

## Mediating Effect of Hedging on the Association between Risk Asset Management and Financial Performance of Commercial Banks in Cameroon

Arzizeh Tiesieh Tapang<sup>1</sup>; Euphrasia Ebai-Atuh Ndi<sup>2</sup>

<sup>1</sup>Department of Accounting, Faculty of Social and Management Sciences,  
University of Buea, P. O. Box 63, Buea,  
South West Region ,Cameroon.

<sup>2</sup>Department of Accounting, Faculty of Management Sciences,  
University of Calabar, P.M.B. 1115, Calabar,  
Cross River State , Nigeria.

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### Abstract

*This study aims at examining the mediating effect of hedging on the association between risk asset management and financial performance of listed banks in Nigeria. An ex-post facto research design was adopted and collected data from secondary sources were analysed through a structural equation modelling approach with the aid of a partial least square technique. The results revealed that risk asset management has a significant relationship with financial performance. The study also revealed that there is a relationship between risk asset management and hedging. Furthermore, the results revealed that hedging significantly relates with financial performance. Finally, the study revealed that hedging significantly mediate the relationship between risk asset management and financial performance. The study concludes therefore that hedging fully mediate the relationship between risk asset management and financial performance. The study recommends that listed banks in Nigeria should pay adequate attention to improving hedging of marketable securities for effective risk asset management and enhancing financial performance.*

**Keywords:** Hedging, Risk, Risk Assets, Risk Asset Management, Financial performance, Mediation

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### Introduction

The way banks manage their assets and liquidity has a big impact on how well both individual banks and the overall banking system performs. Because of the importance of liquidity management to banks, the Central Bank must step in and establish a minimum liquidity threshold in order to increase consumers' trust in the banking sector and, ultimately, the performance of the banks' operational systems. As a result, it suggests that the significance of liquidity in the performance of banks' function cannot be overstated (Taiwo & Mike, 2021). A consolidated measure of the various risk factors influencing the assessment of financial instruments, including cash, is represented by risk assets management in the form of risk-weighted assets. Credit risk, market risk, and operational risk are the three main risk factors that go into the calculation of risk-weighted assets. To change the nominal value of financial assets to their more

accurate value, these risk factors are taken into account collectively. In this manner, a correct measurement of the amount that the underlying risk is raising or lowering the accounting value of financial assets is produced to correct the error of window dressing/creative accounting (Crouhy, 2006; Saunders & Cornett, 2007). Many risks that banks are exposed to, have the potential to harm their financial performance. They are more vulnerable to risk than any other type of organization due to the number of dimensions in which they manage assets and obligations. Because they are closely linked to the lending activity of the banks, which accounts for the majority of the banks' earnings, these risks are most visible in the forms of credit risk, interest rate risk, and liquidity risk.

The risk of losing an outstanding loan entirely or partially as a result of credit events is known as credit risk (also known as default risk). According to Geiseche (2004), credit risk is by far the most critical risk that banks confront, and the success of their operations rests more on the precise measurement and effective management of this risk than any other risk. While interest rate risk, which is the bank's exposure to unfavorable changes in interest rates, arises from a typical trait of banks obtaining short-term loans while issuing long-term loans, which results in the maturity mismatch (Zainol & Kassim, 2010).

According to Saunders and Cornett (2006), a sudden rise in withdrawals may force financial institutions to quickly try to liquidate their assets in order to satisfy their short-term obligations. This is known as a liquidity risk. It results from a bank's incapacity to fund rising assets or to handle falling liabilities. A first cause of liquidity risk is banks' inability to manage rising liabilities and declining assets. Other factors can also contribute to liquidity risk. The mismatch between cash inflows and outflows, as well as unexpected liquidity requirements due to emergency situations, come in second. Liquidity risk could result from lending and funding with off-balance sheet assets, which could harm banks' reputations.

The danger of borrower default exists when financial institutions issue loans. As a result, banks occasionally see an increase in their non-performing credit portfolios, which considerably adds to the financial turmoil in the banking industry. Additionally, the usage of status inquiries on a bilateral basis between banks is marred by a few flaws because status inquiries are seen as commercial courtesy, but some banks either don't react to them or respond in a vague way, which causes systemic flaws that lead to systemic collapse. Numerous banks kept providing new loans to clients who already had substantial, unpaid debts with other banks and financial organizations, posing a serious risk to the banking industry. The lack of credit information on the regulators' end had prevented consistent classification of credits granted to specific borrowers and their associated companies as constituting high threats to financial performance because the nonperforming loans will raise doubts and lead to a loss of confidence in potential customers. Poor asset base resulting from poor risk management of those assets primarily result to unsound operations and governance failure. As a result, banks unexpectedly collapse, causing them to merge or be acquired by others. Due to the aforementioned issues, the goal of this study is to ascertain if hedging has a mediating role in the relationship between risk asset management and the financial performance of commercial banks in Cameroon which tends to go unnoticed by local authors.

## **Literature Review**

### **Conceptual Framework**

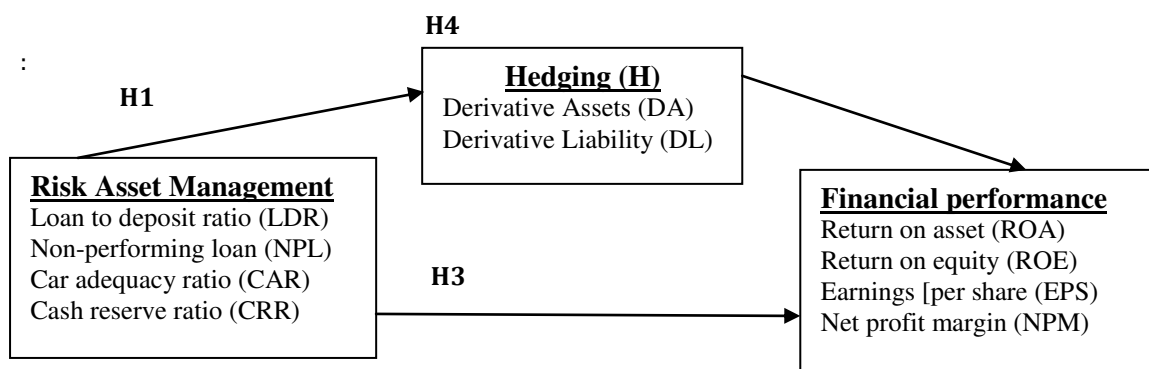
#### **Concept of Risk Asset Management**

Risk is a term that refers to the probability of unfavorable outcomes that are less profitable than anticipated and have a negative impact on the productivity and profitability of businesses. Businesses frequently employ risk analysis to reduce unfavorable effects of losses incurred during operations (Nwude & Okeke, 2018). Risk analysis is helpful in making decisions regarding the use of financial

investments, creating business plans, as well as alerting partners about the performance level of the enterprise. In order to improve the financial performance and viability of any company functioning in a market economy, financial risk analysis uses particular indicators including financial leverage, financial breakeven, and leverage ratio (Nwude & Okeke, 2018).

An asset that has a high degree of price volatility is referred to be a risk asset. Examples include stocks, commodities, high-yield bonds, real estate, and currencies (Basel, 2006). A bank's asset whose value may change due to variations in interest rates, quality, and repayment is specifically referred to as a risk asset in the context of banking. It includes equity capital in a financially troubled or on the verge of Bankruptcy Corporation since the demands of its shareholders would be subordinate to those of the company's bondholders and other lenders (Basel, 2006).

**Fig. 1:** Conceptual Research Model of the **Mediating effect of hedging** on the association between risk asset management and financial performance.



**Source:** Developed by the Researcher, 2023

**Hypotheses Development**

- H1:** Risk asset management has a positive significant relationship with hedging.
- H2:** Hedging has a positive significant relationship with financial performance.
- H3:** Risk asset management has a positive significant relationship with financial performance.
- H4:** Hedging does mediate significantly the relationship between risk asset management and financial performance.

**Risk Assets Management and Procedures in the Banks**

A study by John (2016) found that the practice of risk management in commerce stems largely from the need to avoid contractual, tortious, or statutory liability which has the potential to damage the reputation of the organization. As a result, the importance of risk assets management has increased in today's competitive economic world and cannot be underemphasized as the practice of risk management minimizes financial losses to the firm. As proven by the recent bank crises and their subsequent consolidation, this has rendered many Cameroonian banks insolvent; as a result, it is necessary to evaluate, monitor, and control all inherent risk in their day-to-day business operations. Akindele (2012) cites an Indonesian study by Eduardus et al. (2007) that confirms risk management has a substantial impact on bank performance, particularly corporate governance and bank performance, which are dependent on the kind of bank ownership.

Additionally, banks use credit risk management tactics to prevent or lessen the negative effects of credit risk. To increase profitability and ensure existence, banks need a strong credit risk management system. Credit derivatives give banks a new way to earn fees and give them a chance to lower their required regulatory capital (Shao & Yeager, 2007). Credit default swaps, in which a seller agrees to transfer the credit risk of a loan to the protection buyer, are the most popular form of credit derivative.

### **Banks Operations in Derivatives Markets**

Financial instruments known as derivatives get their value from how well an underlying entity performs. An asset index or interest rate is examples of this fundamental object. A number of uses for derivatives include hedging against future price changes in securities or against asset speculation and trading. Forwards, futures, options, swaps, and variants are a few examples of common derivatives. Exchanges for derivatives carry out more intricate tasks than exchanges on open markets. Through the use of derivatives, which are tied to a particular commodity, a particular financial risk can be exchanged on the financial market. Instead of being considered an essential component of the value of the underlying transaction to which they are tied, they are handled as independent transactions. They are used for risk management, hedging, market arbitrage, and speculation. By lowering risk, they help to increase political and fiscal autonomy (Mullin & Murphy, 2009).

Mullin and Murphy (2011) assert that businesses utilize derivatives to lessen their exposure to the risk of financial distress, and that this distress risk has a systematic component that is valued in the market. The emergence of the derivatives market is a result of contemporary economic liberalization and globalization. The expansion of the financial derivatives market contributes to improved monetary policy efficacy by accelerating the transmission process, altering expectations, and giving the process more authority or credibility.

Empirical research demonstrates that the growth and use of derivatives activities have improved the financial markets' efficiency, capital raising, hedging, and transaction costs (Mullin & Murphy 2009). The use of derivatives is justified on the grounds that it lowers the occurrence of huge funds by cutting transaction costs and increasing liquidity. Financial institutions gain from trading on financial derivatives in a variety of ways, including by increasing their earnings and serving as a key risk management tool for the banks to employ as insurance against unanticipated business event.

### **Capital Adequacy Ratio and Banks Risks Weighted Assets**

Since capital is the most expensive and precious resource, the focus of risk management and risk measurement follows the capital adequacy principle (Abba, Zachariah & Inyang, 2013). The capital adequacy ratio (CAR) assesses banks' capacity to absorb losses and also establishes benchmarks for banks. A bank with a strong CAR has sufficient capital to cover any losses. Therefore, there is a lower chance of it going bankrupt. When a company or individual is unable to pay creditors as their debts become due, this is referred to as being insolvent. Financial difficulty is a condition known as insolvency. As a result, the capital adequacy ratio aids in ensuring that banks have enough capital to safeguard depositors' funds.  $(\text{Tier 1 Capital} + \text{Tier 2 Capital}) / \text{Risk-Weighted Assets}$  is the calculation for CAR. In order to ensure that banks have enough capital to withstand the worst-case losses, it crystallizes the quantified present value of probable future losses.

According to BASEL III, foreign banks must have a minimum capital adequacy ratio of 8%. The Capital Adequacy Ratio (CAR) assists in ensuring that banks have sufficient capital to safeguard depositors' funds. The main indicator of a bank's financial health is Tier 1 capital. The fraction of a company's assets that can be claimed by the owners (in the case of a sole proprietorship or partnership) and the shareholders (in the case of a corporation) is known as shareholder's equity. Retained earnings and equity are determined by subtracting all obligations from the total value of an asset (equity = assets - liabilities). Tier 1 capital can withstand losses without having an effect on business operations. Revalue reserves, concealed reserves, and hybrid securities are all part of Tier 2 capital, on the other hand. Supplementary capital is referred to as such because it has a lesser quality, is less liquid, and is more challenging to evaluate. CAR is calculated using the following equation:  $(\text{Tier 1 Capital} + \text{Tier 2 Capital}) / \text{Risk-Weighted Assets}$ . Where Tier 1 capital is the quoted share capital, Tier 2 capital consists of the banks' re-valued reserves. The amount of a bank's assets, weighted by risk, is its risk-weighted assets. Typical asset classifications for banks include cash and debentures. Therefore, in our study, we exclusively used long-term loans to calculate the risk weighted assets (RWA).

### **Gearing and Banks Financial Performance**

Gearing has been measured differently by different writers using their own definitions, and almost all of them see gearing as the link between fixed interest capital and common share capital, but in somewhat different ways. Some authors suggested that bank loans and overdrafts, which often carry fixed interest rates of return, should be included in the computation. Others define fixed interest capital as aggregate fixed return capital, which includes preference shares and long-term loans. Ola (1985) concurred that gearing should be the relationship between common equity capital and instruments that impose fixed interest or dividend charges on income and have an impact on the mindset of potential common shareholders. In a company's overall capital financing, gearing gauges the relationship between long-term debt and equity. When Olowe (1997) presented leverage as a more effective way to increase profits in a business, he was viewing it from an advantageous angle.

### **Non-Performing Loans and Banks Financial Performance**

Non-performing loans are credit lines that borrowers frequently have trouble repaying, and the problem has drawn more attention in recent years as a result of the bank collapses in Nigeria (Timothy, 2018). NPLs were described by many studies as bad debts whose recovery is highly improbable since they are not receiving the necessary servicing. A stock component (old debt) that is non-performing and a flow component (new lending) that may become non-performing make up the bad loan issues in the banking system. Therefore, loans are not always annual occurrences but rather occur throughout the year and are frequently impacted by seasonal economic performance, but more significantly by short-term inflation, lending rates, and risk levels in areas where the economy is struggling. Earning power is an important measure of bank performance since the health of a bank is not reflected by the size of its balance sheet (reading in billions and trillions), but rather by the return of its assets (Abata, 2014).

A possible bank failure, a barrier to additional lending, a decline in profit level, and adverse economic growth in society are only a few of the effects of unpaid loans on banks' profitability that can be found. In the banking sector in Cameroon, bank failure is currently perceived as a common issue. According to Stallion (2004), non-performing loans are a significant cost of bank collapse, and while poorly managed trading risk can quickly bring down a bank, the oldest and main driver of bank failure is still loans that go bad. The aforementioned assertion is consistent with Nwankwo's (1990) theories, according to which a significant amount of non-performing loans generally results in bank failures, which would halt all future lending relationships between the affected banks and negatively impact economic growth. If not controlled, the impact of non-performing loans can be disastrous to an economy. Additionally, successive bank failures can weaken the public's faith in the banking system, which will have a detrimental impact on the entire banking sector.

### **Financial Performance Measures**

The shareholder's perception of a company's financial performance is based on how much better off he is at the end of a period than he was at the beginning. This can be assessed using ratios derived from financial statements, primarily the statement of financial position and income statement, or by using information on stock market prices (Berger & Di-Patti, 2006). These ratios can be used to compare a firm's ratios with other firms or to identify performance trends over time. They provide evidence of whether the firm is meeting the owners' goals of increasing their wealth. A proper performance measure, according to Chakraborty (2010), should take into consideration all the effects that investments have on the wealth of shareholders. Gaining more wealth is the primary reason shareholders invest in a company. In order to determine how much richer the shareholder has grown as a result of their investment over a certain period of time; the business' performance must be measured (Tapang, Uklala, Bassey, Ezuwore-Obodoekwe, Onyeonu, Ozoji, .., & Obo, 2021).

## Theoretical Framework

### The Trade-Off Theory

According to Markowitz's (1952) trade-off theory, often known as the risk return hypothesis, all investors are risk averse and will select a portfolio with lower risk over two portfolios with the same rate of return. According to this idea, if an investor is ready to take on greater risk, potential return will grow when risk does. To describe this link between risk and return, the risk-return trade-off concept is employed. As a result, the investor will only take on additional risk if it results in a better rate of return. Although Kantz & Zhang (2013) contend that raising risks may somewhat offset higher projected returns by increasing the firm's leverage. A bank's equity to asset ratio (capital) will, however, decrease if it expects higher returns (profitability) and accepts more risks.

The risk-return hypothesis is predicated on the notion that markets are efficient and that when larger returns are anticipated from a portfolio, investors would rush to purchase this investment, driving the price up. But empirical study has generally demonstrated that real risk-return relationships are consistent with the following assertion: For instance, investments with a lesser return than excellent quality fixed income securities often reward them. However, the results become rather inconsistent when relative riskiness is compared to a return that is guaranteed. Take into account, for instance, what Morton wrote in Robert's book in 1974: "Common stocks with the greatest price fluctuations will produce the largest gain to the investor."

### Empirical Review

Jadi (2023) looked at "Effect of risk assets management on the financial performance of commercial banks in Nigeria." For a period of 15 years, from 2005 to 2019, data were compiled from the audited annual reports of ten (10) chosen institutions. In order to analyze the data, a panel moderated multiple regression technique with a structural equation model (SEM) was used. He discovered that hedging had no discernible influence on the link between risk asset management and financial performance.

The study "Financial risk management and performance of insurance companies: the moderating role of hedge accounting" was conducted by Tapang, Uklala, Takon, Efiang, Ihendinihu, Anyingang, Obo, and Nkamare in 2022. Utilizing SMART PLS 3.3.3, they chose the structural equation modeling strategy. Their findings showed that hedge accounting had no meaningful impact on performance while financial risk management did. They also discovered that the relationship between financial risk management and performance is not moderated by hedge accounting. They went on to draw the conclusion that insurance companies should manage risk properly because it has been demonstrated that doing so has a positive effect on financial success. According to the study, insurance company executives should regularly assess their risk management strategies to see whether they are still effective in light of the operational environment's rapid change.

Mahmood and Ahmed's 2022 study on the "Mediating Effect of Risk Management Practices in Iraqi Private Banks Financial Performance" looked at this. Data from current workers of Iraqi private banks were gathered quantitatively. To supplement the study's findings, a partially qualitative approach was employed to elicit additional data that couldn't be obtained quantitatively. Their results confirm that risk management techniques mediate the link between risk-related variables and financial success.

In 2019, Ironkwe and Osaat looked at "Risk Asset Management and FP of Insurance Companies in Nigeria." The database of the Central Bank of Nigeria provided secondary information on the pertinent variables. The long and short-run relationships as well as the causal effects were then estimated using ROA, ROE, and leverage risk. Multiple regression was used to analyze the data. To check for stationarity, a unit root test was run. It was discovered that return on equity and leverage risk were highly correlated. The findings did not match a priori predictions, it was discovered.

Market risk continues to be a significant problem, says Namasake (2019), despite the Kenyan banking sector's expansion. The study's goal was to determine how market risk affected Kenya's commercial banks' financial performance. The study included the years 2010 through 2015. The degree of financial leverage, interest rate risk, and foreign exchange exposure were used to quantify market risk, while return on equity was used to gauge financial performance. 42 Kenyan registered commercial banks' balance sheets and financial ratios were used in the study. The correlations between the variables were conducted pairwise. The amount of variance in the dependent variable that may be attributed to independent factors was calculated using the F-test. According to the findings, there are negative and substantial correlations between financial leverage, interest rates, and foreign exchange exposure and bank profitability.

Adegbie and Dada (2018) used both the ex-post factor and survey research methods to assess the impact of risk asset and liquidity management on the long-term success of Nigerian deposit money banks. In order to gather information from respondents' thoughts, they used all Deposit Money Banks active in the banking sector. Secondary data were then used to examine the managers' actions. Statistical Package of Social Sciences (SPSS) was utilized for the studies, which included both regression analysis and descriptive statistics. Four hypotheses were examined, and all analyses were done at the significance level of 0.05. The results demonstrated that risk asset management and liquidity management had significant correlations. The outcome specifically demonstrated that low cash deposits and non-performing loans had a considerable negative impact on the capital and assets of Nigerian deposit money banks. The study came to the conclusion that efficient risk asset management and liquidity management are still crucial for the banking sector to maintain long-term performance.

Profit after tax (PAT) was used as a metric for deposit money banks' financial performance, and derivative financial liabilities (DFL), derivative financial assets (DFA), trading income on derivatives (TID), and total asset (TA) were used as metric for financial market derivatives using dat. Osayi, Igbinedion, Kasimu, Abudu, and Nkwonta, Chinyere (2018) examined the effects of the use of financial market derivatives on the performance of deposit money banks To ascertain the link between the study's variables, descriptive statistics, a correlation matrix, and regression analysis were used. Their research showed a correlation between the performance of Nigerian banks and derivative financial assets (DFAs). The performance of deposit money banks in Nigeria is considerably impacted by derivative assets, and the total asset that is significantly impacted by derivative financial assets is important in defining the performance of the deposit money banks in Nigeria. The study comes to the conclusion that the use of derivatives has a significant impact on how well Nigerian banks perform.

The impact of liquidity risk on the performance of Islamic banks in Bangladesh was studied by Mohiuddin and Shafir (2018). They examine the impact of liquidity risk on the operating results of Islamic banks from 2012 to 2016. Indicators of liquidity include the loan-to-deposit ratio, the ratio of liquid risky assets to total assets, and the capital-to-total-asset ratio. ROA and ROE are methods used to analyze bank performance. Indicators and panels To determine the impact of liquidity on bank performance, regression analysis is used. Significant link between bank performance and liquidity metrics was discovered. Regression analysis, on the other hand, revealed a substantial negative association between bank performance and liquidity measures.

In their 2018 study, Osayi and Audu looked at how the use of financial market derivatives affected the performance of Nigeria's Deposit Money Banks (DMBs). The performance of deposit money banks is measured by profit after tax (PAT), whereas financial market derivatives are assessed using derivative financial liabilities (DFL), derivative financial assets (DFA), trading income on derivatives (TID), and total assets (TA). The study specifically postulated that the performance of Deposit Money Banks (DMBs) in Nigeria is unaffected by financial market derivatives. The study used data covering five (5) years from ten (10) deposit money banks that report some type of transactions that are of the nature of derivatives

securities in order to experimentally achieve the objective and test the formulated hypothesis. To ascertain the link between the study's variables, descriptive statistics, a correlation matrix, and regression analysis were used. The results of the study's empirical analysis showed a correlation between the performance of Nigerian banks and derivative financial assets (DFAs).

In their 2017 investigation, Kiiro and Ambrose looked at the "Financial Risk Hedging Practices and Performance of Firms Listed in Nairobi Securities Exchange (NSE), Kenya." Information was gathered from the companies' financial statements for the five most recent years, 2011–2015. Their findings showed a correlation between hedging activities, central bank regulations, and listed company performance.

## Research Methods

### Research Design

The ex-post facto research strategy was used in this study to gather data from several firms on the same crucial factors over a predetermined period of time in order to find a common pattern of behavior among the firms. The design is regarded adequate because it mediates the impact of hedging on the relationship between risk asset management and the financial performance of commercial banks in Cameroon. Design is effective in determining the prevalent behaviors in a population at a particular point in time. A content analysis was performed on a cross-sectional sample of ten listed banks' annual reports covering the years 2013 through 2022. Each annual report was carefully examined and evaluated. The population consisted of all nineteen (19) commercial banks in Cameroon. In order to benefit from an in-depth analysis and comprehensive coverage, the sample size consisted of the top ten (10) commercial banks in Cameroon.

### Model Specification

In this work, the structural equation modeling (SEM) methodology was used. In order to confirm that the conditions proposed by Baron and Kenny (1986) are met, mediation experiments were carried out. The following requirements must be met for mediation to take place, according to Baron and Kenny (1986); Kenny, Kashy, and Bolger (1998) as quoted in Duke, Igwe, Tapang, and Obal, (2022); Tapang et al. (2021); Tapang et al. (2022). The effect of the independent variable on the dependent variable is significantly reduced when the mediator is taken into account, as shown in the following statements: (i) Variations in the independent variable significantly account for variance in the presumed mediator; (ii) Variations in the mediator significantly account for variance in the dependent variable; (iii) Variations in the independent variable significantly account for variance in the dependent variable; and (iv) Variations in the independent variable significantly account for variance in the dependent variable.

$$\begin{aligned}
 H_{it} &= \beta_0 + \beta_1 RAM_{it} + \varepsilon_{it} \dots\dots\dots 1 \\
 FP_{it} &= \beta_0 + \beta_1 H_{it} + \varepsilon_{it} \dots\dots\dots 2 \\
 FP_{it} &= \beta_0 + \beta_1 RAM_{it} + \varepsilon_{it} \dots\dots\dots 3 \\
 FP_{it} &= \beta_0 + \beta_1 RAM_{it} + \beta_2 H_{it} + \varepsilon_{it} \dots\dots\dots 4
 \end{aligned}$$

**Where:**

- FP = Financial performance
- RAM = Risk asset management
- H = Hedging
- $\varepsilon$  = Error term
- it = i stands for number of banks and t stands for time



**Table 1: Description of Variables**

Variable	Symbol	Measurement
<b>Independent Variable</b>		
<b>Risk Asset Management (RAM):</b>		
Loans –Deposit Ratio	<b>LDR</b>	Loans divided by deposit
Non-Performing Loans Ratio	<b>NPLR</b>	Ratio of non-performing loans to total loans
Capital Adequacy Ratio	<b>CAR</b>	The formula for CAR is: (Tier 1 Capital + Tier 2 Capital) / Risk-Weighted Assets. Where Tier 1 capital is the quoted share capital, Tier 2 is the revalue reserves of the banks. The risk-weighted assets are the sum of a bank's assets, weighted by risk. Banks usually have different classes of assets, such as cash, debentures. Thus our work employed only long term loans to measure the risk weighted assets (RWA).
Debt to Equity Ratio	<b>DER</b>	Proportion of borrowing to owners equity
Cash Reserve Ratio	<b>CRR</b>	Regulatory requirement denominated by total deposits
<b>Mediating Variable</b>		
<b>Hedging (H)</b>		
Derivative Assets	<b>DA</b>	Own hedged assets which moderate price volatility of other risk assets
Derivative Liability	<b>DL</b>	Risk assets owed to other banks
<b>Dependent Variable</b>		
<b>Financial Performance (FP)</b>		
Return on Assets	<b>ROA</b>	Net profit before tax denominated by total assets
Return on Equity	<b>ROE</b>	PAT divided by shareholders equity
Earnings Per Share	<b>EPS</b>	PAT divided by total shares in issue
Net Profit Margin	<b>NPM</b>	PBIT divided by sales

## Results and Interpretation

### Mediation Tests

To determine the type of mediation and the degree to which hedging affects the connection between risk asset management and financial performance, tests for mediation were carried out. The Baron and Kenny (1986) conditions were put to the test for this. First, it must be shown that the independent variable affects the presumed mediator; second, it must be demonstrated that variations in the mediator significantly account for variance in the dependent variable; third, it must be established that the independent variable affects the dependent variable; and fourth, it must be demonstrated that the effect of the independent variable on the dependent variable is significantly diminished when the mediator is taken into account in the third equation. The outcomes of the mediation analysis are shown in Table 3.

**Table 2:** analysis of Mediation

Effect	Path	Coefficient ( $\beta$ )	SD	T-Value	P-Values
<b>Total effect</b>	RAM → FP	0.268	0.055	6.650	0.000
<b>Direct effect</b>	RAM → H	0.114	0.053	3.050	0.037
	H → FP	0.154	0.042	2.233	0.045
	RAM → FP	0.034	0.055	0.958	0.338
<b>Indirect effect</b>	RAM → H → FP	0.234	0.320	7.336	0.000

**Source:** Smart PLS Version 4.0

**Note:** RAM = Risk Asset Management; H = Hedging; FP = Financial Performance.

The link between risk asset management (RAM) and financial performance (FP) was examined using mediation analysis to determine the mediation effect of hedging (H). The findings (see Table 2) showed a significant ( $\beta = 0.268$ ,  $t = 6.650$ ,  $p = 0.001$ ) overall effect of risk asset management (RAM) on financial performance (FP). The associations between risk asset management (predictor) and hedging (mediator) are also significant (H1:  $\beta = 0.114$ ,  $t = 3.050$ ,  $p = 0.037$ ). This result confirms hypothesis H1, which states that hedging and risk asset management (RAM) are significantly associated.

Additionally, a strong correlation between hedging and financial success was discovered (H2:  $\beta = 0.154$ ,  $t = 2.233$ ,  $p = 0.045$ ), supporting H2. It follows from this that hedging and financial performance is related. The outcome is consistent with Kiio and Ambrose's (2017), Osayi and Audu's (2018), and Osayi, et al. (2018). The effect of risk asset management (RAM) on financial performance (FP) became negligible when the mediating variable hedging (H) was taken into account (H3:  $\beta = 0.034$ ,  $t = 0.958$ ,  $p = 0.338$ ). This shows that risk asset management has no effect on financial results. The results of Ironkwe and Osaat (2019), Mohiuddin and Shafir (2018), and Adegbeie and Dada (2018) were in agreement with this. Significant results were discovered for the indirect impact of risk asset management (RAM) on financial performance (FP) through hedging (H) (H4:  $\beta = 0.234$ ,  $t = 7.336$ ,  $p = 0.001$ ). This demonstrates that hedging (H) fully mediates the relationship between risk asset management (RAM) and financial performance (FP). This is consistent with Mahmood and Ahmed's findings from 2022.

### Conclusion

After the previously mentioned explanation, it is clear that hedging is important to improve financial performance. Additionally, risk asset management continues to be a crucial component of hedging because it determines the capacity of hedging. As a result, the findings add to the body of knowledge on risk asset management and financial performance by demonstrating empirically that hedging plays a significant mediating role in the relationship between risk asset management and financial performance. This study's practical application is that owner/managers of commercial banks should take a keen interest in applying the knowledge they now have about hedging to enhance their financial performance. The paper makes the suggestion that for effective risk asset management and improved financial performance, commercial banks in Cameroon should provide enough attention to increasing the hedging of marketable securities.

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