

# Supervisory Review and Financial Performance of Commercial Banks in Kenya

Mathina Ruth Wanjiru  
(Corresponding Author)

Dr. Ambrose Jagongo  
Kenyatta University, Nairobi, Kenya

Dr. Ruth Mathina  
Kenyatta University, Nairobi, Kenya

Dr. Lucy Wamugo  
Kenyatta University, Nairobi, Kenya

**Abstract:-** The purpose of the study was to establish the effect of supervisory review on financial performance of commercial banks in Kenya. The study was founded on asymmetry information theory. Positivism research philosophy and casual research design were employed. The target population comprised of forty-three commercial banks from which a sample of thirty-eight commercial banks was selected using purposive sampling technique. Commercial banks which were actively operating and not under statutory management during the period of study were selected. Data for the period between 2013-2020 was extracted from the bank supervision annual reports and individual bank's published annual reports using document review guide. Data analysis involved descriptive statistics and inferential analysis. The study conducted panel unit root test, multicollinearity test, normality test, heteroscedasticity test and autocorrelation test to avoid spurious results. The 5% significance level was used to test the research hypothesis. The panel regression findings showed that supervisory review had a positive significant effect on financial performance of commercial banks in Kenya. The conclusion of the study was that supervisory review explains the variation in financial performance of commercial banks in Kenya. Further, increase in supervisory review enhances financial performance. The study thus, recommends that commercial banks in Kenya should adhere to the prudential guidelines on supervisory review so as to enhance financial performance in the long run.

**Keywords:-** Supervisory Review, Financial Performance, Commercial Banks.

## I. INTRODUCTION

Financial performance is the ability of a firm to employ the available resources efficiently in order to generate revenue. Shukla (2014) defined financial performance as the bank capability to create maintainable profits or it's the ability of a

bank to employ available resources to increase shareholders' wealth and generate sustainable profits. The current study thus, defined financial performance as the use of the resources invested by the shareholders efficiently and effectively to generate revenue. From literature, there are two types of financial performance measures, namely, traditional and market based measures. Traditional financial measures include; cost to income (CI) return on equity (ROE), return on assets (ROA), non-performing loans ratio (NPLR), percentage change of pre-tax profits (%GPBT) and net interest margin (NIM). Market based financial measures include; total shareholders returns, price to book value and P/E ratio (Muriithi *et al.*, 2016; Mwangi, Makau & Kosimbei, 2014; Odonkor & Barmor, 2012). The commercial banks financial performance was mainly arrived using ROA since it considers all the assets utilized to generate revenue for the firm, in addition, the banks largest assets consists of bank loans and they are the largest source of earnings. Thus the per Kenyan shilling return on assets is key to the commercial banks management (Muriithi *et al.*, 2016). Moreover, CBK employs return on assets to assess the financial performance of commercial banks in Kenya (CBK, 2015). The present study therefore used return on assets to measure financial performance of commercial banks in Kenya.

Commercial banks of European member countries have been struggling to return to profitability after the 2008-2009 global financial crisis. For instance, European union banks (EUB) profitability remained lower than before the crisis time with the return on equity (ROE) declining from 4.4% in 2015 to 3.5% in 2016 and from 6.1% in 2018 to 5.4% in 2019 (KPMG, 2019; Ernst & Young, 2019). The ROE seem to be very low since the cost of capital was about 10% for most EUB after the global financial crisis. Non-performing loans ratio (NPLR) are still high in some of EU member countries after the crisis. For example, Greece NPLR in 2016 was 46.9% and in 2017 was 46.5% while Cyprus NPLR in 2016 was 47.4% and in 2017 was 42.7% (KPMG, 2017). Financial performance of commercial banks in Kenya declined as noted by return on assets over the study period as shown in table 1 and figure 1.

**Table 1: Return on assets (ROA)**

Year	2013	2014	2015	2016	2017	2018	2019	2020
ROA(%)	4.7	3.4	2.9	3.3	2.7	2.7	2.6	1.7

Source: Central bank of Kenya (2013-2020)

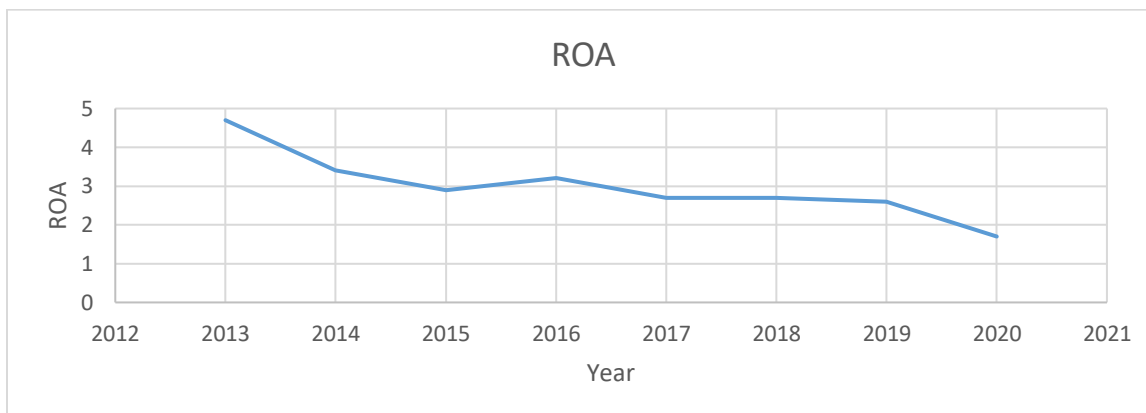


Fig 1: Return on assets (ROA)

Source: Central bank of Kenya (2013-2020)

Table 1 and Figure 1 indicate that return on assets on 2013 was at 4.7% which reduced to 3.4% in 2014 and further to 2.9% in 2015. In 2016 return on assets raised to 3.2% a time when interest capping was introduced by the government of Kenya. But in 2017, return on assets dropped to 2.7%, remained constant in 2018 at 2.7% while in 2019 return on assets, further reduced to 2.6% a time when the government of Kenya abolished the interest capping. In 2020, return on assets reduced further to 1.7%.

Supervisory review is the standard adopted by commercial banks to evaluate the extent to which commercial banks are adhering to stipulated rules guiding banking operations in their respective countries (Fapetu & Kolapo, 2015). Supervisory review ought to be implemented by both regulatory agencies and respective commercial banks. Internally, banks ought to develop their own assessment criterion on adherence to capital adequacy and information disclosure strategies adopted. Supervisory review call for adoption of recommended accounting standards and policies. Recently, commercial banks have adopted varied risk management models through asset liability matching strategies. This has amplified levels of accounting data transparency (David & Muendo, 2018). To achieve supervisory review standards, commercial banks should invest in reasonable risk levels. From literature reviewed, it was noted that supervisory review increased financial performance of commercial banks (Beck, Demirguc-Kunt & Ross, 2006; Barth, Lin, Ma, Seade & Song, 2013). The present study operationalized supervisory review as the oversight of banks in order to identify insecure practices which can be risky to economy or banks. Previous studies measured supervisory review by interventionist supervisory (Chortareas *et al.*, 2012), onsite examination by supervisors (Beverly, Anna & Matthew, 2016), minimum frequency of examination (Rezende & Wu, 2014), Basel core principles index (Beck,

Demirguc-Kunt & Ross, 2006; Barth *et al.*, 2013). In December 2020, 40.46% commercial banks were ranked strong, 54.05% ranked satisfactory, 4.15% ranked fair, 1.25% ranked marginal while 0.09% ranked unsatisfactory. Supervisory review was measured using the natural logarithm of the number of audits made by central bank of Kenya in an individual bank. Delis and Staikouras (2011) noted that improved supervision enhanced financial performance of banks while reducing financial crisis. In addition, Rezende and Wu (2014) argues that frequent examination of banks by the regulators made the banks to adhere to the regulations set by the regulatory authority and therefore, reducing loan losses and increasing financial performance. Faten, Hachmi, Cheffon and Fredji (2014) noted that onsite and off-site examination of commercial banks improved their financial performance hence reducing the chances of failure.

#### A. Statement of the Problem

Commercial banks major role is for directing funds from surplus units to deficit units. Therefore, through this role commercial banks contribute directly to the economic growth and development of any country, thereby improving the lives of the citizens. Since the global financial crisis of 2008- 2009, financial performance of commercial banks in Kenya have recorded a downward trend (Ernst & Young, 2019). Therefore, the central bank of Kenya introduced supervisory review regulations for adoption by all commercial banks actively trading in Kenya so as to enhance their financial performance (CBK, 2013). Nonetheless, despite the momentous efforts by the central bank of Kenya, there have been a reduction in financial performance of commercial banks in Kenya between 2013 to 2020 as shown by return on assets; 4.7% in 2013, 3.4% in 2014, 2.9% in 2015, 3.3% in 2016, 2.7% in 2017, 2.7% in 2018, 2.6% in 2019 and 1.7% in 2020 (CBK, 2020). In addition, charter house bank, imperial bank and chase bank were put

under statutory management in 2006, 2015 and 2016 respectively (CBK, 2015; CBK, 2016). The reduction in financial performance of commercial banks in Kenya may be linked to poor execution of supervisory review policies.

In view of this, the researcher sought to establish the effect of supervisory review on financial performance of commercial banks in Kenya. Previous studies have produced contradicting results on the effect of supervisory review on financial performance. For instance, Faten *et al.* (2014) documented a positive and significant effect of supervisory review on financial performance whereas Khamees (2018) established a negative and significant influence of supervisory review on financial performance. The contradiction in findings may be attributed to contextual differences. Further, most of the previous studies are cross-country level analysis and not bank level analysis (Faten *et al.*, 2014; Barth *et al.*, 2013). Moreover, locally, there are few studies if any on the effect of supervisory review on financial performance of commercial banks in Kenya. It is against this background that the study sought to fill in the existing gap and established the effect of supervisory review on financial performance of commercial banks in Kenya.

## II. THEORETICAL REVIEW

Asymmetry information theory proponents were Akerlof (1970), Spence (1973) and Stiglitz (1961). Asymmetry information is a problem in borrowing and lending of money where the party borrowing has more information about his/her credit worthiness than the party lending. The disparity in information held by the borrower and the lender may result in market failure. In a banking context, information asymmetry may arise when the banks have more information about their operations than the regulator or where the borrower has relevant information than the lender when contracting. Difference in the information held by the parties to a contract may lead to a bank being rated as performing well by the regulator which may not be the case or a lender granting loan at a lower interest rate to a risky borrower which may not be the case. Thus sharing of information among the borrower and lender may reduce adverse selection (Karim, Chan & Hassan, 2010). Richard (2011) observes that information asymmetry may cause both moral hazard and adverse selection as may be hard to distinguish between bad and good borrowers. Guidara, Soumare and Tchana (2013) established that moral hazard and adverse selection has contributed to non-repayment of loans in commercial banks since the lender can make either right or wrong credit decision when granting loans due to the borrower failure to disclose all relevant information to the bank. Moral hazard arises when a party to a contract gives false information about its credit ability, liabilities and assets. While adverse selection arises when the lender cannot distinguish between higher and lower risk borrowers so as to know the risk premium to charge on loans. These information asymmetry problems may be reduced by screening the borrowers before granting

them loans, information disclosure by banks to the public (David & Muendo, 2018).

This theory was applicable in the study in that, in a financial contract, commercial bank depends on the information provided by the borrower to make credit decision, when the borrower conceals relevant information to the loan agreement, commercial bank (lender) may either make right or wrong credit decision, since it may be hard to differentiate a bad borrower from a good borrower. Hence, this might lead to moral hazard and adverse selection which in turn may affect the financial performance of commercial banks through non-payment of interest on loans. This theory anchors on financial performance as the dependent variable. Further the theory anchors on supervisory review since the commercial banks may conceal information about their operations to the central bank (regulator). To mitigate the information asymmetry problems, the CBK should conduct regular audits to supervise if commercial banks have complied with the Basel accord requirements (David & Muendo, 2018; Khamees, 2018; Sudesh & Kumar, 2016). Hence, the study conceptualized supervisory review as the number of CBK audits in an individual bank and established its effect on financial performance of commercial banks in Kenya.

### A. Empirical review: Supervisory review and financial performance

Hirtle, Kovner and Plosser (2016) did a research on supervisory review and bank financial performance in United States. Supervisory review was measured using supervisory hours while financial performance was measured using volatility in earnings. The findings informed that supervisors of large banks in a district recorded more hours as compared to small banks. Additionally, increased supervision lead to less volatility in earnings and less risky lending. The study by Delis and Staikouras (2011) also identified supervisory review as a vital factor in improving the financial performance and reducing the riskiness of a bank. However, the study by Hirtle *et al.* (2016) was done in a developed country with different economic, political and social conditions than those present in Kenya. Rezende and Wu (2014) studied on the influence of bank supervisory review on bank financial performance in United States. Supervisory review was measured by onsite examination (frequency of examinations) while bank financial performance was measured by ROE, net interest margin/total loans, charge offs/total loans, provision for loans and leases/total loans. The study reported that frequent examination of banks by the regulators made the banks to hold safer assets and therefore reducing loan losses and increasing financial performance. The results of the study supported the results by Chortareas *et al.* (2012). However, the study of Rezende and Wu (2014) was done in an advanced country where the conditions are different from those dominant in Kenya. Faten *et al.* (2014) investigated regulations influence on supervisory review on European banks profitability. Profitability measures were ROE and ROA while supervisory review measurement was four components of six graded dimensions of banking

supervision. The study applied Generalized Method of Moments (GMM) estimator. Banking regulations had significant positive effect on profitability. Also, there was significant positive effect of deposit insurance, capital adequacy on profitability. Thirdly, increased banking regulations enhanced commercial banks financial performance. The study by Faten *et al.* (2014) however, was a cross-country level analysis and not bank level analysis. Vighneswara (2014) carried out a study in the course of universal financial crisis on the effect of supervisory review, regulation on efficiency in BRICS countries. Supervisory review was proxied by power of

supervisory agent and onsite examinations while financial performance was proxied by aggregate income, operating costs to assets ratio and NPL ratio. Vighneswara (2014) study reported that regulation, supervisory review and efficiency related significantly. The results of the study corroborated with Rezende and Wu (2014) findings. However, the study by Vighneswara (2014) was a cross country analysis and not bank level analysis.

*B. Conceptual Framework*

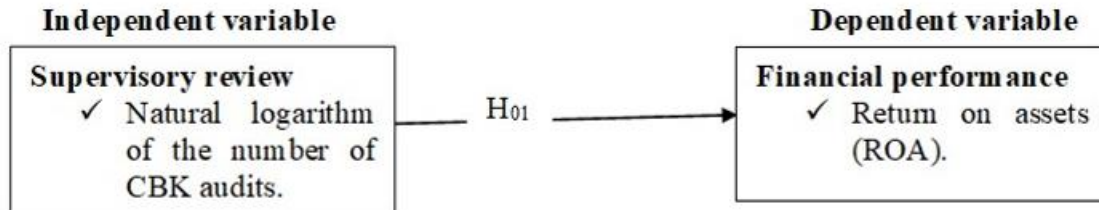


Fig 2:- Conceptual framework  
Source: Researcher (2021)

*C. Research Hypothesis*

H<sub>01</sub>: Supervisory review has no significant effect on financial performance of commercial banks in Kenya.

consists of how the research objective was achieved. That is, it shows how the data was collected, measured and analyzed (Saunders, Lewis & Thornhill, 2012).

**III. RESEARCH METHODOLOGY**

*A. Research Design*

Casual research design was used to find the extent and the nature of cause-and-effect relationships prevailing between supervisory review and financial performance. According to Zikmund, Babin, Carr and Griffin (2013) causal research design is used to assess what effect a specific change will have on prevailing norms and assumptions. Thus, supervisory review as a regressor variable was varied to establish the change in the criterion variable, financial performance. Research design

*B. Empirical Model*

$$ROA_{it} = \beta_0 + \beta_1 SR_{it} + \epsilon_{it} \dots \dots \dots (1)$$

- Where;
- ROA<sub>it</sub>= Financial performance of commercial banks.
- β<sub>0</sub>= Constant.
- SR<sub>it</sub>= Supervisory review.
- β<sub>1</sub>=Coefficient of supervisory review.
- ε<sub>it</sub>= Error term.

**Table 1: Operationalization and measurement of study variables**

Type	Variable	Operationalization	Measurement	Measurement scale
Dependent	Financial performance	Profitability	ROA=Earnings before interest and tax/Total assets	Ratio
Independent	Supervisory review	Oversight of banks in order to detect unsound practices that can affect a bank as well as whole economy.	Natural logarithm of number of central bank of Kenya audits to an individual bank.	Ratio

Source: Researcher (2020)

### C. Target Population

The target population for the study consisted of forty-three commercial banks operating in Kenya over the period of study (2013-2020). However, the unit of analysis involved commercial banks which were not placed under statutory management and were actively trading during the time of the study. The individual commercial banks and banking supervisory annual financial reports from year 2013-2020 were the unit of observation.

### D. Sampling design and Sample size

Purposive sampling design was applied by the researcher in order to choose a sample that represents the population of the study (Mugenda & Mugenda, 2013). Commercial banks that were under statutory management or not actively trading over the eight years of study (2013-2020) were excluded from the sample. The commercial banks carrying out banking activities in Kenya in year 2020 were forty-three. However, five banks were dropped, since Charter house bank, Chase bank and Imperial bank were under statutory management while Mayfair bank and Dubai Islamic bank (K) limited were opened in 2017 and therefore were in operation for less than eight years. Hence, the remainder of thirty-eight commercial banks formed the sample of the study.

### E. Data Collection Procedure

The nature of data in the present study was secondary and quantitative. Panel data sources were individual banks' audited financial reports and banking supervision annual reports between 2013 and 2020. The study used data collection schedules to extract the data specifically from profit and loss account, statement of financial position and disclosures to the reports. Faten *et al.* (2014) proposed that construct validity in

secondary data can be achieved through the literatures reviewed. Therefore, various literatures reviewed informed the development of document review, operationalization and measurement of the study variables.

### F. Data Analysis and Presentation

Panel regression analysis, correlation analysis and descriptive statistics were employed to analyze the data. Analysis of data involved the following steps as suggested by (Zikmund *et al.*, 2013). First, panel data was revised for completeness, consistency and accuracy. Relevant ratios for each bank across time were calculated by the help of Ms- Excel. Stata software was then used for data analysis after importing it from excel. Descriptive statistics values (minimum, maximum, standard deviation, mean) for the variables in the study were computed to explain the patterns of the data and presented using a table. Inferential analysis involved both correlation and multiple regression analysis. Diagnostic tests were done to check the violations of classical linear regression (CLR) assumptions in the panel data. According to Greene (2011) running regression models without checking for the violation of CLR assumptions first, might lead to spurious results. The existence of the effect of Basel accord requirements and financial performance measures were tested using correlation analysis. Association among dependent and independent variable for strength and direction was aided by Pearson's correlation analysis. Finally, panel regression analysis was done so as to test the null hypotheses of the study. Hypotheses testing was done at 0.05 significance level which is the level mostly used in social and business research (Mugenda & Mugenda, 2013). Application of inferential and descriptive statistical analysis improved the study results (Rajkumar, 2014). Information was presented using tables.

## IV. EMPIRICAL RESULTS AND DISCUSSION

**Table 2: Descriptive Statistics**

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Financial Performance	284	.0261067	.0381216	-.1980881	.4938343
Supervisory Review	282	0.4447629	0.4709894	0	1.098612

Source: Study Data (2020)

The results in table 2 show that financial performance in terms of return on assets for 284 observations had a mean value of 0.0261067, a standard deviation of 0.0381216 with minimum and maximum values of -0.1980881 and 0.4938343 respectively. The standard deviation value was higher than the mean value, indicating that during the period of study (2013-2020) there was greater variability in return on assets across commercial banks, which was corroborated by the difference between maximum (0.4938343) and minimum (-0.1980881) values. The positive value of financial performance means that, commercial banks were on average profitable but a negative minimum value of -0.1980881 indicates that some commercial banks were operating at a loss over the same time of study.

From the results in table 2 supervisory review as measured by the natural logarithm of the number of central bank of Kenya audit for 282 observations had a standard deviation of 0.4709894 with a mean value of 0.4447629. The mean value indicates that central bank of Kenya was playing its critical role of conducting audits in each of the commercial banks consequently instilling discipline in the banking industry. Further, there was a higher variability in supervisory review since the mean value was lower than standard deviation value that was confirmed by the minimum value of zero and maximum value of 1.098612. A positive value of supervisory review indicates that improvement in the quality of audit by central bank of Kenya increases financial performance of commercial banks in Kenya.

**A. Diagnostic Test**

The study conducted the following diagnostic tests; panel unit root, normality, heteroscedasticity, autocorrelation to prevent spurious results.

**B. Model Specification Test**

The researcher had to apply either random or fixed effects model hence the decision was made using Hausman specification test (Baltagi, 2013). The null hypothesis stated that random model was preferred to fixed model. Model specification test reported a chi square of 12.35 with a p-value of 0.0063<0.05. The results indicated that the chi square value was statistically significant at 5%. Hence the null hypothesis that random model was preferred to fixed model was rejected. The study concluded that fixed effect model was consistent. The researcher then tested for panel effects in the data by using

Breusch and Pagan Lagrangian multiplier test for random effects. The null hypothesis stated that ordinary least square model was preferred to fixed effect model. The chibar2 value was zero with a p-value of 1.0000 hence the null hypothesis that pooled regression model was preferred to fixed effect model was not rejected. The researcher concluded that the data did not have panel effects and thus employed pooled effect model (Greene, 2011).

**C. Inferential statistics: Regression analysis and Hypothesis testing**

The following hypothesis was tested by the study.

**H<sub>01</sub>: Supervisory review has no significant effect on financial performance of commercial banks in Kenya.**

**Table 3: Effect of supervisory review on financial performance**

	<b>Coefficient</b>	<b>Robust Std. Err.</b>	<b>t</b>	<b>P&gt;t</b>
Supervisory Review	0.0297212	0.0055910	5.32	0.000
Constant	.0044411	.0056281	0.79	0.31
Dependent variable= Financial performance (ROA)				

**Source: Study Data (2021)**

The following model was formulated based on the analysis in table 3.

$$ROA_{it} = 0.0044411 + 0.0297212SR_{it} + \varepsilon_{it} \dots \dots \dots (2)$$

In table 3 supervisory review coefficient ( $\beta=0.0297212$ , p-value of  $0.000<0.05$ ) indicates supervisory review has a positive and significant effect on financial performance (ROA) of commercial banks in Kenya hence the null hypothesis that supervisory review has no significant effect on financial performance of commercial banks in Kenya was rejected at five percent level of significance. The positive coefficient ( $\beta=0.0297212$ ) in the findings suggest that one percent increase in the frequency and quality of supervisory review of commercial banks by central bank of Kenya would increase financial performance of commercial banks in Kenya by (0.0297212 divided by 100) units while holding other factors constant. The finding was consistent with those by Faten *et al.* (2014), Rezende and Wu (2014), Vighneswara (2014) who found a positive and significant effect of supervisory review on financial performance of commercial banks. However, Chortareas *et al.* (2012) found that official supervisory powers improved operations of the banks while interventionist supervisory and regulatory policies lead to higher bank inefficiency levels. The inconsistency with Chortareas *et al.* (2012) study may be due to market differences.

**V. CONCLUSION AND RECOMMENDATIONS**

This study analyzed the effect of supervisory review on financial performance of commercial banks in Kenya using positivism research philosophy and causal research design. The study found that supervisory review has positive and significant effect on return on assets. The finding of the current study is supported by several empirical studies though it also contradicts other studies. The study therefore concludes that as the quality of supervisory review of commercial banks is improved, it may enhance the return on assets as commercial banks will not carryout activities restricted by central bank of Kenya. The study thus recommends that central bank of Kenya should design banking financial policies that increase the number and quality of audit reviews thus preventing commercial banks from engaging in activities restricted by central bank of Kenya. The study also recommends that commercial banks in Kenya should adhere to the prudential guidelines on supervisory review so as to enhance financial performance.

➤ **Suggestion for Further Research**

The scope of this study was commercial banks licensed and operating in Kenya between the period 2013-2020. A similar study can be conducted to investigate the effect of supervisory review on financial performance of other financial and non-financial institutions.

## REFERENCES

- [1]. Akerlof, G. (1970). The Market for Lemons: Quality Uncertainty and the Market Mechanisms. *The Quarterly Journal of Economics*, Vol. 84 (3), 488-500.
- [2]. Baltagi, H. (2013). *Econometric Analysis of Panel Data*, 5th edition. Chichester: John Wiley and Sons.
- [3]. Barth, J., Lin, C., Ma, Y., Seade, J., Song, F. (2013). Do Banks Regulation, Supervision and Monitoring Enhance or Impede Bank Efficiency? *Journal of Banking and Finance* Vol. 37 (81), 2879-2892.
- [4]. Beck, T., Demirguc-Kunt, A., & Ross, L. (2006). "Bank Supervision and Corruption in Lending," *Journal of Monetary Economics*, Vol. 53, 2131-2163.
- [5]. Beverly, H., Anna, K., & Matthew, P. (2016). *The Impact of Supervision on Bank Performance*.
- [6]. Federal Reserve Bank of New York Staff Report No. 768.
- [7]. Chortareas, G., Girardone, C., & Ventouri, A. (2012). Bank Supervision, Regulation and Efficiency: Evidence from European Union. *Journal of Financial Stability*, Vol. 8 (4), 292-302.
- [8]. David, K., & Muendo, D. (2018). Effect of Central Bank of Kenya Regulations on the Financial Performance of Microfinance Institutions. *The Strategic Journal of Business & Change Management*, Vol. 6 (1), 584-623.
- [9]. Delis, M., & Staikouras, P. (2011). Supervisory Effectiveness and Bank Risk. *Review of Finance* Vol. 15, 511-543.
- [10]. Ernst & Young, Global limited (2018). Global banking outlook.UK.
- [11]. Fapetu, D., & Kolapo, F. T. (2015). The influence of Interest Rate Risk on Performance of Deposit Money Banks in Nigeria. *International Journal of Economics, Commerce and Management*, Vol. 3 (5), 1218-1228.
- [12]. Faten, B., Hachmi, A., Cheffon, I., & Fredji, J. (2014). The Effects of Regulation and Supervision on European Banking Profitability and Risk. A Panel Data Investigation. *The Journal of Applied Business Research*, Vol. 30 (6), 1655-1669.
- [13]. Greene, W.H. (2011). *Econometric Analysis*, 7<sup>th</sup> edition. Upper Saddle River, Prentice Hall.
- [14]. Guidara, A., & Soumare, I., & Tchana, F.T. (2013). Bank's capital buffer, risk and performance in the Canadian banking system: Impact of business cycles and regulatory changes. *Journal of Banking & Finance*, 37 (9), 3373-3387.
- [15]. Hirtle, B., Kovner, A., & Plosser, M. (2016). *The Impact of Supervision on Bank Performance*. Federal Reserve Bank of New York, Staff Report No. 768.
- [16]. Karim Z., Chan S., & Hassan S. (2010). *Bank efficiency and Non-Performing Loans: Evidence from Malaysia and Singapore*. College of Art and Sciences and Institute of China Studies, University of Malaysia.
- [17]. Khamees, A. (2018). Impact of compliance with IFRS Disclosure Requirements on ERC. *Journal of Accounting and Finance*, Vol. 22(5). Mugenda, A., & Mugenda, O. (2013). *Research Methods: Quantitative and Qualitative Research*. Nairobi, Kenya. Nairobi Acts Press.
- [18]. KPMG (2019). The profitability of European banks. Retrieved from [kpmg.com/ecb](http://kpmg.com/ecb).
- [19]. KPMG (2017). Non-performing loans in Europe. Retrieved from [kpmg.com/ecb](http://kpmg.com/ecb).
- [20]. Muriithi, J. G., Muturi, W. M., & Waweru, M. (2016). The Effect of Market Risk on Financial Performance of Commercial Banks in Kenya. *Journal of Finance and Accounting*, Vol. 4 (4), 225-233.
- [21]. Mwangi, L. M., Makau, M. S., & Kosimbei, G. (2014). Relationship Between Capital Structure and Performance of Non-Financial Companies Listed in the Nairobi Securities Exchange, Kenya. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, Vol. 1 (2), 72-90.
- [22]. Odonkor, T., & Barmor, C. (2012). Capital Adequacy and Performance of Ghanaian Banks. *Journal of Business Research*, Vol. 6, 1-2.
- [23]. Rajkumar, P. (2014). Impact of Financial Leverage on Financial Performance: Special Reference to John Keells Holdings plc in Sri Lanka. *Scientific Research Journal*, Vol. 2 (2), 15-20.
- [24]. Rezende, M., & Wu, J. (2014). *The Effect of Supervision on Bank Performance: Evidence from Discontinuous Examination Frequencies*. Midwest Finance Association 2013 Annual Meeting Paper.
- [25]. Saunders, K., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. 6<sup>th</sup> edition. Harlow, England: Pearson Education.
- [26]. Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, Vol. 87 (3), 355.
- [27]. Stiglitz, G. (1961). The Economics of Information. *Journal of Public Economy*, Vol. 69 (3), 213-225.
- [28]. Sudesh, D., & Kumar, N. (2016). Corporate Governance and Banks' Performance in India. An Empirical Study. *Journal of Business & Management*, ISSN 2319-7668.
- [29]. Vighneswara, S. (2014). Bank Regulation, Supervision and Efficiency During Global Financial Crisis. *Munich Personal Repec Archive* (MPRA) paper no. 58295.
- [30]. Zikmund, G., Babin, J., Carr, C., & Griffin, M. (2013). *Business Research Methods*. 8<sup>th</sup> edition. South- Western, Cengage Learning, Amazon.