



MAKERERE UNIVERSITY

MAKERERE UNIVERSITY BUSINESS SCHOOL

**INTELLECTUAL CAPITAL, OPERATIONAL RESILIENCE AND FINANCIAL
PERFORMANCE OF COMMERCIAL BANKS IN THE CENTRAL
REGION OF UGANDA**

BY

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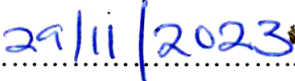
**A DISSERTATION SUBMITTED TO MAKERERE UNIVERSITY BUSINESS
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THE AWARD OF THE DEGREE OF MASTER OF
BUSINESS ADMINISTRATION OF
MAKERERE UNIVERSITY**

PLAN A

NOVEMBER, 2023

DECLARATION

I hereby declare that this research dissertation is a direct result of my own original ideas and never been submitted to any higher learning for any academic award.

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APPROVAL

This is to certify that this dissertation has been submitted with our approval as university academic supervisors.

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DEDICATION

This dissertation is dedicated to my wife Mrs. Rosemary Kezaabu Senabulya Abwoli for the love and support she has given me, friends and family members for the courage, motivation and guidance that helped me put together this piece of work. May the Almighty GOD reward you abundantly.

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LIST OF ACRONYMS

RBV:	Resource-Based View.
BOU:	Bank of Uganda.
NPLs:	Non-Performing Loans.
FSD:	Financial Sector Deepening.
MFPED:	Ministry of Finance, Planning and Economic Development.
SPSS:	Statistical Package for Social Sciences
CVI:	Content Validity Index
EFA:	Exploratory Factor Analysis
PCA:	Principal Component Analysis
CFA:	Common Factor Analysis
ROI:	Return on Investment

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ABSTRACT

The study sought to establish the relationship between intellectual capital, operational resilience and financial performance of commercial banks in the central region of Uganda. Particularly, it focused on examining the relationship between intellectual capital and the financial performance of commercial banks in the central region of Uganda, the relationship between operational resilience and the financial performance of commercial banks in the central region of Uganda and the predictive power of intellectual capital and operational resilience on the financial performance of commercial banks in central region of Uganda.

The study used a cross-sectional research design, which followed a quantitative research approach. The study focused on the 28 Supervised Commercial Banks in Uganda (BOU, 2020) and a sample size of 24 banks was selected where the unit of analysis was banks while the unit of inquiry included the Head Credit, Head Operations, Head Finance, Branch Managers and General Manager giving a total of 168 respondents. However, only 153 respondents were reached. Primary data was obtained directly from the respondents from the selected Commercial Banks using a structured self-administered questionnaire covering all the variables of the study. A 5-point Likert scale ranging from 1(Strongly disagree) to 5(strongly agree) was adopted where respondents were asked to indicate their level of agreement with given statements/questions.

It was found that: there is a significant positive relationship between intellectual capital and the financial performance of commercial banks in the central region of Uganda ($r=0.478^{**}$, $p\leq.01$). Furthermore, the findings show that there is a significant positive relationship between operational resilience and financial performance of commercial banks ($r=0.641^{**}$, $p\leq.01$). Finally, the predictive power of intellectual capital and operational resilience on financial performance of Commercial banks in central region of Uganda was determined using multiple regression and indicated that the predictor variables explained 41.9 % of the variance in financial performance (Adjusted R Square = .419). The results implied that the independent variables (intellectual capital, operational resilience) explain 41.9% of the variance on the dependent variable (financial performance).

On that basis, the study recommended that Commercial Banks need to offer training to their employees to improve their level of experience and also build a motivated workforce to encourage the staff to innovate. The study further recommended that Commercial banks should have adequate and uncommitted resources that they can quickly utilize to finance new strategic initiatives, to be in a position to meet their day-to-day obligations. Commercial banks should in addition reduce idle capacity and costs, minimize wastage and overheads to improve their profit margins and return on investments.

CHAPTER ONE

1.0 Introduction

This chapter represents the background, statement of the problem, purpose of the study, research objectives, research questions, scope of the study, significance and the conceptual framework.

1.1 Background to the Study

Financial performance is a vital factor for organizational survival, sustainability and growth. Performance is basically used to the realization of set goals and objectives in a particular organisation (Odhiambo & Ngaba, 2019). The excellent performance of a banking sector depicts excellent financial performance in the country (Serwadda, 2018). The financial performance of an organization is measured by how well it generates value for its customers (Bayraktaroglu, Calisir & Baskak, 2019). Commercial banks boost the economy's performance through their financial activities (Ahmed, Shakoor, Khan & Ullah, 2021) and creating liquidity for more investments that promote efficiency of capital accumulation (Jajah, Anarfo & Aveh, 2020). This study measures financial performance as profitability, liquidity and capital adequacy.

Globally, financial conditions have tightened and economic financial stability challenges have increased which is disastrous to commercial banks (International monetary fund, 2020). Commercial banks have experienced greater profit losses, liquidity shortages than other financial institutions (World Bank Group, 2020). In Uganda, profitability of commercial banks declined and stagnated, while the value of non-performing loans continued to rise throughout the course of the financial year 2020/2021(The BoU Annual Supervision Report, 2020). According to BoU Financial Stability Review (2022), credit growth was still below pre-pandemic levels, loan arrears increased from Ush.941.5 billion in 2021 to Ush.1.05 trillion in 2022, and banks' aggregate liquidity coverage ratio stood at 297.1% well above the minimum requirement of

100%, proportion of foreign currency gradually decreased from 38.82% in 2017 to 35.07% in 2022. For example, the financial performance of Centenary Bank as measured by its return on equity dropped to 19.2% in 2020 from 28.3% in 2019 (Centenary Bank, 2020). In support, a decline of 5.3% in total assets of financial institutions, a 7.8% reduction in customer deposits and rising costs of deposit funding were reported (BoU Financial Stability Report, 2022). Additionally, total sector credit declined from 20.3% to 16.7% due to the slowdown in economic activity and rising non-performing loans. The Uganda Research Network Report (2019) showed that the aggregate sector NPL ratio increased by 4.3% with bad loans increasing more than UGX. 976.2 billion affecting the financial institution's performance. The BOU Survey Report (2018-2019) showed that the sector's return on assets dropped by 0.5%, return on equity was reduced by 1.9% between 2018 to 2019 due to a rise in provisions for NPLs and operating costs.

This study conceptualizes financial performance being responsible for intellectual capital and operational resilience. This is consistent with FinScope Uganda Survey (2018) and Bank of Uganda (2019). Intellectual capital is a vital aspect in promoting financial performance as it creates and supports connectivity between all sets of competencies inside and outside the organization (Xu & Liu, 2021). On the other hand, operational resilience practices help commercial banks identify and mitigate operational risks (Business Continuity Institute report, 2022). Various studies have assessed the financial performance of financial institutions using various theories. However, this study adopted the Resource-Based View (RBV) theory since it is popular and widely used to evaluate financial performance of banks (Barney & Clark, 2007). According to RBV, a firm's competitive advantage and financial performance are driven by its valuable, rare, inimitable, and non-substitutable resources (Wernerfelt, 1984). Banks that employ appropriate strategies attain high levels of financial stability.

1.2 Statement of the Problem

Commercial banks in Uganda strive to achieve targeted financial performance levels through strategies that focus on the effectiveness and efficiency of financial operations (FSD Uganda, 2020). To improve financial performance, financial institutions have put a lot of attention on effective management of business and business relationships as well as financial skills. However, regardless of these efforts, the financial performance of commercial banks has continued to stagnate and in some cases decline (BOU Financial Sector Report, 2021). If this continues that way, likely consequences such as financial instability, poor reputation and increased costs associated with labour turnover of key management staff as well disruption in bank operations may occur. The poor performance of commercial banks could be attributed to lack of intellectual capital and operational resilience. Although, previous studies have highlighted intellectual capital and managerial competence as some of the factors that determine financial performance in financial institutions (Xu & Liu, 2020; Soewarno & Tjahjadi, 2020; Rajabalizadeh. & Oradi, 2022), it is not clear whether these factors could explain the phenomena in commercial banks in Uganda given the fact that the majority of the studies have been conducted on financial institutions in developed economies. It is upon this background that the study seeks to establish the relationship among intellectual capital, operational resilience and financial performance of commercial banks in the central region of Uganda.

1.3 Purpose of the Study

The purpose of the study was to examine the relationship between intellectual capital, operational resilience and financial performance of commercial banks in the central region of Uganda.

1.4 Objectives of the Study

- i) To examine the relationship between intellectual capital and the financial performance of commercial banks in the central region of Uganda.
- ii) To examine the relationship between operational resilience and the financial performance of commercial banks in the central region of Uganda.
- iii) To examine the predictive power of intellectual capital and operational resilience on the financial performance of commercial banks in the central region of Uganda.

1.5 Research Questions

- i) What is the relationship between intellectual capital and the financial performance of commercial banks in the central region of Uganda?
- ii) What is the relationship between operational resilience and the financial performance of commercial banks in the central region of Uganda?
- iii) What is the predictive power of intellectual capital and operational resilience on the financial performance of commercial banks in the central region of Uganda?

1.6 Scope of the Study

1.6.1 Conceptual scope

This study focused mainly on examining the relationship between intellectual capital, operational resilience and financial performance of commercial banks in the central region of Uganda. Understanding concepts like intellectual capital, operational resilience and financial performance is the intention and focal point. Intellectual capital and operational resilience were the independent variables while financial performance was the dependent variable. Intellectual capital was measured by human capital efficiency, structural capital efficiency and relation capital efficiency; operational resilience entailed slack resources, recoverability, disruption

absorption, operational efficiency and operational disruption while financial performance was determined by profitability, liquidity and capital adequacy.

1.6.2 Geographical Scope

The study was carried out at the headquarters of commercial banks in the central region of Uganda where Kampala city is the chief town.

1.6.3 Time scope

Data for this study was collected between September and October 2023 giving a period of two months. This was dictated by the cross-sectional research design applied in this research, which gathers data at a particular point in time. Literature to facilitate the study ranged from the period of 2000 to 2020 except for theoretical studies that have earlier dates.

1.7 Operational definition of key terms

Financial performance: In this study, financial performance looked at how a bank uses assets from operations to generate revenue (BOU).

Intellectual capital: According to this study, intellectual capital has been defined as the difference between a firm's market value and the cost of replacing its assets (Akpınar & Akdemir, 1999).

Operational resilience: In this study operational resilience is defined as a Commercial bank's ability to respond to, recover and absorb changes and to return to balance after experiencing a temporary disturbance (Irawan, Prabowo, Kuncoro, & Thoha, 2021).

1.8 Significance of the Study

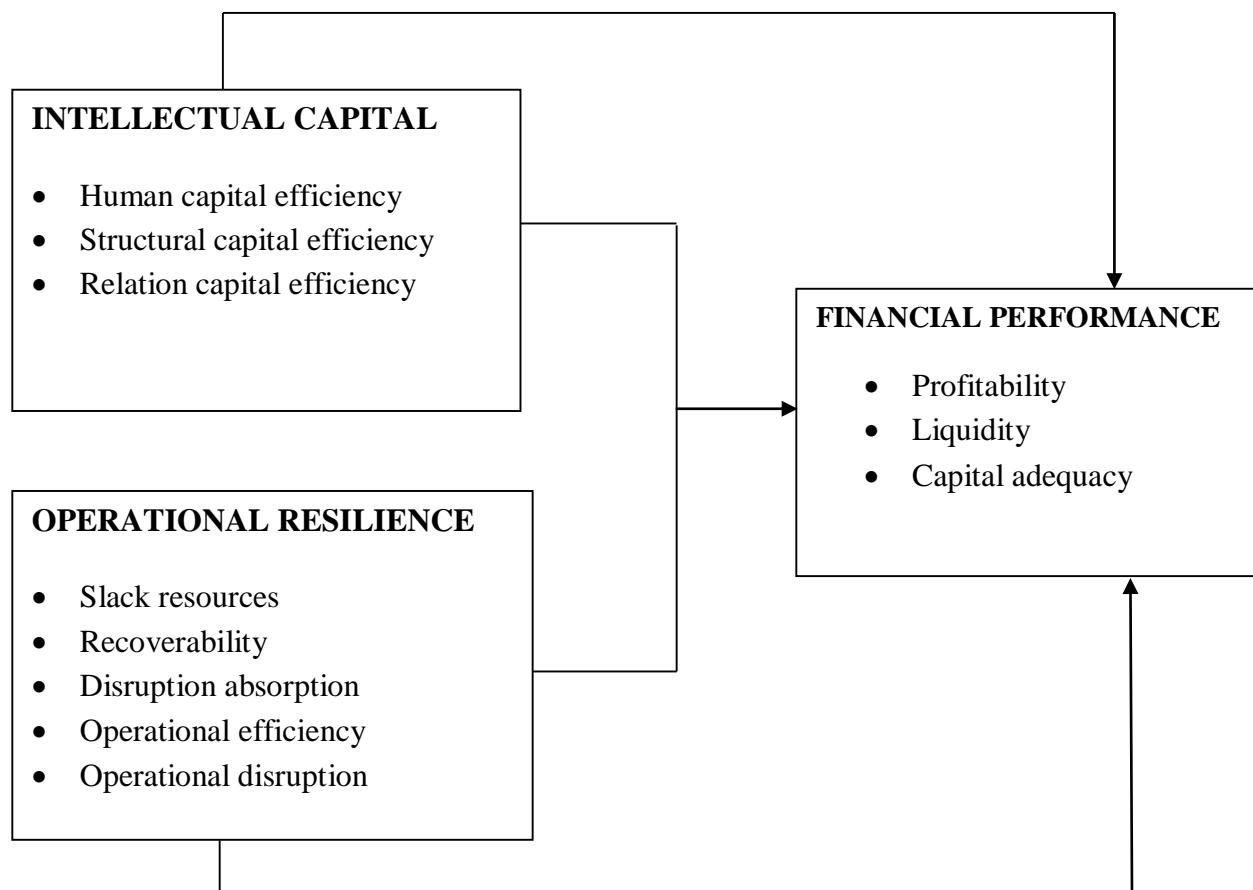
- i) Firstly, conducting this study contributes to the researcher obtaining a Master's degree in Business Administration, as the research is a partial fulfilment of academic requirements.

- ii) The study contributed to the growing body of literature on intellectual capital, operational resilience and financial performance of commercial banks in Uganda.
- iii) The study results enhance the financial sector key players' ability to develop the necessary strategies to improve and strengthen their financial performance through intellectual capital and operational resilience programs.
- iv) The study enhances the development and strengthening of the existing policies and regulations in the financial sector by the financial government regulators like Bank of Uganda and the Ministry of Finance and Economic Development.
- v) The study contributes to helping financial institutions to strengthen their operational priorities as a result of the enactment of intellectual capital and operational resilience strategies to promote financial performance in the different institutions.

1.9 Conceptual Framework

The framework shows the different determinants of financial performance in commercial banks. The model shown in the figure below reflects the relationship between intellectual capital, operational resilience and financial performance. Intellectual capital and operational resilience are principle in determining financial performance.

Figure 1



Source: Adopted and modified from Petty & Guthrie 2004; Wang & Chang, 2005; Heng-Chiang & Chia-wen, 2007; Wieland, Marcus & Wallenburg, 2012; Brandon-Jones et al., 2014; Ledgerwood, 2000

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this section, views of other scholars and researchers in line with intellectual capital, operational resilience and financial performance are presented. The chapter details the theoretical review, while the rest of the review was done under each specific objective and study variable.

2.1.1 Theoretical Review

The study is underpinned by the Resource-Based View (RBV) theory. According to RBV, a firm's competitive advantage and financial performance are driven by its valuable, rare, inimitable, and non-substitutable resources (Wernerfelt, 1984). Banks possess intellectual capital in the form of knowledge, expertise, and information systems. Banks with strong intellectual capital can make more informed lending decisions, effectively manage risk, and identify profitable investment opportunities, leading to better financial performance. Likewise, banks have access to financial capital, such as deposits, equity, and borrowing capabilities. Banks with a strong capital base can support lending activities, expand operations, and withstand economic downturns more effectively (Conner, 1991). On the other hand, a strong brand and reputation are valuable resources for banks. Banks with a positive reputation for integrity, customer service, and financial stability can enjoy a competitive advantage, leading to higher customer loyalty, increased market share, and improved financial performance. According to Barney and Clark (2007), banks have extensive networks and relationships with customers, businesses, regulators, and other stakeholders. Banks that effectively leverage their network and relationships can expand their customer base, offer a wider range of products and services, and generate additional revenue, contributing to improved financial performance. Grant (1991) showed that banks

heavily rely on technology and infrastructure to support their operations. Banks with superior technological capabilities can streamline processes, reduce costs, and offer innovative products and services, leading to improved financial performance. Likewise, the knowledge, skills, and capabilities of bank employees are critical resources. By leveraging and effectively managing these unique resources and capabilities, banks can create competitive advantages that translate into improved financial performance.

2.2 Intellectual Capital and Financial Performance

In order for commercial banks to withstand competitive pressure and enhance their position in the market, competitive strategies are always employed (Wambaka & Adegbuyi, 2021). Kamukama, Ahiauzu and Ntayi (2010) assert that intellectual capital plays a critical role in shaping the financial performance of commercial banks. Regarding human capital, Kamukama, Ahiauzu and Ntayi (2011) showed that the knowledge, skills, and expertise of employees within a commercial bank contribute to its intellectual capital. Highly skilled and knowledgeable employees can provide superior customer service, develop innovative products and services, and make sound financial decisions. This, in turn, can lead to increased customer satisfaction, customer loyalty, and revenue growth, positively impacting the bank's financial performance. On the other hand, Adegbayibi (2021) affirmed that effective knowledge management practices enable commercial banks to capture, organize, and leverage the knowledge and expertise of their employees. By facilitating knowledge sharing, banks can improve operational efficiency, enhance risk management capabilities, and promote innovation (Ahmad & Ahmed, 2016). Knowledge management initiatives can result in cost savings, better risk management, and improved financial performance.

According to Ahmad and Bin Mohammad (2019), intellectual capital is also reflected in the information systems and technology infrastructure of commercial banks. Advanced technological capabilities, such as robust data analytics tools, automation of processes, and digital banking platforms, can enhance operational efficiency, reduce costs, and improve customer experience (Ahmed, Guozhu, Mubarik, Khan & Khan, 2019). These factors can positively impact financial performance by increasing revenue, reducing operational expenses, and attracting tech-savvy customers. In terms of intellectual property, Amin, Usman, Sohail and Aslam (2018) showed that commercial banks may possess intellectual property in the form of proprietary algorithms, software systems, patents, trademarks, and trade secrets. Intellectual property rights can provide a competitive advantage and generate additional revenue streams through licensing or commercialization. Intellectual property can enhance a bank's financial performance by creating barriers to entry for competitors and increasing the value of the bank's offerings.

Similarly, Asif, Ting and Kweh (2020) revealed that relational capital which includes the relationships and trust built with customers, is a vital component of intellectual capital. Strong customer relationships lead to increased customer loyalty, repeat business, and positive word-of-mouth referrals. This can result in higher customer acquisition and retention rates, increased revenue, and improved financial performance for commercial banks. According to Bayraktaroglu, Calisir and Baskak (2019), intellectual capital also influences a commercial bank's brand reputation. A strong brand built on trust, credibility, and expertise can attract new customers, retain existing customers, and command premium pricing for products and services. A positive brand reputation can result in increased market share, improved profitability, and enhanced financial performance. On the other hand, Gupta, Goel and Bhatia (2020) showed that intellectual capital fosters innovation and adaptability within commercial banks. Banks that

encourage a culture of innovation, invest in research and development, and adapt to changing customer needs and market trends can gain a competitive advantage.

Innovation and adaptability can lead to the introduction of new products and services, improved operational efficiency, and enhanced financial performance (Ahmed, et al., 2019). Overall, intellectual capital influences the financial performance of commercial banks by enabling effective human capital management, knowledge sharing, technological advancements, customer relationship management, brand reputation, and innovation. By leveraging intellectual capital effectively, commercial banks can achieve sustainable growth, profitability, and long-term success in a competitive banking landscape.

2.3 Operational Resilience and Financial Performance

Operational resilience practices help commercial banks identify and mitigate operational risks, including those related to technology, cybersecurity, fraud, and natural disasters (Birkie, Trucco & Campos, 2017). By proactively identifying and managing these risks, banks can minimize the financial impact of disruptions, such as financial losses, reputational damage, and regulatory penalties. Puchkova, McFarlane, Srinivasan and Thorne (2020) showed that effective risk mitigation improves financial performance by preserving assets, reducing costs associated with remediation, and maintaining customer trust. Regarding continuity of operations, Lelièvre, Radtke, Rohr and Westinner (2019) affirmed that operational resilience ensures the continuity of critical operations and services, even in the face of disruptions. By implementing robust business continuity and disaster recovery plans, banks can minimize downtime and maintain service availability. Uninterrupted operations contribute to better financial performance by preventing revenue loss, avoiding customer churn, and preserving market share (Ruiz-Martin, López-Paredes & Wainer, 2018).

On the other hand, McEwen, Psych and Boyd (2018) showed that commercial banks with strong operational resilience build customer confidence and trust. Customers value banks that can handle disruptions effectively, ensuring the security and availability of their financial services. Increased customer confidence leads to higher customer retention rates, increased deposits, and expanded business relationships (Tognazzo, Gubitta & Favaron, 2016). Strong customer trust positively impacts the bank's reputation, market standing, and overall financial performance. Regarding regulatory compliance, Ali, Gölgeci and Arslan (2023) showed that operational resilience is closely linked to regulatory compliance requirements imposed on commercial banks. Regulators expect banks to demonstrate resilience in their operations to protect customers, ensure stability, and promote financial integrity (Andersson, Cäker, Tengblad and Wickelgren, 2019). Compliance with regulatory requirements avoids fines, penalties, and reputational damage, thereby supporting financial performance. According to Dittfeld, van Donk and van Huet (2022), operational resilience practices often involve streamlining processes, optimizing resource allocation, and implementing efficient systems. By improving operational efficiency, banks can reduce costs associated with redundancies, inefficiencies, and operational disruptions. Cost efficiency contributes to better financial performance by increasing profitability, enhancing cost-income ratios, and improving return on investment.

In terms of competitive advantage, Chowdhury, Quaddus and Chowdhury (2023) were of the view that operational resilience can serve as a competitive differentiator for commercial banks. Banks that demonstrate a higher level of resilience are better equipped to handle disruptions, maintain service levels, and meet customer needs, even in challenging times (Gerschberger, Ellis & Gerschberger, 2023). This can attract new customers, enhance customer loyalty, and increase market share, positively impacting financial performance. On the other hand, effective

operational resilience contributes to a positive reputation for commercial banks. Banks known for their ability to manage and recover from disruptions are perceived as reliable and trustworthy (Ruiz-Martin, et al., 2018). A positive reputation helps attract customers, foster business relationships, and support revenue growth, ultimately improving financial performance. In line, Tognazzo, et al., (2016) argue that operational resilience influences a bank's risk appetite and business strategy. Banks with a strong focus on operational resilience are more likely to adopt risk-aware decision-making processes, robust risk management frameworks, and resilient business models. A well-aligned risk appetite and business strategy contribute to sustained financial performance by ensuring effective risk management and strategic decision-making. In summary, operational resilience is a critical factor in determining the financial performance of commercial banks in Uganda. By effectively managing operational risks, ensuring business continuity, building customer trust, complying with regulations, optimizing costs, managing reputation, and leveraging competitive advantages, banks can achieve improved financial performance and maintain their competitive position in the Ugandan banking industry.

2.4 Intellectual Capital, Operational Resilience and Financial Performance

According to Hamdan (2018), the interplay between intellectual capital, operational resilience and financial performance in commercial banks is crucial for long-term success. Poh, Kilicman & Ibrahim (2018) showed that intellectual capital encompasses the knowledge, expertise and intangible assets within a commercial bank. It includes human capital (skills and capabilities of employees), structural capital (systems, processes and intellectual property) and relational capital (customer relationships and brand reputation). According to Birkie, et al., (2017), well-trained and knowledgeable employees contribute to operational resilience by effectively managing risks, responding to disruptions, and ensuring continuity of critical operations. Whereas, Sardo,

Serrasqueiro and Alves (2018) revealed that intellectual capital enhances financial performance by driving innovation, improving customer service, and making informed decisions that lead to revenue growth and cost optimization. Regarding structural capital, Xu and Li (2019) showed that effective knowledge management practices and robust information systems support operational resilience by facilitating knowledge sharing, efficient processes, and effective risk management.

Therefore, intellectual capital in this domain enhances financial performance by increasing operational efficiency, reducing costs, and driving innovation. Additionally, strong customer relationships and a positive brand reputation contribute to operational resilience by fostering customer loyalty, trust, and confidence (Xu & Liu, 2020). Intellectual capital in the form of customer knowledge, market insights, and brand equity enhances financial performance through increased customer retention, cross-selling opportunities, and a competitive advantage in the market. In line, Puchkova, et al., (2020) showed that operational resilience which encompasses risk management, business continuity planning and response capabilities influences the financial performance of banks. Further showing that effective operational resilience practices minimize operational risks, such as technology failures, cyber threats, and operational disruptions. By identifying, assessing, and mitigating these risks, banks can reduce the financial impact of disruptions, safeguard assets, and maintain stability, thereby enhancing financial performance (Kaawaase, Bananuka, Kwizina & Nabaweesi, 2019).

According to Andersson, et al., (2019), operational resilience ensures the continuity of critical operations, even during disruptions. By having robust business continuity plans and response mechanisms, banks can minimize downtime, protect customer relationships, and prevent revenue losses (Essuman, et al., 2020). Uninterrupted operations contribute to better financial

performance and customer satisfaction. In support, Ali, et al., (2023) showed that operational resilience practices often lead to increased cost efficiency by streamlining processes, optimizing resources, and reducing the impact of disruptions. Improved cost efficiency positively affects financial performance by reducing operational expenses, improving profitability, and maximizing return on investment. Therefore, intellectual capital and operational resilience have a direct effect on the financial performance of commercial banks. In support, Xu and Wang (2018) revealed that intellectual capital enhances financial performance by driving innovation, customer satisfaction, and market differentiation, which ultimately lead to increased revenue and market share. Whereas, operational resilience practices, including risk mitigation and cost efficiency, directly impact financial performance by reducing operational expenses, minimizing losses from disruptions, and improving cost-income ratios.

According to Kaawaase, et al., (2019), intellectual capital and operational resilience contribute to a competitive advantage, enabling banks to attract customers, retain market share, and outperform competitors, thereby positively impacting financial performance. In summary, intellectual capital and operational resilience are closely intertwined and significantly influence the financial performance of commercial banks. A strong intellectual capital base drives innovation, customer relationships, and efficiency, while operational resilience ensures continuity, risk mitigation, and cost optimization. Together, they contribute to sustained financial performance and competitiveness in the banking industry.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methods and instruments used in conducting the research. These include research design, study population, sampling design and size, data collection methods, data collection instruments, validity and reliability, data analysis and limitations.

3.2 Research Design

The research study adopted a quantitative research design using a cross-sectional survey approach. The cross-sectional design was considered appropriate in this research study because the researcher intended to investigate financial performance at a point in time while the quantitative research design enabled the studying of the relationship among the study variables.

3.3 Study Population

The study population focused on 28 Supervised Commercial Banks in Uganda (BOU, 2020). According to the Quarterly Financial Stability Review (2020), commercial banks are among the financial institutions that have consistently registered financial performance dismal, a reason why the current study focused on the banks. The commercial banks were considered as the unit of analysis. To avoid biased responses, the unit of inquiry constituted three departmental heads, branch managers and a general manager in the selected banks. The departmental heads included; the head of credit, head of operations and head of finance whereas, the branch managers included three bank branches with the highest clientele base in the central region of Uganda where the majority have headquarters in the Kampala district.

3.4 Sample Size and Sampling Techniques

The sample size of 24 banks was selected based on Krejcie and Morgan (1970) table. For each bank, the head of credit, head of operations, head of finance, 3 branch managers and a general manager were selected. The unit of analysis were banks while the unit of inquiry included the head of credit, head of operations, head of finance, branch managers and general manager giving a total of 168 respondents. Purposive sampling was used to select the head of credit, head of operations, head of finance, branch managers and general manager, whereas, simple random sampling was used to select the banks. A sampling frame comprising lists of licensed commercial banks in Uganda was obtained from Bank of Uganda. The names of the banks and assigned numbers were written on small papers and put in a container (rotary method). The papers were selected randomly from the container based on a corresponding sample size of the identified sample size from the sampling determination table. The responses from the banks were provided by the head of credit, head of operations, head of finance, branch managers and general manager of the selected banks using purposive sampling.

3.5 Data Sources and Data Collection Instrument

The researcher used primary data which was collected directly from the selected commercial banks using the questionnaire survey method. These respondents were contacted at commercial banks.

3.5.1 Questionnaire

The researcher used a structured self-administered questionnaire covering all the variables under the study and following systematic and established academic procedures as outlined under ethical considerations below. The questionnaire was used in light of the fact that a lot of data would be gathered in a short time since the respondents were able to read and comprehend the

items (Bill, 2011). The main mode of administration of the questionnaire was directly delivered where the researcher interacted with the respondents face to face. For this study, the researcher adopted a 5-point Likert scale ranging from 1(Strongly disagree) to 5(strongly agree) where respondents were asked to indicate their level of agreement with given statements/questions. Responses were analysed with quantitative methods. Please find the attached in Appendix 1

3.6 Measurement of the Variables

Table 3.6: Measurement of the Variables

Study Variables	Dimensions	Scale	Author(s)
Intellectual capital	<ul style="list-style-type: none"> • Human capital efficiency • Structural capital efficiency • Relation capital efficiency 	5-point scale	Petty & Guthrie 2004; Wang & Chang, 2005; Heng-Chiang & Chia-wen, 2007
Operational resilience	<ul style="list-style-type: none"> • Slack resources • Recoverability • Disruption absorption • Operational efficiency • Operational disruption 	5-point scale	Wieland, Marcus & Wallenburg, 2012; Brandon-Jones et al., 2014
Financial performance	<ul style="list-style-type: none"> • Profitability • Liquidity • Capital adequacy 	5-point scale	Ledger Wood, 2000

Source: Literature Review

Key: 5-point Likert scale ranging from (1) strongly disagree, 2-disagree, 3-not sure, 4-agree and 5-strongly agree.

3.7 Data Collection Procedure

An introduction letter was obtained from MUBS. This was used by the researcher and research assistants and it was shown to different commercial banks. After obtaining the permission, the researcher proceeded with data collection using questionnaires.

3.8 Reliability and Validity of Research Instruments

A closed questionnaire was developed in harmony with the guidelines specified by Sekaran (2000). The validity of the instrument was obtained using two methods, namely; expert judgment and Content Validity Index (CVI) computation. Expert judgment involved submitting the questionnaire designed by the researcher to people who are knowledgeable in the area of accounting and finance. The comments arose after the review was analysed, and accordingly, the questionnaire was adjusted to fit the advice. Designing questions in a Yes/No format for experts to express whether each question within the data collection instruments measures the construct in question and captures the issues to be measured attained Content Validity Index (CVI) determination. Amin (2005) highlights that for a questionnaire to be considered valid, a CVI of 0.7 (70%) or better should be obtained.

Furthermore, the researcher used the Cronbach Alpha Coefficient to measure the internal consistency and relevancy of the questionnaire. A minimum acceptable consistency coefficient of 0.7 and above was obtained. Accordingly, if the resultant coefficient is found to be greater than or equal to 0.7, the research instrument was considered reliable (Gliem & Gliem, 2003).

Table 3.8: Reliability and Validity

	Number of items	Cronbach's Alpha	CVI
Intellectual Capital	6	0.735	0.81
Operational resilience	13	0.767	0.765
Financial Performance	13	0.831	0.83

Source: Primary Data (2023)

From Table 3.8 above, the results from the validity and reliability analysis show that the research instrument was valid and reliable as per the computed CVI and Cronbach's alpha scores for the

questions on constructs measuring intellectual capital, operational resilience and financial performance.

Thus, the questionnaire was deemed valid and reliable because all the computed values were greater than 0.7, which is the minimum value, recommended by Nunnally (1978) and Amin (2005).

3.9 Exploratory factor analysis

Exploratory factor analysis (EFA) through principal component analysis (PCA) and common factor analysis (CFA) was adopted to analyze interrelationships among questionnaire items measuring the manifest variables (Hair et al., 2018). EFA aids in explaining these variables concerning the common underlying factors (dimensions). Moreover, EFA aims at condensing the information entailed in the original variables into smaller sets of factors with minimal information loss (Hair et al., 2018: 124). Therefore, EFA through PCA was employed in this study to establish factors that correlated and explained common variance among study variables. EFA results are presented in the table in Appendix II

3.10 Data Analysis and Presentation

Data from the field was compiled, sorted, edited and coded to have the required quality, accuracy and completeness. The data was then entered into the computer using the Statistical Package for Social Sciences (SPSS V22) for analysis. Data was also aggregated from individual level to firm level. This was done because the unit of analysis was commercial banks and study was on financial performance of commercial banks not individuals. During the analysis of the data, descriptive statistics, item means and factor analysis were used to examine intellectual capital, operational resilience and financial performance of commercial banks. Correlation analysis was used to determine the degree of relationship between the study objectives whereas, multiple

regression was used to present the predictive power of intellectual capital and operational resilience on the financial performance of commercial banks in Uganda.

3.11 Limitations of the Study

- i) Bias from the respondents to simply fill out the questionnaires to please the researcher. The researcher conducted a face-to-face interaction to clarify the purpose and objective of the study.
- ii) The scales in the questionnaire were adopted from other studies conducted in different environments from that of Uganda, which was likely to cause bias. The research indulged experts in the fields of financial services accessibility, financial literacy and business survival of Commercial banks in Uganda to moderate the scales adapted to fit the local environment.
- iii) Fear of giving confidential information as viewed by the organization they work for. Here the research assured them of utmost good faith with supporting documents for undertaking the study.
- iv) The way the questionnaire is designed might limit additional responses. This was mitigated by prompting the respondents to give more information.

3.11 Ethical Considerations

The researcher used an introduction letter from the University which was presented to the Management of the respective commercial banks to seek permission and consent. The respondents were informed of the researcher's request to participate in the activity at an early date and when they agreed, the researcher interviewed the respondents.

Objectivity during the research was emphasized to eliminate personal biases and opinions. This was done by using generalized questions in the research instruments.

The anonymity of the respondents was taken care of during the study through the omission of their names on the questionnaires and the use of codes for the individuals who were interviewed, to avoid victimization. The respondents were informed of the same.

CHAPTER FOUR

PRESENTATION, INTERPRETATION & DISCUSSION OF FINDINGS

4.0 Introduction

This chapter shows data analysis, presentation and interpretation of the study findings following the study objectives. This chapter starts with response rate, demographic characteristics of respondents, correlation, regression and then findings representing the study objectives. The presentation is guided by the research objectives and the statistics are thus a reflection of the respondent's views on the research questions. The descriptive statistics are presented using percentages, and frequencies organized in tables. Zero-order Pearson's correlation was used to estimate the relationship between the independent and dependent variables. Multiple regression analysis was employed to estimate the effect of the independent variables on the dependent variable.

4.1 Response Rate

The research distributed questionnaire to 24 Banks. Out of the 24 commercial Banks, 22 of them responded. This made it possible to yield a response rate of 92%. These questionnaires were usable for further analyses. This gave a response rate of 91%. According to Mugenda and Mugenda (2003). A response rate of 70% and above is very good for data analysis. Besides, this response rate gave a substantial number of questionnaires that are fit to be used in the SPSS to provide reliable results as suggested by Field (2017).

4.2 Descriptive statistics of the sample

4.2.1 Demographic Characteristics of Respondents

This section presents the respondents and firm demographic characteristics of; gender, age, employment tenure, level of education, position, firm ownership, years of operations and number of employees.

4.3.1.1 Gender

The gender of the respondents is shown in Table 4.3.1.1 below;

Table 4.3.1.1 Gender of the Respondents

	Frequency	Percent
Male	80	52.3
Female	73	47.7
Total	153	100.0

Source: primary data (2023)

The majority of the respondents were male at 52.3% while 47.7% were female. This demography implies that both male and female persons have equal employment opportunities in the banking sector in Uganda.

4.3.1.2 Age of the Respondents

The age of the respondents is shown in Table 4.3.1.2 below;

Table 4.3.1.2 Age of the Respondents

	Frequency	Percent
26-30Years	14	9.2
31-35Years	35	22.9
36-40Years	38	24.8
41 and above	66	43.1
Total	153	100.0

Source: primary data (2023)

The majority of the respondents were in the age range of 41 years and above. This age group is characterized by accumulated significant work experience and expertise. The results also showed that a significant number of the respondents were in the age ranges of 36- 40 years (24.8%) and 31-35 years (22.9). The least of respondents were in the age range of 26-30 years at 9.2%. This implies that in the commercial banking sector in Uganda, fewer people have graduated in the past 5- 7 years. Entry-level positions in the banks are at the bachelor's level, where the average completion age is at 25 years.

4.3.1.3 Tenure of Employment

The respondents' tenure of employment is indicated in the table below.

Table 4.3.1.3 Tenure of Employment

	Frequency	Percent
Below 3 years	24	15.7
3-4 years	29	19.0
5-10 years	64	41.8
Above 10 years	36	23.5
Total	153	100.0

Source: primary data (2023)

The majority at 41.8 of the respondents have been in the commercial banking sector for a period of 5-10 years, followed by Above 10 years at 23.5 and between 3-4 years at 19%. This implies that the respondents had substantial experience and banking knowledge. Hence, they were in a position to answer the questionnaire. The least of the respondents had an employment tenure of below 3 years. This resonates with the age of respondents who are new in the banking sector as being the least of the respondents in this study.

4.3.1.4 Education Status of the Respondents

The education status of the study respondents is shown in Table 4.3.1.4 below

Table 4.3.1.4 Education Status of the Respondents

	Frequency	Percent
Diploma	1	0.7
Bachelor's degree	73	47.7
Master's degree	66	43.1
Others	13	8.5
Total	153	100.0

Source: primary data (2023)

The majority of the respondents were degree holders at 47.7%, followed by master's degree holders at 43.1%. This resonates with the practice in commercial banks whereby the entry-level position is a bachelor's degree. It also implies that many of the bank staff upgrade to master level in due course. Only one with a percent representation of 0.7 % had a diploma while 13 of the respondents who indicated to have other qualifications were at 8.5%.

4.3.1.5 Position held

The number of years in the organization is shown in Table 4.3.1.5 below;

Table 4.3.1.5 How long have you been serving in this organization?

	Frequency	Percent
Head Finance	21	13.7
Head credit	19	12.4
Head operations	22	14.4
General manager	19	12.4
Branch Manager	72	47.1
Total	153	100.0

Source: primary data (2023)

The majority of the respondents were branch managers at 47.1% of the sample, followed by heads of operations, heads of credit and general managers at 14.4%, 12.4 % and 12.4

respectively of the respondents. The heads of finance were at 13.7% of the sample. The distribution of the responses is in line with the intended sample respondents. This study intended to pick responses from one head of finance, head of credit, head of operations, one general manager and three branch managers and largely, we gathered the responses as such.

4.3.1.6 Nature of firm ownership

The nature of firm ownership is given in the table below;

Table 4.3.1.6 Nature of ownership

	Frequency	Percent
Foreign Owned	17	77.3
Locally Owned	5	22.7
Total	22	100.0

Source: primary data (2023)

The majority of the respondents 77.3% of the institution were a foreign-owned commercial banksI while 22.7% were locally-owned banks. This statistic resonates with Uganda Institute of Banking report (2022) which indicates that 82% of the commercial banks in Uganda are foreign-owned.

4.3.1.7 Years of Operation

The years of operation are given in Table 4.3.1.7 below;

Table 4.3.1.7 Years of Operation

	Frequency	Percent
1-10 years	1	4.5
11-20 years	4	18.1
21-30 years	5	22.7
31 years and above	12	54.5
Total	22	100.0

Source: primary data (2023)

The majority of the commercial banks 54.5% indicated that they have been in operation for 31 years and above while 22.7% of the commercial banks indicated that, they had been in operation for 11-20 years. The demographics also showed that 18.1% of the commercial banks had been in operation for 21- 30 years. Lastly, 4.5 % of the commercial banks indicated they had been in operation for a period between 1-10 years. Overall, these statistics imply that the commercial banks have stood the test of time regarding financial performance and were fit for the study.

4.3.1.8 Number of Employees

The number of employees in the firms is given in the table below;

Table 4.3.1.8 Number of employees

	Frequency	Percent
Less than 100	0	0.0
100-500	5	22.7
600-1000	11	50.0
1001 and above	6	27.3
Total	22	100.0

Source: primary data (2023)

The majority of the commercial banks indicated that they have between 600-1000 (50%) number of employees, followed by 27.3% with 1001 and above and 22.7% with 100-500 employees. There was no commercial bank that reported to have less than 100 employees.

4.4 Correlation analysis

Pearson’s Correlation coefficient was used to determine the degree of association between the study variables. The results of the correlation tests are presented in Table 4.4 below.

Table 4.4: Correlation results

ITEMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Human Capital (1)	1													
Relational Capital (2)	.513**	1												
Structural Capital (3)	.384**	.332**	1											
Intellectual Capital (4)	.880**	.823**	.583**	1										
Disruption Absorption (5)	.392**	.273**	.210**	.392**	1									
Operational disruption (6)	-.494**	-.462**	-.392**	-.575**	-.353**	1								
Operational Efficiency (7)	.535**	.497**	.342**	.660**	.547**	-.644**	1							
Recoverability (8)	.405**	.453**	.335**	.509**	.427**	-.367**	.483**	1						
Slack Resources (9)	.450**	.376**	.336**	.498**	.463**	-.336**	.528**	.478**	1					
Operational Resilience (10)	.565**	.444**	.311**	.589**	.655**	-.306**	.837**	.649**	.778**	1				
Profitability (11)	.390**	.208**	.258**	.370**	.307**	-.243**	.489**	.360**	.350**	.505**	1			
Liquidity (12)	.382**	.322**	.273**	.422**	.326**	-.244**	.507**	.459**	.375**	.550**	.614**	1		
Capital Adequacy (13)	.396**	.315**	.279**	.428**	.401**	-.306**	.517**	.532**	.450**	.585**	.520**	.625**	1	
Financial Performance (14)	.457**	.332**	.317**	.478**	.403**	-.309**	.592**	.529**	.459**	.641**	.832**	.887**	.834**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Source; primary data (2023)

4.4.1 The relationship between Intellectual Capital and Financial Performance of commercial banks in the central region of Uganda.

Results from Table 4.4 above showed that there was a positive and significant relationship between intellectual capital and the financial performance of commercial banks in the central region of Uganda ($r=0.478$, $p<.01$). This implies that any positive change in intellectual capital is associated with a positive change in the financial performance of commercial banks. In addition, intellectual capital dimensions of human capital ($r=0.457$, $p<.01$) relational capital ($r=0.332$, $p<.01$) and structural capital ($r=0.317$, $p<.01$) have a positive relationship with the financial performance of commercial banks in the central region of Uganda.

4.4.2 The relationship between Operational resilience and Financial Performance of commercial banks in the central region of Uganda.

Results from Table 4.4 above showed that there was a positive and significant relationship between operational resilience the and financial performance of commercial banks ($r=0.641$, $p<.01$). This means that any positive change in operational resilience is associated with a positive change in Financial Performance of commercial banks in central region of Uganda. Additionally, all the dimensions of budgeting practices of operational resilience of slack resources ($r=0.459$, $p<.01$), recoverability ($r=0.529$, $p<.01$), operational efficiency ($r=0.592$, $p<.01$), disruption absorption ($r=0.403$, $p<.01$) have a positive and significant relationship with financial performance of commercial banks except for operational disruption ($r=-0.309$, $p<.01$), that had a negative significant correlation with financial performance of commercial banks.

4.5 Regression Analysis Results

Regression analysis was used to estimate the predictive power of intellectual capital and operational resilience on the financial performance of commercial banks in the central region of Uganda. This was done to determine the extent to which the independent variables impact

the dependent variable. That is, the percentage change in the dependent variable is accounted for by the changes in the independent variable.

Table 4.5 Multiple Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	23.288	2.950		7.894	.000
Intellectual Capital	.280	.140	.153	3.996	.009
Operational Resilience	.451	.063	.552	7.208	.000
Model Summary					
R	.653				
R Square	.427				
Adjusted R Square	.419				
F Change	45.821				
Sig. F Change	.000				
Durbin Watson	1.641				

a. Predictors: (Constant), Intellectual Capital, Operational Resilience

b. Dependent variable: Financial Performance

Source: Primary data (2023)

Regression analysis results in Table 4.5 shows that intellectual capital and operational resilience predicted up to 41.9% (Adjusted R = .419) of the observed change in financial performance of commercial banks in the central region of Uganda. The remaining 58.1% could be explained by other factors that were not examined in this study.

Operational resilience is seen to be the most significant predictor of the financial performance of commercial banks in the central region of Uganda. (Beta = 0.552, Sig = .000). This implies that a unit change in operational resilience contributes 0.552 change in the financial performance of commercial banks in the central region of Uganda. Intellectual Capital was found to have the least impact on financial performance in the model (Beta = 0.153, Sig = .009). This implies that as Intellectual Capital increases by one unit, the financial performance of commercial banks increases by 0.153 units.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS, CONCLUSIONS & RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of the results generated in chapter four. The chapter places the study's findings in the extant literature and delineates the study's contribution. Furthermore, Conclusions and recommendations on how intellectual capital and operational resilience influence the financial performance of commercial banks are advanced. The chapter winds by advancing areas for future research. The discussion is based on the study objectives.

5.2 Discussion of findings

This study was undertaken to establish the relationships between; intellectual capital and the financial performance of commercial banks; operational resilience and the financial performance of commercial banks; and the effect of intellectual capital and operational resilience on the financial performance of commercial banks in the central region of Uganda. This section discusses the study's findings and about existing and the contribution of the findings to extant literature.

5.2.1 Relationship between Intellectual Capital and Financial Performance of Commercial Banks.

The findings showed a positive and significant relationship between intellectual capital and the financial performance of commercial banks. This finding suggests that human capital, relational capital and structural capital significantly influence commercial banks' profitability, liquidity and capital adequacy. In particular, the findings imply that when bank employees have a high level of expertise, commercial banks are in position to realize growth in profits and have increased returns on investment.

Additionally, the findings suggest that when staff are highly motivated, commercial banks are in position to improve their gross profit margins. Also, when bank staff are a source of innovation, commercial banks are in position to develop products and services that boost liquidity, profitability and enable the banks to generate substantial reserves. Moreover, commercial banks that understand their stakeholders very well and have strong cooperation among themselves can realize greater profit margins, greater liquidity and can meet their obligations as and when they fall due. This helps to improve the financial health of the commercial banks.

These findings are in line with Neves and Proença (2021) who argued that organizations always achieve an increment in their financial performance whenever they pay attention to intellectual capital. They are also in agreement with (Iazzolino et al., 2018) who stated that maintaining good relationships with a firm's stakeholders eventually leads to an increase in financial performance since an organization gets an opportunity to maintain the existing customers it has over time who become repeat customers. According to Kamukama et al. (2010) assert that intellectual capital plays a critical role in shaping the financial performance of commercial banks. Regarding human capital, Kamukama et al. (2011) showed that the knowledge, skills, and expertise of employees within a commercial bank contribute to its intellectual capital.

When employees are highly skilled and knowledgeable employees can provide superior customer service, develop innovative products and services, and make sound financial decisions. This, in turn, can lead to increased customer satisfaction, customer loyalty, and revenue growth, positively impacting the bank's financial performance (Ahmad & Ahmed, 2016). Knowledge management initiatives can result in cost savings, better risk management, and improved financial performance. The findings further concur with Gupta et al. (2020) who argued that intellectual capital fosters innovation and adaptability within commercial

banks. Banks that encourage a culture of innovation, invest in research and development, and adapt to changing customer needs and market trends can gain a competitive advantage. Therefore, when commercial banks hinge on intellectual capital they can boost their financial performance.

The findings of this study are also in support of the resource based view theory in the sense that, Banks with strong intellectual capital can make more informed lending decisions, effectively manage risk, and identify profitable investment opportunities, leading to better financial performance as these provide competitive advantage to the bank. Equally, Banks with a strong capital base can support lending activities, expand operations, and withstand economic downturns more effectively (Conner, 1991)

5.2.2 Relationship between Operational Resilience and Financial Performance of Commercial Banks.

The findings revealed that operational resilience significantly and positively influences the financial performance of commercial banks in the central region of Uganda. This finding implies that slack resources, recoverability, operational efficiency and disruption absorption significantly and positively influence the financial performance of commercial banks in the central region of Uganda. These findings further suggest that when commercial banks have uncommitted resources that they can quickly utilize to finance new strategic initiatives, they are in position to meet their day-to-day obligations. Furthermore, commercial banks that have adequate resources available in the short run to fund their initiatives are liquid enough to fund short-run obligations as and when they fall due. Also, banks that have reduced costs and wastage are in a position to improve their profit margins. Similarly, when commercial banks are in a position to minimize their overheads and also reduce idle capacity, they can improve their profit margins, and Return on Investments (ROI). Besides, they improve their liquidity positions hence business sustainability. Moreover, the ability of commercial banks to

mobilize resources within a short notice leads to their ability to avoid liquidity constraints and build a capital base hence eventual profitability.

These findings are in agreement with extant studies that have found operational resilience to influence financial performance. For instance, the findings agree with Lelièvre et al. (2019) who emphasized that operational resilience guarantees the ongoing functionality of vital operations and services, even when faced with disturbances. The implementation of strong strategies for business continuity and disaster recovery by banks can reduce downtime and sustain service accessibility. Continuous operations play a significant role in enhancing financial performance by preventing loss of revenue, averting customer attrition, and safeguarding market share (Ruiz-Martin, López-Paredes & Wainer, 2018). Furthermore, the researcher concurs with Ruiz-Martin, et al. (2018) that Conversely, an efficient operational resilience strategy plays a role in enhancing the favorable image of commercial banks. Banks acknowledged that; for their capacity to effectively handle and bounce back from disruptions are seen as dependable and trustworthy. This positive image aids in attracting clients, nurturing business associations, and promoting revenue growth, ultimately bolstering financial performance.

Moreover, Tognazzo, et al. (2016) contend that operational resilience impacts a bank's tolerance for risk and its overall business approach. Banks that prioritize operational resilience are more inclined to embrace decision-making processes that are mindful of risks, robust frameworks for risk management, and resilient business models. A well-coordinated risk tolerance and business strategy contribute to consistent financial performance by ensuring efficient risk management and strategic decision-making. However, the findings revealed that operational disruption negatively influences the financial performance of commercial banks. This finding is in agreement with Dittfeld et al. (2022) who advised that

commercial banks can improve operational efficiency, by reducing costs associated with redundancies, inefficiencies, and operational disruptions.

The findings of this study concur with the resource based view theory in that, Banks with superior technological capabilities can streamline processes, reduce costs, and offer innovative products and services, leading to improved financial performance.

5.2.3 Predictive power of Intellectual Capital and Operational Resilience on Financial Performance of Commercial Banks

The study findings revealed that intellectual capital and operational resilience when combined significantly and positively influence the financial performance of commercial banks in the central region of Uganda. Overall, the results showed that when regressed together, intellectual capital and operational resilience explain up to 41.9% of the variations in the financial performance of commercial banks. However, the regression results revealed that operational resilience is a stronger predictor of the financial performance of commercial banks compared to intellectual capital. Nonetheless, both intellectual capital and operational resilience significantly and positively influence the financial performance of commercial banks in the central region of Uganda. These findings imply that there is an interplay between intellectual capital and operational resilience towards influencing the financial performance of commercial banks.

Therein, this study contributes to knowledge by showing how intellectual capital and operational resilience interplay to influence the financial performance of commercial banks in the Ugandan context. The findings suggest that human capital, relational capital and structural capital when combined with operational efficiency, recoverability, slack resources and disruption absorption commercial banks can significantly improve their profitability, liquidity and capital adequacy. The findings suggest that commercial banks can improve their financial performance through profitability, liquidity and capital adequacy when they

improve the expertise of their staff, motivate their staff and also encourage staff innovativeness. Furthermore, financial performance improves when commercial banks couple the foregoing aspects with having uncommitted resources, having adequate contingent resources, minimizing wastage of resources minimizing costs and overhead and having the ability to mobilize resources within a short time.

These findings are consistent with Hamdan (2018), who averred that achieving long-term success in commercial banks necessitates a harmonious relationship between intellectual capital, operational resilience and financial performance. Also, Poh, et al. (2018) highlighted that intellectual capital encompasses the knowledge, expertise, and intangible assets within a commercial bank, encompassing human capital (employee skills and capabilities), structural capital (systems, processes, and intellectual property), and relational capital (customer relationships and brand reputation). Supporting this view, Xu and Wang (2018) demonstrated that intellectual capital contributes to improved financial performance by stimulating innovation, enhancing customer satisfaction and setting the bank apart in the market, ultimately resulting in increased revenue and market share. Conversely, operational resilience practices, such as risk mitigation and cost efficiency, directly affect financial performance by reducing operational expenses, minimizing losses from disruptions, and enhancing cost-income ratios.

Additionally, Kaawaase et al. (2019) argued that both intellectual capital and operational resilience play vital roles in creating a competitive advantage for banks, enabling them to attract customers, maintain market share, and surpass competitors, consequently positively affecting financial performance. To sum up, intellectual capital and operational resilience are closely connected and exert significant influence on the financial performance of commercial banks.

The findings of this study are also concur with the resource based view theory it is illustrates that; knowledge, skills, and capabilities of bank employees are critical resources. By leveraging and effectively managing these unique resources and capabilities, banks can create competitive advantages that translate into improved financial performance.

5.3 Conclusions

The current study was hinged on three study objectives. Firstly, the study sought to establish the relationship between intellectual capital and the financial performance of commercial banks in the central region of Uganda. Secondly, the study sought to establish the relationship between operational resilience and the financial performance of commercial banks in the central region of Uganda. Thirdly, the study sought to establish the predictive power of intellectual capital and operational resilience on the financial performance of commercial banks in the central region of Uganda. The results revealed that there is a significant positive relationship between intellectual capital and the financial performance of commercial banks in the central region of Uganda. Also, the results revealed that there is a significant positive relationship between operational resilience and the financial performance of commercial banks in the central region of Uganda. Lastly, the results revealed that there is a significant positive influence of intellectual capital and operational resilience on the financial performance of commercial banks in the central region of Uganda. The results further showed operational resilience to have a stronger effect on financial performance compared to intellectual capital. The study findings contribute to the body of knowledge by showing that there is an interplay of human capital, relational capital, structural capital and slack resources, recoverability, disruptions absorption and operational efficiency towards influencing the financial performance of commercial banks in Uganda.

5.4 Recommendations

- i) Policies on intellectual capital and organizational resilience should be implemented to ensure that financial performance of commercial banks is improved.
- ii) Commercial banks should endeavor to retain experienced staff since the staff's experience has a positive bearing on their financial performance. In addition, they should build a motivated workforce and encourage the staff to innovate in ways that can improve their financial performance.
- iii) Commercial banks should maintain financial reserves (a form of slack resources) to cushion against unexpected expenses and enable operations to continue during challenging times.
- iv) Commercial banks should streamline their processes and eliminate redundancies to reduce operational costs, including personnel expenses, administrative overheads and other related expenditures to improve their profit margins and return on investments.

5.5 Areas for Further Research.

The current study considered a small sample. Therefore further studies can be conducted with a larger sample.

The current study was cross-sectional and quantitative in nature. Cross-sectional studies do not allow capturing changes in variables hence delimiting to infer causality. Also, the study could not capture deeper insights into the variables under study since it was quantitative. Therefore, future studies could adopt longitudinal designs and qualitative with mixed methods designs to triangulate findings.

This study focused on commercial banks in the central region of Uganda. This may deter the generalization of the study findings to a wider context. Thus, future studies could consider investigating all the commercial banks across the country.

This study investigated the predictive power of intellectual capital without considering whether these variables could mediate or moderate the relationship. Therefore, future studies could investigate whether operational resilience mediates the relationship between intellectual capital and financial performance. Correlation results indicated that intellectual capital and operational resilience are related, hence the possibility of mediation between them.

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APPENDIX I: QUESTIONNAIRE



MAKERERE UNIVERSITY

Dear Respondent,

I am **Andrew Senabulya**, a student at Makerere University pursuing a Master of Business Administration (MBA). I am researching on Intellectual Capital, Operational Resilience and Financial performance of Commercial Banks in the Central Region of Uganda. Given your unique experience and position in Uganda's financial sector, you have been chosen purposely for the study. Your response is therefore very instrumental to the success of my study. Kindly assist by answering the following questions as honestly as possible. The data sought shall be purely for research purposes and will therefore be treated with anonymity and utmost confidentiality.

SECTION A: Demographic Characteristics

Section I (a): Individual Characteristics

Kindly tick (✓) the appropriate answer option

01. Your gender

Male	Female
1	2

02. Your age bracket

26-30 yrs	31-35 yrs	36-40 yrs	41 yrs & above
1	2	3	4

03. Your tenure of employment

Below 3 yrs	3-4 yrs	5-10 yrs	Above 10 yrs
1	2	3	4

04. Level of education

Certificate	Diploma	Bachelor's degree	Master's degree	Others
1	2	3	4	5

05. Position held in the Institution

Head Finance	Head Credit	Head Operations	General manager	Branch manager
1	2	3	4	5

Section I (b): Organization Characteristics:

1. Ownership

Foreign-owned	Locally owned
1	2

2. Years of Operation

1-10 yrs	11-20 yrs	21-30 yrs	31 years & above
1	2	3	4

3. Number of Employees

Less than 100	100-500	600-1000	1001 above
1	2	3	4

Section B: Intellectual Capital

Please indicate the extent to which you agree or disagree with the statements below. You are requested to follow the following scale provided.

Scale: 1= strongly disagree; 2=disagree; 3=somehow disagree, 4=somehow agree, 5=A-agree and 5=SA-strongly agree

Human capital	SD	D	NS	A	SA
Bank staff have a high level of expertise.					
Staff are highly motivated in their work	1	2	3	4	5
Staff are highly skilled at their jobs	1	2	3	4	5
Staff are creative	1	2	3	4	5
Staff are highly trained in what they do.	1	2	3	4	5
Bank staff are talented.	1	2	3	4	5
Bank staff are a source of innovation	1	2	3	4	5
Structural capital	SD	D	NS	A	SA
The bank's information system supports business operations.	1	2	3	4	5
The bank tools facilitate cooperation between employees.	1	2	3	4	5
The bank has a great deal of useful knowledge in documents and databases.	1	2	3	4	5
Existing documents and solutions are easily accessible	1	2	3	4	5
The bank has numerous manuals that guide operations.	1	2	3	4	5
The bank has specific policies and guidelines to determine operations	1	2	3	4	5
Relation capital	SD	D	NS	A	SA
At the bank, staff collaborate to solve problems					
All key stakeholders understand each other very well.	1	2	3	4	5
Key stakeholders frequently collaborate to solve problems.	1	2	3	4	5
Cooperation between key stakeholders runs smoothly.	1	2	3	4	5
The bank values customer feedback.	1	2	3	4	5
The bank frequently conducts market surveys to understand customer needs.	1	2	3	4	5
Internal cooperation in the bank runs smoothly	1	2	3	4	5
Different units within the bank understand each other well.	1	2	3	4	5

Section C: Operational Resilience

You are requested to answer the following statements using the following scale;

Scale: 1= strongly disagree; 2=disagree; 3=somehow disagree, 4-somehow agree, 5=A-agree and 5=SA-strongly agree

Slack resource	SD	D	NS	A	SA
The bank has uncommitted resources that can quickly be used to fund new strategic initiatives	1	2	3	4	5
The bank usually has adequate resources available in the short run to fund its initiatives	1	2	3	4	5
We can obtain resources at short notice to support new strategic initiatives	1	2	3	4	5
We have substantial resources at the discretion of management for funding strategic initiatives	1	2	3	4	5
The bank has a reasonable amount of resources in reserve	1	2	3	4	5
Recoverability	SD	D	NS	A	SA
Whenever operations breakdown, it does not take long for us to restore normal operation	1	2	3	4	5
The bank reliably recovers to its normal operating state whenever operations breakdown	1	2	3	4	5
The bank easily recovers to its normal operating state whenever the operations breakdown	1	2	3	4	5
The bank effectively restores operations to normal quickly	1	2	3	4	5
The bank can resume operations within the shortest possible time in case of breakdowns	1	2	3	4	5
Disruption absorption	SD	D	NS	A	SA
The bank can carry out its regular functions whenever disruptive events occur	1	2	3	4	5
The bank grants staff much time to consider a reasonable response to disruptions	1	2	3	4	5
our bank can carry out its functions despite some damage done to its operations	1	2	3	4	5
Without much deviation, we can meet normal operational and market needs	1	2	3	4	5
Without adaptations being necessary, the bank performs well over a wide variety of possible scenarios	1	2	3	4	5
Our operations retain the same stable situation as they had before disruptions occurred for a long time	1	2	3	4	5
Operational efficiency	SD	D	NS	A	SA
The costs we incur in running our core operations have been declining	1	2	3	4	5
The volume of waste in processes that we record has been declining	1	2	3	4	5
The volume of material waste recorded at the bank has been reducing	1	2	3	4	5
overhead costs incurred by the bank have been reducing	1	2	3	4	5
The volume of idle capacity/resources the bank experiences have been declining	1	2	3	4	5
Operational disruption	SD	D	NS	A	SA
Unexpectedly, some staff leave their posts (quit their job)	1	2	3	4	5
Some suppliers fail to make deliveries	1	2	3	4	5
We experience system breakdowns	1	2	3	4	5
We experience service/product failures	1	2	3	4	5

We run out of cash for running day-to-day operations	1	2	3	4	5
We experience machine/technology downtime/failure	1	2	3	4	5
We experience process breakdowns	1	2	3	4	5

Section D: Financial performance

You are requested to answer the following statements using the following scale;

Scale: 1= strongly disagree; 2=disagree; 3=somehow disagree, 4-somehow agree, 5=A-agree and 5=SA-strongly agree

Profitability	SD	D	NS	A	SA
Overall, the bank's gross profit has grown in the past 5 years	1	2	3	4	5
The gross profit margin has been stable for the last 6 months	1	2	3	4	5
Our bank is highly profitable	1	2	3	4	5
The financial position of our bank has improved	1	2	3	4	5
Our profit margins have increased over the years	1	2	3	4	5
The profit margins of the bank have grown	1	2	3	4	5
The profits of the bank have been steadily increasing	1	2	3	4	5
The bank's return on investment has been growing over the years	1	2	3	4	5
The trend of earnings is properly monitored by the bank	1	2	3	4	5
Our bank has a high return on investment	1	2	3	4	5
The bank always transfers part of the net profits to reserves	1	2	3	4	5
The bank's level of profitability has been increasing	1	2	3	4	5
Liquidity	SD	D	NS	A	SA
Our company has enough cash to meet its obligations effectively	1	2	3	4	5
All our deficits are cleared in time	1	2	3	4	5
The bank's Return on Equity has increased for the past 5 years	1	2	3	4	5
The bank's asset base has greatly increased over time	1	2	3	4	5
Our net income has superseded operating costs for the last 5years	1	2	3	4	5
There is an increase in the total assets of the bank	1	2	3	4	5
The liquidity of the bank has improved	1	2	3	4	5
There is a well-set procedure for cash control and expenditure	1	2	3	4	5
There is a centralized cash control mechanism	1	2	3	4	5
Our bank can meet its obligations as and when they fall due	1	2	3	4	5
The bank's existing assets exceed total liabilities	1	2	3	4	5
The bank's financial state enables it to obtain credit	1	2	3	4	5
Our bank is viable	1	2	3	4	5
Capital adequacy	SD	D	NS	A	SA
The bank's capital level is sufficient for its risk profile	1	2	3	4	5
The bank's high market power has contributed to increased returns.	1	2	3	4	5
An adequate level of capital has ensured the bank's financial strength and stability.	1	2	3	4	5
The bank has been in a position to keep its credit risk in check	1	2	3	4	5
Earning capacity is a performance measure used by the bank to define its financial health	1	2	3	4	5
The bank's reported earnings reflect the company's true earnings	1	2	3	4	5

Thank you for your support

APPENDIX II:
EXPLORATORY FACTOR ANALYSIS FOR FINANCIAL PERFORMANCE,
INTELLECTUAL CAPITAL AND OPERATIONAL RESILIENCE

Items	Financial Performance	Intellectual Capital	Operational Resilience
The bank's capital level is sufficient for its risk profile	0.667		
The bank's high market power has contributed to increased returns.	0.577		
The bank has been in a position to keep its credit risk in check	0.522		
Earning capacity is a performance measure used by the bank to define its financial health	0.517		
The bank grants staff much time to consider a reasonable response to disruptions			0.657
Bank staff have a high level of expertise.		0.721	
Staff are highly motivated in their work		0.639	
Bank staff are a source of innovation		0.684	
Our company has enough cash to meet its obligations effectively	0.663		
Our bank can meet its obligations as and when they fall due	0.498		
All our deficits are cleared in time	0.606		
The bank's Return on Equity has increased for the past 5 years	0.605		
The liquidity of the bank has improved	0.552		
Unexpectedly, some staff leave their posts (quit their job)			-0.623
Some suppliers fail to make deliveries			-0.617
The costs we incur in running our core operations have been declining			0.838
The volume of waste in processes that we record has been declining			0.764
The volume of material waste recorded at the bank has been reducing			0.779
overhead costs incurred by the bank have been reducing			0.799
The volume of idle capacity/resources the bank experiences have been declining			0.773
The bank always transfers part of the net profits to reserves	0.597		
Overall, the bank's gross profit has grown in the past 5 years	0.625		
The gross profit margin has been stable for the last 6 months	0.567		
The bank's return on investment has been growing over the years	0.56		
Whenever operations breakdown, it does not take long for us to restore normal operation			0.668
The bank effectively restores operations to normal quickly			0.625
All key stakeholders understand each other very well.		0.656	
Cooperation between key stakeholders runs smoothly		0.622	

The bank has a great deal of useful knowledge in documents and databases.	0.614	
The bank has uncommitted resources that can quickly be used to fund new strategic initiatives		0.647
The bank usually has adequate resources available in the short run to fund its initiatives		0.647
We can obtain resources at short notice to support new strategic initiatives		0.523

Source: Primary Data (2023)