

ISSN Online: 2329-3292 ISSN Print: 2329-3284

# Effects of Mergers and Acquisitions on the Financial Performance of Commercial Banks in Developing Countries—A Case of Zambia

# Mwaanga Haakantu<sup>1</sup>, Jackson Phiri<sup>2</sup>

<sup>1</sup>Graduate School of Business, The University of Zambia, Lusaka, Zambia <sup>2</sup>Department of Computer Science, School of Natural Sciences, The University of Zambia, Lusaka, Zambia Email: mwaangahaakantu@gmail.com, jackson.phiri@cs.unza.zm

How to cite this paper: Haakantu, M., & Phiri, J. (2022). Effects of Mergers and Acquisitions on the Financial Performance of Commercial Banks in Developing Countries—A Case of Zambia. *Open Journal of Business and Management*, 10, 3114-3131. https://doi.org/10.4236/oibm.2022.106155

Received: September 15, 2022 Accepted: November 8, 2022 Published: November 11, 2022

Copyright © 2022 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

http://creativecommons.org/licenses/by/4.0/





#### **Abstract**

Mergers and acquisitions are one of the most famous inorganic investment strategies used to grow and expand business operations across the world. However, studies show that the effects of mergers and acquisitions on the financial performance of commercial banks are inconsistent. Although many studies have been conducted on mergers and acquisitions worldwide, in Zambia more studies need to be conducted because little information on the effects of mergers and acquisitions on the financial performance of commercial banks is known. The study aimed to assess the effects of mergers and acquisitions on the financial performance of commercial banks in Zambia. Descriptive statistics and paired sample t-tests were used for the 2 years before and after merger and acquisition for the collected secondary data for mergers and acquisitions that occurred between 2009 to 2019. Finance Bank Zambia, BancABC Zambia and Atlasmara Zambia were selected using convenient sampling. The indicators of financial performance showed mixed results after the study. The liquidity and profitability ratios that were analyzed showed that there was no significant improvement in the financial performance of the business. The efficiency ratio showed improvement with a p-value of 0.014 while the leverage ratios showed mixed results. The study will fill the information gap and help investors, shareholders and bank managers inter alia in making critical decisions on mergers and acquisitions as a long-term business strategy.

# Keywords

Mergers and Acquisitions, Commercial Banks, Financial Performance, Financial Ratios

# 1. Introduction

This research paper has eight sections. Section one covers the introduction to the paper and information on the background of the study. The statement of the problem is given, followed by the aim and objectives. The research questions, scope and significance of the study are also covered in this section. Section two outlines the various literature done by different scholars on the subject matter, identifying findings and gaps. Section three introduces the theoretical framework and the conceptual framework developed by the author. The methodology that was employed to carry out the research design, population, data collection methods, techniques and analysis is in section four. Section five presents the results and analysis, and is followed by the conclusion in section six. The recommendations of the research are outlined in section seven while section eight highlights areas for further studies.

With the advent of globalization, fierce competition among companies has become the order of doing business today, which in turn may diminish or pose a threat to investor prospects. To survive the competition and expand financial growth, a company may have to undertake different management strategies such as joint ventures, retrenchment, divestiture, and mergers and acquisitions (M&A) inter alia.

Mergers and acquisitions are one of the most famous inorganic investment strategies used to grow and expand business operations across the globe. "Mergers and acquisitions are activities involving takeovers, corporate restructuring, or corporate control that changes in the ownership structure of firms," (Rao & Kumar, 2013).

Gupta (2015), argues that "with the level of competition getting intense day by day, mergers and acquisitions have emerged as the most preferred long-term strategy of corporate restructuring". Brownstein et al. (2019) record that the whole of 2018 proved to be another strong year for M&A and the total deal volume reached almost \$4.2 trillion globally, higher than the \$3.7 trillion volume of 2017.

Several banks have undergone the process of mergers and acquisitions in the recent past in their quest to restructure operations and expand financial prospects. For example, in 2012 ABSA acquired Barclays Africa Limited as it sought to achieve its strategy, One Bank in Africa, aimed at improving its earnings, growth prospects, return, and diversity (ABSA, 2012). In the same spirit of expanding operations and improving financial performance, NIC Group PLC and Commercial Bank of Africa Limited (CBA) merged to form NCBA Group PLC in 2019 (Agutu, 2019).

Zambia has also seen a rise in the number of mergers and acquisitions in the recent past. For example, in 2016, Atlas Mara Limited a sub-Sahara African financial services group acquired Finance Bank Zambia Limited and its subsidiaries. This was by way of combining Atlas Mara's Zambian subsidiary, African Banking Corporation Zambia Limited (BancABC Zambia) with Finance Bank

Zambia to form Atlas Mara Zambia. In addition, Access Bank acquired Cavmont Bank Limited in 2021 in its quest to emerge as a stronger and well-capitalized banking franchise with improved scale and capacity to deliver sustainable and best-in-class financial services in the Zambian market. Furthermore, Access Bank in the same year 2021, announced its planned merger with Atlasmara Bank Zambia Limited.

Banks manage to expand operations and build new market havens which in turn result in potentially increased revenue through these mergers and acquisitions. However, mergers and acquisitions may go wrong. Junni et al. (2015), observe that the main drawbacks of mergers and acquisitions are centered on tangible resources and intangible assets such as managerial skills and capabilities, and knowledge base.

Studies show that the effects of mergers and acquisitions on the financial performance of commercial banks have not been consistent. Gupta (2015) and Mutai (2011) in their separate studies on financial performance after mergers and acquisitions concluded that there was a positive impact of mergers and acquisitions on the financial performance of banks that they reviewed. However, in her research on pre and post-merger financial performance analysis of the State Bank of India, Honey concluded that there was no improvement in the financial performance in the post-merger period (Gupta, 2016).

Although many studies have been conducted on mergers and acquisitions worldwide, in Zambia more studies need to be conducted because little information on mergers and acquisitions on the financial performance of commercial banks is known.

Different studies that have been conducted in other countries show contradictory results on the effects of mergers and acquisitions on the financial performance of commercial banks. Sufian et al. (2012) in Malaysia and Musah et al. (2020) in Ghana, found that there was no significant improvement in the financial performance after merger and acquisition. On the other hand, Ayadi et al. (2013) in Europe found that there was a significant improvement in financial performance after mergers and acquisitions.

In Zambia, there is little information on the effects of inorganic investment strategies of mergers and acquisitions on the financial performance of commercial banks. Past studies in Zambia by Ngwira (2014), examined the short-term effects of mergers and acquisitions announcement on the shareholder's return while Chilepa (2009) and Kaira (2008) only focused on the legal and regulatory framework of mergers and acquisitions.

This study will endeavour to fill the gap in knowledge by assessing the effects of mergers and acquisitions on the financial performance of commercial banks in Zambia. The study will also provide answers to stakeholders who view mergers and acquisitions as an alternative inorganic investment strategy to rescue financially distressed banks given the rise in the liquidation of financial institutions in Zambia. It will help decision-makers in the financial industry who seek

long-term sustainable management strategies in their bid to improve their business financial fortunes. Thus managers, investors, brokers, consultancy firms, creditors, government and investment banks will benefit from this study. The study will also provide university students and other researchers with knowledge of the effects of mergers and acquisitions. In addition, it will act as a source of reference for further studies on mergers and acquisitions.

### 2. Literature Review

Abbas et al. (2014), evaluated the financial performance of 10 banks that had undergone mergers and acquisitions in Pakistan. They analyzed the profitability, efficiency, leverage and liquidity ratios to get the financial performance. The study results showed that there is no improvement in the financial performance of the banks in Pakistan after mergers and acquisitions. These findings are inconsistent with the study results obtained by Shrestha, Thapa and Phuyal.

Shrestha et al. (2017), compared the financial performance of banking and financial institutions in Nepal and concluded that merger impacts performance positively when larger and stable parties such as commercial banks act as bidders as opposed to the merger between smaller banking and financial institutions. Another research by Tarila and Ogege (2019) shows that the size of the bank has a significant relationship with the performance of the bank in both the pre and post-merger. However, there was no significant and positive relationship between the liquidity of the firms and their financial performance.

In his study, Pre and Post-Merger Impact on Financial Performance: A Case Study of Jordan Ahli Bank, Al-Hroot (2015), analyzed 12 ratios and found that 41.67% showed significant improvement after the merger with Jordan Ahli Bank, while 25% (3 ratios) had insignificant improvement. Furthermore, 25% (3 ratios) significantly deteriorated after the merger, while 8.33% (1 ratio) insignificantly deteriorated after the merger, thus increasing the performance of Jordan Ahli Bank by 66.67%. Although the performance of the bank increased (efficiency and leverage ratios), the findings on the financial performance (cash flow ratios) of Jordan Ahli Bank insignificantly improved in the post-merger period as the cash flow ratio insignificantly improved.

Gupta (2016), analyzed the financial performance of the State Bank of India covering 8 years of annual data of pre and post-merger using investment ratios, management efficiency ratios, leverage ratios, debt coverage ratios and profitability ratios. Her study results revealed that the financial performance of the State Bank of India did not show any significant improvement post-merger.

Saluja et al. (2012), using CAMEL Model (capital adequacy, asset quality, management capability, earning quality and liquidity), assessed the impact of the merger on the financial performance of HDFC Bank and the study concluded that the financial performance of HDFC Bank improved in the post-merger period in almost all parameters of the model. Similarly, Sharma and Mahima (2012) used the EVA Model to evaluate the financial performance of merged banks and the

study showed positive effects of mergers in the long run.

# 3. Theoretical Framework

Several researchers that have conducted studies on the effects of mergers and acquisitions on financial performance around the world have developed theories that make use of different variables and how they are affected after mergers and acquisitions. Some of these theories are:

#### 3.1. Camel Model on Bank Performance

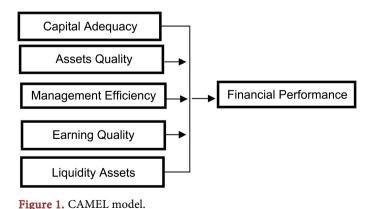
CAMEL (Figure 1) is the model which measures the financial performance of banks using five factors, that is, capital adequacy, assets quality, management, earning quality and liquidity. The model rates these elements according to their influence on financial performance. Capital adequacy measures the minimum capital reserve amount of a bank. It uses the asset factor to assess the quality of assets of the bank and it uses the management efficiency factor to measure the ability of the bank's management team to identify and react to financial stress. It also uses the earnings quality factor to assess the bank's long-term viability and the liquidity assets factor to measure the bank's interest rate and liquidity risk.

# 3.2. A Comparative Study of Merger Effect (Shrestha, Thapa, & Phuyal, 2017)

The framework (**Figure 2**) shows that the different ratios of the pre-merger period of the sampled banks are taken and compared with the post-merger period. The model makes use of both primary and secondary data to compare the effects the financial performance pre and post-merger.

# 3.3. Model on Effects of Mergers and Acquisitions by Jallow (2017)

This model (Figure 3) utilizes the return on assets, which measures how the firm's directors utilize the firm's assets to generate profits. The second variable of the research is the return on equity which is the financial ratio that indicates the amount of profit made compared to the aggregate sum of the shareholder's



**o** 

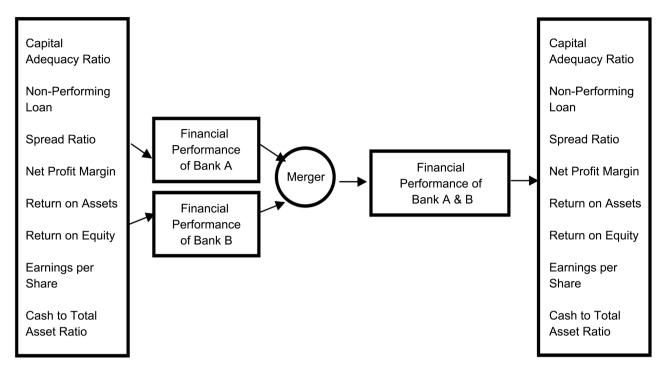


Figure 2. Conceptual framework developed by Shrestha, Thapa, & Phuyal (2017).

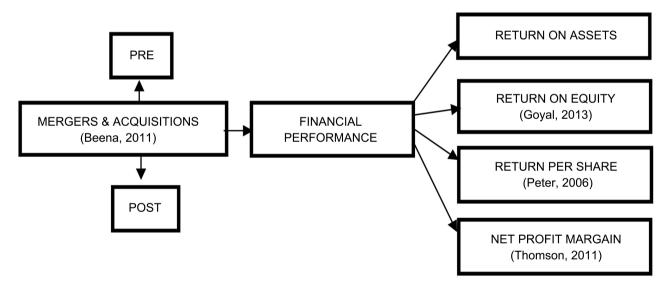


Figure 3. Conceptual Framework developed by Jallow (2017).

equity contributed. Earnings per share is another variable that is used in this model. It measures the firm's profits allocated to each outstanding share of common stock and lastly, it makes use of the net profit margin which is produced from the sales revenue less the cost of operations.

These frameworks, theories and the literature review helped the researcher to develop a new conceptual framework (**Figure 4**), which analyses three dependent variables of indicators of financial performance pre and post-merger and acquisition. These are liquidity, leverage and profitability ratios.

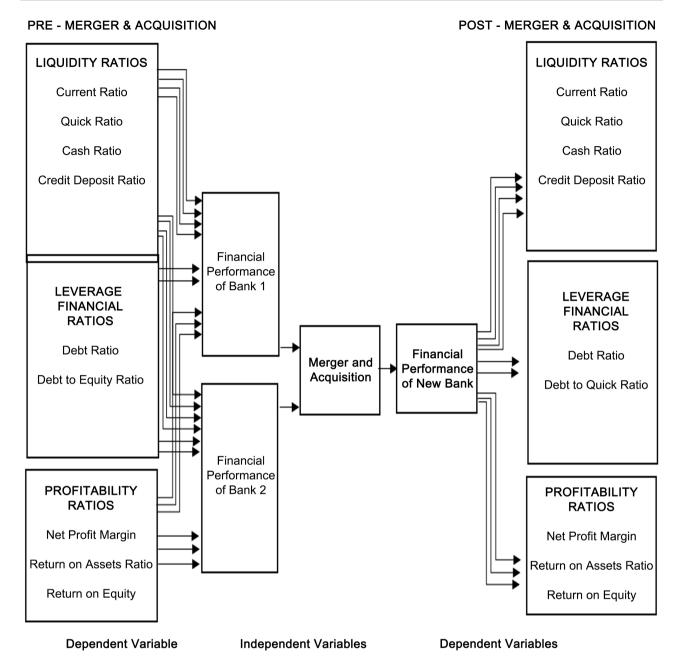


Figure 4. Author's own development.

# 3.4. Research Hypothesis

The following hypothesis was used to measure the impact on the financial performance of mergers and acquisitions.

H0: Mergers and Acquisitions have a positive influence on the liquidity of commercial banks.

H0: Mergers and Acquisitions have a positive influence on the leverage of commercial banks.

H0: Mergers and Acquisitions have a positive influence on the profitability of commercial banks.

# 4. Methodology

This study adopted a descriptive research design as it sought to determine the effects or the relationship of mergers and acquisitions on the financial performance of commercial banks in Zambia. This particular design was preferred since the researcher envisioned describing the behavior of the variables, that is, liquidity, leverage and profitability ratios on banks that were involved in mergers and acquisitions in Zambia without influencing any variables during the event period. The variables were identified, observed and measured. This research was quantitative in nature as it involved the collection of quantifiable and systematic data that was used for statistical analysis of the research problem.

According to the Bank of Zambia records, they were seventeen (17) registered commercial banks in Zambia during the time of the study. From 2009 to 2019, three big mergers and acquisitions took place in the banking industry in Zambia, the merger and acquisition of Finance Bank Zambia, BancABC Zambia to form Atlasmara Zambia, the partial acquisition of InvestrustBank Zambia by Industrial Development Corporation (IDC) and the acquisition of International Commercial Bank by First Capital Bank. This was the population of the study.

The sample size of a survey most typically refers to the number of units that were chosen from which data were gathered (Lavrakas, 2008). Since the study is focused on commercial banks that have undergone mergers and acquisitions from 2009 to 2019. Only three banks underwent mergers and acquisitions in Zambia during that period. The merger and acquisition of Finance Bank Zambia, BancABC and Atlasmara Zambia was used for the study. This study used convenient sampling technique. The method was used because data on Finance Bank Zambia, BancABC Zambia and Atlasmara Zambia were readily available.

Secondary data was used as a means of data collection. The data was collected from the commercial bank's published financial statements on the banks' websites and print media. The data for the financial statements for the 2 years pre and post-merger and acquisitions were then used in ratio analysis. The secondary data that was collected focused on published books, journals, articles and any materials on the financial performance of commercial banks.

Data analysis was done by using financial ratios and to determine and test how correlated the ratios of each dependent variable and the independent variable were, the statistic t-test was used as well as the probability associated with each combination of ratios.

A t-test is a type of inferential statistic used to determine if there is a significant difference between the means of two groups, which may be related to certain features. This was used to estimate the indicators of financial performance and test the level of significance of the merger and acquisition. Therefore, by analyzing the results from these findings of the t-test and level of significance, it was possible to depict the relationship between financial performance based on mergers and acquisitions.

# 5. Results

The data were analyzed by using descriptive statistics, specifically, the mean and then average pre-merger and post-merger data were used to interpret and conclude the results. Furthermore, a sample t-test was used to analyze the significance of the independent and dependent variables of the study. SPSS software was used to run the data collected.

Formulas of the Indicators of Financial Performance of Commercial Banks

**Table 1.** Formulas of the indicators of financial performance of commercial banks.

Variables	Ratios					
	$CURRENT RATIO = \frac{Current Assets}{Current Liabilities}$					
HOLHDITY	$QUICK RATIO = \frac{Current Assets - Inventory}{Current Liabilities}$					
LIQUIDITY	$CASH RATIO = \frac{Cash + Cash Equivalents}{Current Liabilities}$					
	$LOAN-TO-DEPOSIT = \frac{Total Loans}{Total Deposits}$					
LEVERAGE	$DEBT RATIO = \frac{Total Debts}{Total Assets}$					
	$DEBT TO EQUITY RATIO = \frac{Total Liabilities}{Total Shareholders' Equity}$					
	$NET PROFIT MARGIN = \frac{Revenue - Cost}{Revenue}$					
PROFITABILITY RATIO	RETURN ON ASSETS RATIO = $\frac{\text{Net Income}}{\text{Total Assets}}$					
	RETURN ON EQUITY = $\frac{\text{Net Income}}{\text{Shareholder's Equity}}$					

Financial Ratios of the Banks—Pre and Post Merger and Acquisition

Financial ratios (Table 1) are useful metrics that help managers, creditors and potential investors analyze and compare the financial health of a bank. The ratios below are a graphical representation of the results. Figure 5 and Figure 6 represent the results of the banks before the merger and acquisition. While Figure 7 and Figure 8 represent the results of the new bank after the merger and acquisition.

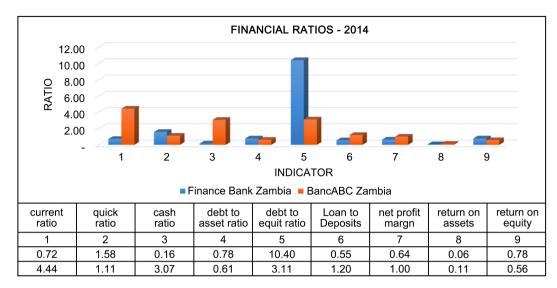


Figure 5. Finance bank Zambia and BancABC Zambia 2014 ratios.

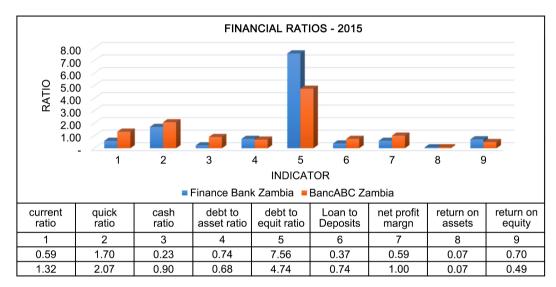


Figure 6. Finance bank Zambia and BancABC Zambia 2015 ratios.

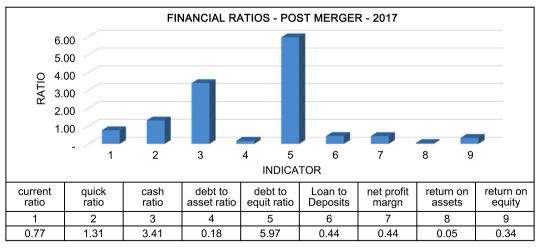


Figure 7. Atlasmara Zambia 2017 ratios.

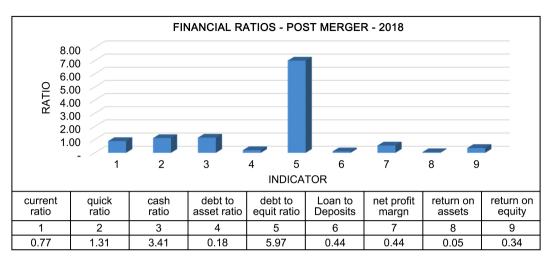


Figure 8. Atlasmara Zambia 2018 ratios.

# LIQUIDITY RATIOS

Liquidity ratios are vital classes of financial metrics as they are used to determine the ability of a debtor to settle current debt commitments without raising external capital. This financial metric uses current, quick and loan-to-deposit ratios in the contexts of banks.

# LIQUIDITY RATIOS—PAIRED SAMPLES TEST

Table 2. Paired samples test.

	Paired Differences								
		Mean	Std. Std. Erro		95% Confidence Interval of the Difference		Т	Df	Sig. (2-tailed)
						Upper			
Pair 1	Pre-Current Ratio & Post-Current Ratio	0.93500	1.23744	0.87500	-10.18293	12.05293	1.069	1	0.479
Pair 2	Pre-Quick Ratio & Post-Quick Ratio	0.40000	0.52326	0.37000	-4.30130	5.10130	1.081	1	0.475
Pair 3	Pre-Cash Ratio & Post-Cash Ratio	-1.19500	0.85560	0.60500	-8.88225	6.49225	-1.975	1	0.298
Pair 4	Pre-Loan to Deposits & Post-Loan to Deposit	0.450000	0.014142	0.010000	0.322938	0.577062	45.00	1	0.014

# **HYPOTHESIS**

H0: Mergers and Acquisitions have a positive influence on the liquidity of commercial banks.

H1: Mergers and Acquisitions have no positive influence on the liquidity of commercial banks.

The pre and post-merger and acquisition current ratio mean value is 0.935 with a T-test value of 1.069 and an insignificant probability of 0.479 which was above 0.05 (the significant level). The results illustrate that we do not have sufficient evidence to support the null hypothesis.

According to **Table 2** above, the pre and post-merger and acquisition quick ratio mean value was 0.4, the T-test value was 1.081 and the insignificant probability value was 0.475, which was above the level of significant 0.05. Therefore, we reject the null hypothesis from the results above because there is no sufficient justification that the mean difference between the pre-test and the post-test score is statistically significant.

The pre and post-merger and acquisition cash ratio mean value of the bank was -1.195 showing an increase in the ratio after the merger. The T-test value was 1.975 and a 2-tailed test probability value of 0.298 which was higher than the significant level of 0.05. The results show that we do not have sufficient evidence to support the null hypothesis.

The pre and post-loan-to-deposit mean value after the merger and acquisition is 0.45 with a T-test value of 45 and a probability value of 0.014 indicating that there is a significant difference between pre and post-merger performance in terms of the loan or credit-to-deposit ratio since the p-value is above 0.05, thus we accept the null hypothesis that mergers and acquisitions have a positive influence on the liquidity of a commercial bank. These results are consistent with a study that was conducted in Nigeria that found that the net loans to deposits ratio increased after a merger and acquisition (Abdou et al., 2016). However, these results are inconsistent with the findings of Gupta (2015), who after analyzing mergers in the Indian banking sector concluded that even though the loans to deposit ratio had improved, the increase was not statistically significant indicating that there was no significant difference between pre and post-merger performance in terms of credit to deposit ratio.

The results from the three ratios show that there is no significant evidence to suggest that mergers and acquisitions have a positive influence on the liquidity position of a commercial bank. However, the loans-to-deposits ratio shows that there was significant evidence to suggest that mergers and acquisitions have a positive influence on liquidity. Studies conducted in Malaysia and China found that the liquidity level of banks had no relationship with the performances of banks after a merger and acquisition (Said & Tumin, 2010). However, a study conducted in Kenya by Njambi (2018) found that the liquidity position of a bank had an influence on profitability after merger and acquisition.

# LEVERAGE FINANCIAL RATIOS

Leverage ratios are used to measure the ability of a bank to meet its financial obligations. Leverage ratios such as asset-to-debt ratio and debt-to-equity ratio become handy in this regard. It helps bank managers to assess the level of debt a bank has and its ability to settle these commitments once they fall due. High debt levels can result in credit downgrades or worse still liquidation of a bank.

The results of the leverage ratios after a merger and acquisition indicate the financial performance of the bank. Essentially, a lower leverage ratio is ideal for a business as it is an indication of the bank's ability to settle its obligations.

#### THE LEVERAGE FINANCIAL RATIOS—PAIRED SAMPLES TEST

Table 3. Paired samples test.

Paired Differences									
		Mean	Std. Deviation	Std. Error Mean	Interva	95% Confidence Interval of the Difference		df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pre-Debt to Asset Ratio - Post-Debt to Asset Ratio	-0.16000	0.01414	0.01000	-0.28706	-0.03294	-16.000	1	0.040
Pair 2	Pre-Debt to Equity Ratio - Post-Debt to Equity Ratio	-0.03000	1.15966	0.82000	-10.44909	10.38909	-0.037	1	0.977

#### **HYPOTHESIS**

H0: Mergers and Acquisitions have a positive influence on the leverage of commercial banks.

H1: Mergers and Acquisitions have no positive influence on the leverage of commercial banks.

According to **Table 3** above, the pre and post-merger and acquisition asset-to-equity ratio mean value was 0.16 with a T-test value of 16 and the significant probability value of 0.04, which is below the level of significant 0.05. Therefore, we accept the null hypothesis from the results above because there is sufficient justification that the mean difference between the pre-test and post-test scores is statistically significant.

The pre and post-merger and acquisition debt-to-equity ratio mean value is -0.03 with a T-test value of 0.037 and the insignificant probability value is 0.977, which is above the level of significant 0.05. The results illustrate that we do not have sufficient evidence to accept the null hypothesis.

# PROFITABILITY RATIOS

Profitability ratios are a class of financial metrics that are used to determine the bank's ability to generate earnings relative to its revenue, operating costs, balance sheet assets or shareholder's equity over a period. Net profit margin, return on assets and return on equity were used in this model to assess the bank's ability to generate earnings. The event of the merger and acquisition influences changes in financial metrics. This model will assess the results of these metrics before the merger and acquisition and compare the findings after the merger and acquisitions.

# PROFITABILITY RATIO—PAIRED SAMPLE TEST

Table 4. Paired samples statistics.

			Pai	ired Differen					
		Std. Mean Deviation		Std. Error Mean	95% Confidence Interval of the Difference		Т	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pre-Net Profit Margin & Post-Net Profit Margin	0.31500	0.09192	0.06500	-0.51090	1.14090	4.846	1	0.130
Pair 2	Pre-Return on Assets & Post-Return on Assets	0.03000	0.01414	0.01000	-0.09706	0.15706	3.000	1	0.205
Pair 3	Pre-Return on Equity & Post-Return on Equity	0.28500	0.06364	0.04500	-0.28678	0.85678	6.333	1	0.100

#### **HYPOTHESIS**

H0: Mergers and Acquisitions have a positive influence on the profitability of commercial banks

H1: Mergers and Acquisitions have no positive influence on the profitability of commercial banks

The pre and post-net profit margin merger and acquisition mean value is 0.315 with a T-test of 4.846 and an insignificant probability of 0.130 which is above 0.05 (the significant level). The results illustrate that the net profit margin has an insignificant relationship with mergers and acquisitions.

According to **Table 4** above, the return on assets pre and post-merger and acquisition mean value is 0.03, the T value is 3 and the insignificant probability value is 0.205, which is above the level of significant 0.05. We fail to accept the null hypothesis from the results above because there is no sufficient justification that the mean difference between the pre-test and the post-test score is statistically significant.

The Return on Equity's mean value of the bank before and after the merger and acquisition is 0.2850 with a T value of 6.33 and a 2-tailed test with a probability value of 0.10 which is higher than the significant level of 0.05. Again the results show that there is no significant evidence to suggest that mergers and acquisitions have a positive influence on the profitability of a commercial bank. The results from the three profitability ratios above show that the merger and acquisition did not have a positive influence on the commercial bank's financial performance.

# SUMMARY OF THE RESEARCH RESULTS

Hypotheses	Ratio	Significant level/Result	Explanation
	Current Ratio	0.479 REJECTED	The P-value is 0.479, which is above the significant level of 0.05. This illustrates mergers & acquisitions have no positive influence on the liquidity of a commercial bank
Mergers and Acquisitions have	Quick Ratio	0.475 REJECTED	The P-value is 0.475, which is above the significant level of 0.05. This illustrates mergers & acquisitions have no positive influence on the liquidity of a commercial bank
a positive influence on the liquidity of commercial banks	Cash Ratio	0.298 REJECTED	The P-value is 0.298, which is above the significant level of 0.05. This illustrates mergers & acquisitions have no positive influence on the liquidity of a commercial bank
	Loan to Deposits Ratio	0.014 ACCEPTED	The P-value is 0.014, which is below the significant level of 0.05. This illustrates mergers & acquisitions have a positive influence on the liquidity of a commercial bank
Mergers and Acquisitions have	Debt to Asset Ratio	0.04 ACCEPTED	The P-value is 0.04, which is below the significant level of 0.05. This illustrates mergers & acquisitions have a positive influence on the leverage of a commercial bank
a positive influence on the leverage of commercial banks	Post-Return on Equity	0.977 REJECTED	The P-value is 0.977, which is above the significant level of 0.05. This illustrates mergers & acquisitions have no positive influence on the leverage of a commercial bank
	Net Profit Margin & Net Profit Margin	0.130 REJECTED	The P-value is 0.13, which is above the significant level of 0.05. This illustrates mergers & acquisitions have no positive influence on the profitability of a commercial bank
Mergers and Acquisitions have a positive influence on the profitability of commercial banks	Return on Assets & Return on Assets	0.205 REJECTED	The P-value is 0.205, which is above the significant level of 0.05. This illustrates mergers & acquisitions have no positive influence on the profitability of a commercial bank
	Return on Equity & Return on Equity	0.100 REJECTED	The P-value is 0.10, which is above the significant level of 0.05. This illustrates mergers & acquisitions have no positive influence on the profitability of a commercial bank

# 6. Conclusion

It can be concluded that mergers and acquisitions yield mixed results or effects on the financial position of a commercial bank. Some indicators of financial performance increase while others decrease after mergers and acquisitions. Mergers and acquisitions may be affected by other factors during the transition period such as economic factors in the market, employee behavior and attitude towards the merger and acquisition, integration of systems and consumer perception of the merger and acquisition.

# 7. Recommendations

The study established that mergers and acquisitions improve the loan-to-deposit ratio of a commercial bank. It is important for banks that want to improve their liquidity position in this regard to consider mergers and acquisitions.

The study recommends that management should establish sustainable strategies to support the process of the merger and acquisition and the management of its assets, liabilities and equity. Management should develop strategies for asset and liability management to avert the problem of mismatching investments and also the quality of assets should be enhanced.

#### 8. Areas of Future Studies

The researcher covered a duration of 2 years pre and post-merger and acquisition, a study should be carried out for a longer period on the effects of mergers and acquisition on the financial performance of commercial banks in Zambia.

# **Conflicts of Interest**

The authors declare no conflicts of interest regarding the publication of this paper.

# References

Abbas, Q., Hunjra, A. I., Azam, R. I., Ijaz, M. S., & Zahid, M. (2014). Financial Performance of Banks in Pakistan after Merger and Acquisition. *Journal of Global Entrepreneurship Research*, 4, 1-15. <a href="https://doi.org/10.1186/s40497-014-0013-4">https://doi.org/10.1186/s40497-014-0013-4</a>

Abdou, H., Agbeyo, B., Jones, K., & Sorour, K. (2016). The Impact of M&A on the Nigerian Financial Market: A Pre-Post Analysis. *Investment Management and Financial Innovation*, 13, 138-150. <a href="https://doi.org/10.21511/imfi.13(1-1).2016.01">https://doi.org/10.21511/imfi.13(1-1).2016.01</a>

ABSA (2012). Barclays Africa Transaction—Investor Presentation.

https://home.barclays/content/dam/home-barclays/documents/investor-relations/IRNewsPresenta-

 $\underline{tions/2012 News/06-Dec-Strategic\text{-}combination\text{-}of\text{-}Barclays\text{-}African\text{-}Operations\text{-}with\text{-}}Absa\text{-}RNS.pdf}$ 

Agutu, N. (2019). Africa Markets.

 $\frac{https://www.african-markets.com/en/stock-markets/nse/kenya-cba-and-nic-to-be-known-as-ncba-bank-after-merger}{}$ 

Al-Hroot, Y. A. K. (2015). Pre and Post-Merger Impact on Financial Performance: A Case

- Study of Jordan Ahli Bank. European Journal of Business and Management, 7, 56-62.
- Ayadi, R., Boussemart, J. P., Leleu, H., & Saidane, D. (2013). Mergers and Acquisitions in European Banking Higher Productivity or Better Synergy among Business Lines? *Journal of Productivity Analysis*, *39*, 165-175. <a href="https://doi.org/10.1007/s11123-012-0309-8">https://doi.org/10.1007/s11123-012-0309-8</a>
- Brownstein, A. et al. (2019). *Mergers and Acquisitions: Harvard Law School Forum on Corporate Governance*.
- Chilepa, L. D. (2009). *Mergers and Takeovers: The Jurisdiction of the Competition and Consumer Protection Commission and Its Impact on Consumer Protection.* A LLB Research Report, University of Zambia.
- Gupta, H. (2016). Pre and Post-Merger Financial Performance Analysis of State Bank of India. *ZENITH International Journal of Multidisciplinary Research*, *6*, 1-8.
- Gupta, K. (2015). Mergers and Acquisitions in the Indian Banking Sector: A Study of Selected Banks. *International Journal of Advanced Research in Management and Social Sciences*, *4*, 94.
- Jallow, M. M. (2017). The Effects of Mergers & Acquisitions on Financial Performance: Case Study of UK Companies. *International Journal of Accounting & Business Management*, 5, 80-85.
- Junni, P., Sarala, R. M., Tarba, S. Y., & Weber, Y. (2015). The Role of Strategic Agility in Acquisitions. *British Journal of Management*, 26, 596-616. <a href="https://doi.org/10.1111/1467-8551.12115">https://doi.org/10.1111/1467-8551.12115</a>
- Kaira, T. G. (2008). *A Review of the Competition Law of Zambia*. LLB Research Report, University of Zambia.
- Lavrakas, P. (2008). Encyclopedia of Survey Research Methods. In P. J. Lavrakas (Ed.), Encyclopedia (pp. 784-785). Sage Publications, Inc. <a href="https://doi.org/10.4135/9781412963947">https://doi.org/10.4135/9781412963947</a>
- Musah, A., Abdulai, M., & Baffour, H. (2020). The Effect of Mergers and Acquisitions on Bank Performance in Ghana. *Asian Journal of Economics and Empirical Research*, *7*, 36-45. https://doi.org/10.20448/journal.501.2020.71.36.45
- Mutai, B. (2011). Assessment of Mergers and Acquisitions on the Performance of Selected Commercial Banks in Kenya. Masaryk University.
- Ngwira, K. F. (2014). The Evaluation of the Short-Term Effects of Mergers and Acquisitions Announcement on the Shareholders Returns: An Event Study of Real Estate Investments Zambia Plc (REIZ). The Zambia Catholic University.
- Njambi, F. N. (2018). Effect of Mergers and Acquisitions Financial Performance of Financial Institutions in Kenya. *International Academic Journal of Economics and Finance*, *3*, 64-79.
- Rao, D. S., & Kumar, K. P. (2013). Financial Performance Evaluation of Indian Commercial Banks during before and after Mergers. *SUMEDHA Journal of Management, 2*, 117-129.
- Said, R. M., & Tumin, M. H. (2010). Performance and Financial Ratios of Commercial Banks in Malaysia and China. *International Review of Business Research Papers*, 7, 157-169.
- Saluja, R., Sharma, S., & Lal, R. (2012). Impact of Merger on Financial Performance of Bank—A Case Study of HDFC Bank. *International Journal of Research in Finance and Marketing*, *2*, 313-326.
- Sharma, M. C., & Mahima, R. (2012). Post Merger Performance of Indian Banks. *The Indian Journal of Commerce*, 65, 67-75.

- Shrestha, M., Thapa, R. K., & Phuyal, R. K. (2017). A Comparative Study of Merger Effect Financial Performance of Banking and Financial Institutions in Nepal. *Journal of Business and Social Sciences Research*, *2*, 47-68. <a href="https://doi.org/10.3126/jbssr.v2i1-2.20957">https://doi.org/10.3126/jbssr.v2i1-2.20957</a>
- Sufian, F. et al. (2012). Assessing the Effect of Mergers and Acquisitions on Revenue Efficiency: Evidence from Malaysian Banking Sector. *Vision: The Journal of Business Perspective, 16,* 1-11. <a href="https://doi.org/10.1177/097226291201600101">https://doi.org/10.1177/097226291201600101</a>
- Tarila, B., & Ogege, S. (2019). Mergers, Acquisitions and Financial Performance: A Study of Selected Financial Institutions. *Emerging Markets Journal*, *9*, 35-44. <a href="https://doi.org/10.5195/emai.2019.162">https://doi.org/10.5195/emai.2019.162</a>