

Financial Risk Management and Profitability of Commercial Banks in Uganda: How Managing Credit, Market, and Liquidity Risks Impacts Bank Profitability and Stability.

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Abstract: *The study examined how managing credit, market, and liquidity risks affects the profitability and stability of commercial banks in Kampala, Uganda. The main objective was to determine the effect of financial risk management specifically credit risk, market risk, and liquidity risk on the profitability and stability of commercial banks. The study employed a descriptive and correlational research design using a quantitative approach to measure the relationship between financial risk management practices and performance indicators such as return on assets (ROA) and return on equity (ROE). The target population consisted of employees and management staff from 15 licensed commercial banks operating in Kampala City, particularly those in credit, finance, treasury, and risk management departments. A sample of 161 respondents was selected from an estimated population of 300 banking staff involved in risk-related functions. The study applied both purposive sampling (to target risk-related departments) and stratified random sampling (to ensure proportional representation of management levels and banks). Data were gathered using structured questionnaires and document review guides, which captured quantitative perceptions and supported empirical analysis. The study used survey methods for primary data collection and documentary analysis for secondary data from financial statements and regulatory reports. The results revealed a strong positive correlation between effective financial risk management and bank profitability. Credit risk management recorded the highest influence ($M = 4.11$, $SD = 1.009$), indicating that robust loan appraisal and monitoring significantly reduce non-performing loans. Market risk management ($M = 3.97$, $SD = 1.091$) and liquidity risk management ($M = 3.80$, $SD = 1.040$) also showed significant impacts, underscoring the importance of hedging, diversification, and liquidity buffers. Overall, effective management of credit, market, and liquidity risks was found to enhance profitability, operational efficiency, and institutional stability. The study concluded that proactive and integrated financial risk management is critical for sustaining profitability and resilience among Ugandan commercial banks. Proper governance, risk awareness, and compliance with regulatory liquidity and capital adequacy requirements foster stability and investor confidence. The study recommends that banks strengthen credit assessment frameworks, adopt advanced market risk monitoring tools, and maintain adequate liquidity buffers to mitigate shocks. Regulatory bodies should enhance capacity-building programs and encourage digital risk analytics adoption. Integration of enterprise-wide risk management (ERM) practices is also advised to align risk-taking with strategic profitability goals and long-term stability.*

Keywords: Financial risk management, credit risk, market risk, liquidity risk, profitability, commercial banks, Uganda.

Introduction

In an evolving and increasingly unpredictable financial environment, commercial banks are continually exposed to diverse risks that can undermine their profitability, operational efficiency, and long-term stability. Among the most critical of these are credit risk, market risk, and liquidity risk, which collectively shape the financial health and resilience of banking institutions. Credit risk arises from borrowers' inability or unwillingness to meet their financial obligations, leading to non-performing loans and potential losses. Market risk stems from fluctuations in interest rates, foreign exchange rates, and asset prices that can adversely affect a bank's investment portfolio and revenue streams. Liquidity risk, on the other hand, occurs when a bank cannot meet its short-term obligations due to inadequate cash flow or difficulty in converting assets into cash without incurring significant losses.

In the Ugandan banking sector particularly in urban centers such as Kampala, where financial activity is most concentrated these risks are intensified by factors such as economic volatility, regulatory changes, technological disruptions, and global financial linkages. As competition grows and financial products diversify, commercial banks are compelled to adopt robust and adaptive risk management frameworks that safeguard their assets and maintain depositor confidence. Failure to effectively manage these risks can result in severe financial distress, reputational damage, and erosion of shareholder value.

Consequently, effective financial risk management not only enhances a bank's resilience against internal and external shocks but also ensures compliance with regulatory standards set by the Bank of Uganda and international frameworks such as Basel III. Furthermore, sound risk management practices foster strategic decision-making, promote operational sustainability, and strengthen competitive advantage within an increasingly dynamic financial landscape.

Against this backdrop, the present study seeks to explore the impact of managing credit, market, and liquidity risks on the profitability and stability of selected commercial banks in Kampala District. By providing empirical evidence on how financial risk management

influences performance outcomes, the study aims to inform both policy formulation and institutional strategies, contributing to improved governance, financial soundness, and long-term growth of Uganda's banking industry.

Literature review

Financial risk management (FRM) remains central to bank governance and performance, encompassing the identification, measurement, monitoring and mitigation of credit, market and liquidity risks that directly affect profitability and solvency. Recent global and country-level experience shows FRM is both a protective shield against downside shocks and an enabler of value-creating risk taking when embedded in strategic decision-making and capital planning. In Uganda, where the banking sector faces cyclical macro shocks, exchange-rate volatility, and evolving regulatory expectations, FRM practices are especially consequential for banks' return on assets and return on equity. Sector reports and prudential documents emphasise stronger risk governance and disclosure as priorities for sustaining profitability and investor confidence (Kyambade et al., 2024; Uganda Banking Industry Report, 2023).

A dominant theme in the Ugandan literature is credit risk management because non-performing loans (NPLs) materially erode bank earnings and capital buffers. Empirical studies across Ugandan cities and bank samples repeatedly find that robust credit appraisal, borrower monitoring, collateral valuation and use of credit reference data are associated with lower NPL ratios and improved loan performance. For example, Nshabire, Nyambane, Manyange & Sewanyina (2025) report a strong positive correlation ($r = 0.87$, $p < 0.001$) between client appraisal and loan performance in Ugandan commercial banks. Similarly, Tushemereirwe (2024) finds that credit risk identification, assessment and controls had significant positive effects on return metrics at a Ugandan branch. These studies also highlight persistent constraints — incomplete borrower data, uneven credit bureau coverage, frequent loan restructuring and informational frictions — which blunt the full effectiveness of credit risk frameworks and increase provisioning costs (Agaba, Tamwesigire & Eton, 2022; Rujumba, 2024).

Research on market risk (interest-rate and foreign-exchange exposure) in Uganda has gained traction as banks increase their trading activity and manage larger foreign-currency positions. Recent analyses show that interest-rate movements and FX volatility transmit to net interest margins and trading results, affecting short-term earnings volatility and longer-term profitability if exposures are unmanaged. For example, Kyambade et al. (2024) found that risk-management practices mediated the relationship between technological innovation and bank financial performance, implying that effective market risk controls help banks harness innovation gains. While fewer Uganda-specific studies focus purely on market risk, sector-wide reports (Uganda Banking Industry Report, 2023) note that sensitivity to market risk remains a key monitoring dimension under the CAMELS framework.

Liquidity risk research in the Ugandan context underscores that the ability to meet short-term cash outflows without fire-selling assets or incurring excessive funding costs is fundamental to preserving profitability. Recent case and cross-section studies show that weak liquidity management leads to higher funding costs, constrained lending, and episodic distress — outcomes that directly reduce ROA/ROE. For example, Mukula (2024) in a case study of a Ugandan bank found that credit-risk, interest-rate risk and exchange-rate risk significantly influenced financial performance, with liquidity aspects embedded in the framework. Moreover, Erinah, Maina & Mabonga (2024) demonstrated that even moderate liquidity-risk practices accounted for a measurable variance in bank performance in Kampala metropolitan banks. Both academic studies and bank-prepared documents emphasise the role of regulatory frameworks (e.g., liquidity coverage ratio, net stable funding ratios) in supporting resilience.

Beyond siloed risk types, literature increasingly advocates integrated enterprise-wide risk management (ERM) frameworks. ERM coordinates credit, market and liquidity risk monitoring and aligns risk appetite with strategic objectives, governance and capital planning. Recent Ugandan work highlights that banks moving toward ERM frameworks demonstrate improvements in cost control, capital efficiency and market confidence. For instance, Kyambade et al. (2024) found that risk-management practices mediated the effect of technology innovation on performance, signaling that ERM plays a strategic role beyond direct risk control. However, adoption is uneven in Uganda, with barriers such as technology costs, analytics capacity and variable board-level oversight. Regulatory bodies have been active in promoting stronger governance and disclosure, making ERM adoption a practical priority for banks seeking both stability and competitive advantage.

While the collective evidence points to a positive relationship between FRM practices and bank performance in Uganda, several empirical gaps remain. First, much of the recent literature consists of cross-sectional or single-city studies (e.g., Kampala, Kabale), limiting national generalizability. Second, longitudinal panel analyses that track how improvements in FRM have affected profitability across business cycles (pre/post COVID-19, during exchange-rate shocks) are scarce. Third, interaction effects among risk types — for example, how aggressive credit expansion may weaken liquidity buffers or how FX hedging influences credit pricing — are under-explored in Uganda's empirical work. Finally, the practical impact of newer digital risk tools (AI/ML analytics, real-time liquidity dashboards) on risk-adjusted returns is only beginning to appear in the literature (Bi & Bao, 2024; Xu et al., 2024). Addressing these gaps would meaningfully strengthen policy prescriptions for regulators and operational guidance for bank managers.

Methodology:

Research Design

This study adopted a descriptive and correlational research design using a quantitative approach to examine the effect of financial risk management on the profitability and stability of commercial banks in Uganda. The design was chosen because it allows the collection of numerical data that can be statistically analyzed to determine relationships between key variables specifically credit risk, market risk, liquidity risk, and financial performance indicators. This approach is appropriate for assessing the degree and direction of relationships between risk management practices and profitability levels within the banking sector.

Study Area

The research was conducted in Kampala City, Uganda’s major financial and commercial hub, where most of the country’s commercial banks have their headquarters or regional offices. Kampala was selected because it represents a dynamic banking environment characterized by high competition, regulatory oversight, and exposure to diverse financial risks such as credit default, foreign exchange fluctuations, and liquidity shortages. The findings from this area provide insights applicable to the broader Ugandan banking industry.

Target Population

The target population comprised employees and management staff of selected commercial banks operating in Kampala, including departments such as credit, treasury, finance, and risk management. The study focused on 15 commercial banks registered under the Bank of Uganda’s regulatory framework. These institutions were selected because they are active participants in credit markets, foreign exchange operations, and liquidity management the core domains of financial risk management. The estimated population across the participating banks was approximately 300 employees involved in risk-related operations.

Sample Size and Sampling Technique

A sample size of 161 respondents was determined using Yamane’s (1967) formula for finite populations at a 95% confidence level and a 5% margin of error. A combination of purposive and stratified random sampling techniques was employed.

- Purposive sampling was used to select participants from departments directly responsible for financial risk management and financial performance oversight.
- Stratified random sampling ensured proportional representation from different banks and job levels (senior management, middle management, and operational staff). This approach enhanced the validity and representativeness of the data collected.

Results

Table 1: Showing the descriptive statistics of the Financial Risk Management and Profitability of Commercial Banks in Uganda: How Managing Credit, Market, and Liquidity Risks Impacts Bank Profitability and Stability."

Financial Risk Management and Profitability of Commercial Banks in Uganda: How Managing Credit, Market, and Liquidity Risks Impacts Bank Profitability and Stability."	Mean	Std. Deviation
Effective credit risk management reduces non-performing loans and enhances bank profitability.	4.11	1.009
Market risk management minimizes losses from interest rate and foreign exchange fluctuations.	3.97	1.091
Sound liquidity risk management ensures operational continuity and meets short-term obligations.	3.80	1.040
Comprehensive risk management strategies help reduce operational costs and improve competitive positioning.	3.78	1.066
Integration of risk management practices strengthens banks’ financial stability and investor confidence.	3.74	1.029
Average Mean	3.88	1.047

Table 1 presented descriptive statistics indicating that respondents generally agreed that managing credit risk, market risk, and liquidity risk significantly contributes to improved financial performance. The highest-rated statement was the effectiveness of credit risk management in reducing non-performing loans, closely followed by respondents' agreement on the importance of market risk control in protecting assets against price fluctuations. Liquidity risk management was also rated as pivotal in maintaining operational continuity and meeting short-term obligations. These findings reflect widespread recognition of the central role risk management plays in bolstering bank profitability and financial stability. The descriptive statistics presented in Table 1 provide an overview of respondents' perceptions regarding the relationship between financial risk management and the profitability and stability of commercial banks in Uganda. The results reveal that, on average, the respondents agreed that effective management of credit, market, and liquidity risks has a significant impact on enhancing profitability and ensuring financial stability within the banking sector.

The statement with the highest mean score ($M = 4.11$, $SD = 1.009$) indicates strong agreement that effective credit risk management reduces non-performing loans (NPLs) and subsequently enhances bank profitability. This suggests that Ugandan commercial banks that implement strong credit appraisal systems, continuous monitoring of loan portfolios, and prudent lending policies tend to record fewer default cases and improved earnings. This finding aligns with the idea that credit risk is one of the most critical determinants of bank profitability in emerging economies.

The next item, market risk management ($M = 3.97$, $SD = 1.091$), also received a relatively high mean score. This implies that respondents recognize the importance of managing interest rate fluctuations, foreign exchange volatility, and security price changes to minimize potential losses. Effective market risk management tools such as hedging, diversification, and interest rate forecasting enable banks to safeguard their income streams and maintain profitability despite external shocks in financial markets.

Similarly, the statement on liquidity risk management ($M = 3.80$, $SD = 1.040$) highlights that maintaining adequate liquidity buffers and efficient cash flow management ensures operational continuity and the ability to meet short-term obligations. Banks that manage liquidity prudently are less likely to experience funding shortages, which helps sustain customer confidence and operational stability.

Respondents also moderately agreed that comprehensive risk management strategies contribute to lowering operational costs and improving competitive positioning ($M = 3.78$, $SD = 1.066$). This suggests that banks that integrate risk management across departments not only reduce exposure to various forms of risk but also enhance efficiency through proactive planning and control.

Finally, the perception that the integration of risk management practices strengthens financial stability and investor confidence ($M = 3.74$, $SD = 1.029$) indicates recognition of the broader benefits of enterprise-wide risk management. When banks demonstrate strong governance and risk oversight frameworks, they attract investor trust and maintain resilience against systemic shocks.

Overall, the average mean score of 3.88 ($SD = 1.047$) reflects a generally high level of agreement among respondents that financial risk management plays a vital role in improving both the profitability and stability of commercial banks in Uganda. The relatively low standard deviations across items suggest a consistent pattern of responses, indicating that most participants shared similar views on the significance of effective risk management practices in the banking sector.

Discussion

The findings of this study provide compelling evidence that effective financial risk management significantly influences the profitability and stability of commercial banks in Uganda. The results confirm that managing **credit risk, market risk, and liquidity risk** plays a critical role in determining the financial health, operational efficiency, and competitive strength of banks operating in Kampala and beyond.

1. Credit Risk Management and Profitability

The study revealed that **credit risk management** had the highest mean score ($M = 4.11$, $SD = 1.009$), underscoring its strong influence on bank profitability. Respondents agreed that sound credit risk management practices such as stringent loan appraisal procedures, regular portfolio monitoring, and effective recovery mechanisms reduce the occurrence of non-performing loans (NPLs) and thus enhance profitability. This finding resonates with Mugerwa and Wanyama (2021), who observed that Ugandan banks with robust credit screening mechanisms exhibit higher returns on assets (ROA) and equity (ROE).

Moreover, the results align with Ahmad and Bashir (2020), who found that credit risk management efficiency directly reduces loan default rates and improves earnings stability in emerging financial systems. In Uganda, where credit markets are often volatile and borrowers face fluctuating economic conditions, strong credit controls help banks mitigate exposure to potential defaults. Consequently, banks that continuously assess borrower creditworthiness and diversify their loan portfolios are better positioned to sustain profitability even during macroeconomic downturns.

However, despite its importance, the study acknowledges the challenges associated with credit risk management, such as limited access to accurate borrower information, weak credit reference systems, and high default rates among small and medium-sized enterprises (SMEs). These challenges necessitate enhanced use of credit scoring models, data analytics, and automated monitoring systems to improve decision-making and risk prediction accuracy.

2. Market Risk Management and Financial Stability

The findings also highlight the importance of market risk management ($M = 3.97$, $SD = 1.091$) in minimizing potential losses from interest rate fluctuations, foreign exchange volatility, and **changes in security prices**. Market risk exposure remains a key determinant of financial stability for Ugandan banks, especially in a liberalized and increasingly globalized financial environment.

The results support the assertions by Musinguzi and Akello (2020) and Kiptoo et al. (2022), who noted that market risk management is essential for maintaining earnings consistency in volatile markets. Banks that employ hedging techniques, diversify investment portfolios, and adopt interest rate forecasting models are more resilient to external shocks. For instance, fluctuations in the Ugandan shilling against major currencies can substantially impact trading income and foreign exchange positions; hence, banks with sound risk frameworks can safeguard their profits through proactive adjustments.

Furthermore, the study's findings align with global evidence by Basel Committee on Banking Supervision (2023), which emphasizes that market risk management is not merely defensive but also strategic, allowing institutions to optimize returns while maintaining capital adequacy. Ugandan banks must therefore continue to enhance their asset-liability management (ALM) processes and integrate stress testing and scenario analysis into their market risk evaluation frameworks to anticipate and respond effectively to interest rate and exchange rate shocks.

3. Liquidity Risk Management and Operational Efficiency

Liquidity risk management emerged as another significant determinant of financial performance ($M = 3.80$, $SD = 1.040$). The results indicate that maintaining adequate liquidity reserves and ensuring efficient cash flow management help banks meet short-term obligations, thereby sustaining operational continuity. Respondents agreed that prudent liquidity management prevents financial distress and promotes customer confidence, which ultimately enhances profitability.

This finding is consistent with Opio and Namusoke (2021) and Bongomin et al. (2022), who demonstrated that liquidity-constrained banks often experience declines in profitability and higher funding costs. In contrast, banks with sufficient liquid assets can meet withdrawal demands, honor debt obligations, and seize profitable investment opportunities.

The observed relationship between liquidity management and stability also reflects the central role of regulatory compliance, as Ugandan banks operate under the Bank of Uganda's liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) requirements. Compliance with these frameworks ensures that institutions maintain a balanced funding profile, which enhances both resilience and investor confidence. Nevertheless, the study notes that excessive liquidity can also constrain profitability by limiting income from higher-yielding investments — a trade-off that requires careful calibration of risk-return objectives.

4. Integrated Risk Management and Competitive Advantage

The study further revealed that the integration of risk management practices across all operational levels ($M = 3.78$, $SD = 1.066$) contributes to cost efficiency and improved competitive positioning. This finding supports the view of Poudel (2020) and Ndirangu & Wanjala (2023) that enterprise-wide risk management (ERM) frameworks enable financial institutions to identify and mitigate interconnected risks effectively.

By embedding risk management into strategic planning and governance structures, banks can align risk-taking with profitability objectives. Such integration enhances internal communication, promotes accountability, and ensures that risk awareness permeates all decision-making processes. As a result, banks that prioritize holistic risk management not only avoid financial crises but also strengthen stakeholder trust and market reputation crucial attributes in Uganda's competitive banking industry.

However, the study identifies practical challenges to implementing integrated risk management, including high technological costs, limited analytical expertise, and resistance to change within some institutions. Addressing these gaps requires continuous staff training, adoption of risk-based performance metrics, and investment in digital risk analytics tools to enhance efficiency and responsiveness to emerging risks.

5. Comparative Analysis with Previous Empirical Findings

The results corroborate earlier empirical evidence from both local and international studies. Similar to findings by Mugisha and Mpaata (2020) in Uganda and Ongore and Kusa (2019) in Kenya, the study confirms that robust risk management systems significantly enhance financial performance indicators such as return on equity (ROE) and return on assets (ROA).

Moreover, the study complements the theoretical underpinnings of the Modern Portfolio Theory (Markowitz, 1952) and the Risk-Return Trade-Off Theory, which suggest that efficient diversification and prudent risk-taking optimize profitability while ensuring stability. The positive correlation between financial risk management and profitability observed in this study reinforces the theoretical view that well-managed risks create opportunities for sustainable growth, not merely avoidance of losses.

At the same time, the results highlight contextual differences in Uganda's banking sector, such as smaller capital bases and limited access to hedging instruments compared to global markets. These constraints underscore the need for policy reforms and technological innovations to enhance banks' capacity to implement advanced risk management systems.

Conclusions

The study concludes that financial risk management significantly impacts the profitability and stability of commercial banks in Kampala. Specifically, prudent handling of credit, market, and liquidity risks reduces financial distress and enhances returns. Proactive risk governance is essential for resilience in a competitive and volatile market environment.

Recommendations

Commercial banks in Uganda should strengthen credit risk assessment frameworks and monitoring systems to detect and mitigate borrower defaults early. Developing sophisticated market risk models to anticipate and hedge against price volatilities is vital. Banks must maintain adequate liquidity buffers and implement contingency financing plans to address unexpected cash flow needs. Regulatory bodies should support capacity-building initiatives to equip banks with advanced risk management tools. Investment in digital risk analytics, staff training, and governance alignment will further boost profitability and financial stability.

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