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Capital Level and Financial Stability of Commercial Banks in Kenya

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Abstract

The soundness of banks' finances serves as the foundation for the entire financial sector because they are essential to promoting economic growth. A commercial bank's financial stability should be assessed with specific emphasis given to domestic and foreign issues that affect how the bank operates and figuring out the amount of their influence on the status and operations of the commercial bank. Nevertheless, the impact of the company's capital, liquidity, and asset quality on the financial stability of commercial banks has not been studied. This study aimed to evaluate the effect of capital level on licensed commercial banks' financial stability in Kenya. The research was anchored by capital buffer theory. The explanatory research design was adopted to analyze thirty-nine banks for the period 2016 to 2022 based on the census approach. The study outcomes were arrived at using secondary data obtained under the guidance of the secondary data collection schedule. The assessment of the investigation was evaluated premised on descriptive and panel approaches. The findings indicated that capital level had a positive and significant effect on the financial stability of commercial banks. The study recommended that commercial banks should adopt strategies and measures that will enable them to increase the capital level leading to an increase in financial health.

Keywords: *Capital level, financial stability, commercial banks*

1.0 Introduction

Economic development and growth variance in every sector of the globe is heavily driven by banks. These institutions direct the flow of investment capital from one economic sector to the other. They raise money to help various economic sectors function effectively. By meeting the financial demands of businesses and individuals and lowering transaction costs, they maintain the financial stability of the economy (Ngumo, Collins & David, 2017). Commercial banks remain the most important financial organizations for acting as a middleman between businesses and consumers in an economy (Warue, 2013). Among the many services they offer, lending is the most crucial since it benefits every player in an economy (Jebet & Wepukhulu, 2020). However, many countries' apex banks and other regulatory authorities supervise these banks to preserve order in the financial market to ensure their successful functioning.

With the unveiling of bank-affiliated downfall events in advanced countries such as the United States of America (USA), financial stability is being prioritized over financial development because the latter may not be long-term sustainable (Schneider, 2015). They are tightening financial guidelines to attain financial stability. As the current worldwide financial disaster showed, financial institutions may be volatile and cause disasters that can wreak havoc on the actual economy if they are not properly and effectively regulated. The purpose of guidelines is

to protect financial stability as well as foster economic progress; finances are intended to support economically productive activities (Tirole, 2010).

The banking business in Mexico is still centered around multinational structures that often comprise mostly financial institutions such as commercial banks, institutions related to pensions such as retirement funds, stock-based firms such as brokerage organizations, companies dealing with insurance products without ignoring mutual funds, amid the country's large variety of financial mediators. According to Said (2013), the 7 biggest banks—the G-7—represent nearly 80% of all bank assets and are collectively managed by financial conglomerates. It should be noted that all of these significant advancements, which entail commercial banks continue to face economic difficulties (Mghaieth & Khanchel, 2015).

According to Amatus and Alireza (2015), the banking systems in Africa are less advanced than those in other emerging nations throughout the world. The majority of resources and operations in the financial industry are accounted for by banking systems. Any financial collapse in a nation whereby commercial banks control the financial industry has a negative impact on the nation's economic development. Yensu *et al*. (2021) examined the elements that influence banking industry stability in Ghana using data from 2008 to 2017 and found that the interest rate coverage ratio has a negative effect on stability, whereas inflation, as well as GDP growth, do have substantial positive effect. Ozili (2019) investigated the components influencing Nigerian banking stability and discovered that financial institution effectiveness, bank density, lending supply, as well as the profitability of the banks provide a substantial favorable effect on bank stability, whilst inflation, as well as GDP growth, provides a substantial negative effect. Pham et al. (2021) state that industry structure, sales volume of the organization, loan loss provisions, and prior year's bank stabilization all have a negative impact on bank stability, while equity-to-asset, loan-to-asset, size of the bank, international asset, and earnings diversity all have a positive impact.

Commercial banks are vital to economic growth; hence their financial stability must serve as the cornerstone of the whole financial system (Hussein, 2010). Kenya's commercial banks account for 43.22% of the nation's GDP, which is a sizeable portion (Plecher, 2020). A commercial bank's financial stability must be assessed by carefully weighing internal and external variables that affect the bank's operations and assessing how they affect the bank's operations and status (Brauers, Ginevicius & Podviezko, 2014).

1.1 Problem Statement

The primary drivers of economic expansion worldwide include commercial banks (Cavusgil, Knight, Riesenberger, Rammal & Rose, 2016). By obtaining savings from organizations with idle surplus funds and mobilizing savings for investments in industrialized ventures, they perform a crucial function in economic growth. Commercial banks offer businessmen establishing firms the expansion capital they require, they supply significant loans to the government, they offer management guidance to small company owners, and yet they still offer financial solutions to their customers. The actions of the commercial banks influence the future growth of any nation. The global banking industry provides a range of products to both savers and borrowers entities.

A solid, effective, and stable banking system, as well as economic expansion, depends on a stable economic structure (Gathaiya, 2017). The CBK uses the CAMEL Model as one instrument to evaluate the banks in Kenya about their financial stability (CBK, 2010). However, there have been turbulent moments in Kenyan commercial banks despite the

established model, leading to the receivership of some and the bankruptcy of others (CBK, 2018).

According to the recent financial stability report from the Central Bank of Kenya (2022), commercial banks exhibited stability and resilience in dealing with various challenges in 2022. These challenges included factors such as drought, interest rates, residual effects of the COVID-19 pandemic, and specific risks related to institutions. Overall, the banking sector demonstrated strong capitalization, maintained ample liquidity buffers, and experienced significant profit growth, which is crucial for further bolstering their capital reserves. However, there are potential risks to the stability of the sector, such as elevated credit risks, potential impact of interest rate fluctuations due to tightening monetary policies, risks associated with cybercrime, and the ongoing effects of climate change. Over the past decade, the growth rate of gross loans has been slower compared to the growth rate of NPLs. The period leading up to the banking sector instability between 2015 and 2018, as well as the period when interest rate capping laws were in effect, witnessed the highest increase in NPLs and the slowest growth in gross loans. NPLs have been growing at a much faster pace than new lending since 2013. On average, between December 2013 and June 2023, the growth rate of gross NPLs exceeded that of gross loans, with a 22.2 percent increase compared to a 9.7 percent growth rate respectively. The recent surge in the growth rate of NPLs in the first half of 2023 can be attributed to the rising interest rates, which were implemented as part of monetary policy tightening measures to mitigate inflationary pressures.

The CBK supervisory reports state that overall net assets increased from the original monetary value of Kenya 4,002.74B in the financial period of 2017 December which was an increment of 10.14 percent. In 2018 it witnessed a further 19.03% growth in money invested in government securities but only a 3.07% increase in loans. The bankruptcies of Chase Bank in April 2016 and Imperial Bank in October 2015, along with the implementation of the Interest Rate Cap Act in September 2016, considerably impeded the growth of deposits and loans (Financial Sector Report, 2018). The majority of banks moved money into government securities instead of lending to the private sector. Despite a slight improvement, gross loan as well as advance growth has been minimal. Customer deposits, however, which were retrieved in the first half of 2017, rose by 12.4 percent from the original figure in billions to 3,259.5 billion Kenya shillings in the financial year ending in 2018. This is a 12.4% increase. In December 2020 and June 2021, the net assets of the banking system increased by 12.4% and 5.1%, respectively, to KSh 5,405.8 billion and 5,676.9 billion. The COVID-19 pandemic undermined a fragment of repair towards the close of 2019, going to follow the overturn of the interest rate capping law. As a consequence, enhanced loans to big companies and assets in treasury bonds indicate a flight to protection. Client deposits increased to KSh 4,021.9 billion in December 2020, up 8.7 percent, and then to KSh 5,7 billion in June 2021. This growth was driven by the necessity for consumers to retain liquidity as well as bank efforts to increase deposit mobilization, which mostly involved broadcast platforms. Deposits account for 74.8% of overall commercial bank liabilities and shareholder funds (Financial Sector Report, 2021). Therefore, there was a need to look into how firm characteristics affect the financial stability of commercial banks in Kenya.

Bansal (2014) asserts that financial institutions should constantly create instruments to promote and guarantee financial stability. There is no evidence to support the stability and resilience of Kenyan banking institutions. Several banks have had liquidity and organizational governance concerns, which caused two banks to fall into bankruptcy in the 2015 fiscal year and additional banks to do the same in the first quarter of 2016. Considering that this is their first meeting in

more than ten years (CBK 2016). According to CBK (2016), the above difficulties manifested against a background of rising overall banking industry asset growth.

However, because some research was positive, negative, substantial, or not significant, the link between corporate features and commercial banks' financial stability lacked conceptual and empirical consistency. Much of this research looks at how different bank characteristics impact the stability of the financial system. The financial soundness and capital sufficiency of Kenyan commercial banks are strongly correlated, according to Githinji and Njuguna's (2016) analysis. According to Oduora, Ngokab, and Odongoba's (2017) research, banking institutions significantly and favorably affect Africa's financial stability. This current research will however focus on Kenyan commercial banks. Ameni *et al*. (2017) reported that a rise in liquidity risk was a factor in bank instability in Tunisia and Saudi Arabia. Sheefeni (2016) reported that inflation had a favorable, but no statistical significance, impact on non-performing loans in Namibia. Vaicondam, Hishan, and Shan (2019) concluded that Interest rates have an impact on the rise in nonperforming loans in Malaysia's banks. The results from these three studies cannot be directly applicable to Kenya commercial banks as they were done for different countries. There has been little research conducted on Kenyan commercial banking institutions. Thus, the research aim was to assess how capital level affects the financial stability of Kenyan commercial banks.

1.2 Research Hypothesis

H_0: Capital level has no substantial statistical effect on commercial banks' financial stability in Kenya.

2.0 Literature Review

2.1 Theoretical Review

Calem and Rob were the first to introduce Buffer Capital Theory in 1996. According to the theory, banks aim to maintain a surplus of capital above the required minimum to mitigate potential risks that might arise from unfavorable circumstances during their operations. This entails establishing criteria that take into consideration the cyclicality of capital shortages brought on by bank lending activity (Wakaba, 2014). As such, banks that lack sufficient capital are at greater risk because they are expecting bankruptcy, which insurance companies will cover. Conversely, banks possessing significant capital engage in high-risk projects in the hope of consistently maximizing profits through capital use (Kibet et al., 2015).

The buffer capital idea links commercial banks' capitalization ratio to their overall financial soundness. This hypothesis states that commercial banks keep reserves to reduce the possibility of their capital ratios dropping below the legally mandated minimum level. The capital held by commercial banks plays a crucial role in safeguarding their stability and allows them to prepare for potential challenges (Mennawi, 2020). By collecting adequate deposits, commercial banks prevent the depletion of their capital base. Therefore, this theory supported capital level.

2.2 Empirical Review

Kirui and Mugo (2023) carried out a study to examine the degree to which the aspect of capital adequacy affected the lending productivity of commercial banks in Kenya in terms of financial performance. They utilized an explanatory research design to achieve their objectives, with a particular focus on Kenyan banks as their primary audience. The researchers analyzed a total of thirty-nine fully operational banks from 2016 to 2021, encompassing the entire population due to their small size. The regression analysis's findings showed that, in Kenya's commercial banking industry, capital adequacy and loan performance had a substantial negative correlation.

The study's overall findings indicate that Kenyan commercial banks can achieve optimal performance by using effective loan management techniques based on the maintenance of adequate capital. However, the study only looked at loan performance, which is one facet of financial stability; as a result, the current study looked at financial stability more broadly.

Ndinda (2023) studied the effects of capital sufficiency, operational effectiveness, credit size, and earnings on the financial stability of Kenya's commercial banks. The study used an explanatory design. Forty Kenyan commercial banks made up the research target population, which was determined through a census-based method. By making use of a secondary data review guide, the annual audited banks' reports were used as the key source of the needed data. The study discovered that capital sufficiency did not influence the financial stability of Kenyan banks in any significant manner. The research however covered data up to 2020 whereas there have been monetary policies that have been constituted after 2020 that may affect financial stability.

Nyanyuki, Nyanga'u, and Onwonga (2022) examined this idea in 2022 and expressed serious concerns about the impact of sufficient capital on the financial stability of financial institutions like Kenyan banks. The researchers incorporated a purposive sampling methodology for the sake of establishing the sample size. As a result, only 10 commercial banks were identified for this exercise. To assess the interrelationship between the various study variables, the Pearson Product moment coefficient model was utilized. It was revealed that the conceptual connectivity of capital sufficiency and financial performance was statistically significant and inverse. It is crucial to remember that while the current analysis included all commercial banks, the previous study only looked at listed commercial banks.

Wafulu (2020) study set out to evaluate the relationship between capital sufficiency and monetary stability. The study considered the exchange rate. From 2011 to 2018, 17 vulnerable commercial banks in Kenya were utilized to undertake an investigation whereby causal research design was considered fit. The outcome portrayed that the predictor variable in this case capital sufficiency had an inverse and statistically significant connection to the financial soundness of the banks. This study emphasizes the interconnectedness of capital adequacy and the overall financial health of commercial banking firms in Kenya. The interest rate was used as a moderating variable in the current study, which will use an explanatory research design.

Yulianti, Aliamin, and Ibrahim (2018) conducted a research project that examined the conceptual linkage between the following predictors; capital adequacy, bank size, and the dependent variable which was nonperforming loans in Indonesian government banking institutions. Accounting records of Bank Indonesia were used as the main source of data. A hypothesis-testing method was utilized, and a purposeful selection strategy was employed with a sample size of 81 participants. The research was conducted between 2012 and 2016. The hypotheses were evaluated using panel data assessment with the multi-linear regression technique. The final research outcome portrayed that the ratio associated with capital adequacy consecutively influenced the aspect of nonperforming loans. That is, a direct link existed between capital adequacy ratio and nonperforming loans. The research will now focus on Kenyan commercial banks instead of its initial focus on the association between the dependent variable—nonperforming loans for Indonesian government banks—and bank size, as stated in the preceding paragraph.

Oduora et al. (2017) looked into capital sufficiency and creditworthiness in Africa. In the period from 2000 to 2011, a total of 167 banks from Africa participated in the study, while between 2007 and 2013, 145 banking institutions from 23 African countries were involved. The

financial health was assessed using the NPL (Non-Performing Loan) ratio. The findings indicate that, apart from banking institutions, greater equity in small banks causes an increase in the credit crisis in Africa. This suggests that banking institutions have a direct influence on financial stability which is significant. Instead of doing a cross-national analysis, the study concentrated on Kenyan commercial banks, yielding a targeted conclusion and recommendation.

Githinji and Njuguna (2016) looked at the financial health and capital sufficiency of Kenyan commercial banks. Using a descriptive methodology, 43 banks were examined. Their primary method for acquiring information was a questionnaire. As a measure of financial health, the NPL ratio was utilized. The investigation was done both longitudinally and cross-sectionally. Additionally, secondary data were employed for regression data analysis. The outcome showed a substantial association between sufficiency level of capital and financial health in Kenyan commercial banks. This current study employed an explanatory design and utilized only secondary data for data collection.

3.0 Methodology

The explanatory research design was adopted to analyze thirty-nine banks for the period 2016 to 2022 based on the census approach. The study outcomes were arrived at using secondary data obtained under the guidance of the secondary data collection schedule. The assessment of the investigation was evaluated premised on descriptive and panel approaches. All ethical moral was considered.

4.0 Results and Discussion

4.1 Descriptive Analysis

The descriptive analysis results, including mean, standard deviation, minimum, and maximum values, are reported in Table 1.

Table 1: Summary of Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
Financial stability	273	1.546	1.020	-0.296	4.310
Capital level	273	0.265	0.209	-0.732	1.061

Source: Research data (2024)

The mean financial stability of Kenya's commercial banks between 2016 and 2022 was 1.546, with a standard deviation of 1.020, according to the results of the descriptive study. Between -0.296 and 4.310 was the lowest and greatest value that was observed during this time. This implied that overall, the commercial banks were in financial distress since the mean was less than 1.8. However, it was evident that some commercial banks were financially stable as shown by a maximum value of 4.310 which is above 3.

The capital adequacy for the banks in the same period averaged 0.265 with a standard deviation of 0.209. The range was from -0.732 to 1.061. This implied that in terms of capital adequacy, the commercial banks were doing well as the values were above the minimum value of 0.08 and hence were in a good position to meet their financial obligations.

4.2 Correlation Analysis Results

The correlation analysis was conducted to assess the link between capital level and financial stability. This was achieved through Pearson’s correlation coefficient. Results are presented in Table 2.

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Table 2: Correlation results; Capital level and financial stability

		Financial stability	Capital level
Financial stability	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Capital level	Pearson Correlation	.484**	1.000
	Sig. (2-tailed)	.000	
	N	273	

** Correlation is significant at the 0.01 level (2-tailed).

Source: Research data (2024)

The Pearson's correlation coefficient (r) between capital level and financial stability was 0.484 and the P value was 0.000. Therefore, it was revealed that the correlation between capital level and financial stability was positive and significant. Accordingly, if the capital level increased, financial stability would increase, and vice versa. The results concurred with Githinji and Njuguna (2016) whose results showed a substantial correlation between capital sufficiency and financial health in Kenyan commercial banks. However, the findings disagreed with those of Nyanyuki, Nyanga'u, and Onwonga (2022) whose results showed that capital sufficiency and Kenyan commercial banks' financial performance were negatively correlated.

4.3 Regression Analysis

Table 3 presents regression results on the link between capital level and financial stability of commercial banks.

Table 3: Regression Results

Regression Outcome						
Numberofobs	= 273					
R-sq:	= .2337					
Waldchi2(4)	= 3.71					
Prob > chi2	= 0.045					
Financials stability	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Capital level	0.250	0.130	1.930	0.045	-0.005	0.505
_cons	1.480	0.125	11.840	0.000	1.235	1.725

Source: Research data (2024)

The results revealed that the R squared was 0.23. This implied that the capital level explains 23.4% of the variations in financial stability. The remaining variation of 76.6% could be explained by other factors that were outside the purview of this investigation. The overall p-value was 0.045<0.05 hence the model could be interpreted as being statistically significant and hence relevant in estimating the effects. The coefficient for the variable capital level was 0.250 and the P value was 0.045. This means that there is a positive and significant relationship between capital level and financial stability. This was in agreement with Oduora et al. (2017) who found that capital sufficiency of banking institutions has a positive and significant impact on financial stability.

4.4 Hypothesis Testing

Regarding the first hypothesis H_0: There is no significant statistical effect of capital level on commercial banks' financial stability in Kenya, the coefficient was found to be positive and significant (β=0.130, p=0.045). Therefore, the null hypothesis was rejected and therefore there was a significant statistical effect of capital level on commercial banks' financial stability in Kenya.

5.0 Conclusion

The study found that there is a statistically significant relationship between capital level and financial stability of commercial banks. This study hence concluded that capital level has a positive and significant effect on financial stability. When banks increase their capital level, they can improve their health as they can better protect their institution from external shocks. This leads to an improvement in the institution's ability to control risks, absorb shocks, and facilitate and improve economic processes. An increase in the capital level would mean that banks have a higher ability to cover risks that may occur hence mitigating the risk and the banks can get increased profitability in terms of return on assets hence a high financial stability.

6.0 Recommendations

Based on the conclusion that capital level has a positive and significant effect on the financial stability of commercial banks, this study recommends that banks adopt strategies that will enable them to increase the capital level of the institution. Commercial banks should also seek to increase the amount of total capital and reduce the amount of risk-weighted assets to ensure that the banks are in a good position to absorb shocks from liabilities that may arise. Furthermore, the results of this study indicate that the CBK ought to develop guidelines for the appropriate quantity of capital that banks need to maintain sound operating circumstances.

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