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MODERATING EFFECT OF FINANCIAL REGULATION ON THE RELATIONSHIP BETWEEN ORGANIZATION CHARACTERISTICS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

Kennedy Ochuka
University of Nairobi, School of Business, Department of Finance and Accounting, Kenya
ochuka@gmail.com

Kennedy Okiro
University of Nairobi, School of Business, Department of Finance and Accounting, Kenya
kennedy.okiro@uonbi.ac.ke

Fredrick Ogilo
University of Nairobi, School of Business, Department of Finance and Accounting, Kenya
fredrick.ogilo@uonbi.ac.ke

Abstract

The objective of this paper was to assess the relationship between organization characteristics and financial performance and to establish the moderating effect of financial regulation on the relationship. The study was premised on the positivism research philosophy and adopted a longitudinal, descriptive research design for the period 2011 to 2021. The study used panel data and covered all the 43 commercial banks operating in Kenya. Organization characteristic was measured using a composite index derived from total assets, liquidity risk, asset quality, management quality, non-traditional activities and technological innovation; financial regulation was measured using a composite index derived from capital adequacy and deposit/loan ratio; while financial performance was measured using a composite index of return on assets and net interest margin. The paper assessed the relationship using panel least squares regression and

adopted the Baron and Kenny moderation model. The fixed effects regression model revealed statistically significant relationship between organization characteristics and financial performance of commercial banks in Kenya. Financial Regulation had a statistically significant moderating effect on the relationship between organization characteristics and financial performance. The study concluded that organization characteristics and financial regulation affected financial performance and that several factors should be considered in the identification of determinants of financial performance. The study recommends that policy and regulatory programs should encourage banks to adopt characteristics that enhance their profitability and note that adopt regulatory frameworks that enhance the financial performance of commercial banks, especially in emerging economies.

Keywords: Organization Characteristics, Financial Regulation, Financial Performance, Commercial Banks, Kenya

INTRODUCTION

Organisational characteristics are demographic features, such as size, financial revenue, technological expertise, and location (Oncioiu, 2019) and are distinguishing features of an organization that influence its performance (Ondigo, 2019). When applied to banks, they are the internal determinants of bank performance that are unique to each bank, and which the management can control and manipulate to achieve different levels of performance (Abobakr, 2018). Financial regulations are policies that restore the welfare properties that free markets would have if market failures were eliminated (Campbell, 2016). Ayadi, Naceur, Casu and Quinn (2016) define banking regulation as a combination of supervisory and restrictive policies aiming to both protect the banking sector from excessive risk-taking, and minimize moral hazard. The Central Bank of Kenya defines regulations as rules and guidelines put in place to reduce systemic risk; avoid misuse of banks, protect banking confidentiality and direct credit allocation to favoured sectors (Central Bank of Kenya, 1999). Financial performance is a critical determinant of the health of commercial banks. Taouab and Issor (2019) argue that scholars have not agreed on one accepted definition of performance, and the concept of performance can be better understood by looking at several parameters associated with it. It is anchored upon the idea that an organization is an association of productive assets, for the purpose of achieving a shared purpose (Jensen & Meckling, 1976).

Bank characteristics have been identified as loans to assets ratio, liquidity, deposits to assets ratio, capital adequacy, operating income to asset ratio, non-interest income to asset ratio, and bank size (Abobakr, 2018); size, credit risk, regulatory capital, efficiency and capital,

(Ercegovac, Klinac & Zdrilic, 2020); size, off-balance sheet transactions, liquidity, quality of loans, concentration (Erdogan and Aksoy, 2016); and technological innovation, mobile banking, computer software, internet banking, and Automated Teller Machines (Chaarani & Abiad, 2018). Financial regulation is measured by the level of restriction on banking activities, usually assessed by the capital adequacy requirements, liquidity regulation requirements, existence of interest rate caps, and forex exposure requirements (Osano & Gekara, 2018). This study used capital adequacy and deposit to loan ratio as measures of financial regulation. Performance of banks was assessed from the accounting perspective which uses accounting measures like return on average assets (ROAA), return on average equity (ROAE), net interest margin (NIM), cost to income ratio (CIR). The study used ROA and NIM to measure performance. NIM is used for its ability to measure the spread, which some studies consider a better measure of performance than ROAA and ROAE (Ongore & Kusa, 2013), while ROA is seen as a superior indicator of performance as compared to return on equity (ROE) (Kalunda, 2015).

LITERATURE REVIEW

The study was guided by Financial Intermediation Theory (Gurley Shaw, 1955), Resource Endowment Theory (Barney, 1991) and Agency Theory (Jensen & Meckling, 1976). Financial Intermediation Theory (Gurley Shaw, 1955) contends that commercial banks are financial intermediaries which transmit excess resources from surplus to deficit units and must attain minimum cost production to remain a viable alternative to self-financing or direct-financing. Resource Endowment Theory (Barney, 1991) argues that firms, including banks use their internal resources (labour, capital among others) as inputs in different ratios, and gain competitive advantage by using the resources with which they are heavily endowed. Agency Theory (Jensen & Meckling, 1976) explores how the principal can manage the self-serving behaviour of the agent so as to protect the principal's interest. In the banking systems there are several principal-agent relationships. The oversight in the principal-agent relationship is provided both internally and externally. As the cost of monitoring the principal-agent relationships becomes expensive, public regulatory agencies come in to perform this task, moving part of the risk from banks to government, and ultimately to the tax payer, making the government and banks principal and agents respectively (Donnellan & Rutledge, 2016).

Several studies have examined the different aspects of organization characteristic and financial performance with diverse and inconsistent findings. Erdogan and Aksoy (2016) reported that financial performance showed positive and statistically significant relations with capital, size, off-balance sheet transactions, liquidity and loans; and strong negative and statistically significant relations with quality of loans and concentration. This finding was in

agreement with Kassem and Sakr (2018), Petria, Caprarub and Ihnatovc (2015) and Rani and Zergaw (2017) who found that size was positively related with ROA and ROE. The result was however at variance with Ercegovac, et al. (2020) who found that size had no effect on bank performance. Kassem and Sakr (2018), Abobakr (2018) established that capitalization was negatively related with ROE. When ROA was used, Erdogan and Aksoy (2016), Rani and Zergaw (2017), Kassem and Sakr (2018), Abobakr (2018) all found positive relation between capitalisation and performance. Ercegovac et al. (2020) however differed and found that capitalisation had no effect on performance. Kassem and Sakr (2018) found capitalization and ROE were negatively related, implying that banks with low capitalization are considered riskier and thus more profitable. Non-performing had a negative relation with performance (Erdogan & Aksoy, 2016), while Ercegovac et al. (2020) reported that management efficiency had a negative correlation with performance due to the substantial cost to the bank of keeping quality. Liquidity is negatively related to performance (Erdogan & Aksoy, 2016). Rani and Zergaw (2017) reported that liquidity had an inverse relationship with performance. Chaarani and Abiad (2018) found that investment in internet banking and Automated Teller Machines (ATMs) positively impacted bank performance, while mobile banking and investment in computer software had no significant impact. Okiro and Ndungu (2013) found that adoption of internet banking enhances efficiency, effectiveness and productivity of financial institutions. Rahman et al (2018) reported that capital regulation had a positive and significant relationship with performance while the relationship between capital regulation and risk was negative. Bouheni, Ameur, Cheffour, Jawadi (2014) reported that regulations that restrict banking activities decrease commercial banks performance, while regulations that focused on building adequate capital for the banks and on building the deposit insurance system increased performance for the banks. Osano and Gekara (2018) noted a direct relationship between capital adequacy requirements and performance while liquidity regulation ratio and interest rate cap had a positive impact. Forex exposure cap negatively affected performance, with the impact being greatest among larger banks.

The definition of bank characteristic variables is not uniform across the reviewed studies. This makes cross comparison difficult. The three most commonly used measures, size, liquidity and capitalization tend to give inconsistent results depending on the country the study is done (Erdogan & Aksoy, 2016). The results leave doubt as to the exact nature of the relationship between organization characteristic, financial regulation and financial performance. This study attempts to add to the literature by studying this relationship among the commercial banks in Kenya.

METHODOLOGY

The study used secondary panel data extracted from the Central Bank of Kenya (CBK) Bank Supervision Annual Reports and the audited annual financial statements for 43 commercial banks and covered the period 2011 to 2021. The study adopted longitudinal descriptive research design since the key variables are well defined with clearly stated hypotheses and investigative questions. The general objective of the study was to establish the moderating effect of financial regulation on the relationship between organization characteristics and financial performance of commercial banks in Kenya. The study was based on two research questions:

- "Does organization characteristic affect the financial performance of commercial banks in Kenya?"
- "Does financial regulation moderate the relationship between organization characteristic and financial performance of commercial banks in Kenya?"

Commercial banks were identified because their characteristics vary greatly, are in a very competitive sector and hence strive to enhance their performance. In addition they are a heavily regulated industry since their operations affect large segments of the economy through contagion effect. The population in this study was the 42 (forty two) commercial banks and 1 (one) mortgage institution registered in Kenya as at December 2021. Two of the banks that were in receivership, one bank that was under statutory management and one mortgage institution were excluded from the study. The study population thus consisted of all the operating 39 commercial banks. Secondary data for an eleven (11) year period from 2011 to 2021 was used. Secondary quantitative data was collected in this study using Microsoft Excel sheets for the eleven-year period. The data on organization characteristics, efficiency, financial regulation and financial performance was collected from Central Bank of Kenya (CBK) Bank Supervision Annual Reports and from the audited annual financial statements of the commercial banks. In the first instance, data was obtained from CBK and where there were gaps, additional data was obtained from the banks. The data collection was done by the researcher. The data was analyzed using SPSS 26 software.

Sekaran and Bougie (2017) divide validity into content validity, criterion-related validity, and construct validity. Content validity ensures that the measure includes an adequate and representative set of items that tap the concept and is a function of how well the dimensions and elements of a concept have been delineated. Criterion-related validity is established when the measure differentiates individuals on a criterion it is expected to predict. Construct validity testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed. The study variables were selected basing on prior theoretical and

empirical literature review in the area. A pilot study of three banks was used to test the data collection tool and the results of the study used to refine the data collection instrument. Data validity was achieved by ensuring that the data collection tool was simple and contained variables which could be easily found in the CBK Bank Supervision Annual Reports and in the banks' annual financial statements. In addition, data validity was achieved by doing a census study. To increase data reliability, the data was collected by the researcher. Since the study used secondary data, no primary data reliability tests were conducted.

Model Specification

The major dependent variable is the composite index of financial performance derived from ROA and NIM. Determinants of organization characteristics is the composite index of organization characteristic derived from total assets, liquidity risk, asset quality, management quality, non-traditional activities and technological innovation. The following baseline model was used:

Performance = f (Organization Characteristics, Financial Regulation, factors)

$FP = \beta 0 + \beta_1 OC + \beta_2 FR + \beta_3 OCxFR + \varepsilon$

Where:

- FP is financial performance
- β_0 is the intercept
- $\beta_1 – \beta_2$ are the Coefficients
- OC is organization characteristics
- FR is financial regulation.
- ε is the error term.

RESULTS AND DISCUSSIONS

To determine if the variables are correlated, the study used several methodologies and tests that are deemed to best meet the study objectives. The following diagnostic tests were conducted: normality autocorrelation, multicollinearity and heteroscedasticity. Pearson correlation was used to assess the strength of the relationship between the variables. The moderation effect was evaluated using the Baron and Kenny (1986) method, which proposes three causal paths (steps) that feed into the outcome (dependent variable). Step one tested the main effect of the independent variable on the dependent variable. This tests the impact of the noise intensity as a predictor. Step two tested the effect of the moderating variable on the dependent variable, which is the impact of controllability as a moderator. Step three tested the effect of the interaction term between the independent variable and the interaction term on the

dependent variable. The moderator hypothesis is supported if the interaction in the third step is significant. The organization characteristic and the financial regulation variables were first centred by converting the two variables into standardized (Z) scores that have mean zero and standard deviation one. A composite score for organization characteristic (OC) was used together with the composite score for financial regulation (FR), i.e. capital adequacy (CA) and deposit/loan (DL) variables. A single indicator representing the products of the organization characteristic and financial regulation measures was calculated (OCxFR).

Model Choice

Table 1: Hausman Test

	(b) Fe	(B) re	(b-B) Difference	FP (V_b- V_B) S.E.	Prob>chi^2
Organizational Characteristics	0.333	0.288	0.045	0.034	0.000
Financial Regulations	0.394	0.287	0.108	0.022	0.000
Financial performance	0.743	0.622	0.121	0.023	0.000

b = Consistent under Ho and Ha

B = Consistent under Ha, efficient under Ho; Ho: systematic difference in coefficients

chi^2 (5) = (b-B)'[(V_b-V_B) ^ (-1)] (b-B) = 3.26 Prob>chi^2 = 0.0362

H_0: The appropriate model is RE

H_1: The appropriate model is FE

The results in Table 1 show that the p-value is significant (p<0.05). We therefore fail to accept H_o, and accept H_1. Hausman test confirms that the analyzed data fitted the Fixed Effects model. The next step analyzed the best model between OLS and REM. The study used the Breusch-Pagan Lagrangian Multiplier Test for random effects. The H_o is that the appropriate model is pooled OLS model, while the H_1 is that the most appropriate model is REM. If the p>0.05, we fail to reject H_o, meaning that the appropriate model is pooled OLS. If p<0.05, we accept H_1, meaning the most appropriate model is REM. The results are presented in Table 2.

Table 2: Breusch-Pagan Lagrangian Multiplier Test

Model	Value
Chibar2(01)	15.580
Prob > chi^2	0.000

H_0: The appropriate model is pooled OLS

H_1: The appropriate model is RE

The Breusch-Pagan Lagrangian Multiplier test table 2 shows that p<0.05. We therefore reject H_o meaning pooled OLS is not the appropriate model. We accept H_1, meaning REM is the most appropriate model.

Normality

Table 3: Tests of Normality

	Kolmogorov-Smirnov		
	Statistic	**df**	**Sig.**
Organizational characteristics	.147	429	.123
Financial Regulation	.190	429	.082
Financial Performance	.112	429	.089

Table 3 indicates that all the components of financial performance had Kolmogorov-Smirnov probability >.05 indicating that the financial performance data follow a normal distribution.

Autocorrelation

The Breusch-Godfrey LM Autocorrelation Test was used to test for the autocorrelation in the panel data (Table 4).

Table 4: Results for Breusch-Godfrey LM Autocorrelation Test

Lags	**Chi^2**	**df**	**p > chi^2**
1	30.251	1	0.46

The results in Table 4 show that the p-value (p = 0.46) is greater than 0.05 level of significance and conclude that the model has no serial correlation.

Multicollinearity

The presence of multicollinearity in the panel data was assessed using the VIF (Tolerance) test. Multicollinearity was considered not to exist if the tolerance threshold of 0.1<VIF<10 was met.

Table 5: Results of Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Organization characteristics	.921	1.086
Financial Regulation	.932	1.073

Based on the research findings as shown in Table 5, Organization characteristics had VIF value of 1.086 and Financial Regulation had VIF value of 1.073. The test confirms there was no multicollinearity in the multiple linear regression model, as the variables met the Tolerance threshold of 0.1 < VIF < 10). This implied that the research data was good for further analysis.

Heteroscedasticity

Homoscedasticity was tested in the research using Breusch-Pagan/Cook-Weisberg test. Table 6 shows the results of White's test (White, 1980) show that the p-value = 0.081 is greater than 0.05 and conclude that the dataset is homoscedastic.

Table 6: Results of Breusch-Pagan/Cook-Weisberg Heteroscedasticity Test

$Chi^2(1)$	$Prob > chi^2$
8.24	0.081

Stationarity Test

The augmented Dickey-Fuller (ADF) was used to check for stationarity of the data variables p-values at 0.05 significance level. Table 7 shows the results of the inverse normal Z statistic for organizational characteristics and financial performance have p-values of 0.000 and conclude that the data for the variables is stationary.

Table 7: Results of the Augmented Dickey-Fuller

Variable	Inverse normal Z statistic	P-value
Organizational Characteristics	3.243	0.000
Financial Regulations	2.758	0.000
Financial Performance	0.751	0.000

Descriptive Statistics

Table 8: Descriptive Statistics

	OC	FR	FP
N	429	429	429
Minimum	.000	.000	.120
Maximum	.830	.865	.700
Mean	.302	.132	.219
Std. Deviation	.248	.147	.160
Skewness	.498	.297	.545
Kurtosis	-1.090	-.401	-.658

The table shows that the mean ($\bar{x}$) scores and standard deviation (σ) for the variables. Organization characteristics level was 30 percent ($\bar{x}$ = .302, σ = .248), financial regulation was 22 percent ($\bar{x}$ = .219, σ = .210), and financial performance was 22 percent ($\bar{x}$ = .219, σ = .160). Further, both skewness and kurtosis were within the acceptable range of ± 2 and ±3 respectively. All the variables exhibit positive skewness. All the variables exhibited negative kurtosis.

Trend Analysis

Trend analysis in a time series data analysis involves comparing the movement of a data variable over a period of time in order to assess its general pattern and project its possible future movement. The trend analysis was done for the composite scores and the results are presented below.

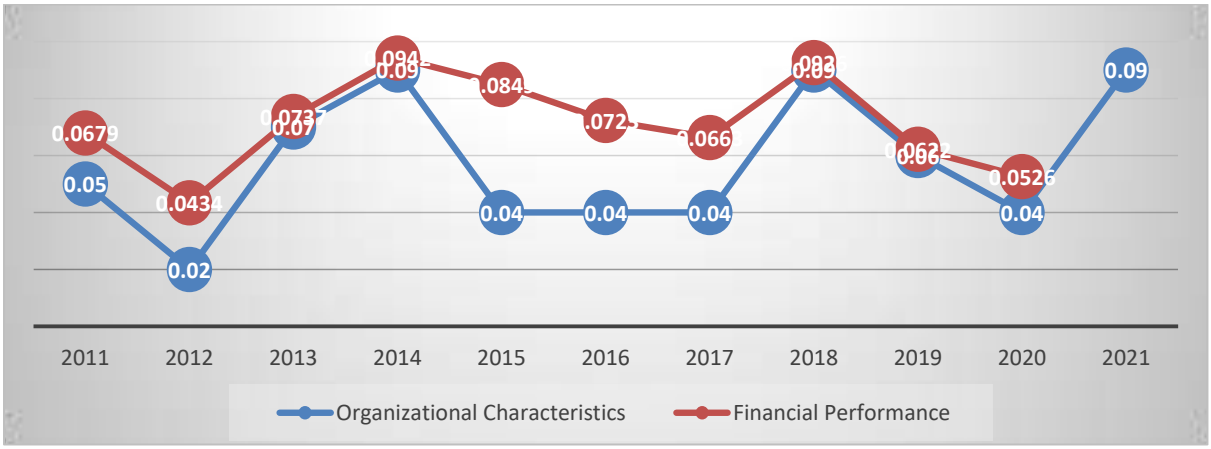

Figure 1: Trend Analysis of Organization Characteristics and Financial Performance

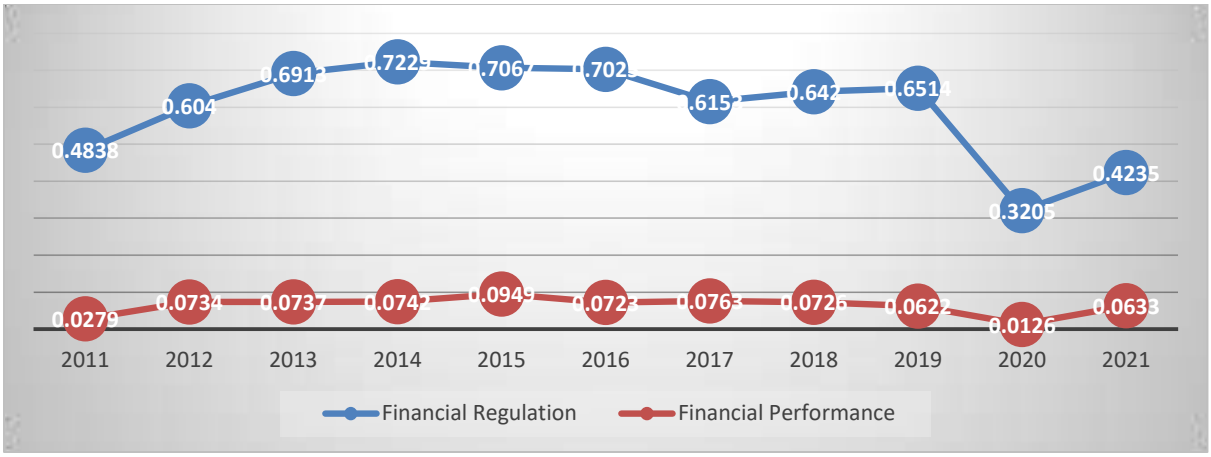

Figure 2: Trend Analysis of Financial Regulation and Financial Performance

Figure 2 and Figure 3 show that organization characteristic and financial performance were irregular over the years. The implication of this was that Organization Characteristic and Financial performance in the sector changed a lot during the period of the study. Financial regulation and financial performance of the commercial banks over the years of study was fairly stable and regular, meaning that the banks had obtained stability in their operations in relation to those two variables.

Correlation Analysis

Correlation was used to assess the strength of the relationship between the variables using Pearson correlation as shown in the table below:

Table 9: Correlation Analysis

		Organizational characteristics	Financial Regulation	Financial Performance
Organizational characteristics	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	429		
Financial Regulation	Pearson Correlation	.250**	1	
	Sig. (2-tailed)	.000		
	N	429	429	
Financial Performance	Pearson Correlation	.895**	.656**	1
	Sig. (2-tailed)	.000	.000	
	N	429	429	429

The results in Table 9 show that there was a statistically significant positive correlation between organization characteristic and financial regulation (r = .250, p<.01). There was a statistically significant positive correlation between Organization Characteristic and financial performance (r = .895, p<.01). Finally financial regulation and financial performance had statistically significant positive correlation (r = .656, p<.01). The results suggest absence of autocorrelation problem between the variables.

Hypothesis Testing

The study assessed the moderating effect of financial regulation on the relationship between Organization Characteristics and Financial Performance using the method proposed by Baron and Kenny (1986), which proposes three causal paths (steps) that feed into the outcome (dependent variable). Step one tested the main effect of the independent variable on the dependent variable. This tests the impact of the noise intensity as a predictor. Step two tested the effect of the moderating variable on the dependent variable, which is the impact of controllability as a moderator. Step three tested the effect of the interaction term between the independent variable and the interaction term on the dependent variable. The moderator hypothesis is supported if the interaction in the third step is significant. The organization characteristic and the financial regulation variables were first centred by converting the two variables into standardized (Z) scores that have mean zero and standard deviation one. A composite score for organization characteristic (OC) was used together with the composite score for financial regulation (FR), i.e. capital adequacy (CA) and deposit/loan (DL) variables. A single indicator representing the products of the organization characteristic and financial regulation measures was calculated (OCxFR).

The analysis tested the moderating effect of financial regulation composite score and financial performance composite score to check the overall effect. the results of the hierarchical multiple regression predicting bank financial performance from organization characteristic, financial regulation and the interaction between organization characteristic and financial regulation are reported below. The moderation hypothesis would be supported if the interaction (Organization Characteristic x Financial Regulation) in predicting bank financial performance yields a statistically significant coefficient.

Step one of the moderation process tested the relationship between financial performance as the dependent variable and organization characteristic as independent variable without considering the interaction variable (OCxFR). This step is similar to the tests done in hypothesis one ($H_0$1) of this study.

Table 10: Effect of Organization Characteristics on Financial Performance

FP	Coefficient	Std. Err.	t	p>t	F(1, 427)	Prob > F	R^2	N
OC	.575	.014	41.071	0.000	1686.827	0.000	0.801	429
_cons	.046	.005	9.200	0.000				

The results in Table 10 confirmed that the F-test is statistically significant (F (1,427) = 1686.827, p<.05) meaning the regression model is significant. Furthermore Organization Characteristic (β = .575, p<.05) is a significant predictor of Financial Performance. The relationship between OC and FP is positive and statistically significant. The results showed that there is .575 increase in Financial Performance for every unit increase in Organization Characteristic. The t-test of OC is 41.071 and is statistically significant (p<.05), meaning that the regression coefficient for OC is statistically different from zero. The R^2 is .801 suggesting that OC accounts for 80.1% of the variance in Financial Performance of commercial banks in Kenya. It was deduced from the results that there was a significant relationship between Organization Characteristic and Financial Performance of commercial banks in Kenya.

Step two of the moderation process tested the relationship between Financial Performance as the dependent variable, Organization Characteristic as independent variable and Financial Regulation as the Moderator variable. The results are presented in Table 5.7.

Table 11: Effect of Organization Characteristics and Financial Regulation on Financial Performance

FP	Coefficient	Std. Err.	t	p>t	F(2, 426)	Prob > F	R-Squared	N
OC	.575	.014	41.071	.000	854.61	.000	.800	429
FR	-.007	.036	-.194	.844				
_cons	.046	.006	7.667	.000				

The results in Table 11 shows that the F-test is statistically significant (F (2,426) = 854.61, p<.05) meaning the regression model is significant. Furthermore Organization Characteristic (β = .575, p<.05) is a significant predictor of Financial Performance. The relationship between OC and FP is positive and statistically significant. The results showed that there is .575 increase in Financial Performance for every unit increase in Organization Characteristic. The t-test of OC is 41.071 and is statistically significant (p<.05), meaning that the regression coefficient for OC is statistically different from zero. Financial Regulation has (β = -

.007, p>.05) is not a significant predictor of Financial Performance. The relationship between FR and FP is negative and not statistically significant. There is -0.007 decrease in FP for every unit increase in FR. The t-test of FR is -.194 and is not statistically significant (p>.05), meaning that the regression coefficient for OC is not statistically different from zero. The R^2 is .800 suggesting that OC and FR account for 80.0% of the variance in Financial Performance of commercial banks in Kenya. It was deduced from the results that there was a significant relationship between Organization Characteristic and Financial Regulation on the Financial Performance of commercial banks in Kenya.

Step three of the moderation process tested the relationship between Financial Performance as the dependent variable, Organization Characteristic as independent variable and Financial Regulation as the Moderator variable. The results are presented in Table 12.

Table 12: The moderating effect of Financial Regulation on the relationship between Organization Characteristic and Financial Performance

FP	Coefficient	Std. Err.	t	p>t	F(3, 425)	Prob > F	R-Squared	N
OC	.583	.014	41.643	.000	618.34	.000	.814	429
FR	.020	.035	.571	.565				
OCxFR	.061	.011	5.545	.000				
_cons	.019	.008	2.375	.016				

The results in Table 12 show that the F-test is statistically significant (f (3,425) = 618.34, p<.05) meaning the regression model is significant. Furthermore organization characteristic (β = .583, p<.05) is a significant predictor of financial performance while financial regulation (β = .020, p>.05) is not a significant predictor of financial performance. The relationship between organization characteristic and financial performance is positive and statistically significant, while the relationship between financial regulation and financial performance is positive and not statistically significant. The linkage between financial performance and the interaction term (Organization Characteristic x Financial Regulation) was statistically significant (β = .061, p<.05). The t-test of Organization Characteristic is 41.643 and is statistically significant (p<.05), meaning that the regression coefficient for Organization Characteristic is statistically different from zero. The t-test of financial regulation was .020 and was statistically insignificant (p>.05). The t-test for the interaction term OCxFR equals .061 (p<.05) which is statistically significant. The R^2 was .814, suggesting the OC (predictor variable), financial regulation (moderator

variable) and the interaction term (OCxFR) jointly account for 81.4% of the variance in financial performance. The F (3, 425) is 618.34 ($p<.05$), which was significant, meaning the model is strong and the relationship is strong. Every unit change in financial performance corresponds to 0.583 increase in organization characteristic, 0.20 increase in financial regulation and 0.061 increase in the interaction term (Organization Characteristic x Financial Regulation). The R^2 increased after the introduction of the interaction term (OC*FR) in the fixed effects model from .800 to .814 and was statistically significant. The study concludes that financial regulation has a moderating effect on the interaction between organization characteristic and financial performance of commercial banks in Kenya. The interaction term altered the relationship between organization characteristic and financial performance. The relationship can be expressed as

$FP_{it} = 0.019+0.583OC_{1it}+ 0.020FR_{it}+ 0.061(OCxFR)_{it}+\varepsilon_{it}$

Where

FP_{it} = Financial Performance;

: 0.19 is the predicted value of FP when OC, FR and OCxFR values are zero

: 0.583 is the estimated change of OC on FP when FR and OCxFR values are zero

: 0.020 is the estimated change of FR on FP when OC and OCxFR values are zero

: 0.061 is the estimated change of OCxFR on FP when OC and FR values are zero

The regression coefficients (β) of the explanatory variables were as follows: organization characteristics (β=.583, $p<.05$), financial regulation (β=.020, $p>.05$), Organization Characteristics x Financial Regulation (β=.061, $p<.05$). The relationship between financial performance and organization characteristics and the interactive term (Organization Characteristics x Financial Regulation) were statistically significant. The relationship between financial performance and financial regulation was not statistically significant. The results show that financial regulations has a moderating effect of the relationship between organization characteristics and financial performance.

The results show that financial regulation has a moderating effect on the interaction between organization characteristics and financial performance of commercial banks in Kenya as the interaction term altered the relationship between organization characteristics and financial performance and shows that the strength of the causal relationship between organization characteristics, financial performance and financial regulation changes after the introduction of the interaction term. The study concluded that financial regulation has a moderating effect on the interaction between organization characteristic and financial performance. The findings we consistent with Bouheni, Ameur, Cheffour, Jawadi (2014) who

found that regulations that restrict banking activities decrease commercial banks performance, while regulations that focused on building adequate capital for the banks and on building the deposit insurance system increased performance for the banks. The study agreed with Osano and Gekara (2018) who reported that capital adequacy requirements, Liquidity regulations and forex exposure cap affected the performance of commercial banks in Kenya. Rahman et al (2018). They found that capital regulation had a positive and significant relationship with performance. The study however contradicted Raz, Irawan, Indra, and Darisman (2014) which reported weak evidence that capital adequacy regulations reduces performance of banks, but more so for large banks. Further, the study seems not to support the Agency Theory (Jensen & Meckling, 1976) which contends that as the cost of monitoring the debtor-lender relationships becomes expensive, public regulatory agencies come in to perform this task, moving part of the risk from banks to government, and ultimately to the tax-payer, creating a principal-agent relationship between the government and the banks. The Financial Intermediation Theory (Gurley & Shaw, 1955; Brealey, Leland & Pyle, 1977; Diamond & Dybvig, 1983; Diamond, 1984), which contend that firms have moved away from self-finance and direct finance models of funding investments and that commercial banks are financial intermediaries which transmit excess resources from surplus to deficit units. To resolve the agency problem between the lenders and the borrowers and to reduce the cost of monitoring the lender to the borrower, the government takes over this role by designing adequate and targeted regulations to monitor the lender. These additional regulations with their attendant costs lead to lower profitability of banks. Financial regulations used optimally enhance stability in the financial sector which in turn may enhance performance. This is supported by the positive correlation between financial regulation and financial performance seen in the results.

CONCLUSIONS

The study concludes that Financial Regulation moderated the relationship between organization characteristics and financial performance. Financial regulation is thus one of the factors commercial banks must consider in order to determine the possible range of financial performance. Organization characteristics are good indicators of Financial Performance of commercial bank in Kenya. Including Financial Regulation in the study increased the predictive power of the model. The study recommends use of more than one measure of Financial Performance to assess the performance of banks as performance is not a one-dimensional concept and must be looked at from different perspectives (Taouab & Isso, 2019). The study combined the two measures to attain one index score which improved its predictive power. NIM and ROA are considered superior measures of financial performance. By combining the two

measures into one index score, the study has taken the strengths of the two measures and combined them into one, increasing the predictive power of the indicator.

This study has increased the existing body of knowledge on bank characteristics, regulation and financial performance and in determining relevant factors impacting on this relationship and has several contributions to board of directors, corporate managers, regulators, depositors and investors in general. The fact that there is a relationship between Organization Characteristics and Financial Performance of banks, the policy makers must pay attention to these characteristics. Policy reforms should be geared towards merging and consolidating small banks to make them more profitable. Regulators of commercial banks like the Central Bank of Kenya and the Capital Markets Authority will better understand that regulations have a moderating effect on the relationship between Organization Characteristics and Financial Performance of banks. They could ensure that the right level of financial regulation is set to balance between the profit maximisation motive and the financial health of the banks. The regulators could also regulate more those Organization Characteristics that affect Financial Performance. The findings of this study will be beneficial to investors and depositors in commercial banks in making better investment decisions. Investors bear the risk when banks fail and collapse. The investors could better assess the bank characteristics that could lead to better financial performance and avoid those banks whose bank characteristics show likelihood of profit failure. The risk of the inconveniences caused by bank losses, failures and bankruptcy could be avoided. This study shows the linkage between organisation characteristics and adequate financial regulation translates to better bank financial performance that benefits all stakeholders.

It is recommended that further studies can be carried out to determine causality in the relationship between organization characteristics and financial performance to better define which organization characteristics variables cause changes in financial performance. Further research can include more variable in testing the relationship between organization characteristics and financial performance. It would be important to include other variables that moderate the relationship between organization characteristics and financial performance. This study used quantitative measures of the variables. Future research could be conducted based on both the quantitative and qualitative measures of the variables. The study focussed on commercial banks in Kenya. Further studies could be replicated focussing on other financial institutions like insurance companies, housing finance companies, microfinance institutions and foreign exchange. Finally, further studies can replicate this study to assess this relationship in other countries.

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