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Navigating the Agency Banking-Financial Performance Nexus for Commercial Banks in Uganda: A Moderated Model Drawn from a Multi-Theoretic Approach

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ABSTRACT

Purpose: This study investigates the structural relationship between agency banking adoption and the financial performance of commercial banks in Uganda, explicitly evaluating how institutional cash management practices moderate this strategic nexus.

Materials and Methods: A quantitative, cross-sectional census research design was conducted across all 22 licensed commercial banks registered with the Uganda Bankers' Association. Primary data were obtained through purposive sampling of 86 senior banking executives, utilising a validated 5-point self-administered questionnaire. Secondary financial performance indicators, including loan portfolio quality and profitability metrics, were derived from audited annual financial statements. Hypotheses were empirically tested using Pearson zero-order correlation coefficients and hierarchical multiple regression analysis

Findings: Pearson correlation analysis results confirm that agency banking and cash management practices exert strong, statistically independent positive effects on financial performance. Crucially, hierarchical regression modelling shows that adding the interaction term increases the explained variance in financial performance by a substantial 7.5%, confirming cash management as a moderator of the relationship.

Implications to Theory, Practice and Policy: The findings empirically support a combined approach using both Bank-led and Liquidity Preference theories. Agency banking acts as a fast, cost-effective method to expand market share and attract deposits from the unbanked. However, its ability to generate actual profits and reduce non-performing loan (NPL) ratios depends on maintaining efficient internal liquidity management.

Keywords: *Agency Banking (G29); Cash Management Practices (E41); Financial Performance (G30); Commercial Banks (G21)*

INTRODUCTION

The financial performance of commercial banks has attracted the attention of researchers and policymakers across the globe (Ngari & Muiruri, 2014; Ngumi, 2014; Okoth Ongore, Assistant Commissioner et al., 2013). Commercial banks are a key player in economic development through adequate financing of economic activities, contributing to the stability of their countries' financial systems (Lamido Sanusi & Governor, 2020). They are the institutions that can withstand economic shocks and are the most capable of directing available savings and funds to areas where liquidity deficits and demand for these savings are made through the practice of credit activity (Al Zaidanin & Al Zaidanin, 2021). Globally, Government regulatory authorities have issued a series of policies, among other interventions, to guide commercial banks' operations and improve their financial performance. For example, the China Banking Regulatory Commission (CBRC) issued the Guidelines on Green Credit and the Guidelines on Energy Efficiency Credits in 2012 and 2015, respectively (Lian et al., 2022). Similarly, there has been an emergence and development of the national models of financial regulation, international standards and codes, and regional and national financial regulation and supervision in the UK, USA, Sweden, the EU, and Finland, to improve the performance of commercial banks (Al Zaidanin & Al Zaidanin, 2021; Shavshukov et al., 2023)

Globally, according to Fitch Ratings, nonperforming loans had surpassed pre-pandemic levels. The 60+ days late payment rate doubled to 6.4% between 2021 and 2025 (Agarwal et al., 2023; Morrissey et al., 2025). S&P Global Ratings forecasts an increase in global bank credit losses of over $140 billion between 2024 and 2026, reaching $750 billion in 2025(Morrissey et al., 2025). In 2025, Qatar's Commercial Bank (CBQ) reported a 21% decline in net profit compared to 2024(Qatar & 2025, 2025). Likewise, the Federal Reserve reported that U.S. commercial banks' nonperforming loans (NPLs) rose to 0.70% in 2024, reaching their highest level since 2013. Additionally, in the U.S., the average banking ROE dropped to 11.10% in 2024, a 23% decline from 2023(Quamar et al., 2023). Moreover, S&P Global Ratings projects that Chinese banks' nonperforming loans ratio, a broader measure of problem loans, may rise to 5.6% and 6.3% between 2025 and 2027 (Volta, 2025).

In Africa, commercial banks in specific regions experienced financial net losses and high levels of non-performing loans (NPLs) (Ahiase et al., 2024; Saliba et al., 2021). For example, in South Sudan, a 2023 joint report noted that 14 local banks were at risk of insolvency. Worse still, a 2025 analysis of the Bank of South Sudan found that the share of total non-performing loans had risen from 12.8% in 2013 to 16.8% in 2020 (Abuelgasim et al., 2025; Finance & 2023, n.d.; Odongo, 2024). In West Africa, West African Monetary Union (WAMU) banks, which include financial institutions in Niger, Guinea-Bissau, Mali, and Burkina Faso, showed an average gross NPL ratio increase of 8.8% between 2021 and September 2025 (Egbuna et al., 2021b, 2021a; Salimata, 2025), leaving banks vulnerable to unabsorbed losses. In South Africa, commercial banks had much higher percentages, reaching 30% between 2021 and 2025, above an industry benchmark of 5% (Mengistie et al., 2025; Wilson et al., 2025).

According to the 2023 report by the Uganda Bankers Association, United Bank for Africa (UBA) and Cairo Bank reported net losses in Uganda in 2021 and 2022 (Uganda Bankers' Association, 2023) as explained in the problem statement. On average, the banking sector has experienced a steady decrease in Return on Equity (ROE) over the past 23 years, from 2000 to 2023, with an

average decline of 23.2% and nearly constant ROA, with limited growth. This signifies the ineffectiveness of commercial banks in utilising financial resources to generate profit, as indicated in Figure 1.1.

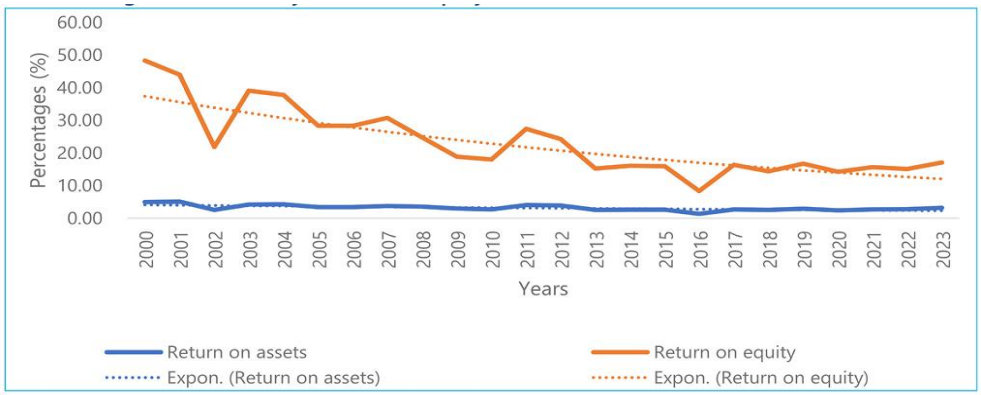

Figure 1.1: Uganda's Banking Industry ROA and ROE (2000 to 2023)

Source: Uganda Bankers Association (2023)

Additionally, commercial banks continue to face challenges with rising NPLs. For example, between 2017 and 2023, the average growth rate of non-performing loans across all commercial banks in Uganda was 13%. By the end of December 2023, these loans had amounted to Ugx 1.22 trillion (Uganda Bankers' Association, 2023), as indicated in Figure 1.2.

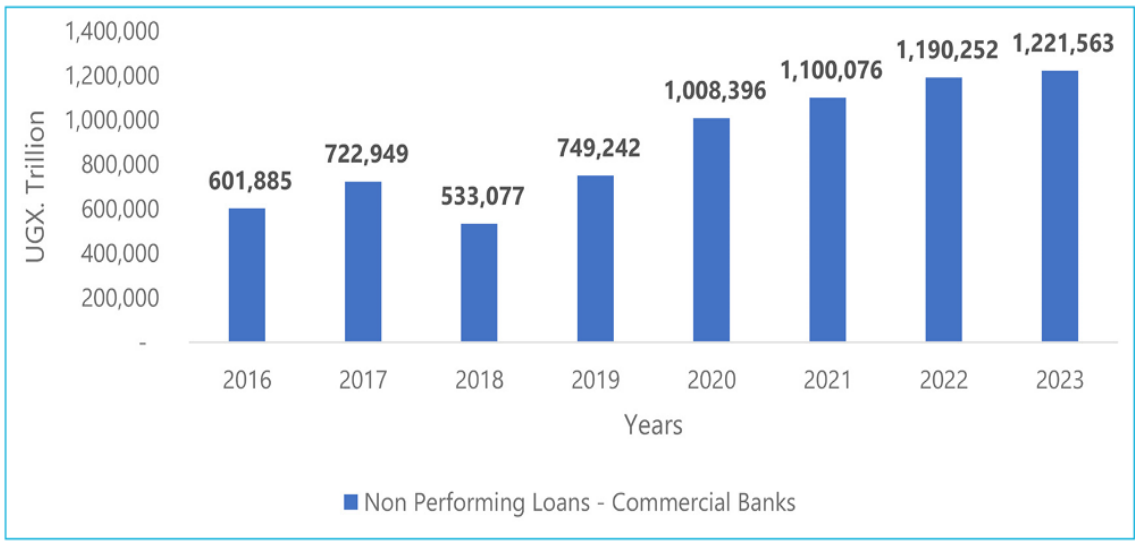

Figure 1.2: NPLs for Commercial Banks in Uganda (2016-2023)

Source: Uganda Bankers Association (2023)

If the rising trend of poor financial performance among commercial banks continues unaddressed at the global, regional, and local levels, nations will face severe economic shocks that will be difficult to recover from.

Existing studies have underscored agency banking as a predictor of financial performance. In Uganda, Financial Performance in the commercial banking sector is seen as a multidimensional

indicator encompassing operational efficiency, liquidity management, risk mitigation, and earning ability. Instead of assessing financial results separately, research in Uganda shows that a bank's financial statements mirror its structural adjustments to the Financial Institutions (Agent Banking) Regulations (2017). A study by Mwasakabeto (2020) on the financial performance of banks in Tanzania revealed that agency banking is a vital means for banks to serve their customers efficiently and effectively at the lowest costs. It is a type of branchless banking that allows traditional banks to extend their branch and service networks cost-efficiently through authorized agents. Additionally, it was established that digital banking services significantly and positively influenced the financial inclusion of women enterprises in Kenya. The study concluded that agency banking, mobile banking, online banking, and ATM services significantly influenced the access and use of banking services by the locally based women enterprises in Kenya. Furthermore, Ashiru, Balogun, and Paseda (2023) established that agency banking positively and substantially affects the performance of deposit money banks in Nigeria. Still, Mulama et al. (2021) observed that mobile banking explains variability in the performance of SACCOs in Kenya. However, despite the positive effect of agency banking reporting in extant literature, some scholars reported mixed findings. For instance, Ayadi et al. (2023) noted that agency banking has major operational problems, including transaction failures, delayed reversals, network failures, and fraud. It was recommended that improved operational efficiency, network facility upgrades, and agent training go a long way toward improving agency banking in Nigeria.

Nevertheless, other scholars note that cash management practices can explain financial performance. For instance, studies (Dahiyat et al., 2021; Koech et al., 2021) established a positive effect of financial management practices on the financial performance of commercial banks in Kenya. Additionally, Laghari et al. (2023) observed that positive changes in cash flow measures and metrics were positively related to the financial performance of commercial banks in China. On the other hand, Abdallah et al. (2025) established that liquidity had a significant positive influence on a bank's ROA in Tunisia. Relatedly, Vol (2023) observed a positive relationship between cash management practices and the financial performance of listed Breweries in Nigeria.

The other school of thought suggests that the relationship between agency banking and financial performance depends on cash management practices. Cash management practices can act as a moderator, either strengthening or weakening the positive impact of agency banking on a commercial bank's financial performance (Bongomin et al., 2023; Duncan & Kenyatta, 2015). Effective cash management improves a bank's liquidity and operational efficiency, enhancing its ability to benefit from the expanded reach and customer base of agency banking (Dulacha, 2025a). Conversely, poor cash management can hinder the performance gains from agency banking, as a lack of liquidity can offset the increased transaction volumes (Adebayo et al., 2025).

Bongomin et al. (2023) conducted a study on agent liquidity, exploring its role as a catalyst for mobile money banking among the unbanked poor population in rural sub-Saharan Africa. The findings demonstrated a significant moderating effect of agent liquidity in the relationship between mobile money services and the financial inclusion of the unbanked poor population within this region. Adebayo et al. (2025) examined the impact of digital banking on the liquidity management practices of banks in the United States. The research provided empirical evidence that, despite the enhancements in transaction efficiency and customer experience attributed to digital banking, it also introduces substantial liquidity management risks, such as increased deposit volatility and heightened vulnerability to liquidity shortages. Additionally, Ombongi (2021) investigated the

influence of agency and mobile banking on the liquidity of commercial banks in Kenya. The study recommended that banks invest more in these areas, while emphasising the importance of bank assets and the capital adequacy ratio to strengthen liquidity. Ombongi further noted that, although banks should invest in technological advancements, they must also consider unanticipated events that could impact their liquidity.

The relationship between agency banking is supported by the Bank-led theory as coined by Timothy, Lyman, Ivantury, and Stefan in 2006 (Kinyua et al., 2025; Nsabimana, 2024) . These authors observed that institutions licensed to offer financial services deliver these services through retail agents. This theory holds that the role of banks is to develop products and services, while distribution is carried out through agencies that handle the majority, if not all, customer interactions (Kinyua et al., 2025). The bank, however, remains the ultimate giver of financial services and products, and is also the entity that clients hold accounts with. The agencies maintain physical interactions with clients and carry out cash deposit and withdrawal functions just the same way as tellers at the bank branches would process customer deposits as well as withdrawals (Adebayo, 2021; Udoh, 2025). In some agency banking models, agencies conduct all account opening procedures, while in other instances, retail agents can identify and service loan clients. However, despite its elaborate explanation of the role of agency banking in financial performance, the bank-led theory ignores the moderating effect of cash management in the agency banking-financial performance nexus. Thus, this study incorporated the liquidity preference theory to leverage the complementarity of a multi-theoretic approach.

The study was further premised on liquidity preference theory, developed by John Maynard Keynes (Ghani et al., 2023; Randall, 2023). The theory suggests that companies and individuals prefer to hold cash due to uncertainty, directly impacting cash management and financial performance by influencing the trade-off between holding liquid cash and earning potential returns (Ghani et al., 2023; Udoh, 2025). Effective cash management, guided by this theory, involves balancing the need to maintain liquidity to cover transactions, precautionary needs, and speculative opportunities with the desire to earn interest, thereby affecting a firm's profitability and overall financial health (Arts et al., 2024; Barnabas, 2024). Notably, the network of agents allows customers to access cash for emergencies, satisfying their precautionary demand for liquidity. It suffices to note that a bank's cash management policy safeguards against a cash shortage. The bank mitigates liquidity risk and reinforces customer trust by accurately forecasting liquidity needs at agent locations and ensuring funds are readily available (Esther Nasimiyu, 2024; Ghani et al., 2023). This, in turn, secures the deposit base, which is crucial for the bank's stability and financial performance. However, the liquidity preference theory does not explain the role of agency banking in the financial performance of commercial banks. Thus, this study adopted a multi-theoretic lens, adopting bank-led and liquidity preference theories in tandem for a comprehensive assessment of the financial performance of commercial banks in Uganda.

However, despite their contribution to knowledge, existing studies are replete with empirical gaps. They concentrated on developed economies such as China (Laghari et al., 2023) and the USA (Adebayo et al., 2025). It should be noted that developed economies often have well-established institutions, such as regulatory bodies, and more advanced and diversified technology infrastructure. Thus, their findings cannot be generalised to Uganda, a developing country with limited technological advancements and a different regulatory environment (Herman, 2020). Likewise, other studies focused on different types of organisations, such as manufacturing firms

and SACCOs (Mulama et al., 2021), listed Breweries (Vol, 2023) and the unbanked poor population (Bongomin et al. 2023), ignoring commercial banks despite the significant role they play in economic development and stability (Mwasakabeto, 2020; Odongo, 2024). Additionally, existing literature bears mixed findings, with some scholars reporting a positive effect and others (Ayadi et al., 2023a) reporting an adverse effect on the financial performance of commercial banks, thus leaving the matter inconclusive. Notably, studies (Dulacha, 2025a; Mwasakabeto, 2020; Ombongi, 2021) did not examine the moderation effect of cash management despite the theoretical support of a moderated relationship between agency banking and financial performance (Ghani et al., 2023; Randall, 2023). Moreover, the moderation test aids a detailed understanding of how the independent variable explains the dependent variable as a function of the third variable (moderator), aiding informed decision-making (Abdallah et al., 2025), a factor that extant studies largely ignored.

Drawing on a multi-theoretic approach, this study addressed the above empirical gaps, among others, by examining the relationship between agency banking and commercial banks' financial performance and assessing the moderating effect of cash management on this relationship among commercial banks in Uganda.

Problem Statement

The Ugandan government has intervened to support commercial banks through various measures, including fiscal support for businesses impacted by the pandemic via the Small Business Recovery Fund (Muriithi, 2021; Okumu et al., 2021) , monetary policy adjustments like setting the Central Bank Rate to manage inflation, and regulatory reforms such as strengthening credit and fiscal management (Bwire, 2023; Mawejje & Odhiambo, 2021). Other initiatives include promoting financial inclusion, developing financial markets through the Financial Markets Development Plan, and increasing minimum capital requirements for banks to improve their stability (Boachie et al., 2023; Ediagbonya et al., 2023; Ofosu-Mensah Ababio et al., 2023).

Despite the above interventions, the financial performance of commercial banks in Uganda continues to dwindle with rising NPLs and net losses. For instance, United Bank for Africa (UBA) and Cairo Bank reported net losses in Uganda in 2022. UBA's net loss was Ugx 10.34bn in 2021 and Ugx 8.07bn in 2022. Cairo Bank Uganda's net loss widened to Shs 5.27bn in 2022 from Shs 1.87bn in 2021. Additionally, Equity Bank Uganda saw its net profit reduced by 46.8% in 2022, with corresponding NPLs of 17% compared to the industry benchmark of 5% (Uganda Bankers' Association, 2023). On average, the banking sector has experienced a steady decrease in Return on Equity (ROE) over the past 23 years, from 2000 to 2023, with an average decline of 23.2% and nearly constant ROA, with limited growth. Relatedly, Uganda's commercial banks continue to face challenges with rising NPLs. For example, between 2017 and 2023, the average growth rate of non-performing loans across all commercial banks in Uganda was 13%. By the end of December 2023, these loans had amounted to Ugx 1.22 trillion (Uganda Bankers' Association, 2023) (see figures 1.1 and 1.2 in the background).

Despite contributing to understanding the poor financial performance of commercial banks, extant studies exhibit empirical gaps and offer limited solutions to the problem. Studies have concentrated on other types of organisations (Muriithi, 2021; Ofosu-Mensah Ababio et al., 2023), developed economies (Aguilar et al., 2025; Lian et al., 2022; Liao, 2024), and used other predictors (Boachie et al., 2023; Ediagbonya et al., 2023; Muriithi, 2021; Ofosu-Mensah Ababio et al., 2023). Notably,

studies (Barnabas et al., 2024; Boachie et al., 2023; Ediagbonya et al., 2023; Muriithi, 2021; Ofosu-Mensah Ababio et al., 2023) mainly focused on testing the direct relationships between variables without other descriptive analyses (Egbuna et al., 2021b, 2021a; Morrissey et al., 2025; Qatar & 2025, 2025) without an attempt to examine the moderation effect of cash management practices in the hypothesized relationships, thus failing to vividly explain the conditions under which agency banking relates to financial performance. This study contributed to the existing literature by examining the relationship between agency banking and the financial performance of commercial banks, and by assessing the moderating effect of cash management on this relationship among commercial banks in Uganda.

Conceptual Framework

This study explores the relationship between agency banking and the financial performance of commercial banks in Uganda. It also assesses the moderating effect of cash management practices on the relationship between financial performance and financial performance. The conceptual framework (Figure 1) below has been developed based on the theories and empirical literature explaining the relationship between agency banking, cash management practices, and financial performance.

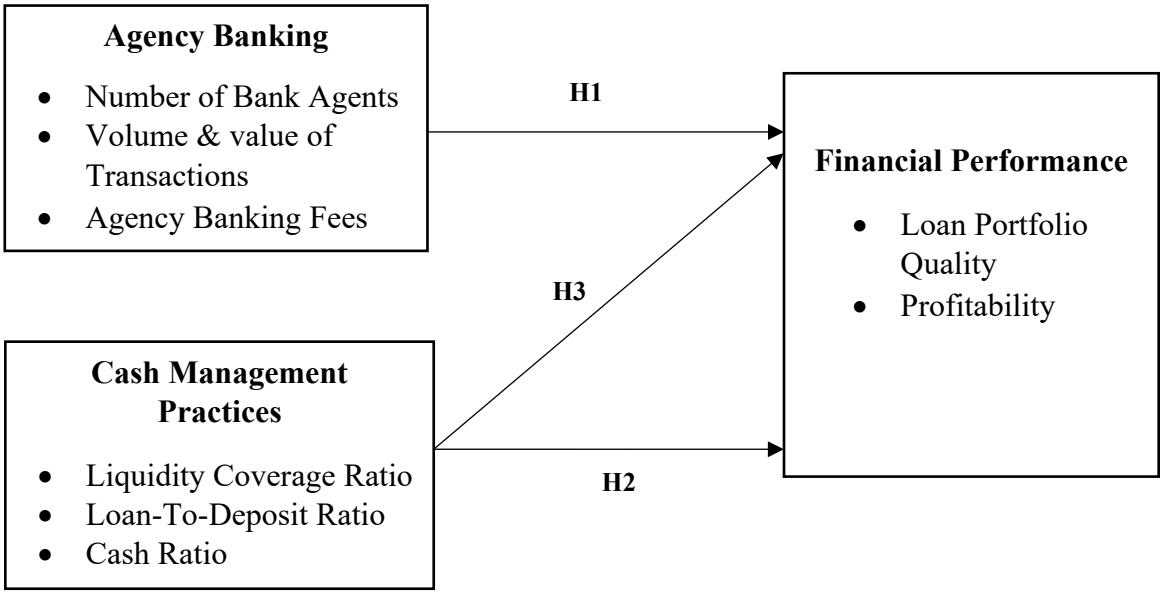

Figure 1.3: Conceptual Framework

Source: Developed from reviewed literature (Akpan et al., 2024; AWOGBEMI et al., 2023; Chamboko et al., 2021; Dibiah et al., 2025; Joseph et al., 2023; Ndirangu et al., 2022; Njoki et al., 2023; Pervin et al., 2021; Shrestha et al., 2023; Thiong' et al., 2024; Zaidanin et al., 2021)

Explanation of the Model

Based on the bank-led theory and empirical literature, this study hypothesised that agency banking in the form of the number of bank agents, volume of transactions and agency banking fees is positively associated with the financial performance in terms of loan portfolio quality and profitability of commercial banks in Uganda (Dulacha, 2025b; Githaiga Ngware, 2021; Gurisha,

2023c, 2023a). Furthermore, premised on liquidity preference theory, it was also hypothesised that efficient cash management practices, as indicated by liquidity coverage ratio, loan-to-deposit ratio and cash ratio, can lead to improved financial performance of commercial banks in Uganda (Awosanya et al., 2022; Dhakal, 2024; Githaiga Ngware, 2021). Besides, premised on the multi-theoretic foundation, this study also hypothesised that cash management practices moderate the relationship between agency banking and the financial performance of commercial banks. Cash management practices can act as a moderator, either strengthening or weakening the positive impact of agency banking on a commercial bank's financial performance (Bongomin et al., 2023; Duncan & Kenyatta, 2015). Effective cash management improves a bank's liquidity and operational efficiency, enhancing its ability to benefit from the expanded reach and customer base of agency banking (Adebayo et al., 2025; Bongomin et al., 2023; Dulacha, 2025a; Ombongi, 2021).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Theoretical Review

Bank-led Theory

The relationship between agency banking is supported by the Bank-led theory, as coined by Timothy, Lyman, Ivantury and Stefan in 2006 (Kinyua et al., 2025; Nsabimana, 2024). The theory suggests that institutions licensed to offer financial services deliver these services through retail agents. The bank-led theory holds that the role of banks is to develop products and services, while distribution is carried out through agencies that handle the majority, if not all, customer interactions (Kinyua et al., 2025). The bank, however, remains the ultimate giver of financial services and products, and is also the entity that clients hold accounts. The agencies maintain physical interactions with clients and carry out cash deposit and withdrawal functions just the same way as tellers at the bank branches would process customer deposits as well as withdrawals (Adebayo, 2021; Udoh, 2025). In some agency banking models, agencies conduct all account opening procedures, while retail agents can identify and service loan clients in others.

A stream of studies applied the bank-led theory and confirmed this theory in explaining the financial performance in Nepal (Dhakal, 2024), Rwanda (Hillowle et al., 2021) , Tanzania(Gurisha, 2023b) among others. However, the studies are replete with empirical gaps, such as concentration on other types of organisations, concentration on developed economies and failure to examine the moderating effect of cash management practices on the relation between agency banking and financial performance.

The bank-led theory is not without drawbacks. Although it advocates for agency banking to increase financial inclusion, Banks may be hesitant to fully participate in agency banking initiatives to avoid regulatory oversight, especially if they are generating windfall gains (Nurtrontong et al., 2018). They may intentionally keep certain transactions and activities outside the agency banking system to avoid paying taxes or other risks on these profits. Additionally, the bank-led model struggles with the high costs of expanding physical infrastructure, such as bank branches, into remote and sparsely populated rural areas. These costs are often not recouped from servicing small, low-value agent accounts (Efuntade et al., 2023; Howarth & James, 2022). Likewise, while agency banking may appear cost-effective, customers can face hidden fees for transactions, currency conversion, and other services, which can disadvantage low-income users (Mbhele, 2021; Shakya, 2022). Additionally, despite its elaborate explanation of the role of agency

banking in financial performance, the bank-led theory ignores the moderating effect of cash management in the agency banking-financial performance nexus. This study, therefore, also adopted the liquidity preference theory as explained below to benefit from the complementarity of a multi-theoretic approach.

Liquidity Preference Theory

The study was further premised on liquidity preference theory, developed by John Maynard Keynes (Ghani et al., 2023; Randall, 2023). The theory suggests that companies and individuals prefer to hold cash due to uncertainty, which directly impacts cash management and financial performance by influencing the trade-off between holding liquid cash and earning potential returns (Ghani et al., 2023; Udoh, 2025). Effective cash management, guided by this theory, involves balancing the need for liquidity to cover transactions, precautionary needs, and speculative opportunities with the desire to earn interest, thereby impacting a firm's profitability and overall financial health (Arts et al., 2024; Barnabas, 2024). Notably, the network of agents allows customers to access cash for emergencies, satisfying their precautionary demand for liquidity. It suffices to note that a bank's cash management practices safeguard against a cash shortage. By accurately forecasting liquidity needs at agent locations and ensuring funds are readily available, the bank mitigates liquidity risk and reinforces customer trust (Esther Nasimiyu, 2024; Ghani et al., 2023). This, in turn, secures the deposit base, which is crucial for the bank's stability and financial performance.

However, the liquidity preference theory does not account for other factors, like agency banking, that explain commercial banks' financial performance. Modern economic systems are much more complex than the theory accounts for, and financial innovations play a significant role in determining liquidity and interest rates. Thus, this study adopted a multi-theoretic lens, adopting bank-led and liquidity preference theories to assess commercial banks' financial performance in Uganda comprehensively.

Conceptual Review

Agency Banking

Agency banking is a model that allows customers to access withdrawal services, deposit services, balance checking and loan repayment services through other third parties who run some designated financial services on behalf of the parent bank (Ayadi et al., 2023b; Kilonzo, 2023; Mohere, 2023). An agent bank cannot handle deposits or the loan application process in its own name, but in the name of the parent and principal bank (Carrillo-Yale, 2024). Studies on agency banking have used various measurements, such as agency banking fee, its market share, volume of transactions, and perceived risks associated with agency banking, as common indicators used to measure agency banking (Aliefendić, 2025; Carrillo-Yale, 2024; Magnus et al., 2022).

Cash Management Practices

Cash management is the efficient collection, disbursement and investment of the organisation’s cash while meeting the firm’s liquidity requirements (Major & Major, 2020). Cash management practices refer to effectively and efficiently managing an organisation’s cash, ensuring enough money to support ongoing operations, financing opportunities, and payments for unforeseen services (Major & Azali, 2022). Dzapasi (2020) notes that maintaining stable banking operations hinges on efficient cash management. This entails striking a healthy balance between cash inflows,

outflows, and DMBs, as inadequate management can erode customer trust and disrupt smooth operations. Thus, managing liquidity metrics enhances smooth day-to-day operations to achieve optimal liquidity.

Cash flow management refers to tracking how much money comes into and out of the business. It helps to predict how much money will be available in the business in the future (Zhou, Tong, & Ren, 2022). Effective cash management is essential for the financial health of any entity, as mismanagement can lead to the downfall of otherwise profitable businesses. Akinyomi (2014) emphasises the critical role of cash flow control and planning in determining an entity's success. Despite its importance, cash is often considered the least productive asset in a business's portfolio. The amount of cash a business holds depends on size and operational needs. The entity must maintain a sufficient cash reserve to achieve financial goals and prevent bankruptcy. Hamza et al. (2015) highlight that sound cash management strategies significantly impact financial performance, emphasising the need for financial decision-makers to integrate efficient cash management practices to enhance business sustainability in a dynamic and unpredictable environment.

Firms usually keep a specific or optimal level of cash to avoid any liquidity problems in the future and take advantage of any investment opportunities (Khan et al., 2019). However, the primary motivation for cash holdings is precautionary. Hence, excess cash holdings may increase agency conflicts, and firms may misuse cash resources for their benefit (Wellalage et al., 2023). Practical cash management principles involve making timely expenditure decisions, promptly collecting and banking revenue, and accurately forecasting cash flow dynamics (Soaga, 2012). Nyabwanga (2011) asserted that setting a cash balance policy will ensure prudent cash budgeting and investment of surplus cash. Ogutu (2022) emphasises the importance of establishing clear protocols and procedures to track cash inflow and outflow, thereby reducing the risk of financial mismanagement and fraud. Kamau and Muigai (2020) stress that cash policy signifies enterprises' structured approach to regulate cash-related activities. It entails developing specific protocols and practices guiding cash handling, including collection, disbursement, and investment procedures, aiming to optimise financial performance.

Financial Performance

Financial performance is a broad indicator of a company's overall financial health, strength, and capacities throughout time (Kiaritha, 2015). It is a monetary measurement of the outcomes of an organisation's policies and operations (Adam, 2014). Gao (2010) and Miller et al (2013) emphasised that an organisation's financial performance reflects its operational efficiency, sales and profit enhancement, and ability to thrive in a competitive business environment. Bank financial performance is the cornerstone and objective of any banking activity (Ferrouhi, 2018), and a financial institution's financial performance is judged by its profit-earning capacity and loan portfolio quality (Al-Homaidi et al, 2018; Ebenezer et al, 2017). The return ROA and ROE are real-world financial performance indicators (Ledhem, 2021). Hamann and Schiemann (2021) indicate that organisational performance has four dimensions: profitability, liquidity, growth, and stock market performance.

Empirical Literature

Agency Banking and Financial Performance

Ashiru et al. (2023) examined the impact of mobile, internet, and automated teller machines (ATMs) on banks' financial performance. Utilising data for the 2012 to 2021 period, this study considered the causal effect of innovation on commercial bank performance. Based on the ARDL model analysis, bank innovation was found to have the most significant impact on deposit money bank performance because of the large volume and value of transactions witnessed in the banking sector. Roosmawarni et al. (2025) This study investigated the effect of digital and paperless banking on Eastern Bank PLC's financial performance, specifically within the Retail and SME Banking Division at the Jashim Uddin Road Branch. It examined how adopting digital platforms affects EBL's operational efficiency, customer satisfaction, and cost savings. Results showed that paperless systems significantly improve transaction speed, reduce manual errors, and speed up service delivery.

Additionally, Theiri et al. (2024) studied the impact of bank digitisation strategies on the financial performance of Tunisian banks has been evaluated. The study employed the generalised least squares estimation method to analyse data from a sample of twelve Tunisian banks from 2010 to 2020. It was found that digital transformation positively impacts the financial performance of Tunisian banks, measured by return on assets and equity. Specifically, investments in payment tools, digital channels, and internet security are associated with enhanced bank performance. These findings indicate that banks offering digital services tend to perform better, as they can increase profitability, ensure financial stability, and enhance transparency.

Likewise, Jeremiah and Ejedegba (2025) examined electronic banking and the performance of Nigeria's banking sub-sector from 2009 to 2023. Data analysis was conducted using the Panel Random Effects model. Findings showed that mobile pay and ATM banking services contributed to higher ROA, although only ATM banking significantly improved the banks' overall performance indicator. Similarly, Dimbia et al. (2023) assessed the role of agency banking in promoting financial inclusion in Kenya, focusing on KCB, Equity, and Cooperative Bank. A descriptive research design was applied to address the research problem. The study utilised multiple regression analysis and central tendency measures, including standard deviation, mean, and frequencies. The study established a positive relationship between agent banking and financial inclusion.

Nevertheless, despite the extant studies' contribution to extant knowledge, empirical gaps still exist. For instance, studies investigated other predictors such as mobile, internet, and automated teller machines (Ashiru, Balogun, Globalisation, et al., 2023), electronic banking (Jeremiah & Ejedegba, 2025) and bank digitisation (Theiri et al., 2024), ignoring the role of agency banking despite the bank-led theoretical support. This study, therefore, filled the above gaps by examining the relationship between agency banking and the financial performance of commercial banks in Uganda. The study hypothesised as follows;

H1: Agency banking is positively related to the financial performance of commercial banks in Uganda.

Cash Management Practices and Financial Performance

Scholars note that cash management practices can explain financial performance. For instance, studies (Dahiyat et al., 2021; Koech et al., 2021) established a positive effect of financial management practices on the financial performance of commercial banks in Kenya. Additionally, Laghari et al. (2023) observed that positive changes in cash flow measures and metrics were positively related to the financial performance of commercial banks in China. On the other hand, Abdallah et al. (2025) established that liquidity significantly positively influenced a bank's ROA in Tunisia. Relatedly, Vol (2023) observed a positive relationship between cash management practices and the financial performance of listed Breweries in Nigeria.

Likewise, Oluoch (2016) emphasised the significance of efficient cash management in enabling businesses to use their limited cash reserves effectively. This ensures the availability of sufficient funds to support operational activities, investments, and financial obligations, ultimately enhancing profitability. The relationship between cash management and financial performance has been extensively studied concerning factors such as bankruptcy, liquidity, working capital, and overall financial health. This is a key area of interest for managers and stakeholders. This study was generally conducted among SMEs.

Miller et al (2013) emphasise the importance of liquidity as a crucial factor for organisations to fulfil short-term obligations while sustaining profitability. Efficient cash management enhances an organisation's sustainability and attracts potential investors seeking to inject capital for expansion. Investors often evaluate a company's cash flow management strategy as a key criterion for investment decisions, underscoring the importance of effective cash management in attracting external funding. Similarly, Lesmana et al (2022) posit that an effective cash disbursement and payment policy can positively impact profitability. By implementing streamlined payment procedures, organisations can enhance cash flow, reduce expenses related to delayed payments, and improve their financial performance. Puspitarini et al (2023) contend that proficient management of cash disbursement and payment strategies can lead to increased profitability by lowering transaction costs and enhancing cash flow management, thereby creating better investment prospects. Cash reserves are crucial in positively impacting profitability by safeguarding against unforeseen expenses or economic downturns.

According to Mun et al. (2020), cash reserves act as a protective buffer that enables companies to navigate financial challenges without jeopardising profitability. Profitability is safeguarded by avoiding the necessity for expensive external financing during challenging periods. Ewa and Udoayang (2012) in a study on the impact of internal control design on bank ability to examine fraud, detection and staff lifestyle on Nigerian banks, observed that control designs determine the position towards fraud, with the adoption of strong internal procedures being a deterrent to fraud while weak procedures create avenues for the commission of fraud by staff. Wanja (2011) studied the degree of association between the determinants of working capital management of Kenyan SMEs. Through a survey study that targeted a sample of 205 SMEs. The study observed that firms with more cash flow volatility maintain excess cash for stable and smooth daily operation. Attom (2014) researched the cash management practices employed by micro and small enterprises in Ghana. The study aimed to identify the cash practices and controls adopted and recommend the policies to enhance prudent and efficient cash management practices.

Additionally, Kuria et al. (2022) highlight the crucial role of effective cash forecasting and planning in promoting business growth and attracting investments. Mugalanzi et al. (2023) studied how cash management practices affect the performance of microfinance institutions, finding a strong positive correlation. Furthermore, Nangih et al. (2020) investigated the alliance between cash management and the financial performance of an assortment of oil and gas firms listed on the Nigerian Stock Exchange. In the oil and gas business, cash flows derived from operating and investing activities exhibited an adverse and inconsequential link with profitability. In contrast, cash flows from financing operations had an indisputable and substantial relationship with firm performance.

Existing research on cash management and financial performance in commercial banks suffers from several empirical gaps, including a reliance on descriptive metrics and a narrow focus on traditional practices. Dimensions of cash management, like liquidity coverage ratio and cash ratio, are largely unexplored in the context of commercial bank performance. Furthermore, the simplified descriptive research designs adopted by some studies to assess complex relationships fail to capture the nuance and complexity of modern cash management and struggle with generalizability. Additionally, financial performance depends on a bank's environment, yet studies have focused on developed countries despite their vastly different regulatory environments, infrastructure, and market volatilities. Despite their relevance to a country's economic development, most empirical studies have concentrated on other types of organisations, such as general SMEs and gas firms, rather than commercial banks.

H1: There is a positive relationship between cash management practices and the financial performance of Commercial banks in Uganda.

Moderating Effect of Cash Management on the Relationship between Agency Banking and Financial Performance

Existing literature emphasises that cash management practices serve as a moderator, either enhancing or diminishing the effect of agency banking on the financial performance of a commercial bank (Bongomin et al., 2023; Duncan & Kenyatta, 2015). Effective cash management boosts a bank's liquidity and operational efficiency, strengthening its capacity to leverage the expanded reach and customer base of agency banking (Dulacha, 2025a). On the other hand, ineffective cash management can undermine the benefits of agency banking, since insufficient liquidity may negate the advantages of higher transaction volumes (Adebayo et al., 2025).

Bongomin et al. (2023) conducted a study on agent liquidity as a catalyst for mobile money banking among the unbanked poor population in rural sub-Saharan Africa. The findings showed that agent liquidity significantly influences how mobile money services impact the financial inclusion of the unbanked poor in rural sub-Saharan Africa. Adebayo et al. (2025) conducted a study on how digital banking changes the liquidity management practices of banks in the United States. The study found empirical evidence that digital banking, despite its enhancements in transaction efficiency and customer experience, also involves significant liquidity management risks such as higher deposit volatility and increased susceptibility to liquidity shortages.

Furthermore, Ombongi (2021) conducted a study on the effect of agency and mobile banking on the liquidity of commercial banks in Kenya. Financial institutions were advised to increase their investments, particularly in bank assets and the capital adequacy ratio, to improve liquidity. Ombongi observed that while banks should allocate more resources toward technological

advancements, they must also consider unforeseen events that could impact their liquidity. Sohrab et al. (2024) examined how financial institutions interact with women's empowerment through agent banking. Using a quantitative research design. The study includes 408 women residing in rural Bangladesh. As demonstrated, agent banking moderates the favourable effect of financial inclusion on economic and social empowerment, suggesting that this effect is indirect. These results suggest that financial inclusion strengthens women's power when financial institutions prioritise the development of agent banking.

Furthermore, Ratna Gumilang et al. (2023) examined the influence of fintech adaptation, green finance and blue finance on financial performance moderated by digital transformation. The research was conducted on banking sub-sector companies listed on the Indonesia Stock Exchange from 2021 to 2023. The WRAP PLS analysis revealed that fintech adaptation and green finance do not affect financial performance, while blue finance significantly impacts financial performance. Chen et al. (2024) examined the relationship between liquidity regulation, bank risk-taking, and the shadow banking sector, focusing on Chinese commercial banks. The study takes a novel approach to comprehensively analysing how adjustments in bank asset structures impact risk-taking behaviour and the scale of shadow banking from a micro perspective. Empirical analysis, covering 116 banks from 2012 to 2021, called for more effective liquidity management practices that contribute to the dual goals of liquidity supervision and risk control.

Matagaro Brian (2021) explored how banks could partner with agents and other commercial entities. The study focused on selected commercial banks in Nyeri County, Kenya, collecting data using questionnaires. The study indicated that customers would forego the extra charge to procure banking services through agent banking outlets. Lack of liquidity and security concerns were found to be low. However, the study recommended that agents must be thoroughly vetted and monitored as more agent banking outlets are opened to avoid a lack of liquidity.

However, studies bear empirical gaps. For instance, studies concentrated on other units of analysis, such as the unbanked poor population (Bongomin et al., 2023) and women (Sohrab et al., 2024). Furthermore, other studies focused on developed economies such as China (Chen et al., 2024), the USA (Adebayo et al., 2025), with more advanced technology and stringent financial sector regulations than Uganda's. Studies have also investigated other moderators, such as digital transformation (Ratna Gumilang et al., 2023) and women's empowerment (Sohrab et al., 2024). This study aimed to bridge research gaps by examining how cash management practices moderate the relationship between agency banking and financial performance. It offers a comprehensive view of how these factors interact to influence commercial banks' performance in Uganda. The study, therefore, hypothesised as follows:

H3: Cash Management Practices Moderate the Relationship Between Agency Banking and The Financial Performance of Commercial Banks in Uganda

MATERIALS AND METHODS

Research Design and Approach

This study employed a cross-sectional research design to investigate the relationship between agency banking and the financial performance of commercial banks, collecting data at a single point in time (Saunders et al., 2007; Sekaran, 2003). This design was deemed suitable due to the relative stability of the variables over the short data collection period (Rwakihembo et. al., 2024).

Besides, a cross-sectional design was chosen for its efficiency, allowing for simultaneous comparison of variables without additional costs (Oso & Onen, 2018). A quantitative approach was employed to gather quantitative data to explain the correlation between agency banking, cash management practices, and the financial performance of commercial banks. According to Watson (2015), a study is considered quantitative when examining a phenomenon using data collected through a questionnaire. This approach was preferred for its effectiveness and efficiency in data collection and analysis (Rahman, 2020).

Study Population and Sample Size

The study population comprised 22 licensed commercial banks that are members of the Uganda Bankers' Association (Uganda Bankers' Association, 2023) . The scope was considered suitable because the Uganda Bankers Association is an umbrella association for all licensed commercial banks in Uganda, and they submit reports to it annually. Besides, the Association has a research Centre that publishes an annual report reviewing the performance of Uganda's Banking Sector (Uganda Bankers' Association, 2023). The study used a census approach for the unit of analysis, surveying all 22 commercial banks in Uganda since they were below a threshold of 30, which is appropriate for sampling according to the central limit theorem (Rahman, 2020). It should be noted that no public data is available for the specific number of finance employees at the head office of commercial banks in Uganda, as this information is typically proprietary (Baraka, 2023; Ekwaro et al., 2220). Statistics on the number of employees in individual commercial banks might be available. However, the specific breakdown within departments, like finance, internal audit, agent banking or operations at the head office, is confidential and not released to the public (Bezabih, 2024; Dulacha, 2025c; Oluoch, 2022). Nevertheless, the sample size for the target unit of inquiry was 86 respondents at the head offices of the licensed commercial banks, determined using the formulae Yamane (1973) used for sample size computation, as indicated below.

$$n = \frac{\mathrm{N}}{1 + \mathrm{N}(e)^2}$$

Where n is the sample size, N is the population, and e is the tolerable error (5%).

Table 3.1: Sampling Frame

Respondents' Categories	Population	Sample	Sampling Technique
Head of Finance	22	17	Purposive sampling
Manager Agent Banking	22	18	Purposive sampling
Head of Treasury	22	17	Purposive sampling
Head Operations	22	17	Purposive sampling
General Manager, Internal Audit	22	17	Purposive sampling
Total	**110**	**86**	

Source: Uganda Bankers' Association (2023)

Sampling Method and Sample Selection Technique

The study used a non-probability sampling method because the respondents were diverse yet specific to the research. First, respondents in each commercial bank's head office were categorised by their respective departments and positions (strata). Second, respondents were deliberately chosen from each category (stratum) through purposive sampling, ensuring each participant was

relevant to minimise inaccurate responses (Wang & Cheng, 2020). This stratification and purposive selection aimed to intentionally select the most relevant and insightful respondents, enhancing the quality and relevance of the collected feedback (Rahman, 2020).

Unit of Analysis and Unit of Inquiry

The study considered a population of 22 commercial banks licensed by the Bank of Uganda and registered with the Uganda Bankers' Association (Uganda Bankers' Association, 2023).

Demographic Characteristics of the Unit of Analysis

The demographic characteristics of the unit of analysis were years of operation, as demonstrated in Table 3.1a.

Table 3.1a: Years of Operation of Banks

	Frequency	Percent
Below 5 years	02	19.4
5-9 years	02	34.4
9-13 years	10	34.4
Above 13 years	08	11.8
Total	**22**	**100**

Source: Primary data (2025)

Based on the study findings in Table 3.1a, most banks have been in business for over 5 years. This can be evidenced by the fact that only 19.4% of the banks have been in business for less than 5 years. This implies that the going concern principle was implemented in the banks studied. In addition, banks with a substantial period in business are associated with experience in their operations. They are also conversant about the dynamics of microfinance institutions' business environments.

Unit of Inquiry

The study included 86 respondents from 22 commercial banks' head offices. From each institution, questionnaires were distributed to head of finance, the agent bank manager, the head of treasury, the head of operations, and the head of internal audit, who were selected because, according to earlier research (Komezusenge, 2024; Agasha et al., 2020), they are the most knowledgeable and involved in commercial banks' daily financial activities.

Demographic Characteristics of the Unit of Inquiry

The demographic characteristics of the unit of inquiry were age, marital status, educational background, gender, position held, and years of service, as indicated in Tables 3.1b to 3.1e.

Table 3.1b: Age of Respondents

	Frequency	Percent
Below 30 years	5	5.81
30-34 years	15	17.44
35-38 years	42	48.84
Above 38 years	24	27.91
Total	**86**	**100**

Source: Primary data (2025)

Table 3.1c: Respondents' Education Level

	Frequency	Percent
Postgraduate	48	55.81
Undergraduate	38	44.19
Diploma	0	0
Certificate	0	0
Total	**86**	**100**

Source: Primary data (2025)

Table 3.1d: Positions Held by the Respondents

	Frequency	Percent
Head Treasury	17	19.77
Head of Operations	17	19.77
Head Finance	17	19.77
Head Agent Banking	18	20.92
Head Internal Audit	17	19.77
Total	**86**	**100**

Source: Primary data (2025)

Table 3.1e: Respondents' Years in Service

	Frequency	Percent
Below 2 years	02	02.33
2-6 years	05	05.81
6-10 years	52	60.47
10-14 years	20	23.26
Above 14 years	07	08.14
Total	**86**	**100**

Source: Primary data (2025)

Study findings shown in Table 3.1b indicate that most respondents (48.84% and 27.91%) were between 35 and 38 years old and above 38 years old, respectively. The results imply that most of the respondents were mature and experienced in conducting the operations of the commercial

banks, providing reliable responses. The study findings in Table 3.1c revealed that all (55.81% and 44.19%) respondents possessed first degrees and Postgraduate qualifications, respectively. This implies that all respondents possessed high skills, knowledge, and competencies vital for running the banks' operations smoothly. It also means that most respondents were well educated and informed; thus, their responses were assumed to be accurate and reliable.

The majority (20.92%) of the respondents were managers of agent banking. In contrast, an equal proportion of respondents were in other relevant strategic positions, such as Heads of treasury (19.77%), finance (19.77%), internal audit (19.77%), and operations (19.77%), as indicated in Table 3.1d. This means that all respondents were knowledgeable about the banks' operations. Thus, their responses were assumed to be accurate and reliable. The study findings specified in Table 3.1e demonstrate that most (60.47%) of the respondents had served the banks for 6-10 years, while 23.26% had served for 10-14 years, and 14% had served for more than 14 years, and the rest had served for less than 6 years. The findings imply that most of the respondents possessed relevant working experience and knowledge in conducting the operations of banks, and hence, were able to provide accurate and reliable information about agency banking and cash management practices of the banks they work for.

Data Collection Methods, Instruments and Procedure

The study employed a survey method with a self-administered structured questionnaire with closed-ended questions to collect primary data on agency banking and cash management. In contrast, secondary data on financial performance (the dependent variable) was collected through a documentary review of financial statements. A questionnaire was ideal due to its ability to achieve a high response rate, ease of summarising responses, reduced bias, and anonymity, all at a lower cost. According to Orobia et al. (2020), closed-ended questions provide respondents with a predetermined set of options, limiting their ability to express personal opinions, which can bias the results.

Questionnaire items were scaled on a five-point performance scale customized based on the study context, where "5" indicated the highest level of performance and" 1 "the lowest level of performance. A 5-point Likert scale was preferred as it enhances response quality and rate while maintaining respondent engagement compared to longer scales that may lead to boredom and frustration (Creswell, 2009). Furthermore, Park and Park (2019) validated the scale's effectiveness in quantitative studies.

Data Collection Procedure

The researcher received an introductory letter from Mountains of the Moon University, permitting them to collect data. Respondents completed a questionnaire voluntarily after providing informed consent, confirming their willingness to participate in the study. Secondly, the questionnaire was emailed to respondents who were far away to ensure convenience and timely data collection. To facilitate data collection, the researcher presented a letter of authorization from the university to the head offices of commercial banks. A similar letter was provided to participants, requesting their informed consent to participate. The questionnaire briefly introduced the researcher and clearly stated that all collected data would be kept confidential and exclusively used for academic purposes.

Data Quality Control

Content Validity

Content validity was ensured by verifying that the questionnaire was carefully structured, accurately, and consistently measured intended concepts (Nielsen, 2021). Expert validation was sought from the senior academicians and subject experts in bank operations to review each item against the theorised constructs. The Content Validity Index (CVI) was calculated, with a threshold of 70% and above (Earl-Babbie, 2011), indicating satisfactory validity. The study considered the global variables since the study used ratios and scales rather than a Likert scale for all variables, as recommended by other scholars (Ayadi et al., 2023b; Dimbia et al., 2023; Theiri et al., 2024) , allowing for more quantitative statistical analysis. Consequently, the questionnaire's Content Validity Index (CVI) was determined with reference to four relevance scores: 1= irrelevant, 2= somewhat relevant with major revision, 3= relevant with minor revision, and 4= relevant (Fajarini & Rahayu, 2020). The researcher determined the content validity index (CVI) from their responses, using the formula (Munisamy et al, 2021) below.

$$CVI = \frac{\text{Number of items rated relevant}}{\text{Total Number of items}} X\ 100$$

Ambiguous items were rephrased, and others were deleted (Safdari et al., 2022). Consequently, the instrument was considered valid since the CVI for all constructs (Table 3.2) was equal to or greater than 0.7, as Earl-Babbie (2011) recommended.

Table 3:2: Content Validity Index

Variable	CVI
Agency Banking	.75
Cash Management Practices	.77
Financial Performance	.82

Source: Primary Data (2025)

Data Reliability

A reliability analysis using Cronbach's Alpha was conducted to evaluate the reliability of the questionnaire items. Utilising SPSS version 21, Cronbach's Alpha coefficient values were calculated to determine the reliability of the instruments. Following Amin's (2005) guideline, a Cronbach's Alpha threshold of 0.7 or higher was considered acceptable for establishing reliability. All constructs yielded the accepted Cronbach's Alpha above 0.7 (Shrestha, 2021).

Measurement of Variables

This study employed a five-point scale to assess respondents' agreement levels with quantitative scales related to agency banking (independent variable) and cash management practices (moderator variable). Additionally, the study calculated ratios for the dependent variable using data from the commercial banks' financial statements. Agency banking (the independent variable) was scaled regarding the number of agents, volume and value of transactions and agent bank transaction fees (Ayadi et al., 2023a; Mwasakabeto, 2020; Shakya, 2022). Furthermore, financial performance (dependent variable) was scaled in terms of loan portfolio quality (in terms of NPL), and profitability (ROA and ROE) (Dulacha, 2025b; Uganda Bankers' Association, 2023; Zaidanin

et al., 2021). Cash management practices were assessed regarding liquidity coverage ratio, cash ratio and loan-to-deposit ratio (Arts et al., 2024; Kalimashi et al., 2022; Shrestha et al., 2023).

FINDINGS

Descriptive Characteristics of Study Variables

After data collection, SPSS version 21 was employed to perform descriptive statistical analysis. Quantitative data were examined using descriptive statistics, including means and standard deviations, summarising the characteristics of the study's overall variables as indicated in Table 3.3a.

Table 3.3a: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Dev.
Agency Banking	86	2.07	5.00	3.631	.467
Cash Management Practices	86	2.13	4.21	3.782	.347
Financial Performance	86	1.78	3.78	2.742	.483
Valid N (listwise)	86				

Source: Primary Data (2025)

The descriptive statistics presented in Table 3.3a provide important insights into agency banking, cash management practices, and financial performance. The average scores are generally high, except for financial performance: agency banking (M = 3.631, SD = .467), cash management practices (M = 3.782, SD = .347), and financial performance (M = 2.742, SD = .483). These results indicate that commercial banks in Uganda mainly engage in strong agency banking operations and effective cash management. The comparatively lower mean for financial performance highlights ongoing issues with poor financial results in these banks. The standard deviations, between .448 and .483, are below 1, showing strong agreement among respondents (Nkundabanyanga et al., 2017). A low standard deviation suggests responses were closely clustered around the mean, indicating consensus and consistency, which confirms that the mean accurately reflects the financial performance of commercial banks. Overall, the findings suggest that the calculated means reliably represent the actual data observed.

Data Processing and Management

Data was entered into SPSS for cleaning and analysis. Specifically, the process involved screening the data for missing values and managing outliers effectively before testing for hypotheses (Pallant, 202). Quantitative data analysis was conducted using SPSS version 21. The analysis comprised data screening for missing values, outliers, and checking for data compliance with parametric assumptions. These included tests for normality, linearity, and multicollinearity (Pallant, 2020; Tabachnick & Fidell, 2007).

Management of Missing Values

Following Tabachnick and Fidell's (2007) guidelines, a missing value analysis was performed to assess the extent and pattern of missing data. Frequency distributions were created to identify missing responses. Completed questionnaires were also examined to differentiate between respondent omissions and data entry mistakes (Pallant, 2020). The results revealed no missing

data. This was confirmed by carefully reviewing each completed questionnaire to see if omissions or entry errors occurred, with follow-up contact with respondents (Mohammed et al., 2020).

Management of Outliers

The study used box plots (Figure 3.1) in SPSS to identify outliers. In box plots, only extreme points more than three box lengths from the box's edge marked with an asterisk*—are classified as outliers (Ur Rehman & Belhaouari, 2021). Outliers caused by data entry errors were removed. Genuine values were adjusted to less-extreme ones to include these cases in the analysis while preventing outliers from skewing the results (Smiti, 2020). As shown in Figure 3.1, outliers were observed in agent banking and cash management practices for cases 1 and 3 in agency banking, and cases 3 and 1 in cash management. These cases remained in the dataset because they were not marked with asterisks, indicating they were not extreme and thus unlikely to affect the findings (Pallant, 2020).

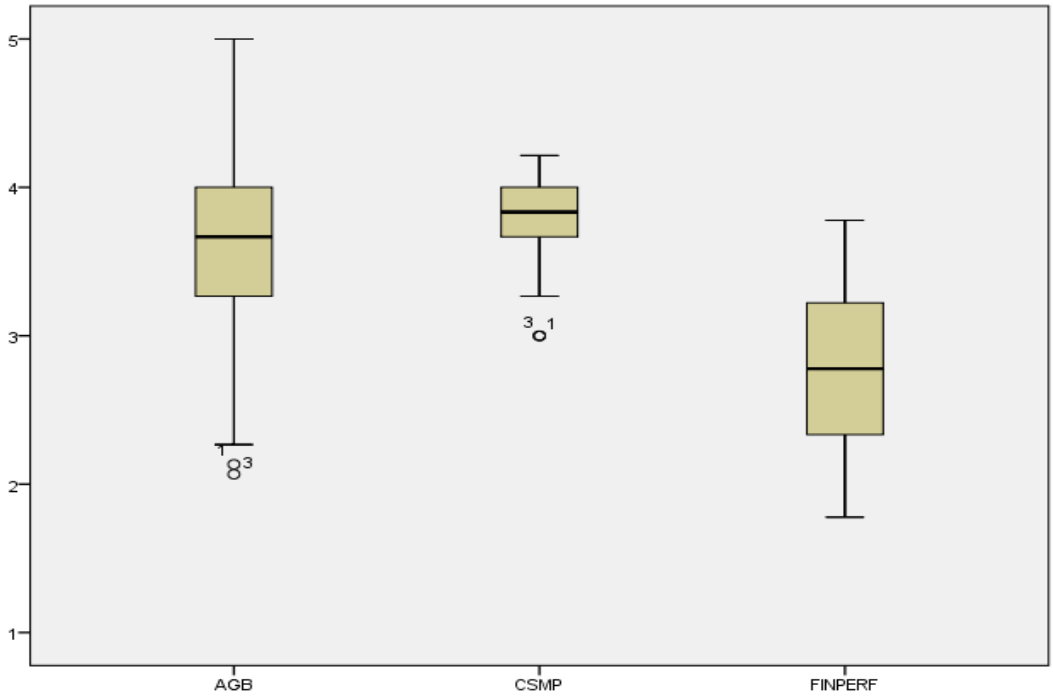

Figure 3.1: Box Plots

Source: Primary Data (2025)

Note: AGB is agency banking; CSMP is cash management practices, and FINPERF is financial performance.

Test for Parametric Assumptions

Test for Normality of Data and Linearity of Variables

To evaluate data normality and linearity, a histogram and a normal probability plot were created using regression standardised residuals, following the method by Hernandez (2021). The histogram (Figure 3.2) appeared symmetrical and bell-shaped, indicating a normal distribution. Similarly, the normal probability plot (Figure 3.3) supported normality and linearity because the

data points closely followed a diagonal line from the bottom-left to the top-right, with only minor deviations. This confirms linearity as described by Rwakihembo John et al. (2024) and Hernandez (2021).

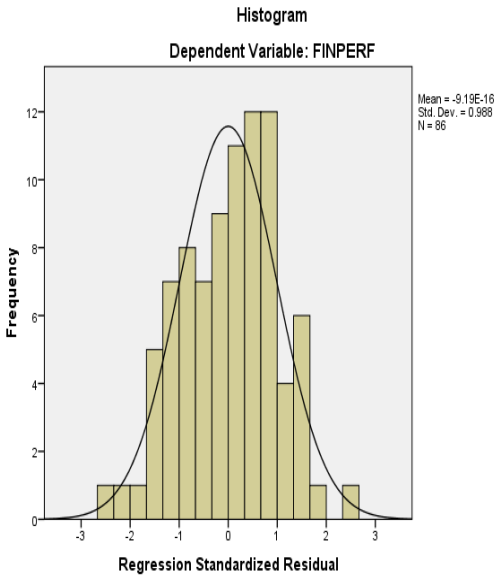

Figure 3.2: Histogram

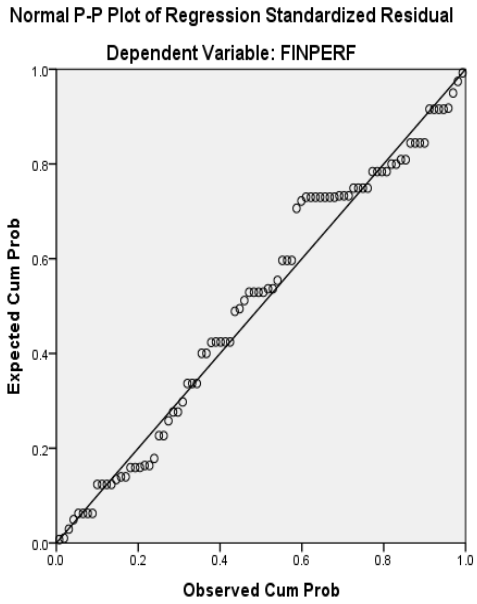

Figure 3.3: Normal Probability Plot

Source: Primary Data (2025)

Test for Multicollinearity

A multicollinearity check was conducted to ensure the regression model's robustness in analysing correlations among the independent variables (Hernandez, 2021). The study performed a regression analysis to assess each independent variable's Variance Inflation Factor (VIF) and tolerance levels. As per the guidelines by Karina et al. (2023), VIF values over 10 and tolerance below 0.1 signal severe multicollinearity. The collinearity analysis results (Table 3.5) show all VIF values are below 10 and all tolerance levels are above 0.1, indicating no evidence of severe multicollinearity, in line with the criteria established by Karina et al. (2023) and Pallant (2020).

Table 3.5: Collinearity Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	Agency banking	.645	1.550
	Cash Management Practices	.645	1.550

a. Dependent Variable: Financial Performance

Source: Primary Data (2025)

Data Analysis and Hypothesis Testing

Pearson Correlation Analysis

To achieve objectives one and two and test hypotheses H1 and H2, Pearson correlation analysis was conducted to investigate the relationship between agency banking, cash management practices, and financial performance among commercial banks in Uganda. Given its higher statistical power, Pearson correlation was preferred over Spearman's rank correlation (a non-parametric test) to minimize Type I and Type II errors (Pallant, 2020).

Testing for the Moderation Effect of Tax Knowledge

To fulfil the third objective and evaluate hypothesis H3, this study explored how cash management practices influence the link between agency banking and financial performance in Ugandan commercial banks. Hierarchical multiple regression analysis was used to assess this moderating effect. The independent and moderator variables were multiplied to create an interaction term for testing moderation (Pallant, 2020). As a result, the following regression models were analyzed.

$$FP = \beta_0 + \beta_1 AGB + e \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots i$$

$$FP = \beta_0 + \beta_1 CMP + \beta_2 MC + e \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots ii$$

$$FP = \beta_0 + \beta_1 AGB + \beta_2 CMP + \beta_3 AGB^{*} CMP + e \ldots\ldots\ldots\ldots\ldots\ldots iii$$

Where;

FP represents financial performance; b_0, constant; $b_1 AGB$, coefficient of agency banking; $b_2 CMP$, coefficient of cash management practices, $\beta_3 AGB^{*}$ CMP, coefficient of the interaction term and e represents the error term.

Note: *"β "* represents the standardized beta coefficient (Pallant, 2020)

Ethical Issues

The study addressed ethical principles such as honesty, objectivity, respect for intellectual property, social responsibility, confidentiality, and non-discrimination. The researcher obtained a letter of authorization from the head offices of commercial banks. Participants were asked for their informed consent to take part. The questionnaire included a brief introduction from the researcher and clearly stated that all data collected would be kept confidential and used solely for academic purposes. Participants were given sufficient time to read and understand the contents of the questionnaire they received.

Presentation and Interpretation of Results

Pearson Correlation Analysis

To fulfil study objectives one and two and to evaluate hypotheses H1 and H2, the research investigated the relationship between agency banking, cash management practices, and the financial performance of commercial banks in Uganda. As outlined in Chapter Three, preliminary data analysis was conducted to ensure compliance with parametric assumptions, such as normality, linearity, and multicollinearity. The study employed Pearson correlation analysis to assess the relationships between the variables. The selection of Pearson correlation, a parametric test, was supported by Podsakoff et al. (2012), who indicated that it possesses greater statistical power than

Spearman. Accordingly, the following hypotheses were tested using Pearson's zero-order correlation.

H1: There is a positive relationship between agency banking and financial performance among commercial banks in Uganda.

H2: There is a positive relationship between cash management practices and commercial banks' financial performance in Uganda.

The Pearson correlation results of the above hypotheses are indicated in Table 4.1 below.

Table 4.1: Pearson Correlation Analysis Results

		1	2	3
1	Agency Banking	1		
2	Cash Management Practices	.596**	1	
3	Financial Performance	**.518****	**.511****	**1**

** p<0.01 level (1-tailed), n=86

Source: Primary Data (2025)

There Is a Positive Relationship Between Agency Banking and Financial Performance Among Commercial Banks in Uganda (H1)

The results of the Pearson correlation analysis (refer to Table 4.1) show a strong, positive link (r = .518, p < .01) between agency banking and the financial performance of commercial banks in Uganda. This suggests that improvements in agency banking are connected to better financial results for these banks. Specifically, banks with more agents and high-value transactions at low fees tend to experience sound financial performance regarding better loan portfolio quality and profitability. These findings support hypothesis H1, which states that "agent banking is positively related to the financial performance of commercial banks in Uganda.

There Is a Positive Relationship Between Cash Management Practices and Commercial Banks' Financial Performance in Uganda (H2)

The Pearson correlation analysis confirmed a significant positive link (r =.511, p<.01) between cash management practices and the financial performance of commercial banks in Uganda (see Table 4.1). The findings suggest that enhancements in the liquidity coverage, cash, and loan-to-deposit ratios are associated with better financial performance. This means that when commercial banks manage their cash flows effectively, they will likely see improved profitability and loan portfolio quality. Consequently, these results support the hypothesis that cash management practices are positively related to the financial performance of commercial banks (Hypothesis H2).

Testing the Moderation Effect of Managerial Competences (Hypothesis H3)

Consistent with study objective three and hypothesis H3, the study examined the moderating effect of cash management practices on the nexus between agency banking and the financial performance of commercial banks. the moderation effect was tested through hierarchical multiple regression analysis as explained in Chapter Three. Agency banking and cash management practices were multiplied, and an interaction term was created from their product before the model estimation (Andersson et al., 2014). According to Jose (2013), the criterion for assessing and confirming the

moderation effect is that the effect of the interaction term on the dependent variable must be significant. The present study, therefore, hypothesised that cash management practices moderate the relationship between agency banking and the financial performance of commercial banks in Uganda (Hypothesis H3). The results of the moderation analysis are indicated in Table 4.2 below.

Table 4.2: Hierarchical Multiple Regression Results for the Moderation Effect of Cash Management Practices

	Model 1	Model 2	Model 3
	Beta (β)	Beta (β)	Beta (β)
Constant	.801	-.593	-.524
Agency Banking	.518**	.331**	.101
Cash Management Practices		.314**	.300**
Interaction Term			.364**
Model Summary			
R	.518	.576	.638
R-Square	.268	.332	.407
R-Square Change	-	.063	.075
Sig. R Square Change	-	.01	.01
Sig. (ANOVA)	.01	.01	.01

Interaction term = AGB*CMP; **p<.01
DV: Financial Performance

Source: Primary Data (2025)

The results of the hierarchical multiple regression analysis (Table 4.2, model 2) demonstrated that agent banking (β = .331, p<.01) and cash management practices (β = .314, p<.01) are significant predictors, collectively accounting for a substantial 33% of the variance in the financial performance of commercial banks (R-squared = .332, p<.01). Nevertheless, with the inclusion of the interaction term in model 3, the predictive capacity of the model increased by a significant 7.5% (from R-squared = .332 in model 2 to R-squared = .407 in model 3). Importantly, the significant positive effect of the interaction term in model 3 (β = .364, p<.01) indicates that cash management practices (serving as the moderating variable) augment the influence of agent banking on the financial performance of commercial banks. The aforementioned findings illustrate that commercial banks derive greater benefits from agent banking when they implement efficient cash management practices characterised by high liquidity coverage and favourable cash and loans-to-deposit ratios.

Discussion of Results

Agency Banking and Financial Performance

Rooted in theoretical foundations and existing literature, this study investigated the relationship between agency banking and the financial performance of commercial banks in Uganda. As outlined in Chapter Three, it was hypothesised that agency banking positively correlates with financial performance (hypothesis H1). The Pearson correlation results in Chapter Four (Table 4.1) demonstrate a strong and statistically significant positive association between agency banking

and financial performance, confirming hypothesis H1. This suggests that improvements in agency banking are connected to better financial results for these banks. Specifically, banks with more agents and high-value transactions at low fees tend to experience sound financial performance regarding better loan portfolio quality and profitability.

The study results corroborate the observation by other studies. For instance, Ashiru et al. (2023) examined the impact of mobile, internet, and automated teller machines (ATMs) on banks' financial performance. Based on the ARDL model analysis, bank innovation was found to have the most significant impact on bank performance. Roosmawarni et al. (2025) investigated the effect of digital and paperless banking on. They examined how adopting digital platforms affects EBL's operational efficiency, customer satisfaction, and cost savings. Results showed that paperless systems significantly improve transaction speed, reduce manual errors, and speed up service delivery. Additionally, Theiri et al. (2024) studied and evaluated the impact of bank digitisation strategies on the financial performance of Tunisian banks. It was found that digital transformation positively impacts the financial performance of Tunisian banks, measured by return on assets and equity. These findings indicate that banks offering digital services tend to perform better, as they can increase profitability, ensure financial stability, and enhance transparency.

Likewise, Jeremiah and Ejedegba (2025) examined electronic banking and the performance of Nigeria's banking sub-sector from 2009 to 2023. Findings showed that mobile pay and ATM banking services contributed to higher ROA, although only ATM banking significantly improved the banks' overall performance indicator. Similarly, Dimbia et al. (2023) assessed the role of agency banking in promoting financial inclusion in Kenya and established a positive relationship between agent banking and financial inclusion.

Furthermore, the study supports the bank-led theory by demonstrating how banks, through external agents, can expand their reach and reduce costs to boost profitability and market share (Kinyua et al., 2025). This model, where the bank is the primary service provider distributed via agents, enables banks to serve more customers more efficiently. It aligns with the theory's central idea that banks can leverage low-cost channels such as agency banking to deliver services and facilitate growth (Adebayo, 2021; Udoh, 2025).

Cash Management Practices and Financial Performance

The study further established a significant positive link between cash management practices and the financial performance of commercial banks in Uganda (see Table 4.1). The findings suggest that enhancements in the liquidity coverage, cash, and loan-to-deposit ratios are associated with better financial performance. This means that when commercial banks manage their cash flows effectively, they will likely see improved profitability and loan portfolio quality. Consequently, these results support the hypothesis that cash management practices are positively related to the financial performance of commercial banks (Hypothesis H2).

These results relate to the findings by other scholars. For instance, studies (Dahiyat et al., 2021; Koech et al., 2021) established a positive effect of financial management practices on the financial performance of commercial banks in Kenya. Additionally, Laghari et al. (2023) observed that positive changes in cash flow measures and metrics were positively related to the financial performance of commercial banks in China. On the other hand, Abdallah et al. (2025) established that liquidity significantly positively influenced a bank's ROA in Tunisia. Relatedly, Vol (2023) observed a positive relationship between cash management practices and the financial performance

of listed Breweries in Nigeria. Likewise, Oluoch (2016) emphasised the significance of efficient cash management in enabling businesses to use their limited cash reserves effectively. This ensures the availability of sufficient funds to support operational activities, investments, and financial obligations, ultimately enhancing profitability.

Miller et al. (2013) highlight liquidity as essential for organisations to meet short-term obligations while maintaining profitability. Efficient cash management supports sustainability and attracts investors looking to expand capital. Investors often consider a company's cash flow strategies crucial when making investment decisions, emphasising the role of effective cash management in securing external funding. Similarly, Lesmana et al. (2022) argue that efficient cash disbursement and payment policies can boost profitability. Streamlined payment processes help improve cash flow, cut costs from delayed payments, and enhance financial health. Puspitarini et al. (2023) suggest that managing cash disbursements effectively reduces transaction costs and strengthens cash flow, leading to better investment opportunities. Maintaining cash reserves is also vital for profitability, as they provide a safety buffer against unexpected expenses or economic downturns.

The study confirms a positive correlation between cash management and banks' financial performance, supporting liquidity preference theory. This theory explains why banks hold liquid assets, and cash management practices put this into action to enhance performance. Banks must keep enough cash to cover daily withdrawals, loans, and unforeseen needs, but holding too much cash can decrease profits. Effective cash management, like precise budgeting and forecasting, helps banks maintain an optimal cash level to meet liquidity demands without sacrificing returns. Managing cash flows effectively enables banks to meet daily obligations and reduce financial risks, aligning with their transaction and safety motives.

Moderation Effect of Cash Management Practices on Agency Banking-Financial Performance Nexus

The study examined the moderating effect of cash management practices on the relationship between agency banking and the financial performance of commercial banks in Uganda. Similarly, Fredrick (1986) highlighted the importance of testing for the interaction effect, recommending an evaluation of whether the predictor variable's effect depends on the level of the moderator. Based on the bank-led and liquidity preference theoretical foundations and existing empirical literature, the study hypothesised that cash management practices influence the relationship between agency banking and financial performance among commercial banks in Uganda (hypothesis H3).

The results (Table 4.2) showed that: i) the interaction term had a significant positive impact on financial performance in regression model 3; ii) adding the interaction term significantly improved the model's predictive ability. These findings suggest that the influence of agency banking on financial performance is affected by cash management practices among commercial banks, supporting the hypothesis (H3). In essence, while agency banking, measured by the number of agents, high-value transactions, and agency transaction fees, can enhance financial performance through better loan portfolio quality and profitability, this effect depends on cash management practices such as liquidity coverage ratio, cash ratio, and loan-to-deposit ratios among commercial banks in Uganda.

The above results rhyme with the findings of other scholars. For instance, existing literature emphasises that cash management practices serve as a moderator, either enhancing or diminishing

the effect of agency banking on the financial performance of a commercial bank (Bongomin et al., 2023; Duncan & Kenyatta, 2015). Effective cash management boosts a bank's liquidity and operational efficiency, strengthening its capacity to leverage the expanded reach and customer base of agency banking (Dulacha, 2025a). On the other hand, ineffective cash management can undermine the benefits of agency banking, since insufficient liquidity may negate the advantages of higher transaction volumes (Adebayo et al., 2025).

Bongomin et al. (2023) conducted a study on agent liquidity as a catalyst for mobile money banking among the unbanked poor population in rural sub-Saharan Africa. The findings showed that agent liquidity significantly influences how mobile money services impact the financial inclusion of the unbanked poor in rural sub-Saharan Africa. Adebayo et al. (2025) conducted a study on how digital banking changes the liquidity management practices of banks in the United States. The study found empirical evidence that digital banking, despite its enhancements in transaction efficiency and customer experience, also involves significant liquidity management risks, such as higher deposit volatility and increased susceptibility to liquidity shortages that reduce its benefits.

Furthermore, Ombongi (2021) conducted a study on the effect of agency and mobile banking on the liquidity of commercial banks in Kenya. Financial institutions were advised to increase their investments to improve liquidity. Ombongi observed that while banks should allocate more resources toward technological advancements, they must also consider unforeseen events that could impact their liquidity. Chen et al. (2024) examined the relationship between liquidity regulation, bank risk-taking, and the shadow banking sector, focusing on Chinese commercial banks. Empirical analysis calls for more effective liquidity management practices that contribute to the dual goals of liquidity supervision and risk control. Likewise, Matagaro Brian (2021) explored how banks could partner with agents and other commercial entities. The study recommended that agents must be thoroughly vetted and monitored to avoid a lack of liquidity.

Additionally, the moderating effect of cash management practices on the relationship between agency banking and financial performance supports the theoretical foundations of bank-led and liquidity preference models. This study reveals how effective management of a bank's agents' cash flows is vital in transforming the strategic advantages of agency banking into better financial results. This process is consistent with and explained by core principles from the bank-led and liquidity preference frameworks. The study found that a bank with strong cash management can utilise its agency network more profitably than one with poor cash management. Notably, effective cash management enables the commercial bank to maintain strict oversight of its agents, a fundamental aspect of the bank-led theory. By centrally implementing cash policies, supervising agents, and regulating settlements, the bank ensures that the agent network functions as a coherent and profitable extension of the bank.

Additionally, liquidity preference theory suggests that companies and individuals hold cash for transactions, precautionary, and speculative reasons. The way cash management practices influence the relationship between agency banking and financial performance directly addresses these motives and reinforces the theory. Furthermore, agency networks thrive by providing accessible and convenient financial services. Banks accordingly implement effective cash management strategies to keep their agent’s liquid, meeting customers' needs to hold cash for everyday transactions and unforeseen emergencies.

CONCLUSION AND RECOMMENDATIONS

Conclusions

In line with the study objectives, formulated hypotheses, and study results, as elaborated in the previous chapters, the following conclusions have been drawn;

The present study identified a significant positive link between agency banking and financial performance. This positive link confirms that agency banking is a key part of important banking innovations to enhance financial performance. Consequently, agency banking enables commercial banks to reach underserved rural areas without the substantial capital costs of establishing physical branches. A larger market share correlates with increased profitability as banks benefit from greater economies of scale. By mobilising higher deposits through agents, banks accumulate a larger pool of funds to lend, thereby improving the quality of their loan portfolios.

Additionally, the study found that effective cash management practices are strongly and positively linked to the financial performance of commercial banks in Uganda. These practices enable banks to handle liquidity effectively, minimize credit risks, enhance operational efficiency, and seize opportunities, all contributing to better financial outcomes.

Similarly, the study showed that the link between agency banking and financial performance relies on the cash management practices of commercial banks in Uganda. It was understood that agency banking is a financial innovation within the banking sector. However, agents can harm the bank's reputation without effective cash management, placing more stress on clients due to liquidity shortages. In a related aspect, the moderation effect examined by this study aligns with the idea that efficient cash management enhances the role of agent banking in boosting the financial performance of commercial banks in Uganda.

Recommendations

Building on the positive link between agency banking and financial performance found in this study, commercial banks should focus on expanding their agent networks and adopting customer-centric strategies, such as reducing transaction costs and running awareness campaigns to encourage high-value transactions. Furthermore, banks should strengthen security measures and simplify agent systems to boost efficiency and profitability.

This study recommends that commercial banks maintain a high-quality liquidity asset buffer, adopt optimal liquidity models to maximise returns, and implement efficient cash management practices, such as regular bank account reconciliation and adequate cash reserves to hedge against sudden liquidity outflows.

Additionally, commercial banks need to enhance their systems for tracking and replenishing agents' cash reserves, especially in remote regions with more severe liquidity shortages. This can be accomplished by developing comprehensive cash forecasting models for the entire bank and individual agents and by establishing fair commission structures that motivate agents to stay, especially those with low transaction volumes in rural areas.

The Central Bank of Uganda should implement standardized cash management protocols across all commercial banks to enhance efficiency and security. Furthermore, given the documented low awareness and trust in agency banking, particularly in rural regions, targeted financial literacy initiatives should be directed at customers.

Study Implications

Policy and Regulatory Implications

The Central Bank of Uganda ought to establish uniform cash-management protocols tailored to third-party networks. Furthermore, regulators are advised to require commercial banks with a substantial number of agents to maintain dedicated liquid-asset buffers to mitigate the risk of liquidity cascades. Likewise, Government agencies should introduce public financial inclusion initiatives to transform informal cash holdings into verified commercial deposits.

Managerial and Practical Implications

Algorithmic Liquidity Forecasting: Commercial banks need to implement predictive, agent-level cash-forecasting models to effectively manage daily transaction volatility in local markets. Firms should redesign rural agent fee structures with tiered commission minimums to ensure retention of low-volume agents. Management must implement strict screening processes, combined with end-to-end-encrypted transaction hardware, to prevent decentralised agency fraud.

Theoretical Implications

The study confirms that integrating Bank-led and Liquidity Preference models effectively explains the returns to branchless banking. It fills empirical gaps by demonstrating that operational infrastructure should be analyzed alongside capital liquidity variables. The research expands the literature by shifting the focus from highly institutionalized Western digital environments to resource-scarce, volatile microeconomic contexts.

Study Limitations and Areas for Future Research

The present study focused on commercial banks that could have limited its scope. Future studies could broaden the scope to include Microfinance Institutions (MFIs) or other financial institutions engaged in agency banking.

This study examined how cash management practices affect relationships among variables. Future research could investigate the moderating effects of additional factors, such as bank size, the regulatory environment, or digital technology adoption, to better understand how agency banking influences the financial performance of commercial banks in Uganda.

The study used a quantitative approach, which limited the inclusion of respondents' opinions and may have led to different results. This approach leverages the strengths of mixed methods; bias could have impacted the reliability of the findings and conclusions. Future research should consider combining methods to leverage the strengths of mixed-methods design.

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Appendix 1: Questionnaire

I am Katerega Robert, a master's student in Business Administration at Mountains of the Moon University. To fulfil my degree requirements, I am required to conduct a study in my field of specialisation. This study examines the relationship between agency banking and financial performance, including how cash management practices moderate this relationship among commercial banks in Uganda. You have been selected to participate, and all information you provide will be used solely for academic purposes. It will remain confidential and not be used against you or your organisation. Please do not write your name on the questionnaire. Kindly complete and return it to me.

I appreciate your cooperation.

Katerega Robert

MBA Student

Section A: Background Information

You are kindly required to respond to the questions on the individual characteristics by ticking in the box provided:

1. Age of respondent: (a) **Below** 30 years (b) 30-34 ye (c) 34-38 y (d) Above 38 year
2. Highest level of education: (a)Postgradu (b) Grad (c) D a (d) Certificate
3. Position held in the Bank: (a) Head Operati , (b) Head of Agent Banki (c)Head Financ (d) Head Internal Au (e) Head Tre
4. Number of years you have been serving the Bank: (a)Below 2 year (b)2-6 years (c) 6-10 years (d) 10-14 yea (e) Above 14 y
5. Years of operation of the Bank: (a) Below 5 ye (b)5-9 years (c)9-13 years (d)Above 13 years

Section B: Agency Banking

	Item	**(a)**	**(b)**	**(c)**	**(d)**	**(e)**
1.	Number of Bank Agents	Less than 30	30-60	60-90	90-120	Over 120
2.	Volume of Agency Bank Transactions *(Percentage of Banks' Monthly transactions from agents)*	Less than 3%	3-6%	6-9%	9-12%	Over 12%
3.	Value of Bank transactions from agents per month (Ugx)	Less than 3bn	3bn-5bn	5bn-7bn	7bn-9bn	Over 9bn

Section C: Cash Management Practices		(a)	(b)	(c)	(d)	(e)
	Liquidity Coverage Ratio *(Cash and Cash equivalents/total net cashflow*100)*	Less than 3%	3– 6%	7 - 10%	11- 14%	Over 14%
	Cash Ratio *(Cash and Cash Equivalents/Total Current Liabilities*100)*	Less than 3%	3– 6%	7 - 10%	11- 14%	Over 14%
	Loan-to-deposit ratio *(Total Loans/Total Deposits *100)*	Less than 3%	3– 6%	7 - 10%	11- 14%	Over 14%

Section D: Financial Performance

You are required to rate the financial performance of the Bank by ticking under the appropriate letter:

	Item	(a)	(b)	(c)	(d)	(e)
	Profitability					
1.	The Bank's Return on assets *(i.e. Net Operating Income/Average Total Assets (%)* is:	Less than 3%	3-6%	6-9%	9-12%	Over 12%
2.	The Bank's Return on Equity *(i.e. Net Operating Income/Average Total Equity (%)* is:	Less than 3%	3-6%	6-9%	9-12%	Over 12%
3.	The Banks' Net Profit (Ugx)	Less than 3bn	3bn-5bn	5bn-7bn	7bn-9bn	Over 9bn
	Loan Portfolio Quality					
1.	The Bank's NPLs *(i.e. Overdue loans/total gross loans*100%)*	Less than 3%	3– 6%	7 - 10%	11- 14%	Over 14%

END