

The Impact of Risk Management Practices on the Financial Performance (Field study in Cooperative and Agricultural Credit Bank - CAC in Aden)

Dr. ISKANDER H. A. SATTAR^{1*}; Tamer Mohamed Ahmed Hussein²; Nezar Mohammed AL-Samhi³

¹Professor Assistant - Business Administration Section, Faculty of Administrative Sciences, University of Science and Technology – Aden, Yemen.

²MBA Candidate, Business Administration Section, Arab Academy for Administrative, Financial and Banking Sciences – Aden.

³Department of Marketing, College of Business Administration, University of Ha'il, Ha'il, Kingdom of Saudi Arabia.

*Corresponding Author: Dr. ISKANDER H. A. SATTAR

DOI: <https://doi.org/10.5281/zenodo.18760380>

Article History	Abstract
Original Research Article	<p><i>The aim of this study is to explore the impact of risk management practices on the financial performance of the Cooperative and Agricultural Credit Bank (CAC Bank) in Aden from 2016 to 2023, within Yemen's challenging context of political instability and banking sector fragmentation. The study adopted a quantitative cross-sectional design, data were collected from 94 employees through a structured questionnaire measuring five dimensions of risk management—credit, liquidity, operational, market, and regulatory/compliance—alongside perceived financial performance indicators such as profitability, cost efficiency, and operational stability. For appropriate diagnostic testing, Ordinary least squares regression analysis was applied.</i></p> <p>Keywords: Risk Management Practices; Financial Performance; Credit Risk; Liquidity Risk; Operational Risk; Market Risk; Regulatory Compliance Risk; Banking Sector; Political Instability; Ordinary Least Squares (OLS); Cooperative and Agricultural Credit Bank; Aden; Yemen.</p>
Received: 03-02-2026	
Accepted: 18-02-2026	
Published: 24-02-2026	
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<p>Citation: Dr. ISKANDER H. A. SATTAR, Tamer Mohamed Ahmed Hussein, & Nezar Mohammed AL-Samhi. (2026). The impact of risk management practices on the financial performance (Field study in Cooperative and Agricultural Credit Bank – CAC in Aden). UKR Journal of Economics, Business and Management (UKRJEBM), Volume 2(2). 183-196.</p>	

Introduction

Today, the risk management proved to be essential in the banking sector due to technological advances, financial innovation, market liberalization, and intensified competition, all of which have increased banking risks. Banks run their assignments in a complex and volatile environment and are exposed to multiple risks—such as credit, liquidity, capital, interest rate, inflation, and market risks. This directly affect their performance, asset quality, and the safety of depositors' funds. Effective risk management requires clear risk identification, assessment, prioritization, monitoring, and evaluation to achieve a balance between client objectives, capital preservation, and sustainable financial performance. When bank fall failure to manage risks properly can lead to financial losses and institutional failure.

In Aden, banks face additional risks, including security and political instability. The sector has become more competitive with the growth in the number of traditional

and microfinance banks. Since 2016, Yemen's banking sector has faced severe challenges due to ongoing conflict, economic collapse, and the division of the central bank between Aden and Sana'a. This split has led to conflicting monetary and fiscal policies, intensified regulatory pressure, and a severe liquidity crisis, resulting confidence in the banking system has declined, causing financial flows to shift from formal banks to informal channels, further weakening the sector's stability.

Problem Statement

Ongoing conflict, political instability, and the division of the central bank between Aden and Sana'a have intensified risks threatening the survival of banks in Aden. In response, this study examines the impact of risk management practices on the financial performance of Yemeni commercial banks, using the Cooperative & Agricultural Credit Bank (CAC Bank) as a case study. CAC Bank is selected due to its strategic importance as one of Yemen's

three state-owned banks, which continue to play a vital role in economic stability despite the growth of microfinance institutions.

Research Questions

These questions are addressed by this research:

Q1: What is the impact of credit risk management on the financial performance of the CAC Bank?

Q2: What is the impact of liquidity risk management on the financial performance of the CAC Bank?

Q3: What is the impact of operational risk management on the financial performance of the CAC Bank?

Q4: What is the impact of market risk management on the financial performance of the CAC Bank?

Q5: What is the impact of regulatory and compliance risk management on the financial performance of the CAC Bank?

Research Objectives

The objective of this research is to study the impact of risk management practices on the financial performance of the Cooperative & Agricultural Credit Bank (CAC Bank) in Aden, from 2016 to 2023. For this purpose, this study has the following objectives.

1. To identify the impact of credit risk management on the CAC bank's financial performance.
2. To identify the impact of liquidity risk management on the CAC Bank's financial performance.
3. To identify the impact of operational risk management on the CAC Bank's financial performance.
4. To identify the impact of market risk management on the CAC Bank's financial performance.
5. To identify the impact of regulatory and compliance risk management on the CAC Bank's financial performance.

Significance of the Study

This study attempt is to examine credit, liquidity, operational, and other risk management practices of commercial banks in Aden, focusing on CAC Bank during the period 2016–2023. It provides a comprehensive analysis of how Yemeni banks manage risks under challenging conditions and the strategies used to mitigate them. The study contributes theoretically by enriching local and regional literature on banking risk management and practically by offering useful insights for CAC Bank and other banks operating in Yemen's fragile banking environment.

Scope of the Study

The objective of this study is to assess the impact of CAC Bank's risk management practices on its financial performance using a descriptive–analytical approach. The study combines qualitative and quantitative data from questionnaires, financial statements, risk metrics, and performance indicators to identify key risks, evaluate the effectiveness of risk management practices, and analyze their influence on financial performance, considering economic and regulatory factors over the period 2016–2024.

Literature Review

Risk in banking: It refers to the probability of any threat that has the effect to disturb the core earnings capacity of a bank, or to increase the volatility of earnings and cash flows caused by external or internal exposures. (Ishtiaq,2015)

Risk Management : This concept involves eliminating, reducing, and controlling risks to maximize profits and minimize negative outcomes from speculative exposures.

Credit risk: This issue arises when a counterparty fails to meet obligations because of a failure in repayment ability or inability to comply with the contract.

Credit risk management: It is the process of identifying, assessing, and mitigating the risk of loss due to a borrower's failure to repay a loan or meet contractual obligations.

Liquidity risk: This may be defined as the possibility that a bank will not be able to pay its obligations immediately within a specified period.

Liquidity risk management: This refers to the strategies and processes used to ensure a financial institution can meet its short-term financial obligations without incurring significant losses.

Operational risk: The term is defined as the potential for loss that may arise from the failure or inadequacy of internal processes, people, systems, and external events (Yohannes, 2019).

Operational risk management: It is the process of identifying, assessing, and mitigating risks that arise from inadequate or failed internal processes, people, systems, or external events.

Market risk: The Basel Committee expressed the market risk as the risk of loss due to changes in market prices in positions held in banks' on-and off-balance sheet accounts.

Market risk management: It deals with the process of identifying, assessing, and mitigating risks that arise from fluctuations in market prices, such as interest rates, equity prices, exchange rates, and commodity prices.

Regulatory risk: This arises from non-compliance with laws, regulations, or ethical measures.

Regulatory and compliance risk: This refers to the processes and strategies used to ensure an organization adheres to laws, regulations, guidelines, and internal

policies. Failure to comply with regulatory standards can result in legal penalties, financial losses, and reputational damage.

Conceptual Framework

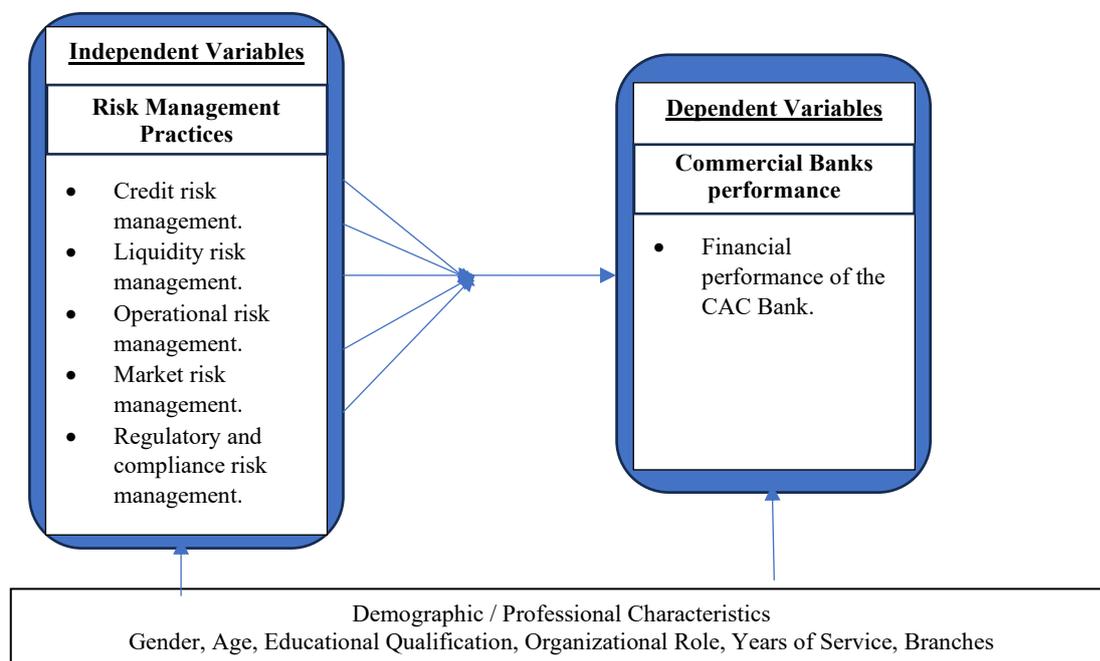


Figure 2.1 Conceptual Framework

Research Hypotheses

H1: Credit Risk Management Practices and Financial Performance

Hypothesis 1 (H1): Cooperative and Agricultural Credit Bank's credit risk management practices have a significant positive impact on its financial performance.

H2: Liquidity Risk Management Practices and Financial Performance

Hypothesis 2 (H2): Liquidity risk management practices have a significant positive impact on Cooperative and Agricultural Credit Bank's financial performance.

H3: Operational Risk Management Practices and Financial Performance

Hypothesis 3 (H3): Operational risk management practices have a significant positive impact on Cooperative and Agricultural Credit Bank's financial performance.

H4: Market Risk Management Practices and Financial Performance

Hypothesis 4 (H4): Market risk management practices have a significant positive impact on Cooperative and Agricultural Credit Bank's financial performance.

H5: Regulatory and Compliance Risk Management Practices and Financial Performance

Hypothesis 5 (H5): Regulatory and compliance risk management practices have a significant positive impact on Cooperative and Agricultural Credit Bank's financial performance.

Research Methodology

Research Design and Approach

The study depends on a quantitative, cross-sectional explanatory design to test theory-driven links between five risk-management practices and financial performance at CAC Bank-Aden using ordinary least squares (OLS) linear regression. Constructs were measured with standardized five-point Likert items and aggregated to construct means; prior to modeling, the unit of analysis is the individual employee's perception.

Population, and Sampling

This study was implemented at CAC Bank in Aden, covering the head office and selected branches where risk management practices are integral to daily operations. The target population included full-time employees involved in or affected by risk management across different functions and levels. Stratified random sampling by role and branch was used to ensure representativeness and reduce bias, with inclusion limited to staff with at least six months of tenure. The final sample (~94 respondents) met statistical

requirements for multiple regression analysis. Data were collected through coordinated distribution, with confidentiality assured, nonresponse minimized, and missing data handled appropriately.

Instrument Development and Structure

The study adopted a structured, self-administered questionnaire composed of closed-ended items rated on a five-point Likert scale (1 = strongly disagree ... 5 = strongly agree). The instrument was designed to capture employees' perceptions of risk-management practices (RMPs) across five domains. Items were written in clear, practice-oriented language tailored to banking operations at CAC Bank–Aden to minimize interpretive ambiguity and respondent burden.

Data Collection Procedures

Data for this study were collected through a self-administered questionnaire distributed to CAC Bank staff at the head office and selected branches during a single cross-sectional period. Stratified invitations, reminder notices, and screening for completeness were used to assure data quality and response rates. Ethical standards were strictly followed through informed consent, anonymity, confidentiality, and voluntary participation. Measures such as neutral wording and procedural separation were applied to reduce bias and social desirability effects.

Analysis and Results

Gender Distribution

Table 4.1 Gender Distribution of the Respondents

Category	Frequencies	%
Male	49	52.1
Female	45	47.9
Total	94	100.0

The table 4.1 shows that the sample is nearly gender-balanced (52.1% male, 47.9% female), minimizing gender-related sampling bias in assessing risk management practices (RMPs). This balance allows the study to examine potential gender differences in credit, compliance, and documentation processes, and supports including gender as a control in analyses without compromising representativeness of the overall workforce.

Age Distribution

Table 4.2 Age Distribution of the Respondent

Category	Frequencies	%
Less than 30 years	13	13.8
30–40	44	46.8
41–50	27	28.7
More than 50	10	10.6
Total	94	100.0

The table 4.2 demonstrates that most respondents are in early- to mid-career stages (30–50 years, 75.5%), suggesting they are actively involved in credit, monitoring, and compliance functions central to risk management practices (RMPs). Smaller proportions at the age extremes indicate insights mainly reflect operational and mid-management perspectives.

Educational Qualifications

Table 4.3 Educational Qualification of the Respondent

Category	Frequencies	%
Bachelor	83	88.3
Master	6	6.4
Ph.D.	1	1.1
Other	4	4.3
Total	94	100.0

The table 4.3 shows most respondents hold a Bachelor's degree (88.3%), with few holding Master's, Ph.D., or other qualifications, indicating relatively homogeneous financial literacy for implementing risk management practices (RMPs).

Job Title Distribution

Table 4.4 Organizational Roles of the Respondents

Category	Frequencies	%
Manager	1	1.1
Deputy Manager	2	2.1
Branch Manager	4	4.3
Department Head	21	22.3
Staff Member	66	70.2
Total	94	100.0

As indicated in the table 4.4, Staff Members constitute 70.2% (n = 66) and Department Heads 22.3% (n = 21), while managerial roles are comparatively few (Manager n = 1; 1.1%; Deputy Manager n = 2; 2.1%; Branch Manager n = 4; 4.3%). These figures suggest the evidence primarily captures implementation-level views of RMPs.

Years in Service

Table 4.5 Respondent Distribution based on Years in service

Category	Frequencies	%
Less than 5 years	28	29.8
From 4 to 10 years	21	22.3
From 11 to 15 years	17	18.1
More than 15 years	28	29.8
Total	94	100.0

It can be noticed from the table 4.5 that the tenure profile is bimodal: <5 years (n = 28; 29.8%) and >15 years (n = 28; 29.8%) bracket the distribution, while 5–10 years (n = 21; 22.3%) and 11–15 years (n = 17; 18.1%) form the middle. These figures imply the dataset blends perspectives of recently trained staff with those possessing substantial institutional memory.

Branch Distribution

Table 4.6 Respondents Distribution among Branches

Category	Frequencies	%
Head Quarter	23	24.5
Aden Main Branch	22	23.4
Crater	14	14.9
Almansourah	17	18.1
Alshaikh Othman	14	14.9
Alboraiqah	4	4.3
Total	94	100.0

Table 4.6 describes that nearly half the sample comes from the Head Office (24.5%) and Aden Main Branch (23.4%), with the rest from other branches. This distribution supports including branch fixed effects in analyses to account for local market differences, though estimates for smaller branches like Alboraiqah (4.3%) may be less precise.

Descriptive Statistics

Descriptive Statistics of Credit Risk Management

Table 4.7 Descriptive Statistics of Credit Risk Management

No.	Indicating Statement	Mean	SD	t-value	p-value	%
1	The bank has clear procedures to assess customers' creditworthiness before granting loans.	4.20	0.84	13.92	0.00	84%
2	Credit risk management policies are periodically reviewed to align with Basel standards.	3.97	0.80	11.79	0.00	79%
3	Effective mechanisms exist to monitor non-performing loans and reduce their occurrence.	4.02	0.84	11.76	0.00	80%
4	Credit risk management practices improve the bank's profitability by reducing loss ratios.	3.88	0.95	9.02	0.00	78%
5	Employees receive regular training on credit risk management tools.	3.92	0.97	9.15	0.00	78%
	Credit Risk Management	4.00	0.67	14.43	0.00	80%

The analysis in table 4.7 shows that CAC Bank in Aden demonstrates strong credit risk management practices. Clear procedures for assessing borrowers' creditworthiness ($M = 4.20$) and regular reviews aligned with Basel standards ($M = 3.97$) indicate robust policy frameworks and regulatory compliance. Non-performing loan monitoring ($M = 4.02$) and training programs ($M = 3.92$) further support effective risk oversight, though training coverage varies. The overall credit risk management score ($M = 4.00$, $SD = 0.67$, $t = 14.43$, $p < .001$) reflects an institution-wide culture of disciplined lending that enhances profitability, operational resilience, and stakeholder confidence. These findings confirm that structured credit governance, even in Aden's fragile economic environment, is critical for financial stability and aligns with prior research linking effective credit risk management to sustainable performance.

Descriptive Statistics of Liquidity Risk Management

Table 4.8 Descriptive Statistics of Liquidity Risk Management

No.	Indicating Statement	Mean	SD	t-value	p-value	Weight
1	The bank maintains adequate liquidity reserves to cover emergency withdrawals.	4.00	0.92	10.59	0.00	80%
2	Liquidity management strategies are continuously updated to keep pace with market changes.	3.87	1.03	8.22	0.00	77%
3	Daily cash flows are closely monitored to avoid liquidity crises.	3.97	0.97	9.71	0.00	79%
4	Liquidity management policies help maintain depositor and investor confidence.	3.99	0.97	9.92	0.00	80%
5	The bank follows Basel standards in assessing liquidity ratios (LCR and NSFR).	3.67	1.02	6.37	0.00	73%
	Liquidity Risk Management	3.90	0.80	10.95	0.00	78%

In the table 4.8, it is noticed that CAC Bank in Aden demonstrates strong liquidity risk management practices. Respondents rated adequate liquidity reserves ($M = 4.00$), continuous strategy updates ($M = 3.87$), daily cash-flow monitoring ($M = 3.97$), and policies sustaining depositor confidence ($M = 3.99$) highly, while Basel compliance was slightly lower ($M = 3.67$). The overall liquidity management score ($M = 3.90$, $SD = 0.80$, $t = 10.95$, $p < .001$) indicates a mature framework combining proactive monitoring, regulatory alignment, and strategic adaptability. These findings confirm that robust liquidity management directly supports financial performance and resilience, particularly in Yemen's volatile economic environment.

Descriptive Statistics of Operational Risk Management

Table 4.9 Descriptive Statistics of Operational Risk Management

No.	Indicating Statement	Mean	SD	t-value	p-value	Weight
1	The bank has effective internal control systems to limit operational errors and fraud.	4.10	0.83	12.79	0.00	82%
2	Periodic assessments of operational risks (e.g., IT system failures) are conducted.	3.78	0.87	8.66	0.00	76%
3	A clear emergency plan exists to handle operational crises (e.g., natural disasters).	3.62	1.02	5.88	0.00	72%
4	Operational risk management reduces unexpected costs and improves financial performance.	3.92	0.86	10.27	0.00	78%
5	Employees are trained in operational risk management per international best practices.	3.72	1.00	7.02	0.00	74%
	Operational Risk Management	3.83	0.73	11.00	0.00	77%

Table 4.9 shows that CAC Bank's operational risk management (ORM) is perceived as strong ($M = 3.83$, $SD = 0.73$, $t = 11.00$, $p < .001$). Internal controls limiting errors and fraud ($M = 4.10$) and periodic risk assessments ($M = 3.78$) are robust, while emergency planning ($M = 3.62$) and training ($M = 3.72$) show room for improvement. Staff recognize ORM's direct financial benefits ($M = 3.92$). Overall, the bank has a solid first line of defense in daily operations, but resilience against high-impact events could be strengthened through standardized business-continuity plans, targeted training, enhanced KRIs, and improved disaster-recovery protocols. These findings confirm that disciplined operational risk governance supports financial performance, service reliability, and depositor confidence.

Descriptive Statistics of Market Risk Management

Table 4.10 Descriptive Statistics of Market Risk Management

No.	Indicating Statement	Mean	SD	t-value	p-value	Weight
1	The bank conducts regular analyses of interest-rate and foreign-exchange volatility risks.	3.89	0.86	10.06	0.00	78%
2	Overall market-risk exposure is kept at conservative levels aligned with available capital.	3.81	0.82	9.56	0.00	76%
3	There are specific policies for managing risks of investment in securities and sudden price fluctuations.	3.65	0.92	6.81	0.00	73%
4	Market risk management contributes to the long-term stability of the bank's profits.	3.81	0.88	8.88	0.00	76%
5	Market risk management strategies are implemented according to the Basel III framework.	3.71	0.98	7.05	0.00	74%
	Market Risk Management	3.77	0.70	10.78	0.00	75%

From table 4.10 seems that CAC Bank demonstrates strong market-risk management ($M = 3.77$, $SD = 0.70$, $t = 10.78$, $p < .001$). Staff report regular monitoring of interest-rate and FX volatility ($M = 3.89$) and maintaining conservative exposures ($M = 3.81$), supporting earnings stability and capital preservation. Policies for securities and Basel III implementation are favorable but show some variability ($M = 3.65$ – 3.71), indicating areas for improvement in instrument-level guidelines, stress testing, and IRRBB assessments.

Descriptive Statistics of Regulatory & Compliance Risk Management

Table 4.11 Descriptive Statistics of Regulatory and Compliance Risk Management

No.	Indicating Statement	Mean	SD	t-value	p-value	Weight
1	The bank fully complies with local and international regulations (e.g., Basel standards, Central Bank of Yemen).	4.27	0.93	13.21	0.00	85%
2	Compliance reports are periodically reviewed to avoid legal penalties.	4.13	0.74	14.84	0.00	83%
3	A specialized unit monitors compliance with regulatory requirements.	4.14	0.81	13.60	0.00	83%
4	Compliance practices enhance the bank's reputation and attract investments.	4.12	0.80	13.52	0.00	82%
5	Internal policies are continuously updated to align with legal changes.	4.06	0.90	11.44	0.00	81%
	Regulatory & Compliance Risk Management	4.14	0.62	17.93	0.00	83%

From table 4.11, it can be noticed that CAC Bank exhibits a strong compliance culture ($M = 4.14$, $SD = 0.62$, $t = 17.93$, $p < .001$), with high staff agreement on adherence to local and Basel regulations ($M = 4.27$), active review of compliance reports ($M = 4.13$), and a specialized unit overseeing regulatory requirements ($M = 4.14$). Compliance practices are linked to reputation and investment readiness ($M = 4.12$), with continuously updated policies ($M = 4.06$). This coherent framework strengthens legal and regulatory resilience, preserves market access, builds depositor and partner trust, and enhances financial performance.

Descriptive Summary on Risk Management Practices

Table 4.12 Descriptive Summary on Risk Management Practices

Construct	Mean	SD	t-value	p-value	%
Credit Risk Management	4.00	0.67	14.43	0.00	80%
Liquidity Risk Management	3.90	0.80	10.95	0.00	78%
Operational Risk Management	3.83	0.73	11.00	0.00	77%
Market Risk Management	3.77	0.70	10.78	0.00	75%
Regulatory & Compliance Risk Management	4.14	0.62	17.93	0.00	83%

Table 4.12 shows CAC Bank's strongest risk-management pillars are compliance and credit risk, providing regulatory credibility, capital protection, and profitability through disciplined lending. Liquidity management is solid but could be better harmonized across units. Operational risk controls are effective in daily operations, though business-continuity planning and training need strengthening. Market-risk governance is positive but requires more granular policies, integrated stress testing, and consistent implementation. These findings reinforce that high-quality risk governance directly supports financial performance, reduces losses, and maintains stakeholder trust in challenging operational and market conditions.

Bank's Financial Performance

Table 4.13 Descriptive Statistics of Financial Performance

No.	Item	Mean	SD	t-value ($\mu=3$)	p-value	Weight
1	The bank achieved stable growth in net profits over the past five years.	3.86	0.84	9.98	0.00	77%
2	Financial performance indicators (e.g., ROA and ROE) are improving.	3.76	0.88	8.36	0.00	75%
3	Risk management practices contribute to reducing the ratio of unplanned expenses.	3.78	1.02	7.40	0.00	76%

4	Risk management practices contribute to the bank's long-term financial stability.	3.93	0.94	9.53	0.00	79%
5	The bank is considered financially stable and a strong competitor in the banking services sector in Aden.	4.12	0.88	12.33	0.00	82%
6	The bank demonstrates an ability to attract new customer segments, contributing to an increase in the revenue base.	4.14	0.96	11.53	0.00	83%
7	The bank demonstrates an ability to recover quickly from any financial changes it may face.	4.15	0.73	15.21	0.00	83%
	Financial Performance	3.96	0.66	14.02	0.00	79%

It can be seen from table 4.13 that CAC Bank's financial performance is perceived as strong ($M = 3.96$, $SD = 0.66$, $t = 14.02$, $p < .001$), with stable profit growth ($M = 3.86$), improving ROA/ROE ($M = 3.76$), reduced unplanned expenses ($M = 3.78$), and confidence in long-term stability ($M = 3.93$). Staff also report strong market position and recovery capacity ($M \approx 4.12$ – 4.15). These outcomes reflect the cumulative impact of robust compliance, credit, liquidity, operational, and market-risk practices, translating risk governance into tangible financial and competitive results.

Hypotheses Testing

The Impact of Credit Risk Management on Financial Performance

Table 4.22 Hypotheses Testing (Credit Risk Management)

Model	β	t-value	p-value	R Square	F
Credit Risk Management	0.663	8.501	.000	0.440	72.265
<i>Dependent variable: Financial Performance</i>					

Credit Risk Management has a strong, positive, and significant impact on CAC Bank's financial performance ($\beta = 0.663$, $t = 8.501$, $p < .001$; $R^2 = 0.44$, $F = 72.265$). Effective practices—credit screening, monitoring, provisioning, and collections—translate into higher profits, earnings stability, and funding access, especially in Aden's high-volatility, conflict-affected environment. The effect size is substantial (Cohen's $f^2 \approx 0.79$), highlighting practical importance. Strengthening credit governance, enriching borrower data, and proactive client restructuring are recommended to sustain and enhance these performance gains.

The Impact of Liquidity Risk Management on Financial Performance

Table 4.23 Hypotheses Testing (Liquidity Risk Management)

Model	β	t-value	p-value	R Square	F
Liquidity Risk Management	0.578	6.786	.000	0.326	46.053
<i>Dependent variable: Financial Performance</i>					

Liquidity Risk Management significantly and positively impacts CAC Bank's financial performance ($\beta = 0.578$, $t = 6.786$, $p < .001$; $R^2 = 0.326$, $F = 46.053$), with a large effect size (Cohen's $f^2 \approx 0.484$). Sound liquidity practices—adequate buffers, maturity control, funding diversification, and FX oversight—enhance earnings stability and resilience, particularly in Aden's volatile, conflict-affected environment. Strengthening cash monitoring, contingency planning, and liability management supports profitability and mitigates funding shocks.

The impact of Operational Risk Management on Financial Performance

Table 4.24 Hypotheses Testing (Operational Risk Management)

Model	β	t-value	p-value	R Square	F
Operational Risk Management	0.531	6.011	.000	0.282	36.137
<i>Dependent variable: Financial Performance</i>					

Operational Risk Management positively and significantly affects CAC Bank's financial performance ($\beta = 0.531$, $t = 6.011$, $p < .001$; $R^2 = 0.282$, $F = 36.137$) with a moderate-to-large effect (Cohen's $f^2 \approx 0.39$). Strengthening internal controls, process reliability, incident management, IT/cybersecurity, and fraud prevention reduces errors, downtime, and losses. In Aden's challenging operational environment, continued investment in control testing, staff training, business continuity, and vendor oversight supports profitability, cost efficiency, and overall financial resilience.

The impact of Market Risk Management on Financial Performance

Table 4.25 Hypotheses Testing (Market Risk Management)

Model	β	t-value	p-value	R Square	F
Market Risk Management	0.562	6.514	.000	0.326	42.326
<i>Dependent variable: Financial Performance</i>					

Market Risk Management has a strong, positive, and significant effect on CAC Bank's financial performance ($\beta = 0.562$, $t = 6.514$, $p < .001$; $R^2 = 0.326$, $F = 42.326$) with a large effect size (Cohen's $f^2 \approx 0.484$). Effective management of interest-rate, FX, and repricing risks stabilizes margins, protects trading results, and reduces capital shocks, with further gains expected from enhanced monitoring, early-warning systems, and strict limit governance.

The impact of Regulatory and Compliance Risk Management on Financial Performance

Table 4.26 Hypotheses Testing (Regulatory and Compliance Risk Management)

Model	β	t-value	p-value	R Square	F
Regulatory and Compliance Risk Management	0.661	8.458	.000	0.437	71.536
<i>Dependent variable: Financial Performance</i>					

Regulatory and Compliance Risk Management has a strong, positive, and significant impact on CAC Bank's financial performance ($\beta = 0.661$, $t = 8.458$, $p < .001$; $R^2 = 0.437$, $F = 71.536$) with a large effect size (Cohen's $f^2 \approx 0.78$). Effective compliance practices—policies, monitoring, reporting, staff training, and remediation—reduce fines, operational losses, and reputational costs, support stable growth, and preserve access to payment channels.

Table 4.27 Hypotheses Testing (Risk Management Practices)

Model	β	t-value	p-value	R Square	F
Risk Management Practices	0.744	10.670	.000	0.553	113.853
<i>Dependent variable: Financial Performance</i>					

Overall Risk Management has a very strong, positive, and significant effect on CAC Bank's financial performance ($\beta = 0.744$, $t = 10.670$, $p < .001$; $R^2 = 0.553$, $F = 113.853$) with a very large effect size (Cohen's $f^2 \approx 1.24$). Integrating credit, liquidity, operational, market, and regulatory/compliance practices into a coherent enterprise-wide system—covering risk limits, dashboards,

underwriting, cash and FX controls, process/cyber safeguards, and AML/KYC monitoring—substantially reduces loss volatility, protects margins, ensures funding access, and translates disciplined risk governance into sustained profitability and resilience in Aden's volatile, conflict-affected environment.

Findings

Findings from Descriptive Statistics

- Across constructs, scores sit above the midpoint (3/5)—RRM 4.14 (83%), CRM 4.00 (80%), LRM 3.90 (78%), ORM 3.83 (77%), MRM 3.77 (75%)—indicating moderate-to-high adoption and maturity of practices.
- Regulatory & Compliance Risk Management is highest, signaling strong policy alignment, monitoring, and reporting discipline, with continued value in automation and horizon scanning.
- Credit and Liquidity Risk Management are solid, implying underwriting rigor, early-warning and collection routines, provisioning logic, liquidity-gap control, and contingency funding are substantively embedded, with scope to harmonize execution across branches.
- Operational and Market Risk Management register upper-mid levels—process/control reliability, incident and cyber readiness, and repricing/FX governance are present and functioning, but would benefit from deeper continuity planning, simulation-based training, and more granular instrument-level market-risk protocols.
- Overall, the composite pattern reflects an organization with mature foundational controls and bank-wide consistency, now progressing toward more integrated, enterprise-level execution (e.g., unified dashboards, integrated stress testing, tighter policy-to-practice feedback loops).
- Financial Performance is above average ($M = 3.96$; 79%), indicating that current practice maturity is translating into stable earnings and competitiveness, while headroom remains for gains via enhanced market-risk depth, continuity preparedness, and cross-branch harmonization of liquidity analytics.

Findings from Hypotheses Testing

All risk domains—Credit, Regulatory & Compliance, Liquidity, Market, and Operational—positively and significantly influence CAC Bank's financial performance, confirming the sub-hypotheses. Credit and Regulatory & Compliance risks are the strongest predictors, while Liquidity, Market, and Operational risks also contribute meaningfully. The combined Risk Management Practices index shows a very large effect, highlighting that integrated, consistent risk governance across all functions drives the greatest performance gains. In Aden's volatile, regulated, and infrastructure-challenged context, strengthening and

harmonizing these practices can produce tangible improvements in profitability and financial resilience.

Conclusion and Research Summary

This part shows a consistent, substantive message: maturing risk practices pays off in performance. Across domains—Credit, Liquidity, Operational, Market, and Regulatory & Compliance—each set of practices exhibits a positive, statistically significant relationship with Financial Performance, and the integrated index of Risk Management Practices yields a very large overall effect. Descriptively, scores sit below the midpoint of a five-point scale, indicating foundations are present but execution is uneven and not yet institutionalized enterprise-wide. Synthesizing the evidence, two pillars emerge as foundational enablers—credit discipline and compliance hygiene—conditioning the payoff from liquidity playbooks, market-risk governance, and operational resilience. The pattern suggests complementarity: coherence and alignment across silos create value above the sum of parts.

For CAC Bank – Aden, the findings align with a context of volatility, evolving regulatory expectations, and infrastructure constraints. Strengthening cash-flow-based appraisal, early-warning indicators, provisioning and collections, alongside rigorous KYC/EDD, screening, QA/testing, and prompt remediation, is likely to deliver near-term gains by stabilizing the cost of risk and protecting access to correspondent services. Institutionalizing a liquidity playbook (gap limits, intraday monitoring, contingency funding, diversified sticky funding), enforcing ALCO-led repricing and open-FX limits, and hardening process/cyber controls and BCP/ITDR should dampen earnings volatility and reduce avoidable losses. The overarching implication is managerial: shift from isolated improvements to integrated risk governance—clear appetite and limits, shared KRIs/dashboards, disciplined escalation, and continuous remediation—so that risk capability compounds into durable profitability and resilience.

In sum, the evidence provides a credible, context-sensitive basis for action: CAC Bank can raise its performance ceiling and lower volatility by closing execution gaps in credit and compliance first, then scaling liquidity, market, and operational routines under a unified governance umbrella. Future work that blends survey measures with objective KPIs and tracks interventions over time will help pinpoint which practices move the needle fastest, guiding sustained, data-driven improvement.

Proposals For Future Research(es)

Several paths can strengthen inference and extend insight. A longitudinal or panel design (e.g., quarterly branch-level data) would allow lagged effects and shock responses to be

estimated, clarifying causality. Expanding to a multi-bank sample within Yemen (and, where feasible, regional comparators) would improve external validity and enable multigroup comparisons by bank size, ownership, or business model. Blending survey constructs with objective KPIs (NPL ratio, cost of risk, provisioning coverage, liquidity gaps, FX/open position limits, uptime/incident frequencies) would sharpen measurement and reduce method bias. Modeling mediation (e.g., risk culture → risk practices → performance) and moderation (e.g., digital infrastructure, regulatory intensity, funding concentration) can illuminate mechanisms and boundary conditions. To address endogeneity, future work could employ instrumental variables, control-function approaches, or difference-in-differences around policy or macro events. Finally, qualitative follow-ups—process tracing, audits, and case studies of specific improvements.

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