

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2025, 15(6), 589-595.



Investigating the Principal Factors Influencing Bank Performance in South Africa: A Comprehensive Analysis

Makhathini Lungani Rudolph¹, Kansilembo Aliamutu²*

¹Department of Accounting and Law, Mangosuthu University of Technology, South Africa, ²Department of Auditing, College of Accounting sciences, University of South Africa, South Africa. *Email: freddyali6@gmail.com

Received: 03 May 2025 Accepted: 12 September 2025 DOI: https://doi.org/10.32479/ijefi.20651

ABSTRACT

The paper aims to explore the impact of the Capital Adequacy Ratio, Net Profit Funding, Funding to Deposit Ratio, and Operations Costs to Operational Revenue on profitability evaluated by return on assets. This research examines the banking industry, particularly the banks listed on the South Africa Stock Exchange from 2022 to 2024. This period was chosen to collect more recent data, which would enhance comprehension of the sector's present situation. The analysis indicates that the CAR value exceeds the expected significance value, suggesting that CAR does not significantly impact production. A consistently high CAR indicates that the bank is in a robust position, which often enhances performance in generating profits. The findings of this analysis demonstrate that the magnitude of the bank's capital adequacy ratio (CAR) does not significantly correlate with an increase in profit. Banking professionals are advised to prioritise the management of operational profitability and to mitigate the non-performing financing ratio (NPF) to ensure sustainable growth in bank profitability.

Keywords: Back Performance, Profitability, Financial Performance, and Liquidity

JEL Classifications: G21, G28, O16

1. INTRODUCTION

The name "bank" derives directly from the Italian term "banco," meaning "seat." A bank operates as an enterprise that collects capital from the public and reallocates it via diverse lending to improve the well-being for several persons (Bhatt et al., 2025). The daily operation of a bank is essential for evaluating the accomplishments of the banking industry, especially regarding its profitability. Banks function as essential middlemen, linking the performance with neighbourhoods and then investing those assets back inside the community (Jena, 2022). Key statistics utilised to evaluate profitability encompass CAR (capital adequacy ratio), NPF (net profit funding), FDR (funding to deposit ratio), and OCOR (operations costs to operational revenue).

Profitability entails acquiring capital from the public via savings, with banks functioning as venues for individuals to store or

invest monies (Alnabulsi et al., 2022). Individuals often save money mostly for financial performance, for investing with the anticipation of accruing interest on their savings, as well as to enable payments to be made (Moharrak and Mogaji, 2025). To accomplish these goals, guarantee the security of cash and permit investment banks to provide diverse deposit alternatives.

Deposits offered may vary somewhat between banks, but generally encompass demand payments, savings deposits, and time deposits. Smidt and Jokonya (2022) assert that the capital adequacy ratio (CAR) measures the sufficiency of a bank's capital to cover riskladen assets, including loans issued. The Capital adequacy ratio (CAR) signifies the bank's capacity to absorb asset depreciation resulting from hazardous financial losses. A bank incurs expenses from its own resources and obtains supplementary funding from external sources (Smidt and Jokonya, 2022). Alongside CAR and NPF, the element influencing performance is OCOR. Based

This Journal is licensed under a Creative Commons Attribution 4.0 International License

on KANS, OCOR evaluates operating expenses in relation to operational income. The operating cost ratio assesses the effectiveness and capability of the bank in its business operations. A lower OCOR indicates higher effectiveness in a bank's management of operational costs; enhanced efficiency of costs will result in increased profits (Arias-Oliva et al., 2021).

Alongside CAR, NPF, and OCOR, FDR is an additional determinant of profitability. The FDR is a ratio that quantifies the relationship between the volume of credit extended and the quantity of public money and equity utilised. The financing-to-deposit ratio (FDR) assesses the ability of a lender to fulfil withdrawal obligations by dividing the quantity of financing extended by the bank using external funding sources. The data released indicate that operational costs have risen owing to the depreciation of financial assets (reduction) (Arias-Oliva et al., 2021). The OCOR ratio indicates that a bank's performance in operations influences its income; a greater OCOR correlates with increased profit, resulting in a negative effect. The return on assets (ROA) indicates that inadequate bank management effectiveness necessitates reduced operating expenses to enhance the bank's net profit (Long et al., 2023).

Despite numerous studies investigating the determinants of bank profitability, a complete analysis of the combined contributions of CAR, NPF, OCOR, and FDR, particularly in government-owned financial institutions listed on the JSE during the current time, remains lacking (Zheng et al., 2021). This research highlights the significance of efficiency in operations and financing management of risks that were not fully investigated as factors influencing performance in South African banking. The research's originality stems from its methodology, which integrates four prominent financial performance metrics into a single regression model, focusing on the post-global economic recession time frame and applying return on assets (ROA) as the primary profitability metric, thereby offering a more precise assessment of bank performance in fluctuating market environments.

2. LITERATURE REVIEW

The structure-conduct-performance (SCP) paradigm is a fundamental theory in industrial organisation that elucidates how the structure of the banking sector, including market concentration, size distribution, and entry barriers, influences the conduct of banks, such as pricing strategies, competition levels, and risk-taking behaviours, thereby determining their overall performance (Usman et al., 2024). In the South African banking sector, characterised by a limited number of dominant banks that command a substantial market share, the SCP model is crucial for comprehending the impact of market dominance, regulation, and competitive dynamics on profitability, efficiency, and customer service (Adeniyi et al., 2024). This theory offers a macro-level perspective for evaluating the interplay between market forces and institutional behaviour to elucidate bank performance results.

In addition, the resource-based view (RBV) emphasises the internal capabilities and resources of a bank as the principal determinants of competitive advantage and performance (Yuan

et al., 2022). This theory posits that both tangible and intangible assets, including technological infrastructure, talented staff, financial capital, organisational culture, and brand reputation, must possess value, rarity, inimitability, and non-substitutability (VRIN) to achieve outstanding and sustained performance. In the South African context, the resource-based view elucidates why certain banks excel over others despite analogous market conditions: it is the proficient use of distinctive internal strengths and innovative capabilities that results in improved operational efficiency, client loyalty, and profitability (Sergi et al., 2021).

Key statistics utilised to evaluate financial performance encompass CAR (capital adequacy ratio), NPF (non-performing funding), FDR (funding to investment ratio), and OCOR (operating cost to operating revenue). Performance entails acquiring capital from the community via deposits, with banks functioning as intermediaries for individuals to store or spend monies (Lee and Zhao, 2023). Individuals often save money mainly for financial stability, for investing with the anticipation of accruing fascination, and to enable payment transactions. To accomplish these goals, guarantee the security of money and permit investment banks to provide diverse deposit alternatives (Almajali et al., 2022). Deposits offered may vary somewhat between banks but generally encompass requirements for deposits, savings deposits, as well as time deposits.

2.1. Concept of Profitability

Profitability is a metric employed to assess a company's capacity to produce revenues from its routine business operations. Leadership must enhance profits for stakeholders while simultaneously advancing the health of employees (Işık et al., 2024). This may occur just if the corporation derives income from its company operations. The management anticipates elevated net income before tax, since increased performance enhances the company's operating flexibility. The average total assets represent the average volume of company or resources (Moyo and Rapatsa, 2021).

2.1.1. The hypothesis impact of capital adequacy ratio (CAR) on profitability

In accordance with the profitability concept, banks that enhance perks typically exhibit increased retained earnings, resulting in a rise in capital adequacy ratio (CAR). Katusiime (2021) argues that CAR indicates a bank's ability to absorb operational losses, significantly affecting return on assets (ROA) within South African banks. The subsequent CAR indicates a more advantageous situation for a bank. When the capital adequacy ratio (CAR) is elevated, the bank is optimally situated to support its activities, and this advantageous condition will yield benefits. Return on net resources assesses the effectiveness of capital management in generating net profit (Van Niekerk et al., 2023). As returns advance, distributing profits promotes the augmentation of profits and reinvesting in conjunction with retained earnings.

H₁: CAR significantly impacts profitability

2.1.2. Impact of non-performing financing (NPF) on profitability

The bank's risk of funding is a significant trade peril, arising from the failure to repay loans or investments. If the NPF share is high, the degree of profit that the bank will receive appears to be low (Al-Dmour et al., 2023). The substantial volume of non-performing loans relative to profitable assets might generate opportunities for salary disbursements from growth, thus diminishing profits and adversely impacting bank efficiency. To enhance banking effectiveness, each institution must uphold its own standards. Barak and Sharma (2024) determined that NPF has a significant and favourable influence on ROA, indicating that a reduction in NPF will lead to an enhancement in the bank's ROA.

H₂: NPF exerts a substantial influence on profitability.

2.1.3. Impact of operating costs and operating revenue (OCOR) on profitability

OCOR is employed to assess the ability of bank management to manage operating expenditures in relation to operating income. A lower OCOR ratio is preferable, as it indicates that the bank can adequately cover operational expenses with its income (Sarfraz et al., 2022). A reduced OCOR indicates more efficiency in a bank's management of operational costs; hence, higher profitability is achieved. Abdullahi et al. (2022) said that OCOR has a significant and beneficial effect on ROA. The positive ratio of OCOR indicates that a lower OCOR signifies more performance in the bank's operational activities.

H₃: OCOR exerts a substantial influence on profitability.

2.1.4. The impact of financing to deposit ratio (FDR) on profitability

The funding to store percentage (FDR) is positively correlated with FDR and bank performance. FDR indicates the bank's limited ability to compensate contributions by regulating the credit and repayments associated with its financial performance (Alomari and Abdullah, 2023). A larger share indicates reduced liquidity for the respective bank. Conversely, a smaller FDR indicates the bank's requirement for sufficient financing. An elevated FDR at a certain level will enhance the bank's advantages; as advantages grow, production will rise, since advantages may influence overall advantage. Alomari and Abdullah (2023) shown that FDR has a favourable and significant effect on ROA. The favourable perception of FDR indicated that a higher FDR correlates with increased efficacy in the bank's commercial activities, potentially enhancing the bank's ROA.

H₄: FDR exerts a substantial influence on profitability.

2.1.5. The impact of CAR, NPF, OCOR, and FDR on performance

This study aims to evaluate and analyse CAR, NPF, OCOR, and FDR on production concurrently to ascertain if all independent variables incorporated into the regression have an effect on the dependent variable, revealing that CAR significantly influences ROA in South African banks. Almansour et al. (2021) determined that NPF has a significant and influence on ROA, indicating that a reduction in NPF will lead to an enhancement in the bank's ROA. Demircan Çakar et al. (2021) determined that NPF has a positive and significant influence on ROA, indicating that a reduction in NPF will result in a boost in the bank's ROA. The analysed funding to store proportion (FDR) showed to positively influence FDR and the efficiency of banks. The four variables are ratios employed to enhance banking profitability. The four parameters

significantly influence efficiency, since these ratios can enhance the sustainability of banks in increasing profits (Khan et al., 2022). H_5 : CAR, NPF, OCOR, and FDR concurrently influence profitability.

2.1.6. Conceptual framework

The research explores the impact of independent variables CAR, NPF, OCOR, and FDR on the dependent variable of the financial performance of banks. The analysis of these elements is predicated on the premise that the impact of each independent variable on bank performance may be articulated within a conceptual framework, as seen in Figure 1.

3. RESEARCH METHODS

This paper employs quantitative research with hypothesis testing. Quantitative study employing mathematical and statistical methodologies. Udeagha and Muchapondwa (2022) define quantitative research techniques as grounded in positivism, employing quantitative instruments for sampling and data gathering to evaluate stated hypotheses.

3.1. Population and Sample

This research examines the banking industry, particularly the banks listed on the Johannesburg Stock Exchange from 2022 to 2024. This period was chosen to collect more recent data, which would enhance comprehension of the sector's present situation. The current research utilises intentional sampling, a type of non-probability sampling strategy. This conclusion indicates that each component in the population possesses an equal probability of getting chosen for the sample. Requirements need to be satisfied to be accepted as a study sample. Throughout the stated time, 30 banks were enumerated on the Johannesburg Stock Exchange.

3.2. Source and Categories of Data

Data collection is a methodical and standardised process for acquiring the necessary data. A correlation exists between the data-collecting methodology and the research topic to be addressed. Secondary data denotes information obtained from pre-existing sources, including proof, records, or reports systematically organised in archives and presented in published formats. This study employs secondary data-collecting methods, including data acquired in a completed format, previously collected and analysed by external entities, and often presented in journals. This data has

CAR

PPP

OCOR

FDR

Figure 1: Conceptual framework

been gathered by other entities for reasons not aligned with the research requirements of the researcher.

3.3. Method of Data Acquisition

This approach involves the collection and utilisation of bank financial report data from the 2022 to 2024 timeframe, sourced from the Johannesburg Stock Exchange (JSE). The present research will use literature reviews and documentation as its data collecting techniques. The literature evaluation entails examining pertinent references, including pertinent publications, papers, legislation, regulations, and other material associated with Islamic banking along with this research.

3.4 Multiple Regression Analysis

The correlation between Y and a single or several independent variables. To examine the independent factors in relation to the dependent variables. The employed data analysis approach is a multiple linear regression model utilising data pooling. The current research employed data pooling due to the restricted sample size, comprising just 7 banks using data spanning 3 years (2022-2024), resulting in a total of 18 observations. This value fails to satisfy the minimal criteria for panel data analysis, necessitating greater individual (cross-sectional) and temporal (time series) variances to enhance the robustness and accuracy of model estimations. Moreover, combining data is more straightforward and appropriate when there is insufficient data to meaningfully differentiate individuals and temporal implications, allowing for the successful implementation of multiple linear regression models to examine the relationships across variables.

$$Y = \alpha + \beta 1 CAR + \beta 2 NPF + \beta 3 OCOR + \beta 4 FDR$$

4. RESULTS

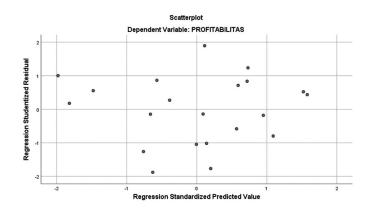
4.1. Data Normality test

The normality test assesses whether both the independent and dependent variables in a regression model have a normal distribution. Charles and Uford (2023) state that data normality may be assessed utilising the Kolmogorov-Smirnov normality test. A dataset is considered normally distributed if its significance value exceeds the 5% significance threshold (Asymp. Sig [2-tailed] > 0.05). The outcomes of the One-Sample Kolmogorov-Smirnov (K-S) test are presented in the following table:

As shown in Table 1, the Kolmogorov value is 0.086 for Asymp. The significance level (2-tailed), which is 0.100, is more than 0.05. Consequently, it may be inferred that the residual value follows a normal distribution and satisfies the normality requirement.

4.2. Test for Heteroscedasticity

The heteroscedasticity test is conducted on the regression model to assess the variance disparity of the residuals across different observations. The existence or lack of heteroscedasticity in a model may be inferred from the pattern of the distribution observed in a scatterplot of the model. The evaluation of the scatterplot indicates that the multiple linear regression model is devoid of heteroscedasticity if:



The scatterplot above indicates that the points are distributed haphazardly and lack a discernible pattern. The data are spread both above and below the zero threshold. This outcome exhibits heteroscedasticity in the regression model, rendering it appropriate for research purposes.

4.3. Test of Multicollinearity

We examine the hypothesis that multicollinearity, as indicated by the variance inflation factor (VIF) and tolerance (TOL), can be used; consistent with Katusiime (2021), a VIF value over 10 signifies a high level of multicollinearity, and vice versa. If the VIF value exceeds 10, it indicates a lack of collinearity. If the TOL value is below 0.10, the regression model is considered free from multicollinearity.

As seen in Table 2, the VIF value for the CAR variable (X1) is 1.283, which is <10, and the tolerance value is 0.662, above 0.1; hence, the data in this research does not exhibit multicollinearity.

4.4. Autocorrelation Test

Table 1: Normality test results

Unstandardised Residual					
N		19			
Standard variables	Mean	0000000			
	Standard deviation	0.46815332			
Highest pronounced disparities	Unconditional	0.086			
	Positive	0.064			
	Negative	-0.086			
Test statistic		0.86			
Asymp. significance (2-tailed)		0.100 ^{c,d}			

^cKolmogorov-Smirnov test for normality; ^dA significance level (Asymp. Sig.) greater than 0.05 indicates that the residuals are normally distributed, confirming the assumption of normality. Source: Self-generated

Table 2: Multicollinearity test results

Table 2. Winterconnectity test results						
Model	Non-standardized coefficients		Standardised coefficients	t	Significance	
	В	Standard	Beta			
		error				
1						
(Constant)	5.681	1.411		1.605	0.09	
CAR	-0.042	0.042	-0.270	-0.144	0.116	
NPF	-0.024	0.084	-0.661	-4.543	0.000	
BOPO	-0.019	0.122	0.122	-0.723	0.014	
FDR	0.008	0.112	0.012	0.317	0.036	

Source: Self-generated

The autocorrelation test measures the connection between variables across samples at various periods or across various individuals. We assess the presence of autocorrelation, and the Durbin-Watson (DW) test may be conducted. The outcomes of the correlation analysis are presented as follows:

As indicated in Table 3, the D-W value in the output is 1.622, which is between -2 and 2. Consequently, the regression model adopted is devoid of autocorrelation influence.

4.5. Multiple Linear Regression Analysis

The purpose of the multiple linear regression tests is to predict the value of the dependent variable/response (Y) given the values of the independent predictor variables. Furthermore, it is crucial to ascertain the direction of the link between the dependent variable and the independent components. The results of several linear regression tests are presented in the following table:

The results of the relapse test in Table 4 indicate that among the four independent variables, non-performing financing (NPF) as well as operational costs to being involved pay (BOPO) significantly affect productivity (ROA), with P = 0.000 and 0.014, respectively, both below the significance threshold of 0.05. NPF has a substantial negative correlation (-1.024), indicating that an increase in NPF correlates with a decrease in the bank's production. Furthermore, BOPO exerts a detrimental effect, indicating that inadequate operational efficiency would diminish profits. The CAR (capital adequacy ratio) variable has a significant value of 0.116, whereas the FDR (financing to deposit ratio) is 0.013. Nonetheless, the significance of FDR remains noteworthy.

Table 3: Autocorrelation test results

Model	R	R	Adjusted	Standard error	Durbin
		square	R-squared	of the estimation	Watson
1	0.751a	0.632	0.567	0.53626	1.622

Source: Self-generated

Table 4: Results of regression analysis

Model	Non-standardized coefficients		Standardised coefficients	t	Significance
	В	Standard	Beta		
		error			
1					
(Constant)	5.681	1.411		1.605	0.009
CAR	-0.042	0.042	-0.270	-0.144	0.116
NPF	-1.024	0.084	-0.661	-4.543	0.000
BOPO	-0.019	0.122	0.122	-0.723	0.014
FDR	0.008	0.112	0.012	0.317	0.013

Source: Self-generated

Table 5: Results of coefficient of determination

Model	R	R	Adjusted Standard error		Durbin
		square	R-squared	of the estimation	Watson
1	0.751a	0.632	0.567	0.53626	1.622

^aPredictors: (Constant), CAR, NPF, OCOR, and FDR. Source: Self-generated

4.6. Coefficient of Determination

The coefficient of determination is employed to assess the extent to which the model accounts for the variability of the dependent variable. The coefficient of assurance ranges from zero to one; if the value is low or negligible, the variability of the dependent variable is significantly restricted. Regardless of whether the esteem is broad or close to one, almost all the information is necessary to anticipate the dependent variable. The coefficient of the assurance test is displayed below:

The table above indicates that the R-squared test outcomes provide 0.632. This outcome reveals that 63.2% of the profitability factors are explicable by the CAR, NPF, FDR, and OCOR variables, whilst other variables account for 36.8%.

5. DISCUSSION

5.1. The Impact of Capital Adequacy Ratio on Profitability

The t-test table indicates that the capital ampleness percentage (CAR) for Unstandardised Beta Coefficients has a centralisation level beyond the predetermined threshold. The analysis indicates that the CAR value exceeds the expected significance value, suggesting that CAR does not significantly impact production. A consistently high CAR indicates that the bank is in a robust position, which often enhances performance in generating profits. The findings of this analysis demonstrate that the magnitude of the bank's capital adequacy ratio (CAR) does not significantly correlate with an increase in profit. These findings contradict the analysis carried out by Cuong and Tien (2023), which asserted that the capital adequacy ratio (CAR) significantly affects efficiency. This notion is inconsistent with the findings of Feng et al. (2023), which indicate that CAR exerts a significant influence. The T-test table indicates that the capital ampleness proportion (CAR) for Unstandardised Beta Coefficients possesses a centrality level that exceeds the predetermined threshold. The analysis reveals that the cumulative abnormal return (CAR) is more than the expected normal return, indicating that CAR does not significantly influence profits. A consistently high CAR indicates that the bank is in a strong position, which often aids in enhancing profitability. The findings of this study demonstrate that the magnitude of the bank's capital adequacy ratio (CAR) does not correlate with an increase in profitability. These findings contradict the analysis carried out by Bag et al. (2023), which asserted that the capital.

5.2. Adequacy Ratio (CAR) Significantly Affects Production

Moreover, this perspective does not align with the findings of Ayanwale and Ndlovu (2024), who determined that CAR exerts a significant influence. The t-test table for the capital ampleness percentage (CAR) value of Unstandardised Beta Coefficients indicates that CAR exhibits a significance level beyond the crucial threshold. According to the conducted analysis, CAR significance exceeds the expected prominence, leading to the conclusion that CAR does not significantly affect production. If capital adequacy remains substantial, the stronger the bank's health, the more effectively it generates profits. This analysis demonstrates that the bank's capital adequacy ratio (CAR) does not influence the

assessment of the bank's profitability. The results of this research contradict the study undertaken by Feng et al. (2023), which indicated that the capital adequacy ratio (CAR) significantly influences profitability. The research undertaken by Bag et al. (2023) does not substantiate the claim that Ha has a significant influence.

5.3. The Impact of NPF on Profitability

The t-test table indicates the non-performing funding (NPF) value of the unstandardised beta coefficients. NPF is recognised to possess a much lower level than H2, and it asserts that NPF critically influences production. Research indicates that NPF significantly affects the productivity of banks listed on the JSE from 2022 to 2024. A rise in the NPF ratio will deteriorate the quality of the bank's financing, resulting in an expansion of hazardous lending. Banks with elevated non-performing funds will incur increased expenses, encompassing both lucrative resource losses and additional expenditures, hence heightening the risk of financial distress. Due to adverse circumstances, the bank's profits will decline. The outcomes of this analysis correspond with the experiment undertaken by Ayanwale and Ndlovu (2024), which asserts that benefit aspects significantly influence NPF. The analysis of the investigation undertaken by Kayembe et al. (2021) reveals that Ha has a significant influence.

5.4. The Impact of BOPO on Profitability

According to the T-test table above, the value of working costs working wages is indicated. The unstandardised beta coefficients indicate that OCOR exhibits a much lower level, so we conclude that OCOR has a substantial impact on the efficiency of banks listed on the JSE from 2022 to 2024. H₃ asserts that OCOR significantly influences profits. A higher OCOR correlates with diminished bank profitability. Conversely, the demands of labour often result in a rise in income generated by the bank. In the event. The likelihood that operating costs are more significant will result in a decrease in operating income. This discovery impacts the increase in the bank's overall profit, occasionally lately assessed, and ultimately enhances efficiency. The results of the study indicate that productivity significantly affects OCOR. The findings of this study reinforce the investigations carried out by Chong et al. (2022), which revealed that Ha exerts a significant influence.

5.5. The Impact of FDR on Profitability

According to the T-test table, the Funding to Store proportion (FDR) value of the Unstandardised Beta Coefficients indicates that FDR has a significantly lower level, leading to the conclusion that FDR exerts a substantial influence on the profitability of banks listed on the JSE from 2022 to 2024. As the FDR share rises, the bank's advantage will augment. $\rm H_4$ asserts that FDR significantly influenced benefits. A tall FDR indicates that the total finance provided by the bank to open is more significant. The more the funding provided by the bank to customers, the more significant the bank's profits. The bank's advantages are allocated to capital; hence, the more funding provided, the more capital is acquired. The study done concludes that production significantly influences FDR. The Influence of CAR, NPF, OCOR, and FDR on Benefits.

H5 posits that Net Profit Factor, Bank Operating Profitability, and Financial Dependency Ratio influence production. According to the table, the unstandardised beta coefficient is determined, revealing that NPF, OCOR, and FDR possess a significance level below the crucial threshold. Therefore, it can be inferred that NPF, OCOR, and FDR together impact the productivity of banks. A decreased NPF, OCOR, and FDR indicate less credit risk for the bank, enhanced operational efficiency, and diminished likelihood of funding miscalculations. This study reflects on the research undertaken by Chong et al. (2022), indicating that NPF, OCOR, and FDR significantly influence profitability.

6. CONCLUSION AND RECOMMENDATION

Following the analysis and discourse on the enquiries and hypotheses undertaken, the subsequent findings on the influence of external influences on company value may be articulated: Non-performing lending significantly impacts bank profitability. Moreover, working costs and working income substantially impact efficiency in banks. The financing-to-deposit ratio significantly influenced the productivity of commercial banks, as evidenced by data from the Johannesburg Stock Exchange from 2022 to 2024. Benefits for Management: Administration should prioritise reinforcing essential elements such as profitability and capital structure to augment share appeal to shareholders. Companies can enhance investor trust and increase stock returns by optimising the Net Profit Margin (NPM) and sustaining a balanced debt-toequity ratio (Drns). Moreover, companies with substantial market capitalisation must maintain consistent profitability to preserve a competitive advantage and encourage long-term investment. Visibility and effectiveness in operations are essential for augmenting the firm's worth in the capital market.

Banking professionals are advised to prioritise the management of operational profitability and to mitigate the non-performing financing ratio (NPF) to ensure sustainable growth in bank profitability. Professionals must ideally employ the FDR ratio to sustain equilibrium between credit allocation and liquidity. It is advisable for future studies to extend the observation period and incorporate additional variables, such as return on equity (ROE), net interest margin (NIM), and external variables like inflation and evaluate interest rates, to enhance the comprehensiveness and relevance of the profitability analysis in relation to current market circumstances.

REFERENCES

Abdullahi, N.M., Zhang, Q., Shahriar, S., Irshad, M.S., Ado, A.B., Huo, X. (2022), Examining the determinants and efficiency of China's agricultural exports using a stochastic frontier gravity model. PLoS One, 17, e0274187.

Adeniyi, I.S., Al Hamad, N.M., Adewusi, O.E., Unachukwu, C., Osawaru, B., Onyebuchi, C., David, I. (2024), Educational reforms and their impact on student performance: A review in African Countries. World Journal of Advanced Research and Reviews, 21, 750-762.

AL-Dmour, H., Saad, N., Basheer Amin, E., Al-Dmour, R., Al-Dmour, A. (2023), The influence of the practices of big data analytics

- applications on bank performance: Filed study. VINE Journal of Information and Knowledge Management Systems, 53, 119-141.
- Almajali, D.A., Masa'deh, R.E., Dahalin, Z.M. (2022), Factors influencing the adoption of Cryptocurrency in Jordan: An application of the extended TRA model. Cogent Social Sciences, 8, 2103901.
- Almansour, A.Y., Alzoubi, H.M., Almansour, B.Y., Almansour, Y.M. (2021), The effect of inflation on performance: An empirical investigation on the banking sector in Jordan. The Journal of Asian Finance, Economics and Business, 8, 97-102.
- Alnabulsi, K., Kozarević, E., Hakimi, A. (2022), Assessing the determinants of non-performing loans under financial crisis and health crisis: Evidence from the MENA banks. Cogent Economics and Finance, 10, 2124665.
- Alomari, A.S., Abdullah, N.L. (2023), Factors influencing the behavioral intention to use Cryptocurrency among Saudi Arabian public university students: Moderating role of financial literacy. Cogent Business and Management, 10, 2178092.
- Arias-Oliva, M., De Andrés-Sánchez, J., Pelegrín-Borondo, J. (2021), Fuzzy set qualitative comparative analysis of factors influencing the use of cryptocurrencies in Spanish households. Mathematics, 9, 324.
- Ayanwale, M.A., Ndlovu, M. (2024), Investigating factors of students' behavioral intentions to adopt chatbot technologies in higher education: Perspective from expanded diffusion theory of innovation. Computers in Human Behavior Reports, 14, 100396.
- Bag, S., Rahman, M.S., Gupta, S., Wood, L.C. (2023), Understanding and predicting the determinants of blockchain technology adoption and SMEs' performance. The International Journal of Logistics Management, 34, 1781-1807.
- Barak, M., Sharma, R.K. (2024), Does intellectual capital impact the financial performance of Indian public sector banks? An empirical analysis using GMM. Humanities and Social Sciences Communications, 11, 1-11.
- Bhatt, S., Malek, M., Juremalani, J. (2025), Navigating the road to success: Unravelling the key factors influencing PPP selection in Indian road projects. International Journal of Indian Culture and Business Management, 34, 345-364.
- Charles, I.I., Uford, I.C. (2023), Comparative analysis and evaluation of business and financial performance of Amazon. Com: A three-year period critical review of exceptional success. European Journal of Business, Economics and Accountancy, 11, 69-92.
- Chong, A.Y.L., Blut, M., Zheng, S. (2022), Factors influencing the acceptance of healthcare information technologies: A meta-analysis. Information and Management, 59, 103604.
- Cuong, T.P., Tien, N.H. (2023), Factors affecting the decision to study abroad to start a business of students at the University of Food Industry in Ho Chi Minh City. International Journal of Multidisciplinary Research and Growth Evaluation, 4, 563-574.
- Demircan Çakar, N., Gedikli, A., Erdoğan, S., Yildirim, D.Ç. (2021), A comparative analysis of the relationship between innovation and transport sector carbon emissions in developed and developing Mediterranean countries. Environmental Science and Pollution Research, 28, 45693-45713.
- Feng, Y., Hu, J., Afshan, S., Irfan, M., Hu, M., Abbas, S. (2023), Bridging resource disparities for sustainable development: A comparative analysis of resource-rich and resource-scarce countries. Resources Policy, 85, 103981.
- Işık, C., Ongan, S., Islam, H., Pinzon, S., Jabeen, G. (2024), Navigating sustainability: Unveiling the interconnected dynamics of ESG factors and SDGs in BRICS-11. Sustainable Development, 32, 5437-5451.

- Jena, R.K. (2022), Examining the factors affecting the adoption of blockchain technology in the banking sector: An extended UTAUT model. International Journal of Financial Studies, 10, 90.
- Katusiime, L. (2021), COVID 19 and bank profitability in low income countries: The case of Uganda. Journal of Risk and Financial Management, 14, 588.
- Kayembe, H., Lin, Y., Munthali, G.N.C., Wu, X., Banda, L.O.L., Dzimbiri, M.N.W., Mbughi, C. (2021), Factors affecting the sustainability of microfinance institutions: A case of Malawi microfinance institutions. Journal of Financial Risk Management, 10, 117-134.
- Khan, I.U., Hameed, Z., Khan, S.N., Khan, S.U., Khan, M.T. (2022), Exploring the effects of culture on acceptance of online banking: A comparative study of Pakistan and Turkey by using the extended UTAUT model. Journal of Internet Commerce, 21, 183-216.
- Lee, C.C., Zhao, Y.N. (2023), Heterogeneity analysis of factors influencing CO₂ emissions: The role of human capital, urbanization, and FDI. Renewable and Sustainable Energy Reviews, 185, 113644.
- Long, H., Feng, G.F., Gong, Q., Chang, C.P. (2023), ESG performance and green innovation: An investigation based on quantile regression. Business Strategy and the Environment, 32, 5102-5118.
- Moharrak, M., Mogaji, E. (2025), Generative AI in banking: empirical insights on integration, challenges and opportunities in a regulated industry. International Journal of Bank Marketing, 43, 871-896.
- Moyo, N.A., Rapatsa, M.M. (2021), A review of the factors affecting tilapia aquaculture production in Southern Africa. Aquaculture, 535, 736386.
- Sarfraz, M., Khawaja, K.F., Ivascu, L. (2022), Factors affecting business school students' performance during the COVID-19 pandemic: A moderated and mediated model. The International Journal of Management Education, 20, 100630.
- Sergi, B.S., D'aleo, V., Konecka, S., Szopik-Depczyńska, K., Dembińska, I., Ioppolo, G. (2021), Competitiveness and the logistics performance index: The ANOVA method application for Africa, Asia, and the EU regions. Sustainable Cities and Society, 69, 102845.
- Smidt, H.J., Jokonya, O. (2022), Factors affecting digital technology adoption by small-scale farmers in agriculture value chains (AVCs) in South Africa. Information Technology for Development, 28, 558-584.
- Udeagha, M.C., Muchapondwa, E. (2022), Investigating the moderating role of economic policy uncertainty in environmental Kuznets curve for South Africa: Evidence from the novel dynamic ARDL simulations approach. Environmental Science and Pollution Research, 29, 77199-77237.
- Usman, F.O., Kess-Momoh, A.J., Ibeh, C.V., Elufioye, A., Ilojianya, V., Oyeyemi, O. (2024), Entrepreneurial innovations and trends: A global review: Examining emerging trends, challenges, and opportunities in the field of entrepreneurship, with a focus on how technology and globalization are shaping new business ventures. International Journal of Science and Research Archive, 11, 552-569.
- Van Niekerk, T., L'heureux, A.V., Holtzhausen, N. (2023), State capture in South Africa and Canada: A comparative analysis. Public Integrity, 25, 337-349.
- Yuan, D., Gazi, M.A.I., Harymawan, I., Dhar, B.K., Hossain, A.I. (2022), Profitability determining factors of banking sector: Panel data analysis of commercial banks in South Asian countries. Frontiers in Psychology, 13, 1000412.
- Zheng, G.W., Siddik, A.B., Masukujjaman, M., Fatema, N. (2021), Factors affecting the sustainability performance of financial institutions in Bangladesh: the role of green finance. Sustainability, 13, 10165.