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Collaborative Partnerships and Financial Performance of Commercial Banks in Juba, South Sudan.

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Abstract

This study explores the impact of collaborative partnerships on the financial Performance of commercial banks in Juba, South Sudan, a region characterized by economic instability and developmental challenges. Recognizing the vital role of these banks in fostering financial stability, inclusion, and economic growth, the research examines how collaborative partnerships with local and international stakeholders influence operational efficiency, risk management, and profitability. The study employs a mixed-methods approach, combining quantitative analysis of financial data from 30 selected banks with qualitative interviews of bank managers and stakeholders. The target population comprised 625 individuals, including CEOs, CFOs, COOs, middle management, and department heads, all possessing in-depth knowledge of their banks' strategies and operations. The sample size was determined using Yamane's (1969) formula to ensure accurate representation and precision. Data analysis was conducted using SPSS, with structural equation modeling (SEM) applied to evaluate the direct effects of partnerships on financial performance, enabling the simultaneous examination of multiple relationships while accounting for measurement error. Results reveal that collaborative partnerships significantly improve banks' financial outcomes by enhancing resource access, innovative services, and risk mitigation efforts. All relationships were statistically significant ($p < 0.001$), with F-statistics ranging from 37.842 to 43.671, confirming robust linear relationships and rejecting the null hypothesis of non-linearity. R^2 values between 0.195 and 0.216 indicate that a substantial portion of the variance in financial performance is explained by partnership variables. The study concludes that fostering strategic alliances is crucial for strengthening financial sector stability and inclusivity in South Sudan. It recommends that commercial banks actively pursue partnerships with development agencies, international financial institutions, and local organizations to support sustainable growth and contribute to national economic development. These findings provide valuable insights for policymakers and banking practitioners seeking to leverage partnerships to enhance resilience in fragile economies.

Keywords: Collaborative Partnerships, Financial Performance, and Commercial Banks.

Introduction

Background of the Study

The global financial landscape is continually evolving due to technological innovations, shifting customer expectations, and intensified competition, positioning commercial banks as central to economic stability and growth. To adapt, banks are increasingly forming strategic alliances, such as joint ventures, technology-sharing agreements, and collaborations with fintech firms, which help expand market reach, enhance product offerings, and improve operational efficiency [1]. These partnerships are crucial for navigating complex market conditions and translating collaboration into enhanced financial metrics, such as profitability, liquidity, and asset quality. Similar strategies are observed in other sectors, such as education and workforce development, where industry collaboration and curriculum innovation are vital for enhancing graduate competencies and aligning skills with market demands, underscoring the importance of strategic partnerships for sustainable success.

The significance of digital transformation for small and medium-sized enterprises (SMEs) in Africa is highlighted by study, which emphasizes that digital adoption can significantly boost competitiveness, operational efficiency, and market engagement. However, Africa faces unique challenges such as inadequate infrastructure, limited digital skills, and rural-urban disparities, making targeted investments in digital infrastructure, skills development, and change management essential, especially in underserved areas. The study advocates for fostering a supportive technological environment to promote inclusive growth, though most existing research focuses on urban SMEs, indicating a need for further exploration of digital transformation in rural regions and larger enterprises to fully leverage digital technologies for economic development across Africa.

Focusing on South Sudan, the research investigates how collaborative partnerships influence the financial performance of commercial banks. Financial performance is defined as the ability to efficiently utilize resources to generate profits and sustain growth, assessed through metrics such as profitability, risk management, and operational resilience. Employing a mixed-methods approach, data from 20 banks and interviews with key officials reveal that collaborations significantly improve resource access, innovative service delivery, and risk mitigation factors vital in fragile economic contexts. The findings highlight that forming alliances with development agencies, international financial institutions, and local organizations can help banks leverage resources, improve service delivery, and foster resilience, thereby supporting sustainable economic growth in volatile environments.

South Sudan's economy is characterized by high inflation, currency devaluation, political instability, and infrastructural deficits, all of which hinder banking sector performance [2]. High inflation erodes asset values and complicates risk management, while fluctuating exchange rates increase foreign exchange risks. Regulatory uncertainties and the underdeveloped legal framework further constrain operations, increasing compliance costs and credit risks [3]. Limited access to capital, high operational costs, human resource shortages, and competition from informal financial services exacerbate these challenges, reducing banks' capacity to support economic growth. Despite these obstacles, the study emphasizes the need for strategic, context-specific solutions, including digital innovations and policy reforms, to strengthen the resilience of South Sudan's banking sector and promote broader economic development [4 ,5].

Literature Review

The existing body of research offers valuable insights into how strategic partnerships and resource management influence organizational and financial performance across various contexts. Studies such as and Valbuena-Hernandez and emphasize that collaboration, partnership diversity, and organizational responsiveness significantly impact performance metrics, including financial outcomes, sustainability, and innovation. Moreover, research by highlights the importance of knowledge-sharing, resource pooling, and strategic alliances in fostering innovation and organizational resilience, especially within African and emerging economy contexts [6-9]. Additionally, demonstrate the role of organizational linkages in enhancing leadership and institutional effectiveness in challenging environments like South Sudan [10]. Theoretical frameworks such as the Dynamic Capabilities Theory, Resource-Based View (RBV), and Institutional Theory underpin much of this research by explaining how organizations adapt, leverage internal resources, and respond to institutional pressures to achieve performance goals [11]. These frameworks collectively shed light on the mechanisms through which strategic collaborations can be optimized to improve organizational agility, resource utilization, and legitimacy, ultimately influencing financial success [12, 13].

Despite these valuable findings, notable gaps persist, particularly concerning the application and understanding of collaborative partnerships within fragile and conflict-affected environments such as South Sudan. Most existing studies focus on developed economies or stable settings, with limited empirical evidence on how banks in high-risk, resource-constrained, and institutionally fragile contexts can leverage strategic alliances to enhance financial performance. Specifically, there is a scarcity of context-specific research examining the dynamic capabilities and resource management strategies of South Sudanese banks, especially in Juba, amidst ongoing instability, high non-performing loans, and liquidity challenges [14].

Furthermore, there is a need for longitudinal and comparative studies that explore the long-term impacts of these partnerships and identify best practices tailored to such environments. Qualitative insights are also lacking, which could deepen understanding of the underlying mechanisms and contextual factors that determine the success or failure of collaborations in these settings [15]. Addressing these gaps is critical for both advancing academic theory and informing practical strategies to improve the financial stability, resilience, and growth of banks operating in South Sudan's complex environment. This study aims to fill these gaps by examining how strategic alliances, informed by the theoretical lenses of RBV, dynamic capabilities, and institutional influences, affect the financial performance of banks in Juba, providing nuanced insights relevant to policymakers, practitioners, and scholars [16].

Research Methodology

This methodology describes the research methodology used in the study, including the research philosophy, design, target population, data collection, sampling techniques, and data analysis methods. The study was based on a positivist paradigm, which assumes an objective reality that can be measured through empirical and statistical methods. This approach allowed for the formulation and testing of hypotheses regarding the impact of strategic innovation and dynamic capabilities on financial performance in commercial banks in Juba, South Sudan. Data were collected through structured questionnaires and financial reports, ensuring an objective and replicable process aligned with deductive reasoning, which supports generalizable and reliable findings within the context of South Sudan's post-conflict economy. The research employed a quantitative cross-sectional survey design, suitable for collecting standardized numerical data from a large sample at a single point in time. This design facilitated objective measurement of variables such as strategic innovation initiatives, dynamic capabilities, and financial performance indicators among banking executives and managers. Advanced statistical techniques, including multiple regression analysis, factor analysis, and structural equation modeling, were used to analyze the data, allowing the researcher to assess the strength, direction, and significance of relationships while controlling for potential confounders. This approach aimed to produce generalizable results that could inform strategic decision-making in the banking sector operating in emerging, post-conflict environments like South Sudan [17].

The target population comprised 30 licensed commercial banks with physical operations in Juba, including branches and representative offices. The study focused on 625 key personnel, including CEOs, CFOs, COOs, middle managers, and department heads, who possess in-depth knowledge of their banks' strategies, operations, and decision-making processes. By targeting these knowledgeable individuals, the study aimed to gather comprehensive insights into the factors influencing banks' strategic innovation, dynamic capabilities, and financial performance, ultimately contributing to a better understanding of organizational performance in the unique economic context of South Sudan.

Sample Size and Sampling Procedures.
The study determined the appropriate sample size based on Yamane's (1969) formula, targeting a population of 625 key personnel within the South Sudanese banking sector, including CEOs, CFOs, COOs, middle managers, and department heads. Assuming a 5% margin of error, the calculation indicated that a sample of approximately 244 respondents would sufficiently represent the population [18]. This sample size was chosen to ensure accuracy and manageability in data collection while maintaining the representativeness necessary for valid analysis. This approach helped balance the need for comprehensive insights with practical considerations of resource availability and respondent engagement.

To select the sample, a stratified random sampling procedure was employed. The population was first divided into different strata based on organizational hierarchy or department to ensure that each subgroup was homogenous and accurately represented. Within each stratum, respondents were randomly selected, giving each individual an equal chance of participation. This method enhanced the diversity and heterogeneity of the sample, capturing a wide range of perspectives from various managerial levels and functional areas. Such stratification improved the accuracy of comparisons across different groups and increased the overall representativeness of the sample. Data collection was primarily conducted through self-administered questionnaires designed to gather quantitative data on strategic innovation, dynamic capabilities, and financial performance. The questionnaires consisted of closed-ended questions and employed Likert scales to measure the respondents' levels of agreement or disagreement with various statements related to the variables. The questionnaire was structured into five sections, including demographic information and specific items aligned with the conceptual framework of the study. This structured approach facilitated systematic data collection that could be reliably analyzed to address the research objectives [19].

A pilot study was conducted in three states, Wau, Eastern Equatorial, and Malakal, to test the effectiveness of the questionnaires. Using 10% of the intended sample size, the pilot aimed to identify and rectify any issues with the instrument before the full-scale data collection. The data collected during this phase were excluded from the main analysis. The insights gained from the pilot enabled the researcher to refine the questionnaire, improve clarity, and enhance overall reliability and validity [20]. This step was crucial in ensuring that the final instrument was well-suited to capture accurate and meaningful data about the study variables. The reliability and validity of the research instrument were rigorously assessed to ensure data quality. Reliability was evaluated using a test-retest approach, analyzed with SPSS, calculating Cronbach's alpha coefficient to measure internal consistency. A threshold of 0.70 was set; instruments scoring below this indicated the need for further refinement to improve stability over time. Validity was established through expert judgment for content validity, involving academic and professional reviewers. Construct validity was tested using statistical methods such as the KMO measure, Bartlett's test of sphericity, and factor analysis with Varimax rotation. These procedures confirmed that the questionnaire accurately measured the intended constructs, enhancing the credibility and robustness of the study's findings.

The data collection process involved a team of three carefully selected research assistants with bachelor's degrees and knowledge of banking operations, ensuring their suitability for the study. To minimize bias, the recruitment process was conducted cautiously, and the assistants received comprehensive training on research methodology, ethics, and questionnaire administration. A pre-test was conducted to evaluate the clarity and effectiveness of the questionnaire, allowing the team to identify and address any ambiguities or difficulties. This pre-testing also helped build rapport with respondents and ensured that the questions elicited relevant and accurate information. During this phase, an authorization letter from the Ministry of Higher Education was obtained, emphasizing the voluntary participation of respondents, which included CEOs, CFOs, COOs, middle managers, and department heads from South Sudan's commercial banks, ensuring that participants possessed the necessary expertise for meaningful insights.

The data analysis began with data screening to detect and handle issues such as missing data, outliers, and non-normality, often using techniques like imputation. Descriptive statistics, including means, standard deviations, and correlations, were computed to summarize the data. Confirmatory Factor Analysis (CFA) assessed the validity and reliability of the measurement model, verifying that observed variables accurately measured their respective latent constructs. Model fit indices such as χ^2, RMSEA, CFI, and TLI were evaluated against accepted thresholds (e.g., RMSEA < 0.08, CFI and TLI > 0.90). Path analysis was then employed to specify the structural relationships between variables, with the model being identified and estimated using methods like Maximum Likelihood or WLS within SPSS AMOS SEM software. The overall model fit was reassessed, and the significance of path coefficients, including direct, indirect, and total effects, was examined. Modifications were made only when justified theoretically to improve model fit, and the results were interpreted within the context of the hypotheses and theoretical framework, culminating in a comprehensive report supported by diagrams, fit indices, and detailed discussions of the findings [21].

Direct Effects Analysis

The analysis of direct effects between collaboration partnerships and financial performance was conducted using structural equation modeling (SEM), which allowed for the simultaneous assessment of multiple relationships while accounting for measurement errors. For each strategic innovation, namely, collaborative partnerships, employee engagement, and information technology adoption, measurement models were first specified based on relevant indicator variables. For example, collaborative partnerships were represented by eight indicators (CP_1-CP_8), and financial performance by another eight indicators (FP_1-FP_8). The fit of each measurement model was evaluated using indices such as Chi-square/df, CFI, TLI, RMSEA, and SRMR to ensure accurate representation of the constructs. Once the measurement models were finalized, the structural relationships between each strategic innovation dimension and financial performance were tested separately using regression equations to estimate the path coefficients, significance levels, and variance explained, thereby facilitating hypothesis testing [22].

The moderating effects of the collaborative partnership approach were examined by incorporating interaction terms into the SEM framework. Initially, the direct relationship between collaboration and financial performance was established as a baseline. Subsequently, the model was expanded to include the moderator variable—dynamic capabilities and its interaction with collaboration, as well as with other strategic dimensions like employee engagement and IT adoption. The comprehensive model tested the combined effects of these dimensions and their interactions (e.g., CP×DC, EE×DC, ITA×DC) on financial performance. The significance of path coefficients, model fit indices, and explained variance was analyzed to determine the overall explanatory power of the model and to assess the relative impact of each strategic dimension and interaction effect on financial outcomes.

Diagnostic Tests for Inferential Statistics

Several diagnostic tests for inferential statistics were conducted to ensure the appropriateness of the data for analysis. The normality of the data was assessed using the Kolmogorov-Smirnov (K-S) Test; a p-value greater than 0.05 indicated that the data were normally distributed and suitable for SEM, while a p-value below 0.05 suggested non-normality. Multi-collinearity among independent variables was checked through pairwise correlation analysis; p-values above 0.05 indicated no significant correlation, thus no multi-collinearity, whereas p-values below 0.05 signified problematic correlations. Heteroscedasticity of residuals was tested using the Breusch-Godfrey Serial Correlation test, where p-values above 0.05 implied constant variance (homoscedasticity), and those below 0.05 indicated heteroscedasticity, rendering the data unfit for analysis. Linearity was evaluated by plotting residuals against predicted values; a symmetric residual distribution around the horizontal line confirmed linearity, while asymmetry suggested non-linearity. Lastly, the test of independence involved pairwise correlation analysis between each independent variable and the dependent variable; p-values above 0.05 indicated no significant correlation, whereas p-values below 0.05 confirmed significant relationships, ensuring the validity of the regression analysis [23].

Testing of Hypothesis

Hypothesis Testing was based on P-values as summarized in Table 3.33.

Table 3.33: Hypothesis Testing Based On P-Values

p-value < 0.05	Reject the Null Hypothesis
p-value > 0.05	Accept the Null Hypothesis

Source: Modified from other Scholars (2024)

Ethical Considerations

This study adhered to strict ethical standards to protect participant rights and ensure research integrity. Informed consent, confidentiality, and data security were prioritized, along with cultural sensitivity and engagement with community stakeholders. Principles of beneficence and non-maleficence guided the research to ensure benefits without harm. Voluntary participation was emphasized, allowing withdrawal at any time, and efforts were made to minimize bias. Approval from an ethics review board was obtained, and the potential impact on the local community was carefully assessed.

Research Finding

These research findings present the analysis and interpretation of data collected from 244 respondents across 30 commercial banks in Juba, South Sudan, including CEOs, CFOs, COOs, middle management, and department heads with in-depth knowledge of their banks' strategies and operations, focusing on collaborative partnerships and financial performance. The findings are organized according to the research objectives, beginning with respondents' demographic information and followed by descriptive and inferential statistics related to each hypothesis. The survey achieved a high response rate of 93%, reflecting a diverse sample in terms of age, educational background, and professional experience, with data collection conducted through stratified sampling targeting key management personnel across the banking sector. The study achieved a high response rate of 93%, with 227 out of 244 questionnaires completed, surpassing the recommended threshold for reliable analysis. Demographically, most respondents were male, accounting for nearly 75%, while females made up about 25%, highlighting a gender imbalance that may influence gender-related insights within the sector. Most respondents were between 25 and 44 years old, with over 80% falling into this age group. The largest segments were 25-34 (42.73%) and 35-44 (37.89%), indicating that the sample primarily reflects the perspectives of younger and middle-aged banking professionals [24].

Additionally, the workforce is highly educated, with 90.3% holding higher education qualifications, including 16.7% with Master's degrees, supporting the sector's capacity for strategic innovation and advanced planning. Regarding professional experience, most participants had 1-3 years (35.7%) or less than one year (18.5%) of experience, with only 17.2% possessing over 10 years. This suggests a relatively young and developing banking sector in South Sudan, relying on a mix of emerging talent and experienced professionals to foster innovation and enhance financial performance amid ongoing sector challenges [25].

Descriptive Statistics on Collaborative Partnership and Financial Performance

This section assesses respondents' views on collaborative partnerships and strategic innovations in South Sudan's commercial banks, using a 5-point Likert scale to measure eight dimensions of partnerships and their perceived effect on financial performance.

Descriptive Statistics for Collaborative Partnerships

Statement	Frequency (Percentage)					Mean	Std Dev
	5	4	3	2	1		
Strategic alliances have positively contributed to the overall performance of our organization.	82 (50%)	66 (40%)	11 (7%)	0 (0%)	6 (3%)	4.32	0.89
Cooperative partnerships have enhanced our organization's ability to achieve its strategic goals and objectives.	90 (55%)	60 (36%)	12 (7%)	0 (0%)	3 (2%)	4.42	0.78
Collaborative networks have improved our organization's innovation and creativity in problem-solving.	83 (50%)	63 (38%)	13 (8%)	3 (2%)	3 (2%)	4.33	0.84
Knowledge-sharing initiatives have facilitated learning within our organization.	106 (64%)	56 (34%)	0 (0%)	3 (2%)	0 (0%)	4.61	0.59
Access to external resources and expertise has increased through collaborative relationships.	52 (32%)	96 (58%)	14 (8%)	0 (0%)	3 (2%)	4.18	0.73
Collaboration efforts have improved the efficiency and effectiveness of our organization's operations.	75 (45%)	78 (47%)	12 (7%)	0 (0%)	0 (0%)	4.38	0.62
Engaging in partnerships has enhanced our organization's reputation and credibility in the industry or market.	75 (45%)	73 (44%)	14 (8%)	3 (2%)	0 (0%)	4.33	0.71
Collaborative endeavors have resulted in tangible and measurable benefits for our organization.	57 (35%)	74 (45%)	34 (21%)	0 (0%)	0 (0%)	4.14	0.73
Overall						4.34	0.75

The table shows that respondents in Juba's commercial banks have very positive perceptions of collaborative partnerships, with high mean scores across all dimensions. Knowledge-sharing scored the highest (M=4.61), highlighting its importance in organizational learning. Cooperative partnerships, operational efficiency, and innovation also received strong support, with mean scores above 4.3.

The lowest-rated aspect, tangible benefits, still reflected a positive view (M=4.14). Overall, the average score of 4.34 indicates a strong consensus on the value of collaboration in enhancing financial performance, supporting its role as a key driver of organizational success in the sector.

Descriptive Statistics for Financial Performance

This section explores respondents' perceptions of financial performance in South Sudan's commercial banks, using a 5-point Likert scale to assess eight key dimensions related to its importance, components, and drivers.

Descriptive Statistics for Collaborative Partnerships

Statement	Frequency (Percentage)					Mean	Std Dev
	5	4	3	2	1		
Financial performance is a vital indicator of our organization's effectiveness and success.	92 (56%)	57 (35%)	14 (8%)	2 (1%)	0 (0%)	4.45	0.70
High financial performance is essential for the long-term sustainability and competitiveness of our organization.	96 (58%)	58 (35%)	11 (7%)	0 (0%)	0 (0%)	4.52	0.62
Financial performance includes various elements, such as operational efficiency, customer satisfaction, and market share.	94 (57%)	59 (36%)	12 (7%)	0 (0%)	0 (0%)	4.50	0.63
Continuous monitoring of financial performance helps identify areas for improvement and necessary adjustments.	93 (56%)	60 (36%)	12 (7%)	0 (0%)	0 (0%)	4.49	0.63
Effective leadership and strategic management are critical in enhancing financial performance.	94 (57%)	53 (32%)	16 (10%)	2 (1%)	0 (0%)	4.45	0.71

A robust organizational culture that fosters accountability, innovation, and collaboration enhances performance.	98 (59%)	58 (35%)	8 (5%)	1 (1%)	0 (0%)	4.53	0.62
Investing in employee development and engagement has a positive effect on financial performance.	94 (57%)	53 (32%)	17 (10%)	1 (1%)	0 (0%)	4.45	0.70
Aligning organizational goals with performance metrics ensures our efforts are directed toward achieving positive outcomes.	87 (53%)	68 (41%)	9 (5%)	1 (1%)	0 (0%)	4.46	0.63
Overall						4.48	0.66

The findings show that respondents highly value organizational culture (M=4.53), leadership (M=4.45), and employee development (M=4.45) as key to improving financial performance. They also emphasize the importance of long-term strategy (M=4.52) and continuous monitoring (M=4.49) for adaptability and success. These results support the idea that dynamic capabilities, like culture and leadership, positively influence how strategic innovation impacts financial outcomes in South Sudan's banking sector.

Diagnostic Tests

This section provides a comprehensive diagnostic evaluation for the study on collaborative partnerships and financial performance in Juba's commercial banking sector. Key tests linearity, normality, multicollinearity, homoscedasticity, and independence of observations, were systematically conducted to validate the assumptions required for structural equation modeling (SEM). The linearity test confirmed significant linear relationships between independent variables and financial performance ($p < 0.001$), supporting the use of regression-based analyses.

Normality tests, including the Kolmogorov-Smirnov and Shapiro-Wilk, indicated that the data for key variables (collaborative partnerships and financial performance) followed a normal distribution, with slight skewness and kurtosis within acceptable ranges. Multicollinearity assessments showed no problematic correlations among predictor variables, with Variance Inflation Factor (VIF) values well below the threshold of 5, confirming the independence and distinctiveness of each predictor. Homoscedasticity tests, using the Breusch-Pagan and White tests, indicated constant error variances across all relationships ($p > 0.05$), ensuring the reliability of standard errors and hypothesis testing. Additionally, the Durbin-Watson test results (~1.948) demonstrated that residuals were independent, with no evidence of autocorrelation, further validating the appropriateness of SEM for subsequent analysis. Overall, these diagnostic tests establish a solid methodological foundation, confirming that the data meet essential statistical assumptions for SEM. The results indicate that relationships among variables are linear, normally distributed, free from multicollinearity, homoscedastic, and independent, thereby ensuring the validity and robustness of the study's findings in examining the impact of collaborative partnerships on financial performance in South Sudan's banking sector.

Collaborative Partnerships and Financial Performance of Commercial Banks in Juba, South Sudan

This section reports the results of path analysis examining the impact of Collaborative Partnerships (CP) on the Financial Performance (FP) of commercial banks in Juba, South Sudan, using Structural Equation Modeling (SEM). The findings reveal a strong, positive, and statistically significant relationship, with a path coefficient (β) of 0.613 ($p < 0.001$). This indicates that an increase in collaborative partnerships leads to a substantial improvement in financial performance, with the effect being both meaningful and precise, as shown by a low standard error (SE = 0.066). Overall, the results suggest that collaborative partnerships are a powerful strategic innovation for enhancing bank financial outcomes, and policymakers should prioritize fostering such collaborations to boost sector performance.

Model Fit Indices for Collaborative Partnerships and Strategic Innovations on Financial Performance

This section evaluates the model fit for the SEM, examining how Collaborative Partnerships and strategic innovations influence the Financial Performance of banks in South Sudan, using multiple goodness-of-fit indices to validate the model.

Model Fit Indices for Collaborative Partnerships and Strategic Innovations on Financial Performance

Fit Index	Value	Threshold	Status
Chi-square/df	2.13	< 3.0	Good fit
CFI	0.957	> 0.95	Good fit
TLI	0.946	> 0.95	Good fit
RMSEA	0.053	< 0.06	Good fit
SRMR	0.038	< 0.08	Good fit

The model fit indices support the validity of the structural model examining the relationship between Collaborative Partnerships, Strategic Innovations, and Financial Performance. The Chi-square/df ratio of 2.13, CFI of 0.957, TLI of 0.946, RMSEA of 0.053, and SRMR of 0.038 all fall within acceptable ranges, indicating that the model fits the data well. These results confirm that the hypothesized relationships are reliably captured, reinforcing confidence in the finding that collaborative partnerships significantly and positively influence the financial performance of commercial banks in Juba, South Sudan.

Model Summary Statistics for Collaborative Partnerships and Strategic Innovations on Financial Performance

This section presents the results of regression analysis conducted to examine the predictive relationship between Collaborative Partnerships, strategic innovations, and Financial Performance of commercial banks in Juba, South Sudan. The analysis assessed the proportion of variance in Financial Performance explained by Collaborative Partnerships and tested the overall significance of the regression model.

Model Summary Statistics for Collaborative Partnerships and Strategic Innovations on Financial Performance

Statistic	Value
R^2	0.376
Adjusted R^2	0.373
F-statistic	86.29
p-value	< 0.001

The model explains 37.6% of the variance in Financial Performance ($R^2 = 0.376$), with a significant F-statistic (86.29, $p < 0.001$), confirming a strong, significant relationship between Collaborative Partnerships and Financial Performance

Measurement Model for Collaborative Partnerships and Strategic Innovations on Financial Performance

This structural equation model (SEM) illustrates the relationship between Collaborative Partnerships (CP), strategic innovation, and Financial Performance (FP) of commercial banks in South Sudan. The model represents the culmination of confirmatory factor analysis and path analysis, providing a comprehensive visualization of both measurement and structural components.

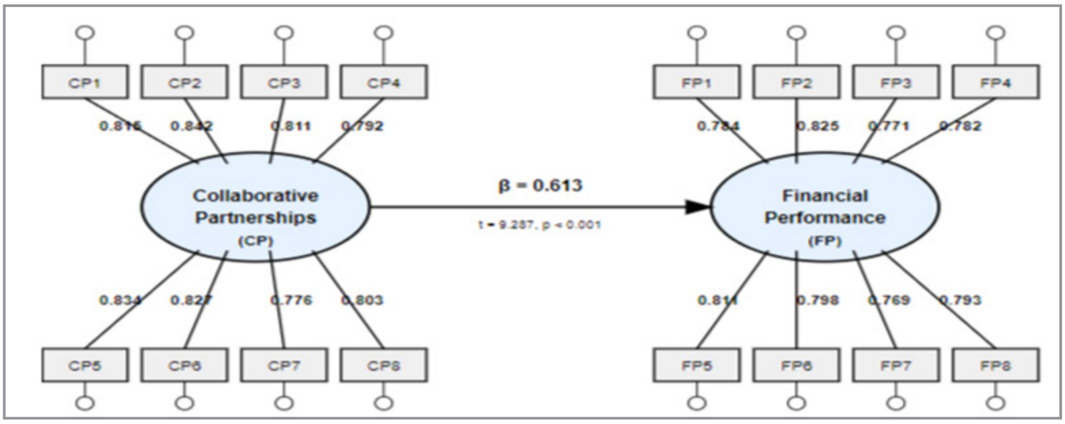

Figure Measurement Model for Collaborative Partnerships as Strategic Innovations on Financial Performance.

The measurement model shows strong validity for both constructs, with Collaborative Partnerships ($\beta = 0.613$, $p < 0.001$) significantly impacting Financial Performance. Indicators for Collaborative Partnerships, such as strategic alliances, resource sharing, and knowledge sharing, exhibit high factor loadings (0.776–0.839), while Financial Performance indicators like operational efficiency, sustainability, and leadership also demonstrate robust loadings (0.769–0.825). The significant path coefficient confirms that strategic collaborations substantially enhance banks' financial outcomes across multiple dimensions, highlighting the importance of effective partnership strategies for organizational success in South Sudanese banks.

Discussion of Findings for Collaborative Partnerships and Financial Performance

The study provides strong empirical evidence that collaborative partnerships play a significant role in enhancing the financial performance of commercial banks in Juba, South Sudan. Descriptive statistics reveal highly positive perceptions among banking professionals, with a mean of 4.34 out of 5, and knowledge-sharing initiatives receiving the highest support (mean = 4.61). These findings align with the dynamic capabilities' theory, emphasizing that learning and knowledge management, facilitated through collaboration, are critical for organizational agility and adaptability in a changing environment. The robust measurement properties of the constructs, evidenced by high factor loadings across indicators, further support the validity of these findings. The significant relationship ($\beta = 0.613$, $p < 0.001$) between collaborative partnerships and financial performance, along with a high explained variance (37.6%), confirms that strategic collaborations substantially contribute to improved financial outcomes, including operational efficiency, resource access, and long-term sustainability.

The results are consistent with prior research in various sectors and regions, demonstrating positive associations between collaboration and financial performance. The strength of this relationship appears particularly pronounced in the South Sudanese banking sector, suggesting that collaborative efforts, such as strategic alliances, resource sharing, and network development, are especially valuable in resource-constrained and uncertain institutional contexts. The operational and innovation dimensions of collaboration, supported by high factor loadings for indicators like collaboration efforts (CP6) and network linkages (CP3), indicate that partnerships not only improve efficiency but also foster innovation and organizational learning. The findings also resonate with institutional theory, as partnerships help banks meet standards, enhance legitimacy, and build stakeholder trust, thereby contributing to improved financial health.

Furthermore, the study highlights the broader implications of fostering collaborative relationships in South Sudan's organizational landscape. The high loadings for key performance indicators, such as long-term sustainability and leadership effectiveness, suggest that strategic alliances can also bolster organizational resilience and responsiveness. The strong model fit indices and the significant path coefficient reinforce the conclusion that investing in collaborative partnerships can lead to tangible benefits in financial performance across multiple dimensions. Overall, these findings underscore the importance of strategic collaboration as a vital driver of organizational success in emerging economies, providing valuable insights for policymakers and bank managers seeking sustainable growth in complex environments.

Summary of Hypothesis

Summary of Hypothesis Testing Results

Hypothesis	Statistical Evidence	Decision	Conclusion
H01: There is no statistically significant influence of collaborative partnerships and strategic innovations on the financial performance of commercial banks in Juba, South Sudan.	$\beta = 0.613$, $t = 9.287$, $p < 0.001$; $R^2 = 0.376$, $F = 86.29$, $p < 0.001$; Model fit indices: Chi-square/df = 2.13, CFI = 0.957, TLI = 0.946, RMSEA = 0.053, SRMR = 0.038	Rejected	Collaborative partnerships and strategic innovations have a statistically significant positive influence on the financial performance of commercial banks in Juba, South Sudan, explaining 37.6% of the variance in financial performance.

Finding presents a comprehensive summary of the hypotheses testing results, providing statistical evidence for the relationships between collaborative partnership and the financial performance of commercial banks in Juba, South Sudan. All hypotheses were rejected based on statistically significant findings. The first hypothesis examined the direct effects of collaborative partnership on financial performance. For Hypothesis H01, the statistical evidence ($\beta = 0.613$, $t = 9.287$, $p < 0.001$; $R^2 = 0.376$) demonstrates that collaborative partnerships and strategic innovations significantly influence financial performance, explaining 37.6% of its variance. The strong path coefficient and excellent model fit indices indicate that banks that develop effective collaborative partnerships experience substantial improvements in financial outcomes. The practical implication is that banks should not only invest in strategic innovations but also develop their organizational agility, adaptability, and resource reconfiguration capabilities to optimize financial returns from these investments

Conclusions and Recommendations

Summary of Findings on Collaborative Partnerships on Financial Performance

The study revealed that collaborative partnerships have a strong positive impact on the financial performance of commercial banks in Juba, South Sudan. Path analysis showed a significant relationship ($\beta = 0.613$, $p < 0.001$), indicating that banks engaging in strategic alliances tend to perform better financially. The model fit indices confirmed the robustness of these findings, and the partnerships explained approximately 37.6% of the variance in financial outcomes, underscoring their practical importance. Furthermore, respondents demonstrated highly positive perceptions of collaborative efforts, especially regarding knowledge-sharing initiatives, which received the highest mean score ($M = 4.61$). These initiatives facilitate organizational learning, enabling banks to adapt and innovate within the challenging market environment. The strong factor loadings across partnership indicators validated that access to external expertise and resources significantly contributes to the banks' competitive advantage, aligning with resource-based and dynamic capabilities theories.

Overall, the findings emphasize that strategic collaborations enhance banks' operational efficiency, resource access, and innovation capacity, ultimately leading to improved financial performance. In the context of South Sudan's emerging market, fostering such partnerships appears vital for building resilience and gaining a competitive edge. The results advocate for integrating collaboration strategies into banking practices to capitalize on external knowledge, resources, and networks, which are crucial for success amid resource constraints and market uncertainties.

Conclusions on Collaborative Partnerships on Financial Performance

The research highlights the crucial role those collaborative partnerships play in enhancing the financial performance of commercial banks in Juba, South Sudan. The analysis demonstrates a strong positive relationship ($\beta = 0.613$, $p < 0.001$) between strategic alliances, cooperative networks, and banking success. These partnerships explain approximately 37.6% of the variation in financial outcomes, emphasizing their importance as a strategic driver for banks operating in South Sudan's challenging economic environment. Key mechanisms such as knowledge-sharing initiatives and access to external resources are particularly influential, with high mean scores and factor loadings indicating their significant contribution to improving financial performance.

The findings strongly support the rejection of the null hypothesis, which posited no significant effect of collaborative partnerships on bank performance. The statistical evidence confirms that these strategic alliances are not only relevant but also have a statistically significant positive impact on the financial outcomes of banks in Juba ($\beta = 0.613$, $t = 9.287$, $p < 0.001$). The high model fit indices and explained variance underscore the robustness of this relationship, illustrating that collaboration is a vital strategic innovation for banks seeking growth and resilience in a resource-constrained and volatile market environment.

Overall, the study concludes that fostering collaborative partnerships is essential for commercial banks in Juba to achieve better financial performance. These alliances enable access to critical resources, promote organizational learning, and facilitate innovative problem-solving, all of which are especially valuable in South Sudan's emerging financial landscape. As such, strategic collaboration should be prioritized as a core component of banking strategies, providing a pathway for banks to strengthen their market position, improve operational efficiency, and secure sustainable success amidst ongoing institutional and resource challenges.

Pilot Study Findings

The pilot study provided initial insights into the research framework, highlighting key trends and potential challenges that informed the refinement of the methodology before the main data collection. These preliminary findings helped ensure that the measurement instruments and overall research approach were appropriately aligned with the study's objectives, thereby enhancing the validity and reliability of subsequent data collection efforts. The reliability analysis demonstrated strong internal consistency across all five key constructs, with Cronbach's Alpha values ranging from 0.903 to 0.932 and Composite Reliability scores between 0.928 and 0.947. These results indicate that the measurement scales are highly reliable, providing stable and coherent data for further analysis. The validity assessment, including convergent validity, confirmed that the items strongly reflect their respective constructs, with AVE values from 0.721 to 0.762 and factor loadings between 0.825 and 0.895, all surpassing recommended thresholds.

Discriminant validity testing using the Fornell-Larcker criterion revealed that each construct is distinct and shares more variance with its indicators than with other constructs in the model. The square root of AVE for key constructs like Collaborative Partnerships and Financial Performance was significantly higher than their inter-construct correlations, ranging from 0.442 to 0.485. These findings confirm that the measurement model effectively captures separate yet related concepts, ensuring that subsequent analyses will be based on valid and reliable constructs. Overall, the pilot study's results support the robustness of the measurement tools and lay a solid foundation for the main study's structural analysis.

Study Implications

The implications of this study extend beyond academic theory, providing valuable practical guidance for policymakers, banking industry leaders, and educational institutions in South Sudan. The findings emphasize the importance of fostering strategic collaborative partnerships, particularly through knowledge-sharing initiatives and access to external resources. For banking practitioners, this suggests establishing dedicated departments or units focused on forming and managing strategic alliances, especially with fintech firms and other financial institutions. Additionally, developing targeted capability-building programs that enhance organizational agility, resource reconfiguration, and innovation flexibility can help banks better navigate South Sudan's resource-constrained and volatile environment, ultimately boosting their financial performance.

From an industry perspective, the research highlights the potential benefits of promoting sector-wide collaboration to enhance innovation. Establishing industry-wide platforms for knowledge exchange and best practice sharing could significantly improve the collective capacity of banks operating in South Sudan. Such platforms would facilitate the dissemination of technological advancements, operational strategies, and market insights, fostering a more cohesive and innovative banking sector. Policymakers should consider creating frameworks that encourage inter-bank cooperation while safeguarding fair competition. Policies aimed at reducing barriers to forming strategic alliances and supporting technological infrastructure development are crucial to strengthening the sector's resilience and long-term growth.

The study also underscores the critical role of technological adoption in improving financial performance. The strong direct effect of information technology (β=0.678) indicates that policymakers must prioritize investments in digital infrastructure and promote technological innovation within the banking industry. Coordinated efforts among financial regulators, technology ministries, and educational institutions are necessary to develop a conducive environment for digital transformation.

Policies should focus on improving digital literacy, incentivizing technological research and development, and ensuring cybersecurity measures are in place. Such initiatives will enable banks to leverage technology effectively, enhance service delivery, and expand financial inclusion in South Sudan. Finally, the findings suggest that tailored policy interventions are vital in addressing South Sudan's unique post-conflict challenges.

Developing policies that facilitate the formation of strategic alliances, support technological infrastructure, and promote institutional reforms can help banks adapt to the complex operating environment. Given the institutional flux and resource limitations, government and regulatory bodies must work collaboratively with industry stakeholders to create an enabling ecosystem that fosters innovation, builds capacity, and encourages sustainable growth. Ultimately, these efforts will help strengthen the financial sector's stability and resilience, ensuring more inclusive and efficient financial services for the broader population.

Recommendations of Collaborative Partnerships on Financial Performance.

Establish Dedicated Partnership and Innovation Departments: Banks should create specialized units responsible for identifying, developing, and managing strategic alliances, including partnerships with fintech firms and industry associations. These departments should implement structured knowledge exchange programs, develop formal evaluation frameworks for partnerships, and regularly map resource complementarities to maximize collaborative benefits and improve financial outcomes.

Promote Policy Frameworks that Encourage Inter-Bank Collaboration: Regulatory bodies should develop policies that facilitate strategic alliances while safeguarding competition. Establishing industry-wide knowledge-sharing platforms, providing incentives for successful collaborative initiatives, and removing regulatory barriers will foster a more cohesive and innovative banking ecosystem, enhancing sector stability and growth.

Support Academic and Research Initiatives Focused on Strategic Innovation: Academic institutions should undertake longitudinal and cross-cultural studies on partnership dynamics, conduct case studies of successful collaborations, and develop evidence-based guidelines for strategic alliances. Encouraging researcher-practitioner collaborations will help generate practical insights that inform industry practices and policymaking.

Adopt an Integrated, Holistic Approach to Innovation: All stakeholders should develop comprehensive frameworks that simultaneously address collaborative partnerships, employee engagement, and technology adoption. Establishing innovation steering committees and performance measurement systems that track both individual and collective innovation impacts will ensure aligned efforts, maximize resource utilization, and strengthen competitive positioning. Banks should prioritize developing organizational agility, technological infrastructure, and leadership capacity to sustain innovation impacts over time. Policymakers should support initiatives that promote a supportive environment for innovation, including training programs and regulatory incentives, while also encouraging research on the risks and unintended consequences of innovation to ensure balanced, sustainable growth.

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