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INFLUENCE OF FINANCIAL DISTRESS ON PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

Commercial banks have continued using various financial models for determining financial distress. However, commercial banks have not identified all the factors influencing financial performance and to which extent they influence financial performance of commercial banks in Kenya. This study was focused on the influence of financial distress on financial performance for commercial banks regulated by Central Bank of Kenya (CBK) since they provide an important contribution to the economy. The study was prompted by the increased number of commercial banks in the recent past facing financial difficulties. The objective of the study was to examine the effects of capital distress, liquidity distress, operating inefficiency and assets quality distress on the performance of commercial banks in Kenya. To strengthen the conceptual framework the study adopted theories such as agency theory, liquidity theory, theory of efficient market hypothesis and buffer theory of capital adequacy. The study showed a diagrammatic representation of the relationship between the independent variables and the dependent variable. The target population was129 employees of commercial banks in Kenya. The sample size was99 employees of commercial banks in Kenya. A modified Likert scale questionnaire was developed and divided into three parts. A pilot study was carried out to refine the instrument. The quality and consistency of the study was further assessed using Cronbach's alpha. Data analysis was performed on a PC computer using Statistical Package for Social Science (SPSS Version 23) for Windows. Analysis was done using frequency counts, percentages, means and standard deviation, regression, correlation and the information generated was presented in form of graphs, charts and tables. The study findings revealed that there was a positive correlation between capital distress, liquidity distress and operating inefficiency but asset quality distress had a negative correlation. The study concluded that capital distress, liquidity distress and asset quality have no significant effect on financial performance of commercial banks in Kenya. Further, the study concluded that operational inefficiency has a significant effect on financial performance of commercial banks in Kenya. The study recommends that commercial banks must consider using debt in their capital structure, non-current debt should be prioritized ahead of short-term debt. This recommendation is based on the finding that long term debt as measure of liquidity reduces the incidence of financial distress among commercial banks; Commercial banks should endeavor to employ more equity and less debt capital to finance their operations. This recommendation is based on the revelation that a reduction in financial leverage is a major recipe for corporate financial distress; The use of collaterals as security of granting loans should be further reviewed to reduce further incidence of bad debts and credit management should be viewed as part of a coordination group efforts made by all departments involved with customers to minimize bad

debts and maximize profit instead of leaving it in the hands of the credit risk management department.

Key words: Financial distress, capital, liquidity, commercial

1. INTRODUCTION

Banks play an important role in the economic development of every nation since they have control over a large part of the supply of money in circulation, foster liquidity and proper functioning of the financial system (Karim & Alam, 2015), Nasieku (2017), (Kamau & Oluoch, 2016). Financial sector faces several challenges among them being financial distress Kariuki (2017). When a company experiences financial distress, operating conditions may deteriorate, heavy financial burdens become common place, wages are renegotiated downwards If the situation continues, bankruptcy may become a reality (Garlappi & Yan, 2015),(Bergman *et al*., 2014). However, if appropriate management steps are taken and financial distress are used effectively, it can recover and experience resurgence (Wang & Shiu, 2014).

Financial distress is a burning problem to almost all the markets in the world. The term financial distress or failure of companies has accelerated in the world especially in the United States of America from 1930's. But even before, the problem of distress caused some large companies to file for bankruptcy. Financial distress is a situation when a company is unable to meet its financial obligations. It is obvious that detecting of such a situation is very important for long term survival of the firms. Therefore, the financial distress has become a problem to answer because when a company is about to the signaling of financial distress, there is a problem for the employees of such company as well as for the shareholders, lenders and the other stakeholders. It badly affects the job security of managers and employees and stakeholders' equity position and claims of lenders since their claims are not guaranteed (Bum, 2017).

2. RESEARCH PROBLEM

The banking sector is among the sectors expected to facilitate the realization of vision2030, by ensuring that there is provision of efficient financial services and investment opportunities that will create a vibrant and global competitive financial service in Kenya (ROK, 2017). Global competitive financial services on banking sector will be achieved only if financial distress will be well managed by banks (Bariviera, BelénGuercio, & Martinez, 2015). As noted by Kamau (2016) and Mwega (2016) banking sector is the engine that drives economic growth through efficient allocation of resources to productive units in any economy resulting in global competiveness. Nasieku (2015) noted that banks provide an efficient system and main source of liquidity in the financial systems.

In spite of this, more than ten financial institutions have either collapsed or been liquidated or have been placed under receivership by Deposit Protection Fund Board in Kenya between 2005 and 2015 (CBK, 2015). This indicates that on average, one financial institution collapsed every year over the eleven-year period making it a worrying trend. In addition, there was a decrease in the number of financial institutions that were rated strong, from 22 banks in 2014 to 11 banks in 2015(CBK, 2015). Kenya's investment rate was below 25% of GDP during 2005 – 2014, indicating the lowest investment rate among the peer group, with the exceptions of Cambodia and Pakistan (WB, 2016). From this analysis, banking industry in Kenya seemed to be experiencing performance fluctuations indicating financial distress (Khaliq, Hussein, Altarturi, Mohd, & Thaker, 2016).

3. GENERAL OBJECTIVE

The general objective of this study was to examine the influence of financial distress on performance of commercial banks in Kenya.

3.1 Specific Objectives

1. To determine the influence of capital distress on performance of commercial banks in Kenya.
2. To examine the influence of liquidity distress on performance of commercial banks in Kenya.
3. To evaluate the influence of operating inefficiency distress on performance of commercial banks in Kenya.
4. To establish the influence of asset quality distress on performance of commercial banks in Kenya.

4. REVIEW OF LITERATURE

4.1 Theoretical Framework

Key theories such as liquidity preference theory and buffer theory of capital adequacy were reviewed in respect to dependent and independent variables.

4.1.1 Buffer Theory of Capital

As a consequence of financial distress, financial institutions may prefer to hold a`buffer' of excess capital to reduce the probability of falling under the legal capital requirements, especially if their capital adequacy ratio is very volatile. Capital requirements are one of the main supervisory instruments in Kenya for financial institutions. According to this theory, capital is more reliable, dependable and can be used for long term planning. Ability of banks to mobilize enough deposits obviates the capital base from being eroded. The buffer theory of Calem & Rob (2016) predicts that a bank approaching the regulatory minimum capital ratio may have an incentive to boost capital and reduce risk in order to avoid the regulatory costs triggered by a breach of the capital requirements. However, poorly capitalized banks may also be tempted to take more risk in the hope that higher expected returns will help them to increase their capital. This is one of the ways risks relating to lower capital adequacy affect banking operations in the event of bankruptcy of a financial institution (Calem & Rob, 2016).

This theory indicates that the firm will be in a stable condition in times of low liquidity since there will be some capital reserves that will ensure the firm meets its obligation when they fall due using the excess capital recognized as a buffer regardless of the performance thus reducing the effect of financial distress in a firm. This means that in the absence of a buffer of capital, firms are likely to fall into financial distress in the future. In addition, Berger & Bouwman (2014) argued that capital helps small banks to increase their probability of survival and market share at all times (during banking crises, market crises, and normal times). Secondly, capital enhances the performance of medium and large banks primarily during banking crises. This therefore makes capital adequacy a significant factor of financial distress. This theory supports capital adequacy objective.

4.1.2 Liquidity Preference Theory

Keynes (1935) believed there were three motives to holding money; transactions motive, precautionary motive, and speculative motive. Under the speculative motive, money demand was negatively related to the interest rate consequently leverage. Holding money was one way of guarding against uncertainty. Hence, liquidity preference framework determines the equilibrium interest rate in terms of supply and demand for money. The model was developed by Keynes (1936) based on several assumptions. First, money pays no interest. Second, that there were only two kinds of assets for storing wealth: money and bonds.

The current study was anchored on liquidity theory, given its emphasis on liquidity distress, and the other variables under study; leverage, efficiency and capital adequacy. The theory notes clearly that liquidity alone does not guarantee success. Financial institutions in Kenya such as Daima Bank, Trade Finance, Allied credit ltd, International Finance ltd, Nairobi Finance ltd, Inter Africa Credit and Finance ltd and Dubai Bank that collapsed and liquidated while Imperial Bank was put under receivership and Chase Bank was under statutory management for a short while as at 31st December 2015. These institutions 'liquidity was high in the year when their businesses went into liquidation or when they went into statutory management.

4.2 Conceptual Framework

Conceptual framework is the diagrammatic representation to show the relationship between dependent variable and independent variable (Cooper & Schinder, 2018). In this study, the dependent variable is performance while the independent variables are capital distress, liquidity distress, operating inefficiency and asset quality distress as shown in Figure 1

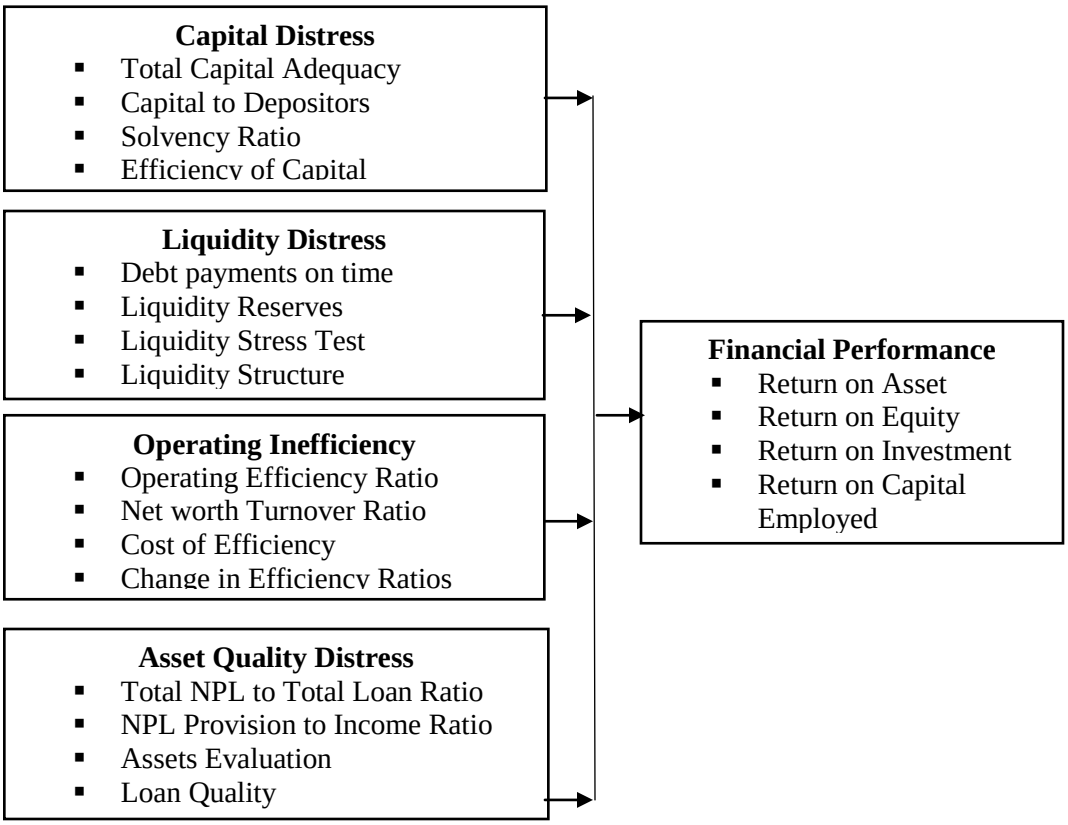

Figure 1 Conceptual Framework

4.3 Review of Study Variables

4.3.1 Capital Distress

Yahaya, Mansor, & Okazaki (2016) suggested that capital adequacy is an important factor that helps in determining the level of risk absorption of banking institutions in completing the bigger picture of banking performance. The researcher further argued that capital adequacy is also closely related to the economic performance of related countries. Olalekan & Adeyinka (2016) argued that capital adequacy has been a vital issue for financial institutions and defined capital adequacy as the percentage ratio of financial institution's primary capital to its assets used as a measure of its financial strength and stability. Olalekan & Adeyinka (2016) further argued that capital would be used to absorb an unanticipated abnormal loss in cases where such losses cannot be absorbed by earnings in financial institutions.

Buyuksalvarcı & Abdioglu (2016) also argued that the primary function of capital in a financial institution is to provide resources to absorb possible future losses on assets and Olweny & Themba (2017) argued that capital adequacy refers to the sufficiency of the amount of equity to absorb any shocks that the bank may experience. CBK issued revised prudential guidelines on capital adequacy in 2017 (CBK, 2017). This entailed new capital requirement for banks, capital charge for market and operational risks and capital conservation buffer, the minimum regulatory capital adequacy requirement, measured by the ratio of core capital and total capital to total risk. Capital adequacy aims to measure capital sufficiency in relation to the Basel and CBK guidelines (Nasieku, 2014).

4.3.2 Liquidity Distress

Liquidity is one of the key financial stability indicators given that its shortage in one bank causes systemic crisis in the banking sub-sector due to interconnectedness. Liquidity held by commercial banks reflects their ability to fund increases in assets and meet their obligations (CBK, 2017). Mwangi (2014) noted that liquidity is a bank's capacity to fund increase in assets and meet both expected and unexpected cash and collateral obligations at reasonable cost and without incurring unacceptable losses. Cheluget, Gekara, Orwa, & Keraro (2014) suggested that liquidity and financial distress on an insurance firm's relationship exists and concluded that liquidity is an important factor of financial distress. The effects of liquidity to firm liquidity and solvency measures have a significant impact on improving cost efficiency; firms with larger expenditures on purchased inputs relative to capital were less likely to improve efficiency when liquidity and solvency were considered (Arif, 2017).

Liquidity and solvency measures have a significant impact on improving cost efficiency, firms with larger expenditures on purchased inputs relative to capital are less likely to improve efficiency when liquidity and solvency are considered (Levi, Russell, & Langemeier, 2015). Liang Fu (2016) suggested that corporate liquidity, also referred to as balance Sheet liquidity, measures the level of liquid asset holdings on the accounting book. Liquidity risk on family firms have lower financial distress risk appetite in their corporate investment behavior, which is confirmed in their substantially higher level of corporate liquidity (Liang Fu, 2016).

On relating liquidity risk to bank's financial performance, Ariffin (2017) noted that the relationship between liquidity risk and financial performance is not always predicted by the conventional financial theory of "high risk-high return". Ariffin (2017) further noted that for the year 2006, the relationship between liquidity risk and ROA was positive whereas for 2007, it was

a negative relationship for Islamic banks. This indicated that in the year of crisis, for example 2007, the liquidity risk, ROA and ROE behaved in an opposite manner. Ariffin (2017) concluded that liquidity risk always lowers ROA and ROE.

4.3.3 Operating Inefficiency

Operational efficiency is defined by Olalere, Temitope & Oluwatobi (2015) as the capability of an enterprise to deliver products or services to its customers in the most cost-effective manner possible while still ensuring the high quality of its products, service and support. Operational efficiency tends to confirm the notion of increasing competitiveness and improving resource utilization by airports. In the literature on bank performance, operational efficiency is usually used to assess managerial efficiency in banks. Some external factors and characteristics may influence an airport manager's control over operations (Sarkis, 2014). According to research, firm's decision makers should increase the efficiency in using the tangibles assets to generate income (Saleh, 2015).

Pranowo & Manurung (2016) argued that firm's efficiency measures how productively the firm is using its assets and operations. The study further noted that operating ratio is a measure of how well a company sells its stock and the efficiency with which it converts sales into cash. Some examples of operating ratios (activity ratios) include; assets turnover (sales to total assets), stocks turn over, debtor's day (day's receivable outstanding) and working capital to sales ratio. Debtor's day shows the average number of days it takes customers to pay for credit sales. Low debtor's day benefits cash flow; an indication for probable saving for positive cash flows.

4.3.4 Asset Quality

A bank's assets comprise largely of its loans and advances to customers. These from shareholder's perspective are meant to earn returns through various investments but mainly through interests from loans to customers to ensure profitability of the entity (Love, Matthews, Simpson, Hill, & Olatunji, 2014). Adeolu (2016) asserted that asset quality as an aspect of bank management entails the evaluation of a firm's asset in order to facilitate the measurement of the level and size of credit risk associated with its operation to ensure profitability resulting in improved financial performance.

According to Vigneswara (2015), financial stability of an economy is largely dependent on the stability of the banking system. Vigneswara (2015) asserted that to achieve banking stability, banks should ensure quality assets are maintained since quality assets result in high profitability. Vigneswara (2015) further noted that failure to ensure banking stability through asset quality can cause financial fragility and may lead to a crisis in the event of market illiquidity and the contagion effect of banks.

Klein (2014) carried out a study on non-performing loans (NPLs) in Central, Eastern and South-Eastern Europe (CESEE) in the period of 1998–2011. The study found out that the level of NPLs can be attributed to both macroeconomic conditions and banks 'specific factors, though the latter set of factors was found to have a relatively low explanatory power. Klein (2014) further suggested that NPLs has an effect to macroeconomic conditions, such as GDP growth, unemployment, inflation and performance of firms. The analysis also indicates that there are strong feedback effects from the banking system to the real economy, thus suggesting that the high NPLs that many CESEE countries currently face adversely affect the pace of economic recovery.

4.3.5 Financial Performance

Financial performance and measures of financial performance have been defined by various studies in the world. Based on accounting and strategic management literature review, Fauzi & Idris (2014) defined performance as the matching of business environment, strategy, internal structure and control system and therefore performance is usually affected by the factors that define it. Kang & Kinyua (2016) further argued that financial performances are a measure of company's policies and operations in monetary terms. Financial performance may also be defined as the extent to which entities achieve goals and objectives (Busch, Bauer, & Orlitzky, 2015). Busch *et al.,* (2015) further argued that economic goals and social goals are related, making financial performance inseparable with social goals.

Financial performance in banking industry has been of interest to academic research and to stakeholders in banking industry in Kenya. This is due to the fact that financial performance has a critical implication for economic growth in any country and its generally considered to be the reflector of financial and economic conditions of a country other than its intermediation role in an economy (Gatuhi, 2015; Ongore & Kusa,2014). Financial performance is also important due to competitiveness in the world economy not only to stakeholders of a firm but also to firms within the same industry (Yalcin, Bayrakdaroglu, & Kahraman, 2014). Accounting measures include return on assets (ROA), return on equity (ROE), earnings per share (EPS), assets utilization, assets turnover among others, while survey-based measurement consist of survey respondents who provide subjective estimates for example an opinion on use of firm's assets (Busch *et al*., 2015). market and accounting measures are the most widely used in research Marte, Temitope & Fagbemi (2014).Traditional measures are also referred to accounting measures of financial performance include ROA, ROE, EPS and price earnings ratio (P/E) while modern based financial performance measure include economic value added(EVA), market value added(MVA),cash flow return on investment (CFROI) and cash value added (CVA).

5. RESEARCH METHODOLOGY

This study adopted a cross-sectional survey research design aimed at collecting large number of qualitative and quantitative data at a point in time so as to establish organizational performance of commercial banks in Mombasa. Stratified random sampling technique was used to select a sample size of 99 respondents from the target population of 129 respondents in the commercial banks in Mombasa County. The study selected respondents at the category of chief operating officers, finance officers and branch managers so as to form the sample size of 99 respondents. Primary data was collected by use of self-administered structured questionnaires which were distributed through the drop and pick method. Secondary data collected from various bank's websites, Kenya Bankers Association, in annual and published financial statements, in national newspapers, during annual general meetings and in-house magazines, important business disclosures in journals, manuals and the various bank's documents were used to cross validate the primary data information collected.

6. DATA ANALYSIS AND RESULTS

6.1 Correlation Analysis

Table 2 Pearson Correlation

	Financial Performance	Capital Distress	Liquidity Distress	Operating Inefficiency	Asset Quality Distress
Financial Performance	1				
	81				
Capital Distress	.375**	1			
	.001				
	81	81			
Liquidity Distress	.114	.312**	1		
	.309	.005			
	81	81	81		
Operating Inefficiency	.485**	.696**	.415**	1	
	.000	.000	.000		
	81	81	81	81	
Asset Quality Distress	-.368**	-.194	.121	-.098	1
	.001	.083	.283	.382	
	81	81	81	81	81
**. Correlation is significant at the 0.01 level (2-tailed).					

Pearson Bivariate correlation coefficient was used to compute the correlation between the dependent variable (Financial Performance) and the independent variables (Capital distress, Liquidity distress, Operating inefficiency and Asset quality distress). According to Sekaran, (2015), this relationship is assumed to be linear and the correlation coefficient ranges from -1.0 (perfect negative correlation) to +1.0 (perfect positive relationship). The correlation coefficient was calculated to determine the strength of the relationship between dependent and independent variables (Kothari & Gang, 2014).

In trying to show the relationship between the study variables and their findings, the study used the Karl Pearson's coefficient of correlation. This is as shown in Table 4.10 above. According to the findings, it was clear that there was a positive correlation between the independent variables, capital distress, liquidity distress, operating inefficiency and asset quality distress and the dependent variable financial performance. The analysis indicates the coefficient of correlation, r equal to 0.375, 0.114, 0.485 and -0.368 for capital distress, liquidity distress, operating inefficiency and asset quality distressrespectively. This indicates positive relationship between the independent variable namelycapita distress, liquidity distress and operating inefficiencyand the dependent variable financial performance whereas asset quality distress and financial performancehad no relationship.

6.2 Coefficient of Determination (R^2)

To assess the research model, a confirmatory factors analysis was conducted. The four factors were then subjected to linear regression analysis in order to measure the success of the model

and predict causal relationship between independent variables (Capital distress, Liquidity distress, Operating inefficiency and Asset quality distress), and the dependent variable (Financial Performance).

Table 3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.583[a]	.340	.305	2.76227
a. Predictors: (Constant), Asset Quality Distress, Operating Inefficiency, Liquidity Distress, Capital Distress				

The model explains 34% of the variance (R Square = 0.340) on Financial Performance. Clearly, there are factors other than the four proposed in this model which can be used to predict financial performance. However, this is still a good model as Bryman & Bell, (2018)pointed out that as much as lower value R square 0.10-0.20 is acceptable in social science research. This means that 34% of the relationship is explained by the identified four factors namely capital distress, liquidity distress, operating inefficiency and asset quality distress. The rest 66% is explained by other factors in the financial performance of the commercial banks in Kenya not studied in this research. In summary the four factors studied namely, capital distress, liquidity distress, operating inefficiency and asset quality distress or determines 34% of the relationship while the rest 66% is explained or determined by other factors.

6.3 Analysis of Variance

The study used ANOVA to establish the significance of the regression model. In testing the significance level, the statistical significance was considered significant if the p-value was less or equal to 0.05. The significance of the regression model was as per Table 4 below with P-value of 0.00 which is less than 0.05. This indicates that the regression model is statistically significant in predicting factors of financial performance. Basing the confidence level at 95% the analysis indicates high reliability of the results obtained. The overall Anova results indicates that the model was significant at F = 9.798, p = 0.000.

Table 4 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	299.024	4	74.756	9.798	.000[b]
	Residual	579.889	76	7.630		
	Total	878.914	80			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Asset Quality Distress, Operating Inefficiency, Liquidity Distress, Capital Distress						

6.4 Regression Analysis

The researcher conducted a multiple regression analysis as shown in Table 4.14 to determine the relationship between financial performance of commercial banks in Kenya and the four variables investigated in this study.

Table 5 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.338	3.111		3.323	.001
	Capital Distress	-.002	.139	-.002	-.014	.989
	Liquidity Distress	-.061	.149	-.043	-.412	.682
	Operating Inefficiency	.745	.214	.473	3.486	.001
	Asset Quality Distress	-.487	.149	-.317	-3.275	.002
a. Dependent Variable: Financial Performance						

The regression equation was:

$Y = 10.338 + -0.002 X_1 + -0.061X_2 + 0.745X_3 + -0.487X_4$……Equation 1

Where;

Y = the dependent variable (Financial Performance)

X_1 = Capital distress

X_2 = Liquidity distress

X_3 = Operating Inefficiency

X_4 = Asset quality distress

The regression equation below established that taking all factors into account (Financial Performance of the Commercial Banks in Kenya) constant at zero financial Performance of commercial banks in Kenya was 10.338. The findings presented also showed that taking all other independent variables at zero, a unit increase in capital distress would lead to a negative -0.002 increase in the scores of financial performance of commercial banks in Kenya; a unit increase in liquidity distress would lead to a negative 0-0.061 increase in the financial performance of commercial banks in Kenya; a unit increase in operating inefficiency would lead to a 0.745 increase the scores of financial performance of the commercial banks in Kenya and a unit increase in asset quality distress would lead to negative -0.487 increase the scores of financial performance of commercial banks in Kenya.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

From the study findings t values was -0.014 which was below the recommended threshold of 2.0. The study findings therefore accepted the null hypothesis that capital distress has no significant effect on financial performance of commercial banks in Kenya. The study therefore concluded that capital distress has no effect on financial performance of commercial banks in Kenya. The study revealed that t values was -0.412 which is below the recommended threshold of 2.0 and therefore accepting the null hypothesis that liquidity has no effect on financial performance of commercial banks in Kenya. The study concludes that liquidity distress has no effect on financial performance of commercial banks in Kenya.

The study findings showed that the t values of the independent variable operating inefficiency were 3.486 which is above the recommended threshold of 2.0 and therefore rejecting the null hypothesis that operating inefficiency has no significant effect on financial performance of commercial banks in Kenya. The study therefore concludes that operating inefficiency has a significant effect on financial performance of commercial banks in Kenya. The study findings indicated that the t values of the independent variable operating inefficiency were -3.275 which is below the recommended threshold of 2.0 and therefore accepting the null hypothesis that asset quality distress has no effect on financial performance of commercial banks in Kenya. It was thus concluded that asset quality distress has no significant effect on financial effect on financial performance of commercial banks in Kenya.

7.2 Recommendation

From the study findings it was thus recommended as follows:

The study recommends that commercial banks must consider using debt in their capital structure, non-current debt should be prioritized ahead of short-term debt. This recommendation is based on the finding that long term debt as measure of liquidity reduces the incidence of financial distress among commercial banks. Commercial banks should endeavor to employ more equity and less debt capital to finance their operations. This recommendation is based on the revelation that a reduction in financial leverage is a major recipe for corporate financial distress. The use of collaterals as security of granting loans should be further reviewed to reduce further incidence of bad debts; Credit management should be viewed as part of a coordination group efforts made by all departments involved with customers to minimize bad debts and maximize profit instead of leaving it in the hands of the credit risk management department.

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