the players in the industry and governmental agencies. The findings indicated that deposits, loans and financial leverage have significant impact on the performance of the listed banks. Income diversification has no significant effects of bank performance. The study recommends a comprehensive policy framework to regulate interest rates and to maintain asset auality. Lastly, the study recommends the banks to sufficiently use internal funds before considering debt-financing.

Key Terms: Deposits, Loans, Income Diversification, Financial Leverage

INTRODUCTION

The banking sector is a crucial financial segment in the economic growth and development particularly developing countries whose capital markets are yet to be fully developed (Ongore, 2013). They avail financing to investors who then channel the funds to viable projects and that promote financial deepening in the country (Otuori, 2013). Therefore, the general financial performance of these institutions is of critical importance to existing and potential investors, financial experts, the general public, management of the entities and researchers (Omondi, 2013). The performance of commercial banks is usually measured by its financial performance levels (Nkegbe & Yazidu, 2015) as financial performance is viewed as important because the soundness of an industry dictates the stability of the economy as a whole.

Despite these commercial banks operating under similar macroeconomics factors, the performance of commercial banks has continued to be impacted by internal factors which can be categorized into bank specific (Ongore, 2013). The internal factors are mainly individual commercial bank characteristics which significantly affect the bank's performance and are largely influenced by the internal decisions of management and the board.

In the recent past, two major reforms have taken place in the banking sector. In November 2015, excise duty of 10% was introduced on commissions earned by the bank and most of the banks transferred this charge to the consumers. In September 2016, in a move to regulate interest rates the Members of Parliament passed a bill that sought to amend the Banking Act by restricting interest rate charged by banks. The amendment capped the lending interest rates at percent above the Central Bank Rate (CBR) of 10 percent and fixed a minimum deposit rate of 70 percent of the CBR. According to the Kenya National Bureau of Statistics (KNBS) report, the amendment of the Banking Act in August 2016 to regulate the interest rates resulted into a significant decline in interest rate; during September 2016 interest rates was 13.84 percent down from 16.75 percent registered in same month in 2015. It would therefore be vital to evaluate if other factors within the organizations further affect performance of these institutions.

Profits are generally a measure of reward for investments and it's mainly the major motivator for engaging in a business. Ogbadu, (2009), observed it is generally an index for measuring the performance of a business. Generally, there exists various measures of financial performance of an organization, these include; financial performance, ability to meet its current liabilities, liquidity, insolvency and operational efficiency. Performance can best be measured by benchmarking where the analyst or researcher compares performance of similar firms through evaluating past, present and projected future performance. More often than not, financial performance ratios have been relied upon as a measure to firms earning capability and success indicator (Majed et al, 2012).

According to the IMF, World Economic Outlook (WEO) October 2016, global GDP growth in 2016 was projected at 3.1%, slightly lower than growth in 2015 and unchanged from the July 2016 WEO. The developments are a reflection of economic activity in both the advanced and emerging market economies. This reflects the global economic activity continues to remain weak with increasing downside risks to the outlook.

According to the CBK financial reports of October – December 2016, the growth in the global economic output slowed to 3.1% in 2016 from 3.2 % in 2015 (IMF, WEO January 2017 update) with subdued activity. This was greatly affiliated weakening performance among the advanced economies leading to major economies registering declines in growth ranging. This ranged between 0.2-1% with the highest decline being registered by the United States of America (US) on account of poor export performance and low private investment.

In Sub-Saharan Africa (SSA), the average returns on assets have been significantly higher than returns of banks in other parts of the world (Flemini (2009). The major factors behind these high returns have been related to investments in highly risky projects and the huge gap between the demand for banking service and their supply (Ongore 2013). The sector has reported continuous growth in loans and financial performance, assets and product offering. Moreover, banking sector's cumulative balance sheet recorded a 3.4% growth from KES.3.26tn in December 2014 to KES.3.37tn in March 2015 (Cytonn Investments, 2015).

It is significant to note, commercial Banks are important financial intermediaries in the economy as they play a significant role in maintaining and promoting the development of economic sectors in a country. They ensure equitable distribution of resources from those with surplus to those with deficits. It is therefore paramount for commercial banks to be highly stable in performance to achieve their roles and generally specific factors influencing this performance must be well understood (Gutu, 2015).

According to World Banks report, Kenya Economic Update forecasted a growth of 5.6 percent in 2016 and 6 percent in 2017. Much of the growth was attributed to a more vibrant sector, currency stability, low inflation, low fuel prices, enhanced infrastructure, and growing middle-class and increased investment in energy and agriculture.

Kenya National Bureau of Statistics (KNBS) quarterly report stated that Kenya's economy grown by 5.7 percent in the third quarter of 2016 compared to 5.8% in the same period in 2015. Despite the slow growth majority of sectors, registered a decline in growth. Inflation was contained since it was at 6.3 percent, with the Central Bank's target, which was slightly higher than what was registered in the same quarter in 2015. This was ascribed to the increases in prices of food and beverages.

As at 31st December 2016, the Kenyan banking industry was made of 42 commercial banks, 1 mortgage finance company, 13 microfinance banks, 77 foreign exchange bureaus, 8 representative offices of foreign banks, 17 money remittance providers and 3 credit reference bureaus. 11 out of these banks were listed and trading on the Nairobi Securities Exchange (NSE). No major changes in the composition of the banking sector were evidenced between the third quarter and fourth quarter of the year (2016).

The Commercial Banks in Kenya are regulated by 5 major financial sector regulators; Central Bank of Kenya (CBK), Capital Markets Authority (CMA), SACCOs Societies Regulatory Authority (SASRA), Retirement Benefits Authority (RBA) and Insurance Regulatory Authority (IRA). The Kenya Deposit Insurance Corporation (KDIC) also plays an important role in regulating of the banks. On 31 May 2016, the National Treasury published a bill that proposed merging of four of the regulatory agencies in exclusion of the CBK into one regulatory body, the Financial Sector Authority (FSA).

In the year 2015, the banking sector was faced with liquidity risks and corporate governance issues which resulted to Dubai Bank of Kenya liquidation in August 2015 and Imperial Bank was put into receivership in October 2017. Chase Bank was also placed under receivership in April 2016 due to its inability to meet its financial obligations. This was as a result of the entity (Chase Bank) reporting a loss of Kes 686m (\$6.8m) loss in 2015 compared to a Kes 2.4bn profit the previous year. It also emerged, insider lending amounted to Kes 13.6bn and not Kes 3.2bn as it had reported a week earlier.

Statement of the Problem

Banks are indubitable important components in the economy and they play a vital role to maintain and spur development in other sectors. Simply put, they refocus resources from those who have surplus to those have deficits. As such, like any other industry, bank performance is highly desirable and therefore it is crucial to study the specific internal factors that influence the performance of listed commercial banks. Through the services offered by banks, the banking industry is deemed to determine the speed of development in the economy hence the prosperity of specific banks will motivate them not to leave the market. These therefore means establishing and understanding specific factors that affects bank performance in Kenya cannot be emphasized as it is mandatory to.

According to (Cytonn Investments, 2017) Kenya's listed banks have recorded a negative EPS growth of 8.2 percent compared with a positive growth of 14.1 recorded in 2016. The poor performance was attributed to reduction in Net Interest Income (NII) following the capping of interest rates. Specifically, NII declined form 9.4 percent in 2016 to 8.4 percent in 2017. Financial performance of Kenya's banking industry has been a subject of public interest and subject. For instance, the industry posted a KSh. 89.5 billion pre-tax profit in 2011, a 20.5 percent increase from previous year KSh.74.3 billion. The customer base has also increased considerably in the last four years form 4.7 million to 15.7 million. This caused public furor and led the introduction effort to cap interest rate, regulate the pricing of loan and interest on deposit.

Ongore & Kusa, (2014), concluded that despite the good overall performance in financial perspective of most commercial banks, there are some banks recording losses. For instance, for the financial year ended 2015, National Bank of Kenya reported a loss of Kes 1.18B while Cooperative bank of Kenya had reported a drop on their profits in 2014 resulting to

restructuring. On the other hand. financial performance of some banks continue to remain steady for example Kenya Commercial bank (KCB) reported after tax profits of Kes 12.4B, 15.9B, 16.5B and 19.8B in 2013, 2014, 2015 and 2016 respectively. This led to a decreasing growth of 22%, 3.6% and 16.7% on the profits in 2014, 2015 and 2016 respectively. In spite of the strong regulatory and legal framework enforced by the Central Bank, the Kenyan banking system has experienced banking problems since 1986, which has led to the collapse of more than 40 commercial banks Gitonga, (2014) with the recent ones in 2015 and 2016 being Imperial, Dubai and Chase banks respectively.

Interest rate volatility has had a negative effect on the financial performance of banks creating a challenge to management of commercial banks in their principal role of lending and performance. Largely, interest rate volatility has been blamed on policies, high inflations and overvalued exchange rates. According to Wambari and Mwangi (2017) the lending interest arte have a positive relationship with financial performance of financial institutions, while deposit interest has relation with bank performance. negative Furthermore, financial performance of commercial banks emanates from the difference between the interest paid in deposit and the interest it charges in lending. Over and above that, Banking Act 2016 implemented to cap the lending rates and state minimum deposit rates make the more imperative to investigate the influence cost of deposit on performance of commercial banks in Kenya.

The findings by the various scholars on this topic are clearly not conclusive as they have not fully exhausted all possible internal factors as most have combined both macro and micro factors that are deemed to affect financial performance of the listed commercial banks in the NSE. The researcher in this study will seek to narrow down to specific factors that have not been studied yet in the Kenyan economy that is loans, deposits, financial leverage and income diversification as determinants of financial performance and therefore fill this knowledge gap by answering the question: What is the effect of internal factors on the financial performance of commercial banks listed on the NSE?

Objectives of the Study

The general objective of the study was to analyze selected internal factors affecting the financial performance of commercial banks listed at the NSE. The specific objectives were:-

- To evaluate the effect of deposits on performance of listed commercial banks on the NSE.
- To assess the relationship between loans and performance of listed commercial banks on the NSE.
- To measure the effect of income diversification on performance of listed commercial banks on the NSE.
- To evaluate the effect of financial leverage on performance of listed commercial banks on the NSE.

Hypothesis

- Deposits have no significant relationship on performance of listed commercial banks.
- Bank loans have no significant relationship on performance of listed commercial banks.
- Income diversification has no significant relationship on performance of listed commercial banks.
- Financial leverage has no significant relationship on performance of listed commercial banks.

LITERATURE REVIEW

Theoretical Literature Review Pecking Order Theory

According to Myers and Majluf (1984) this theory collaborates financial performance, measured by financial performance and financial institution

preference order for capital to finance their business activities. Due to asymmetrical information that defines relationship between the firm and potential investors, the financial institutions will prefer to use retained revenue to debt, either shortrun or long-run, and debt over equity.

It is expected that if a financial institution does not issue new security and uses the retained revenue to finance and support investment opportunity, the information asymmetry problem would be solved. In firms where information asymmetry is large, they should issue a debt to avoid selling underpriced securities. The capital structure decreasing events such as new stock offering hence leading to a firm's stock price decline.

Modern Portfolio Theory

This theory according to Markowitz (1959) collaborates income diversification and portfolio theory on investment approach where investor balances the risk against the expected maximum earning from overall portfolio. Furthermore, diversified portfolio is an effective approach to increase returns while reducing risk associated with the investment. As such, portfolio selection strategies have gained traction in financial literature in the recent past. To this effect, modern portfolio uses the approximate "mean-variance" approach to simply portfolio selection problem.

Markowitz (1959) endeavored to quantify risk and quantitatively validate why and how portfolio diversification works to decrease risk for investors. The 'risk' of a portfolio is quantified as a standard deviation of return from period to period, and the portfolio selection problem is reduced to computing an 'efficient' portfolio, that is, one that minimizes the risk for a fixed level of return in a single period.

According to the portfolio theory, the bigger the expected return the better the investment, and the

smaller the standard deviation of the return the more attractive the investment. Furthermore, the theory shows that we can reduce the standard deviation of the return or risk by combining anticovariant securities. However, each asset class generally has different levels of return and risk and also behaves uniquely so that one asset may be increasing in value as another is decreasing or at least not increasing as much, and vice versa. This theory, however, has a shortcoming; it cannot allow both more and less risk averse investors to find their optimal portfolio, a problem surmounted by the capital asset pricing model (CAPM) Sharpe, (1964).

Trade off theory

This theory cooperates financial leverage as suggested by Myers (1984). It emphasizes a balance between tax saving arising from debt, decrease in agent cost and bankruptcy, financial distress costs and the need for an optimal capital structure (Oruc, 2009). In other words, optimal level of leverage is achieved by balancing the benefits from interest payments and costs of issuing debt (Jahanzebet al, 2014). Sheikh & Wang (2010) stated that Trade Off theory expected to choose a target capital structure that maximizes the firm value by minimizing the costs of prevailing market imperfections.

This theory is also referred as a tax based theory and bankruptcy costs, it assumes each source of money has its own cost and return and these are associates with the firm's earning capacity and its business and insolvency risks (Awan & Amin, 2014). Therefore, firms with more tax advantage will issue more debt to finance business operations and the cost of financial distress and benefit from tax shield are balanced (Chen, 2011).

According to Awan & Amin (2014), financial distress and agency cost theories assume that higher debts bring financial distress and eventually bankrupt a firm or force it to go into liquidation or restructuring. Bankruptcy cost is a cost directly incurred when the perceived probability that the firm will default or financing is greater than zero. One of the bankruptcy costs is liquidation cost, which represents the loss of value as a result of liquidating the net assets of the firm. Another bankruptcy cost is distress cost, which is the cost a firm incurs if stakeholders believe that the firm will discontinue (Chen, 2011). From the explanations above it shows that costs of financial distress and benefits from tax shields are balanced.

Ross (1977), argues debt also has several advantages to the firms. First, it is a valuable device for signaling by firms. He suggests that leverage will increases a firm's value, because enhancing leverage is coinciding with the market's realization of value. Second, agency costs related to equity will be reduced by debt. These agency costs are such as free cash flow problem or also called over investment problem (Jensen, 1986). Third, debt will reduce the agency cost of management so that it disciplines managers.

On the other hand, debt has its own disadvantages: Managers acting in shareholders' interest may shift investment to riskier assets and the costs are incurred by the debt holders. Secondly, managers may borrow still more and pay out to the shareholders, hence the debt holders suffer. Lastly, excessive debt leads to the underinvestment problem or 'debt overhang' problem. This means that many good projects may be passed on because more debt cannot be issued at the right time due to the existing debt (Mostafa & Boregowda, 2014).

Signaling Theory

This theory collaborates financial leverage, according to Arrow (1972) and Spence (1973). Signaling theory presupposes that best performing or profitable firms supply the market with positive and better information Bini et al (2011). In addition, the signaling theory is one of the theories, which have a clarification for the association between financial performance and capital structure (Alkhazaleh & Almsafir, 2014). This theory presupposes that a superior capital structure is an optimistic signal to market worth of the organization (Adeusi et al, 2014).

The signaling theory further postulates that majority of the profitable firms signal their competitive power through communicating new and important information to market. Thus, information is disclosed by means of specific indicators or ratios which, very often, measure specific conditions on which to enter into or renew the agency contract (Bini et al, 2011).

According to the signaling theory, the management of bank signals good future expectation by increasing capital. This indicates that less debt ratio necessarily mean those banks perform better than their identical (Alkhazaleh & Almsafir, 2014). In addition, the theory argues that managers who strongly believe that their bank can outperform other banks in the industry will want to relay such information to various stakeholders in order to attract additional investments.

Thus, the signaling theory affirms that when a bank's performance is excellent, directors will signal the banks performance to its stakeholders and market by making various disclosures which poor performing firms cannot make. By enhancing more disclosure most managers will wish to receive high benefits and a good reputation which may increase the value of the firm and financial performance (Muzahem, 2011).

Modigliani and Miller Theory

This theory collaborates financial leverage and bank loans, according to Modigliani and Miller (MM) (1950). The two professors in the 1950s, studied capital-structure theory intensely and from their analysis, they developed the capital-structure irrelevance proposition. Essentially, they hypothesized that in perfect markets, it does not matter what capital structure a company uses to finance its operations. They theorized that the market value of a firm is determined by its earning power and by the risk of its underlying assets, and that its value is independent of the way it chooses to finance its investments or distribute dividends.

This theory is based on key assumptions which emphasis; no taxes exist, no transaction costs, no bankruptcy costs, equivalence in borrowing costs for both companies and investors, Symmetry of market information, meaning companies and investors have the same information and there is no effect of debt on a company's earnings before interest and taxes. However, in the real world, there are taxes, transaction costs, and bankruptcy costs, differences in borrowing costs, information asymmetries and effects of debt on earnings.



Figure 1: Conceptual Framework

Cost of Deposits

The aim of the study is to establish the effects of the cost of deposit on the performance of the listed banks. Other studies that have delved on the effects of customers deposits include, but not limited to: Naceur and Goiaed, (2006) stated that there are significant effects of level of deposit on performance of banks in Tunisia and Okun, (2012) found that level of deposit increasing substantially had significant impact on finance performance of banks in Kenya. It therefore becomes imperative to investigate the effect of cost of deposit in performance of listed banks to establish its significance.

Asset Quality

Asset quality is another important internal factor that affects bank performance. Bank assets comprise; credit portfolio, current asset, fixed assets among other investments. According to Athanasogluo et al, (2005) the size of the firm's asset is largely determined by the age of the firm. Loan in most cases the main asset of the bank that generates the biggest share of the income. Therefore, quality of the bank determines the performance of the bank. In other words, quality of the loan has a direct bearing on the bank performance. Dang (2011) postulates that the highest risk facing banks is the loss that comes from delinquent loans.

Herfndahl Hirschmann Index

To measure income diversification, Herfndahl Hirschmann Index (HHI) is computed for all the selected banks. As a relative measure, it considers diversification as an equal exposure to every income generating activity. In other words, its used to verify or measure the level of diversity or concentration of banks income. Lin et al, (2012) used HHI measure to determine income diversification of Asian banks. The reduction of the HHI over time is translated as shift to fee-based business.

Debt Ratio

Al-Taani, (2013) carried out a study on how financial leverage measures firms use of debt and equity to finance firm assets and its operations in Pakistan and established as debt increases, financial leverage increases. The increased financial leverage means an increase in the company's capacity and thus, enhances its capacity of making much profit. A firm can fund its investments portfolio through debt and equity. A company can also employ preference capital as another form of capital. The company's rate of return on assets is fixed regardless of the rate of interest on debt.

Return on Equity (RoE)

ROE, along with Return on Asset (ROA), measure the overall firm's financial performance Rappaport, (1986). Technically, shareholder equity value created when equity returns of a firms exceeds the cost of the equity. It is calculated by dividing profit after tax in a given year by the book value of equity at the beginning of the year. Ongore and Kusa (2013) postulates that a company with a higher return on equity is more likely to be more profitable that the one generating more income internally. As such, return on equity is employed to measure the financial performance of the listed commercial banks.

Empirical Review

This review will focus on previous studies carried out by various other scholars on the independent and dependent variables identified to enable the research. These will include; financial performance as the dependent and customer deposits, total loans, income diversification and financial leverage as the independent variables.

Financial Performance

The dependent variable in this study is financial performance and studies have shown the goal of most organization is profit maximization (Niresh & Velnampy, 2014). Athanasoglou et al. (2008) and Sufian (2011), noted there are two major alternative measures of financial performance; return on Assets (ROA) and the Return on Equity (ROE) this is return to the shareholders on their

equity. Rumler & Waschiczek (2010) suggest that ROE is the key ratio for the evaluation of bank financial performance.

Financial performance is a subjective measure of how a firm uses its asset, through the primary mode of business, to generate income. Generally, this term is used to quantify firm's financial health within a given period. It can also be used to compare firms in the same industry in different sectors. According to Ngugi (2013), he defined financial performance analysis as the approach to identify the strengths and weakness of the firm by comprehensively analyzing the items in the balance sheets and profit & loss account.

Niresh & Velnampy (2014) noted the ultimate goal of most organization is to ensure profit maximization. Financial performance involves the capacity to make benefits from all the business operations of an organization, firm or company (Muya & Gathogo, 2016). Profit usually acts as the entrepreneur's reward for his/her investment. As a matter of fact, profit is the main motivator of an entrepreneur for doing business. Profit is also used as an index for performance measuring of a business (Ogbadu, 2009). Stierwald, (2010) noted profits as the difference between revenue received from sales and total costs which includes material costs, labor and so on. According Anene, (2014), performance of a firm can be expressed either in accounting profits or economic profits and it is the main goal of a business venture.

Eliona (2013) researched on the impact of internal factors on bank financial performance in Albania and considered data of 12 most important banks in the country for the period 2005-2012. The variables used in this study were: rate of return on assets ROA, the size of the bank, loans, and loan risk and bank deposits. From the results, the study concluded that: bank loans, bank deposits and bank interest had a positive correlation with financial

performance, whereas loan risk had a negative relation.

Therefore, this study will attempt to measure financial performance by using ROA similar to most of the aforementioned researchers. ROA will be measured as net profit before tax divided by total assets similar to (Olweny & Shipho, 2011).

Customer Deposits and Financial Performance

Okun (2012) studied the effect of the level of deposits on financial performance of commercial banks in Kenya and established there had been a gradual rise in customer deposits in Kenya. The financial performance of the banking sector has also been on the rise. So, the empirical problem was whether there exists a relationship between the customer deposits and banks financial performance. The results indicated that there is a positive and significant relationship between Deposits Ratio and ROA. Following study results, it is recommended that commercial banks in Kenya should invest in attracting more low cost deposits by adopting alternative banking channels innovation such as Mpesa and agency banking in order to attract deposits at the lowest cost possible and to reduce costs associated with other forms of deposit mobilization.

Naceur and Goiaed (2011) investigated the determinants of the Tunisian banks' performances during the period 1996-2011. Empirical evidence indicated that the best performing banks are those who maintained a high level of deposit accounts relative to their assets. Increasing the ratio of total deposits to total assets means increasing the funds available to use by the bank in different profitable ways such as investments and lending activities

The deposits of the public like demand deposits, savings deposits and fixed deposits constitute an important item on the liabilities side of the balance sheet. The success of any banking business depends to a large extent upon the degree of confidence it can instill in the minds of the depositors. The bank can never afford to forget the claims of the depositors. Hence, the bank should always have enough cash to honor the obligations of the depositors (Somashekar, 2009)

Berlin and Mester (2010) concluded that core deposits such as demand and savings deposits, which are largely inelastic, have historically insulated the bank funding costs against economic shocks. Ratnovski and Huang (2009) found out that Canadian banks compared to other large commercial banks in Organization for Economic Cooperation and Development (OECD) countries were more resilient during the 2008 economic turmoil since they relied more on depository funding as compared to the other banks that relied more on wholesale funding.

Non-Performing Loans and Financial Performance

Banks are the major source of debt financing for business and non-business enterprises in Kenya. Loans are mainly available on a fixed and spot basis and can be secured or unsecured, in most cases they are offered for specific periods depending on type of facility. Therefore, the stability of the banking sector is of paramount importance to the financial system as it plays an imperative role in the operation of an economy (Arif, et al, 2013).

This make non-performing loans the best candidate to measure the asset quality of a bank. It is a major concern for all banks to keep its portfolio at risk (PAR) at a low level at all times. This is because the proportion of non-performing loans to total asset impacts the performance of the bank. Technically, low PAR indicates the good health of the bank portfolio, which has a positive effect in bank performance (Sangmi and Nazir, 2010).

To Alton and Hazen (2011), NPLs are loans which have its ninety days or beyond past due or which

have no longer accruing interest from it. This thought was corroborated by Hennie (2013), who also agrees in the form of an argument that NPLs are loans having no revenue generating from it. Fofack (2008) argues that NPLs are credit facilities which has not been generating any income within a reasonable period of time, that is either the principal and or the interest on the facility have not been honored for a period of ninety days or more. Guy (2011) also observed that NPLs are loans facilities that are usually in arrears for a period of ninety days or more.

Commercial banks majorly choose to invest in loans and advances, as a result they risk default associated with these investments. Such potentially investments have negative consequences for bank earnings because some of the loans and advances to customers may end up as bad or doubtful debts. This risk may or may not be covered by collateral securities or high interest rates. If the risk is covered by high lending rates, these compensate for the high risks and the costs incurred in valuing collateral securities, negotiation and debt servicing (Uzhegova, 2010).

Bad loans take their name from the fact that they are practically in opposition to the financial situation of the bank. By the time they are referred to as "bad loans", there is the fear that the amounts involved and their interest cannot be fully paid by the debtor Chelagat, (2012; Awunyo-Vitor, (2013). In this regard, a financial loss is encountered instead of a profit, leading to adverse effects on the commercial bank, the defaulting SMEs and other corporations and individuals who would like to borrow from the commercial bank in future.

Income Diversification and Financial Performance

In the recent past, financial institutions have progressively been generating income from "offbalance sheet" activities and from commission and fees. According Uzhegova (2010) have noted that due to reduction in interest margins, commercial banks have been forced to explore alternative sources of income, making diversification into businesses, other than traditional financial activities. The concept of income diversification follows the principles of portfolio theory which states that individual banks can plummet financial risk by diversifying their portfolios. That notwithstanding, there is a long history of debates about the cost and benefits of income diversification in banking industry. The exponents of income diversification in banking industry urge that it provides a less volatile and stable, economies of scale and scope and the potential of leverage managerial efficiency across service and products (Choi and Kotrozo, 2008).

The against income diversification activities cite increased agency cost, augmented organizational complexity, and likelihood of riskier behavior of managers. According to Mihail (2009) activities meant to diversify income lead to organizations complexities since the top management are not able to monitor the operations of other divisions/branches. Further, the advantage of economies of scale and scope exist to a point. The cost that is accrued for the complexities associated with income diversification may exceed the benefits of revenue diversification. Therefore, the merits of income diversification and bank performance can be likened to an inverted-U where there is an optimal benefits of income diversification beyond which they begin to decline and may eventually become negative.

Sufian and Chong (2008) used annual data of Philipines commercial banks and found a positive relationship between non-interest and total asset, proxy for revenue diversification and financial performance. Uzhegova (2010) applied HHI index of commission, interest income, fee income, noninterest income supported the assertion that income diversification has significant benefits. Contrary, Kotrozo and Choi (2008) undertook the same analysis and found that there is a negative relationship between income diversification and performance.

According to Mercieca (2007), diversification in the banking sector has three dimensions: financial products and services diversification, geographic diversification, and a combination of geographic and business line diversification. Income diversification in the banking sector refers to increasing share of fees, net trading profits and other non-interest income within the net operating income of a bank. In finance theory, diversification of income sources in a bank should lead to a lower risk level and a higher risk-adjusted performance. However, some studies examining the effects of income diversification on the risk-adjusted bank performance prove that diversification may increase the volatility of bank operating income.

Acharya (2008), studied Italian bank and found that diversification increases risk while in other cases it reduced bank performance like in the German banking sector and small European banks Busch and Kick, (2009) and Mercieca, (2007). A number of research studies report negative side of diversification: Berger (2010) that states diversification reduces bank performance in Chinese banking sector, but Kamp (2007) finds neither of the arguments are true with regard to German banking sector. From prior research, there is evidently no consensus on the effect of income diversification on return and risk.

Baele (2007) investigated if income diversification could lead to a better performance/risk profile in European banks over the period of 1989 – 2014. They found a positive relationship between income diversification and the market's anticipation on future bank profits. They also stated that diversification could decrease total risk for most banks, but banks with higher non-interest income portions had more systematic risk.

Chiorazzo (2008) studied the link between income diversification and financial performance of Italian banks by using annual individual bank data over the period of 1993 – 2013. They found that income diversification could increase risk-adjusted returns of Italian banks and this relationship was stronger at larger banks.

Busch and Kick (2009) also analyzed the effects of fee-based income activities on risk-adjusted performance measures of German universal banks between 1995 and 2007. They empirically found that higher fee-based income could increase risk-adjusted returns of German universal banks.

Elsas,(2010) investigated effects of income diversification on both bank performance and market value by using a panel data of nine countries over 1996 to 2008. They found that income diversification could improve bank financial performance and market value. Sanya and Wolfe, (2011) analyzed income diversification of banks in emerging countries. They found evidence that income diversification had a positive effect on riskadjusted performance of emerging market banks. They also asserted that System GMM estimators, research methodology used in their study, is a better econometric model to overcome endogeneity problem in panel-data regression model estimations.

Financial Leverage and Financial Performance.

Financial leverage refers to the use of debt to acquire additional assets. In the quest to optimize their objective, which hinges primarily on quantifiable performance, financial managers have adopted various capital structures as a means to that goal. A firm can finance its investment by debt and/or equity. The use of fixed-charged funds, such as debt and preference capital along with the owner's equity in the capital structure is described as financial leverage or gearing Dare and Sola, (2010).

Al-Taani, (2013) carried out a study on how financial leverage measures firms use of debt and equity to finance firm assets and its operations in Pakistan and established as debt increases, financial leverage increases. The increased financial leverage means an increase in the company's capacity and thus, enhances its capacity of making much profit. A firm can fund its investments portfolio through debt and equity. A company can also employ preference capital as another form of capital. The company's rate of return on assets is fixed regardless of the rate of interest on debt.

The financial leverage used by companies is meant to earn more funds on their fixed charges than operation cost as it impacts on the earnings per share or profit after tax (Ogebe & Alewi, 2013). This therefore means a combination of two leverages has importance to the earnings attributable to ordinary shareholders. Al-Taani, (2012) on a study on the impact of financial performance on working capital management policy and financial leverage concluded that a firm's working capital management policy, represented by financial leverage and firm size have significant relationship to firms' performance in respect to net income however found no significant impact on Return on equity and Return on Assets.

Ammar (2013) found a positive relationship between debt financing and bank's financial performance. They used multiple regression models to estimate the relationship between capital structure and banking performance. The study was conducted in Pakistan using data from banks listed in stock exchange since 2007 to 2011. To Pakistan high level of debt is associated with high financial performance of the banking industry. Dadson and Jamil (2012) conducted a research in Ghana and found that increase in financial leverage results in decrease of financial performance (ROA and ROE) of listed bank. This means that an increase in debt results decrease in financial performance of banks. In their study, they collected data from 2000 to 2010 of all listed banks on Ghana stock exchange and analyzed them using panel regression methodology.

Jameel (2013), concluded that financial leverage negatively affects the accounting performance measures, and the market value of the firms and this impact extends for several subsequent years. The objective of the study was to examine the impact of financial leverage on the different performance measures, and to discover which one of them would be the more affected by financial leverage. Testing the hypothesis on a sample that was extracted from firms listed at Palestinian Security Exchange (consisting of twenty publicly listed corporations during the period (2004-2011). Using the multi regression model, and return on assets (ROA) return on equity (ROE), return on sales (ROS), and sales growth as accounting performance measures, and Tobin's q to measure & represent the market value of the company.

Hashemi and Zadeh (2012), also concluded from their study that companies that have high leverage will distribute less profits to shareholders when compared to companies with low leverage, as result of the reversed correlation between financial leverage & dividend policy. The above was concluded when they conducted a study aiming to test the effect of financial leverage on dividend policy.

METHODOLOGY

Research design is a plan or road map of how data collection analysis is structured in order to meet the research objectives through empirical evidence

economically (Cooper &Schindler, 2013). This research used descriptive research design which will seek to provide more information on the various factors that affect financial performance of Kenyan banks listed at the NSE and how exactly they affect their financial performance. The target population of interest in this study constituted of the 10 out of the 11 listed commercial banks at the NSE as at 31st December 2016, these was out of the 42 banks in Kenya. The 11th bank HFCK was excluded from the study since it had been incorporated as at 2007. To test the four hypotheses, the following model was employed: *Bank performance= f (cost of deposit, asset quality, Herfndahl Hirschmann Index, debt ratio)*

Bank performance was measured by ROE

The Pooled regression model was taken to be;

 $RoE = \alpha_0 + \beta_1 CoD_{it} + \beta_2 AQ_{it} + \beta_3 HHI_{it} + \beta_4 DR_{it} + \varepsilon_{it}$

Fixed Effects Regression model

 $RoE = \alpha_i + \beta_1 CoD_{it} + \beta_2 AQ_{it} + \beta_3 HHI_{it} + \beta_4 DR_{it} + \varepsilon_{it}$

Random Effects Regression Model

 $RoE = \alpha_0 + \beta_1 CoD_{it} + \beta_2 AQ_{it} + \beta_3 HHI_{it} + \beta_4 DR_{it} + u_{it} + \varepsilon_{it}$

RoE = Bank Performance

 β_0 - Intercepts of equation/Constant (fixed at 0)

 CoD_1 - Bank Deposits (measured using cost of deposit - CoD)

 AQ_2 -Bank Loans (measured by asset quality- AQ)

*HHI*₃-Income Diversification (measured by Herfndahl Hirschmann Index- HHI)

 DR_4 - Financial Leverage (measured using Debt Ratio- DR)

 ε_{it} = disturbance term u_{it} = within-entity error Where X_{it} represents explanatory variables, i is the individual bank and t is the time dimension (years). Panel data analysis has three independent approaches which include: fixed effect, random effect, and pooled effect approach. Pooled effects model is similar to Ordinary Least Squares (OLS). Selection of the method may be a subject to the objective of the study, but the assumption of the error terms largely determines whether to employ fixed or random effect model.

RESULTS

Descriptive Statistics of the Response and Independent Variables

Below are descriptive statistics of return on equity and the internal factors of the selected banks. The mean, median, standard deviations, minimum and maximum were considered to describe statistical characteristic of specific factors. The findings are exhibited in Table 1 below.

Statistic	RoE	CoD	AQ	нні	DR
Sample Size	100	100	100	100	100
Minimum	-0.154	0.006	0.006	0.500	0.719
Maximum	0.536	0.069	0.474	14.448	0.928
Mean	0.295	0.033	0.058	0.700	0.849
Standard deviation	0.091	0.016	0.069	1.391	0.034

From Table 1, return on equity shows a percentage mean of 29.53 with a standard deviation of 0.091, cost of deposit indicated a percentage mean of 3.3 percent with a standard deviation of 0.016, the asset quality showed percentage mean of 5.81 with a standard deviation of 0.069, and Herfndahl Hirschmann Index had mean percentage of 70 percent with a standard deviation 1.391 debt ratio indicated a percentage mean of 84.9 with standard deviation of 0.034. The spread of the data was shown by the difference between minimum and

maximum values, and standard deviation. For instance, Herfndahl Hirschmann Index exhibited a high dispersion which is also highlighted by its high standard deviation, which is consonance with what Mikhalkina, et al (2015) found in Czech Republic.

Correlation Analysis

Pearson R correction matrix is sued to determine the association between the independent variables and between response variable and explanatory variables. Correlation matrix of bank performance and internal factors is illustrated below in Table 2.

Table 2: Correlation Matrix of Bank Performance and Specific Internal factors

Variables	RoE	CoD	AQ	HHI	DR
RoE	1.000				
CoD	-0.303	1.000			
AQ	-0.339	-0.155	1.000		
ННІ	0.027	-0.077	-0.019	1.000	
DR	-0.089	0.136	0.170	-0.060	1.000

Return on equity is the measure of performance of commercial banks listed at the NSE. Cost of deposit, asset quality, and debt ratio are negatively correlated to the ROE indicating that they move in opposite direction. Illustratively, increase in asset quality or cost of deposit lead to a decrease in return on equity of a commercial bank. Herfndahl Hirschmann Index (HHI) had a positive relationship with response variable meaning that they increase and decrease together. There was no coefficient greater than 0.8 in the above correlation matrix, hence no strong correlation between the explanatory variables. Afar, the positive values in Table 2 implied the predictors significantly influence

Table 3: Multicolinearity statistics of Explanatory variables

the performance of commercial bank listed in the Nairobi Securities Exchange

Multicolinearity Analysis

According to Guajarati (2007) Variance Inflation Factor (VIF) value above 10 shows existence of multicolinearity. As a thumb rule, if a VIF of the explanatory variables exceeds 10 when R-Squared is greater than 0.9 (R^2 >0.9), then the variables are highly correlated. Over and above that, tolerance values of independent variables are less than 10 (a cut off for tolerance values). From Table 2 above and Table 3 below there is no multicolinearity problem in this analysis.

Statistic	RoE	CoD	AQ	HHI	DR
Tolerance	0.754	0.806	0.782	0.991	0.941
VIF	1.326	1.241	1.279	1.009	1.062

Heteroscedasticity Analysis

To study further, a heteroscedasticity test was carried out to test the null hypothesis that the variance of the residuals is homoscedastic ("has a constant variance"). Breusch-Pagan test is used to **Table 4:** *Test of Heteroscedasticity*

test for heteroscedasticity where the null hypothesis is that the residuals have the same variance (homoscedastic). The output of the test was as represented in table below:

Breusch-Pagan Test			
BP = 109.93,	p-value = 2.2e-16		
degrees of freedom = 13			
The study rejected the null hypothesis since the reported p- value is less than the critical value (2.2e-16<0.05) and thus we concluded that the observations did not have constant variance (Table 5). In other word heteroscedasticity is an issue in this analysis. To overcome the problem of heteroscedasticity, robust errors were used instead of the standard errors.	Unit Root Test Unit root test was undertaken to test whether variables were stationary or not. The null hypothesis was the no unit root (i.e. not stationary) against the alternative presence of unit root. Non- stationarity will affect the behavior of the variables and thus lead to misleading estimates due to spurious regression (Pesaran & Shin, 2013). If the		

data is non-stationary differencing is done until we

achieve stationarity.

Table 5: Unit Root test using Augmented Dickey-Fuller Test Statistics

Variables	Augmented Dickey-Fuller Test
Return on Equity	Dickey-Fuller = -3.6867 (p-value = 0.02899)
Cost on Deposit	Dickey-Fuller = -4.1556, (p-value = 0.001)
Asset quality	Dickey-Fuller = -5.4027, (p-value = 0.01)
нн	Dickey-Fuller = -5.8173, (p-value = 0.01)
Debt Ratio	Dickey-Fuller = -4.822, (p-value = 0.01)

As shown in the table above (Table 5), all the variables are stationary, unit root was not present. The p-values are less than critical value 0.05 and thus all the variables are stationary and no differencing is needed.

Panel Data Analysis

To decide whether to use panel regression model or appropria pooled OLS, the researcher used Breusch-Pagan **Table 6:** Breusch-Pagan Lagrange Multiplier Test for Entity Differences

Lagrange Multiplier to know whether there exist specific differences among the listed commercial banks. Absence of differences or homogeneity would lead to application of pooled OLS, while presence of difference would render panel data regression models the preferred option. The result in Table 6 below indicated that pooled OLS is not an appropriate model for this data (p-value < 0.05).

B		· /··)		
Response Variable Chi- Square		p-value (H ₀)		
Poturn on Equity	17 592	0.0002802 (No significant offects)		
Return on Equity	12.305	0.0003632 (NO significant effects)		
In this section panel data wa	as used in estimation	listed at the NSE using return on equity (ROE) as the		
approach to study the impa	ict of bank deposits,	response variable. The study considered the pooled,		
bank loans, income diversif	ication and financial	random and fixed effects regression approach		
leverage on financial perfor	mance of the banks	across the banks over the period of study.		

Table 7: Pooled, Fixed and Random Effects of Internal factor on Bank Performance.

Variable	Pooled	Fixed Effect	Random Effects
Cons	0.32737*	0.3202	0.2106*
Cost of Deposit	-2.1518***	-1.3616*	-1.7527**
Asset Quality	0.5602***	-0.2406*	-0.3455**
Herfndahl Index	0.00016	-0.0022	-0.00181

Debt Ratio	0.4677***	0.7596**	0.4403***		
No. of Observations	100	100	100		
R –Squared	0.5367	0.5486	0.5987		
Adjusted R-Squared	0.5779	0.5568	0.6012		
F-Statistics (p-value)	F= 7.0150(p-value:	F= 3.1476 (p-value:	F= 3.7957 (p-value:		
	0.00005)	0.01823)	0.00656)		
Hausman Statistics		Chi-Square =8.0304 (0.09047)			

*, **, *** indicate significance at the 10%, 5%, 1% level of significance respectively.

From Table 7, present the internal factors that affect banks' performance in Kenya. The F-statistics value of 7.0150 (p-value: 0.00005), 3.1476 (p-value: 0.01823), and F= 3.7957 (p-value: 0.00656) show that the explanatory variables are jointly statistically significant in pooled, random and fixed effects model in explaining variations in return on equity. The adjusted R-squared statistics values of 0.5779, 0.5568 and 0.6012 show that the four independent variables account for 57.8 %, 55.7% and 60.12 % of the variations on the bank's performance in the

pooled, fixed and random effects models respectively.

Considering the Hausman specification statistics Chi-Square =8.0304 (0.09047), we accept the null hypothesis that the dissimilarity of the coefficients of the random and fixed effect regression model are not systematic, therefore we accept the interpretations of the random effect model. The random effects model of the internal factors affect performance of banks as exhibited below:

Variables	Coefficient	Standard error	t-statistics	Pr > t
Cons	0.2106	0.4311	0.4885	0.03887
CoD	-1.7527	0.6403	-2.7371	0.00739
AQ	-0.3455	0.1272	-2.7161	0.00784
нні	-0.0018	0.0054	-0.3341	0.73900
DR	0.4403	0.0325	13.5311	2.2e-16

Table 8: Random Effects Model of internal factors affecting Bank's Performance.

Bold Pr> |t| are the significant variables.

 $\begin{aligned} \textit{RoE} \ &= 0.2158 - 1.7527(\textit{CoD}) - 0.3455(\textit{AQ}) \\ &- 0.0018(\textit{HHI}) + 0.4403(\textit{DR}) \\ &+ \epsilon_{1i} \end{aligned}$

From Table 8 above, the coefficients indicated the linear relationship with the return on equity ratio. The constant, the return on equity when all other factors are assumed to be zero, is 0.2106 (t-statistic=0.4885, p-value 0.03887), despite being

impracticable is statistically significant at 5% probability level. The p-values is less than the critical value (5 %), hence we reject the null hypothesis that constant is equal to zero. Contrary, Herfndahl Hirschmann Index does not have significant influence on the bank performance as the p-value is greater than the 5 % probability level. This is similar to what Mboya (2012) found when

investigating the effect of income diversification on bank performance in Kenya. This means that a unit change in HHI lead to insignificant decreases in return on equity of 0.18 percent (t-statistic= -0.3341, p-value = 0.7390).

The cost of deposit has significant negative effects on bank performance highlighted by (t-statistic= -2.7371, p-value = 0.00739) which is less than 5 % probability level. Technically, this mean that a unit increase in cost of deposit decreases the return on equity by 1.7527. This make cost of deposit the most significance factor - it has the greatest linear impact. There is a positive relationship between bank performance and debt ratio highlighted to be a significant coefficient (t-statistics= 13.5311, pvalue= 2.2×10^{-16}), the p-value is less the critical value (0.05). Mboya (2012) also found that asset quality has significant negative effect on bank performance in Kenya, as the empirical results in this study -.3455 (t-statistics= -2.7168, reveal, pvalue=0.00784).

CONCLUSION AND RECOMMENDATIONS

The main objective of this study was to study the internal factors that affect the performance of the listed banks in Kenya. The analysis was done using panel regression approach on 10 randomly selected banks over a study period of 10 years stretching from 2007 to 2016, which resulted into a hundred observations. The finding of the study is as stated below.

Cost of deposit, a measure of bank deposits impact on performance of listed commercial banks, has negative effects on the return on equity. Particularly, there is a 1.7527 decrease on return on equity with a percentage increase in cost of deposit. Interest on income has a significant impact on performance of the listed banks. Thus, we reject the null hypothesis that there is no significant relationship between bank deposits and performance of listed commercial banks. This conclusion is in line with what Base Committee on Banking Supervision 2004 found that changes in net interest rates have negative effects. Interest rate is generally associated with poor performance of banks. According to Sayedi (2013) interest on deposit is a significant determinant of the cost of funds used in lending. However, the direction of the interest rate in is difficult. Be that as it may, most studies have established the significance of movement of interest rate on impacting the performance of banks.

From Table 5, bank loan measured using asset quality with a beta coefficient of -0.3455 meaning that there is a negative relation with bank performance. In other words, performance of the bank reduces by 34.5 % with a percent increase in asset quality ratio The impact of asset quality is significant at 5 % level of significance. Thus we reject the null hypothesis that there is no significant relationship between bank loans and performance of the listed banks. This outcome is in line with other studies; Lata, (2015) which established that asset quality (Non-Performing loans proportion) has adverse effects on performance of banks in Bangladesh. Similarly, Roy and Khan (2013) found that non-performing loans significantly influenced bank financial performance with negative effects in net-profit of banks listed in Dhaka. Locally, the analysis conforms with what Malende (2008) found that asset quality adversely affects the performance of Kenyan banks. Li and Zou (2014) established that asset quality is a significant determinant of performance of European banks.

This research work aimed to study the impact of income diversification by listed commercial banks on their performance using Herfndahl Hirschmann Index (HHI) as a proxy of the former and return on equity as the proxy of the latter. From Table 5, the results showed that HHI is not statistically significance at 5% level. Bank performance increase by 0.1% given a percent increase in Herfndahl index which does not significantly affect the bank performance, thus we fail to reject the null hypothesis that there is no significant relationship between income diversification and bank performance. In the recent past, both Elsas et al (2010) and Chiorazzo et al (2008) have established that income diversification influence bank performance through higher margins from nonincome interest business. Contrary, this analysis conforms with other studies (Acharya et al (2002), DeYoun (2006), and Stiroh (2014), among others) that income diversification may not necessary translate into improvement in bank performance; it may, in fact, have a negative impact on financial performance of the bank. Illustratively, reduction of interest charged in loans in object of capturing the customer for other products or service may not be enough to compensate for the lost interest reduction which may be detrimental to the bank (Lepetit et al 2008). From the analysis there is not sufficient evidence to reject the null hypothesis. Therefore, income diversification does not impact significantly the performance of the listed commercial banks.

From Table 5, there was positive relationship between debt ratio and bank performance of the listed bank in Kenya. Specifically, bank performance increase with 44.3 % with a percentage increase in debt ratio, a proxy of financial leverage. In this case, we reject the null hypothesis that there is no significant relationship between financial leverage and performance of listed banks. Other studies have established a positive effect of financial leverage on performance of commercial banks. First, Mboya (2012), established that financial leverage has a positive effect on performance of banks so long as the power of banks' assets exceeds the cost of debts of the bank. Far earlier, Juliet (2017) found that there is a significant positive relationship between debt ratio and measure of bank performance. Other studies include (Artikis and Nifora, 2011; Baker and Martin, 2011; and Barakat, 2014).

Conclusion

The study revealed that banks loan measured using cost of deposit, bank loans measured using asset quality, and financial leverage measured using debt ratio have significant relationship with performance of the listed banks. However, the influence of income diversification, measured using Herfndahl Hirschmann Index (HHI), does not have significant impact on the performance of the bank. The relationship between the response variable (Return on Equity) and explanatory variables was carried out using panel regression modeling using data from randomly selected banks over a period of study from 2007 to 2016. Cost of deposit, asset quality and Herfndahl Index have a negative effect in performance of the listed banks except debt ratio which have a positive effect on bank performance. The relationship between ROE and cost of deposit, asset quality and debt ratio are statistically significant at 5% level of significance. Income diversification is not a significant determinant of bank performance at the same level of significance. Thus, we reject the null hypotheses that there is not significant relationship between bank deposit bank loans, and financial leverage and performance of listed commercial banks. Only the null hypothesis that there is no significant relationship between income diversification and performance of the commercial banks is accepted at 5 % level of confidence.

Lastly, going by the panel regression analysis, the study reveals that bank deposits, banks loans and financial leverage have significant influence of return on equity, a measure of performance of the listed banks. Income diversification has a negative effect on return on equity but it is not significant in determining the performance of the bank at 5% probability level.

Recommendations

Based on the findings of this study, the first recommendations was that since the interest on deposits have negative effects on the performance of the banks, generally is because deposits are the main source of funds which reduces the revenues generated from lending. The instability of interest rates has greatly affected bank performance in Kenya as the interest on deposits are high and interest rate on loans is capped at 14 % in an effort to cushion customers from exploitation by commercial banks. The Central Bank and Kenya Bank Association (KBA) should formulate a policy that stabilizes interest rates to plummet its adverse effects on performance of listed commercial banks.

More often than not, loans are the main assets of commercial banks that generate a major proportion of income. Hence, the quality of the loan portfolio is a major determinant of performance of a bank as established in findings of this study. Asset quality has a direct impact on bank financial performance. Considering that the highest risk facing commercial banks is the losses derived from delinquent loans makes non-performing loan the best proxy of asset quality. As such, commercial banks should strive to have Portfolio at Risk (PAR) at low level. Since high **REFERENCES** level of the non-performing loan negatively affects the performance of commercial banks.

The study also recommends that commercial banks should focus more on finding cheaper sources of debt finance. If possible, they should strive to use internally generated funds to finance activities meant to diversify their income and only go for debt financing when they have exhausted internal funds. This is because the revenues generated in other businesses may not be suffice to cover the income forgone and used in other ventures. Sufficient research and close monitoring of other sources should be done to suppress the negative effects highlighted in this study.

Suggestion for Further Research

Although there were 42 banks in the Kenyan banking industry, this study made inferences from only 10 of the listed ones at the Nairobi Securities Exchange (NSE) for the period of 10 years. The study recommendeed future researchers interested in this field of research should consider factoring all the commercial banks, other internals internal factors, and for a longer period of time. This will increase the scope of the study, reliability of the results and recommendations will be more comprehensive and a better reflection of banking industry in Kenya.

Abreu, M. and Mendes, V., 2006. Commercial bank interest margins and financial performance: Evidence for some EU countries. In: Paper presented at the Proceedings of the Pan-European Conference Jointly Organised by the IEFS-UK & University of Macedonia Economic & Social Sciences, Thessaloniki, Greece, and May 17 – 20, 2006

Adeusi, O.S, Kolapo, T.F, Aluko, O.A. (2014). Determinants of commercial banks' financial performance, panel evidence from Nigeria. International Journal of Economics, Commerce and Management, II (12), 4-17.

Artikis, P., & Nifora, G. (2011). The industry Effect on the relationship between Leverage. Eurasian Business Review, 125-145.

Athanasoglou, P., M. Delis and C. Staikouras, 2008. Determinants in the bank financial performance in the South.

Athanasoglou, PP, Brissimis, SN & Delis, MD 2008, "Bank-specific, industry-specific & macroeconomic determinants of bank financial performance", Journal of International Financial Markets, Institutions & Money, vol.18, no. 2, pp. 121-136.

Awan, A. G., & Amin, M. S. (2014). Determinants of capital Structure. European Journal of Accounting Auditing and Finance Research, 2(9), 22–41.

Baele, L., De Jonghe O. & Vennet R. V. (2007). Does the stock market value bank diversification? Journal of Banking and Finance, 31 (7), 2009-2023.

Baele, L., Jonghe, O.D., Venner, R.V., 2007. Does stock market value bank diversification? Journal of Banking and Finance31, 2009-2023.

Baker, H., & Martin, G. (2011). Capital Structure and Corporate Financing Decision: Theory, Evidence and Practise. New jersey: Joh wiley and sons.

Barakat, A. (2014). The Impact of Financial Structure, Financial Leverage and Financial performance on Industrial Companies Shares Value: Sample of Saudi Industrial Companies. Journal of finance and accounting, 5, 2222-2847.

Berger, A.N. and D.B. Humphrey, 1994. Bank scale economies, mergers, concentration, and efficiency: The U.S. Experience. Working paper. USA: The Wharton Financial Institutions Center.

Berger, A.N., Hasan, I., Zhou, M., 2010. The effect of focus versus diversification on bank performance: Evidence from Chinese banks.

Brooks, C. (2014). Introductory econometrics for finance. Cambridge university press.

Busch R. & Kick T. (2009). Income diversification in the German banking industry. Discussion Paper: Banking and Financial Studies, 9(2).

Central Bank of Kenya (CBK) (2015). Bank Supervision Annual Report 2011. Retrieved from http://www.cbk.co.ke on 31/11/2012.

Chiorazzo, V., Milani, C. & Salvini, F. (2008). Income diversification and bank performance: evidence from Italian banks. Journal of Financial Services Research, 33, 181–203.

Choi, S. & Kotrozo, J. (2008). Diversification, Bank Risk and Performance: A Crosscountry Comparison. A Thesis Submitted in Partial Fulfillment of the Requirements of University of Kuala Lumpur for the Degree of Master of Science.

Cooper, D. R., & Schindler, P.S. (2011). Business Research Methods. New York: McGraw Hill.

Creswell, JW 2009, Research design: quantitative, qualitative and mixed methods approaches, 3rd edn, Sage Publications, California.

Demirguc-Kunt, A., and Huizinga, H., 2000. Financial structure and bank financial performance. Working Paper, World Bank, Washington DC.

DeYoung, R. & Rice, T. (2014). Non-interest income and financial performance at U.S.A commercial banks, The Financial Review, 39(1), 456-478.

DeYoung, R. & Roland, K. P. (2006). Product mix and earnings volatility at commercial banks: Evidence for a degree of total leverage model. Journal of Financial Intermediation, 10 (1), 54-84.

Eastern European Region. Journal of Financial Decision Making, 2: 1-17.Gremi, E. (2013). Internal Factors Affecting Albanian Banking Financial performance. Academic Journal of Interdisciplinary Studies, II (9).

Economy: Empirical Evidence from Philippines. Asian Academy of Management

Elsas, R., Hackethal, A., Holzhauser, M., 2010. The anatomy of bank diversification. Journal of Banking and Finance 34, 1274-1287.

Gitonga, K. W. (2014). Effects of Macroeconomic Variables on Credit Risk in the Kenyan Banking System. International Journal of Business and Commerce, 3(9),01-26.

Gujarati, D. (2014). Basic Econometrics. United States Military Academy, West Point.

Gujatrati, D. (2013). Basic Econometrics 4th edition. . New york: McGraw Hill.

Hausman, J. A., & Taylor, W. E. (1981). Panel data and unobservable individual effects. Econometrica: Journal of the Econometric Society, 1377-1398.

Hsiao, C. (2005). Why panel data?. The Singapore Economic Review, 50(02), 143-154.

Ivatury, G. (2008). Using Technology to Build Inclusive Financial Systems. Focus Note Washington, D.C: CGAP. Journal of Accounting and Finance. 9(5), 14-20.

Josephat K, Mboya (2012), Income Diversification in the Banking Sector and Earnings Volatility: Evidence from Kenyan Commercial Banks. Kenya Bankers Association (KBA).

Juliet Chelagat Tangut, (2017), Effects of financial leverage on stock returns of nonfinancial companies listed in the Nairobi Securities Exchange, School of Management and Commerce (SMC) Strathmore University

Kothari, C. R. (2014). Research Methodology: Methods and Techniques. (2nd Ed.). India: New Age International.

Kyereboah-Coleman, A. (2007). Corporate governance and firm performance in Africa: a dynamic panel data analysis. Asian Institute of Corporate Governance, Turkey.

Lata, R. S. (2015). Non-Performing Loan and Financial performance: The Case of State Owned Commercial Banks in Bangladesh. World Review of Business Research, 5(3), 171-182.

Malede, M. (2014). Determinants of commercial banks lending: evidence from Ethiopian commercial banks. European Journal of Business and Management, 6(20), 109-117.

Markowitz, H. M. (1952). "Portfolio Selection". The Journal of Finance 7 (1), 77–91.

Mayston, D. (2002). Tackling the Endogeneity Problem When Estimating the Relationship Between School Spending and Pupil Outcomes. Great Britain, Department for Education and Skills.

Mercieca, S., Schaeck, K. & Wolfe, S. (2007). Small European banks: Benefits from diversification? Journal of Banking and Finance, 31, 1975–1998.

Mihail, I.C. (2009). Effects of Asset liability management in Banks: An Empirical study

Mikhalkina, E., Maitah, M., & Šrédl, K. (2015). Measuring market structures in the dairy market in the Czech Republic. *Asian Social Science*, *11*(21), 306.

Modigliani, F & Miller, MH 1958, "The Cost of capital, corporation finance & the theory of investment" The American Review, vol. 48, no. 3, pp. 261-297.

Mostafa, H. T., & Boregowda, S. (2014). A Brief Review of Capital Structure Theories. Research Journal of Recent Sciences, 3(10), 113–118.

Moturi, D. N. (2017). Analysis on the Effect of Internal Factors on the Financial Performance of Firms in the Cement Manufacturing Industry in Kenya (Doctoral dissertation, United States International University-Africa).

Mugenda, O. M. & Mugenda, A. G., (2009). Research methods: Quantitative and qualitative approaches. Nairobi, Acts Press.

Nakamura, A., & Nakamura, M. (1981). On the relationships among several specification error tests presented by Durbin, Wu, and Hausman. Econometrica: journal of the Econometric Society, 1583-1588.

Ngugi, P.N. (2013). The Effect of Interest Rate Spread on Financial Performance of Commercial Banks in Kenya. Nairobi, Kenya: University of Nairobi of Banks in Europe Faculty of Finance, Cesta NaAmfiteature 21 June.

Olweny, T & Shipo, MT 2011, "Effects of banking sectoral factors on the financial performance of commercial banks in Kenya", Economics and Finance Review, Vol. 1, no. 5, pp. 1-30.

Olweny, T. & Shipho, T. M. (2011). Effects of banking sectoral factors on the financial performance of commercial banks in Kenya. Economics & Finance Review, 1 (5), 1-30.

Ongore, V.O., 2013. Determinants of financial performance of commercial banks in Kenya. International Journal of Economics and Financial Issues, 3(1): 237-252.

Oruç, E. (2009). Behavioral Dimension of Cross-Sectoral Capital Structure Decisions : ISE (Istanbul Stock Exchange) Application, 28(28).

Otuori, O.H., 2013. Influence of exchange rate determinants on the performance of commercial banks in Kenya. European Journal of Management Sciences and Economics, 1(2): 86-98.

Pesaran, M. H., & Shin, Y. (2013). Testing for unit roots in heterogeneous panels. *Journal of econometrics*, *115*(1), 53-74.

Porter, M. (1990). The competitive advantage of the nations, Ed. New York: The Free Press, A Division of MacMillan Press Ltd. Financial performance in Developing Economies.

Roden, D. M., & Lewellen, W. G. (1995). Corporate capital structure decisions: evidence from leveraged buyouts. Financial Management, 76-87.

Roman, A. & Dănulețiu, E.A. (2013). An Empirical Analysis of the Determinants of Bank Financial performance in Romania. Annales Universitatis Apulensis Series Oeconomica, 15 (2), 582.

Roy, M. K., & Khan, S. H. (2013). Study on Private Commercial Banks in Bangladesh. ASA University Review, 7(1).

Rumler, F & Waschiczek, W 2010, "The impact of economic factors on bank profits", Monetary Policy & the Economy, vol. 4, pp. 49-67.

Sanya, S. and Wolfe, S.(2011). Can Banks in Emerging Economies Benefit from Revenue Diversification?. Journal of Financial Services Research. 40: 79-101.

Sehrish, G., Faiza, I. & Khalid, Z. (2011). Factors Affecting Bank Financial performance in Pakistan. The Romanian Economic Journal, 14(39), 61 – 87

Sheikh, N. A., & Wang, Z. (2010). Financing Behavior of Textile Firms in Pakistan. International Journal of Innovation, Management and Technology, 1(2), 130–135. <u>http://doi.org/10.7763/IJIMT.2010.V1.24</u> Statistics, 57: 410- 416.

Stiroh K.J., 2014. Diversification in banking: Is noninterest income the answer. Journal of money credit & Banking, 36(5), 853-882.

Sufian, F. & Chong, R. R. (2009). Determinants of Bank Financial performance in a Developing

Taub, A. (1975), Determinants of firm s capital structure, Review of Economics and

Torres-Reyna, O. (2007). Panel data analysis fixed and random effects using Stata (v. 4.2). Data & Statistical Services, Princeton University.

Uzhegova, O. (2010). The Relative Importance of Bank-specific Factors for Bank

Wang, C., Wei, Y., & Liu, X. (2010). Determinants of bilateral trade flows in OECD countries: evidence from gravity panel data models. The World Economy, 33(7), 894-915.

Zou, Y., & Li, F. (2014). The Impact of Credit Risk Management on Financial performance of Commercial Banks: A Study of Europe.