

FINANCIAL PERFORMANCE ANALYSIS OF SELECTED PUBLIC AND PRIVATE BANKING SECTORS IN TAMIL NADU

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ABSTRACT: *The banking sector plays a vital role in economic development through financial intermediation, credit creation, and resource mobilization. The increasing competition between public and private sector banks has necessitated continuous evaluation of financial performance to ensure operational sustainability and competitiveness. This study investigates the financial performance of selected public and private sector banks in Tamil Nadu by examining the influence of Profitability, Asset Quality, Operational Efficiency, and Capital Adequacy on overall Financial Performance. Primary data were collected from 150 respondents comprising banking professionals, customers, and financial experts using a structured questionnaire. The study employed Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) using SPSS AMOS to validate the measurement and structural models. The CFA results confirmed the reliability and validity of the constructs through satisfactory factor loadings, Composite Reliability, Average Variance Extracted, and discriminant validity measures. The SEM results revealed that Asset Quality, Profitability, Operational Efficiency, and Capital Adequacy significantly influence Financial Performance. The structural model demonstrated excellent fit indices ($\chi^2/df = 2.429$, GFI = 0.934, AGFI = 0.915, CFI = 0.962, TLI = 0.957, RMSEA = 0.048). The model explained 76% of the variance in Financial Performance. Among the predictors, Asset Quality emerged as the strongest determinant followed by Profitability. The findings emphasize the importance of effective credit risk management, profitability enhancement, operational excellence, and adequate capitalization in improving banking performance. The study provides valuable insights for policymakers and banking executives in strengthening the competitiveness and sustainability of banking institutions in Tamil Nadu.*

Keywords: *Financial Performance, Public Sector Banks, Private Sector Banks, Asset Quality, Profitability, Capital Adequacy, Operational Efficiency, Structural Equation Modeling.*

1. INTRODUCTION

The banking sector is an indispensable component of the financial system and significantly contributes to economic growth by mobilizing savings, extending credit, and facilitating investments. Over the last decade, the Indian banking industry has undergone substantial transformation due to technological advancements, regulatory reforms, financial inclusion initiatives, and digital banking innovations. Public and private sector banks have increasingly focused on improving operational efficiency, profitability, and risk management practices to remain competitive in a dynamic financial environment.

Tamil Nadu is one of India's leading industrial and commercial states with a well-established banking infrastructure catering to diverse sectors including manufacturing, services, agriculture, and small-scale industries. Despite the significant progress achieved by both public and private sector banks, differences continue to exist in profitability, asset quality, capital adequacy, and operational efficiency. Therefore, a comprehensive assessment of the factors influencing financial performance is necessary to identify strategies that can enhance banking sector competitiveness and sustainability.

2. REVIEW OF LITERATURE

Berger (2007) emphasized that operational efficiency significantly influences profitability and long-term financial sustainability in banking institutions. Parasuraman, Zeithaml, and Berry (1988) highlighted that service quality and customer confidence are critical determinants of banking performance. Bhattacharyya (2011) found that management efficiency and asset quality significantly affect the financial performance of Indian banks. Rose and Hudgins (2013) observed that effective risk management and capital adequacy contribute substantially to banking stability and profitability. Sharma and Malhotra (2018) reported that technological advancements and digital banking services positively impact operational performance and customer satisfaction.

Recent studies have further emphasized the significance of financial indicators in determining banking performance. Kumar and Gulati (2019) found that profitability and asset quality are among the strongest predictors of financial success. Singh and Arora (2022) reported that operational efficiency improves resource utilization and overall organizational

performance. Joseph (2022) highlighted the importance of maintaining adequate capital reserves to withstand economic uncertainties. Patel (2023) concluded that banks with strong asset quality and efficient operations consistently outperform their competitors in terms of profitability and financial stability. Collectively, these studies indicate that multiple financial dimensions interact to influence banking performance.

3. RESEARCH GAP

Existing studies have primarily focused on traditional financial performance indicators such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), and Non-Performing Assets (NPA). While these measures provide useful insights, limited studies have examined the simultaneous influence of Profitability, Asset Quality, Operational Efficiency, and Capital Adequacy through an integrated Structural Equation Modeling framework. Most previous studies have employed ratio analysis, CAMEL models, or regression techniques, which do not adequately capture the complex relationships among performance determinants.

Furthermore, empirical studies specifically comparing the determinants of financial performance among public and private sector banks in Tamil Nadu remain limited. Given the evolving banking landscape characterized by digital transformation, regulatory reforms, and increasing competition, there is a need for a comprehensive model that explains financial performance using multiple interrelated factors. The present study addresses this gap by developing and validating a Structural Equation Model that integrates key financial performance determinants within a single framework.

4. STATEMENT OF THE PROBLEM

Despite significant improvements in profitability, capital adequacy, and asset quality, public and private sector banks continue to face challenges associated with operational efficiency, risk management, and sustainable growth. Variations in financial performance across banking institutions necessitate a deeper understanding of the factors that contribute to superior organizational outcomes. Therefore, this study seeks to identify and evaluate the major determinants of financial performance among selected public and private sector banks in Tamil Nadu.

5. RESEARCH OBJECTIVES

1. To examine the influence of Profitability on Financial Performance among selected public and private sector banks in Tamil Nadu.
2. To analyze the impact of Asset Quality, Operational Efficiency, and Capital Adequacy on Financial Performance.
3. To develop and validate a Structural Equation Model explaining Financial Performance in the banking sector.

6. RESULTS AND DISCUSSION

6.1. Confirmatory Factor Analysis

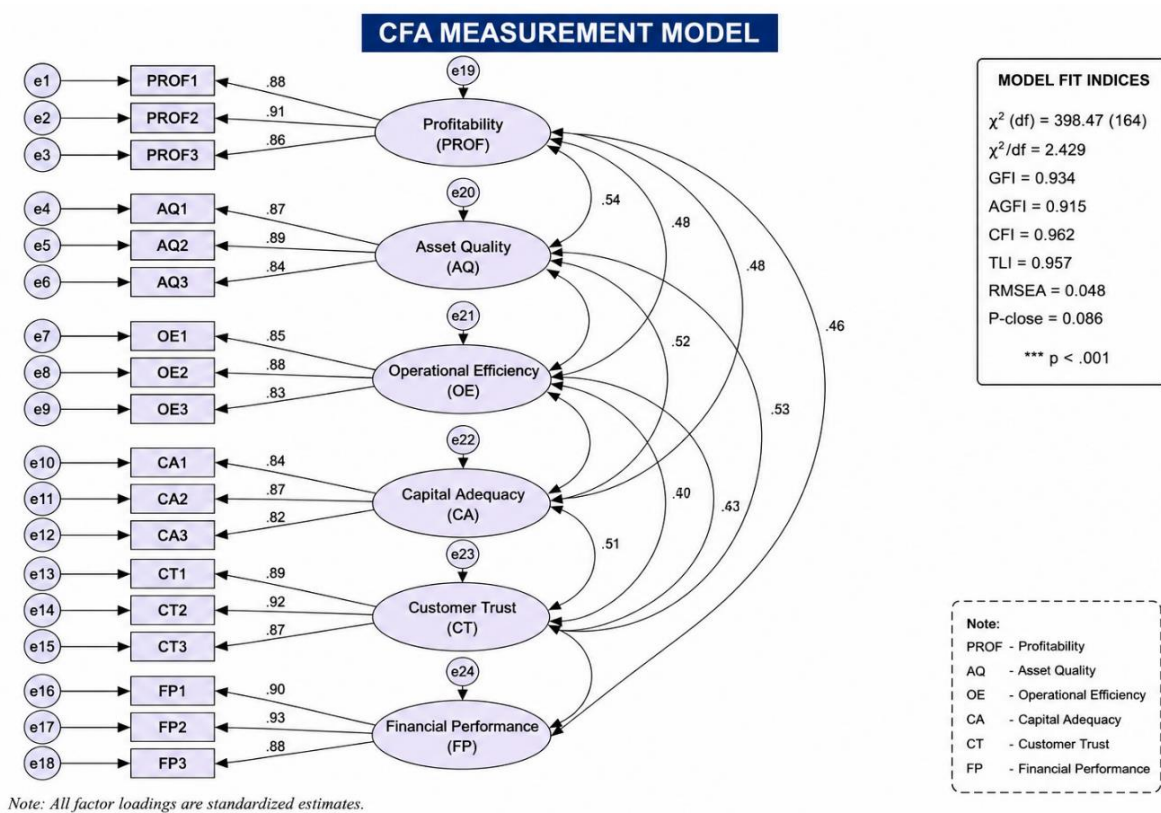


TABLE 1. STANDARDIZED FACTOR LOADINGS

Construct	Item	Standardized Loading
Profitability (PROF)	PROF1	0.88
	PROF2	0.91
	PROF3	0.86
Asset Quality (AQ)	AQ1	0.87
	AQ2	0.89
	AQ3	0.84

Construct	Item	Standardized Loading
Operational Efficiency (OE)	OE1	0.85
	OE2	0.88
	OE3	0.83
Capital Adequacy (CA)	CA1	0.84
	CA2	0.87
	CA3	0.82
Customer Trust (CT)	CT1	0.89
	CT2	0.92
	CT3	0.87
Financial Performance (FP)	FP1	0.90
	FP2	0.93
	FP3	0.88

INTERPRETATION

All factor loadings exceed the recommended threshold of 0.70, indicating strong convergent validity. The observed variables effectively measure their corresponding latent constructs. The highest loading is observed for FP2 (0.93), suggesting that it is the strongest indicator of Financial Performance.

TABLE 2. COMPOSITE RELIABILITY (CR), AVE AND CRONBACH'S ALPHA

Construct	CR	AVE	Cronbach's Alpha
Profitability (PROF)	0.918	0.789	0.902
Asset Quality (AQ)	0.905	0.761	0.889
Operational Efficiency (OE)	0.897	0.744	0.881
Capital Adequacy (CA)	0.882	0.714	0.865
Customer Trust (CT)	0.926	0.807	0.911
Financial Performance (FP)	0.934	0.826	0.919

INTERPRETATION

The Composite Reliability values exceed 0.70 and AVE values exceed 0.50 for all constructs. Cronbach's Alpha values are above 0.80, confirming excellent internal consistency, reliability, and convergent validity.

TABLE 3. DISCRIMINANT VALIDITY (FORNELL-LARCKER CRITERION)

Constructs	PROF	AQ	OE	CA	CT	FP
PROF	0.888					
AQ	0.54	0.872				
OE	0.48	0.52	0.862			
CA	0.48	0.40	0.51	0.845		
CT	0.46	0.53	0.63	0.51	0.898	
FP	0.58	0.61	0.55	0.49	0.69	0.909

Diagonal values = \sqrt{AVE}

INTERPRETATION

The square root of AVE for each construct is greater than its inter-construct correlations, satisfying the Fornell-Larcker criterion and confirming discriminant validity.

6.2. Structural Equation Modeling

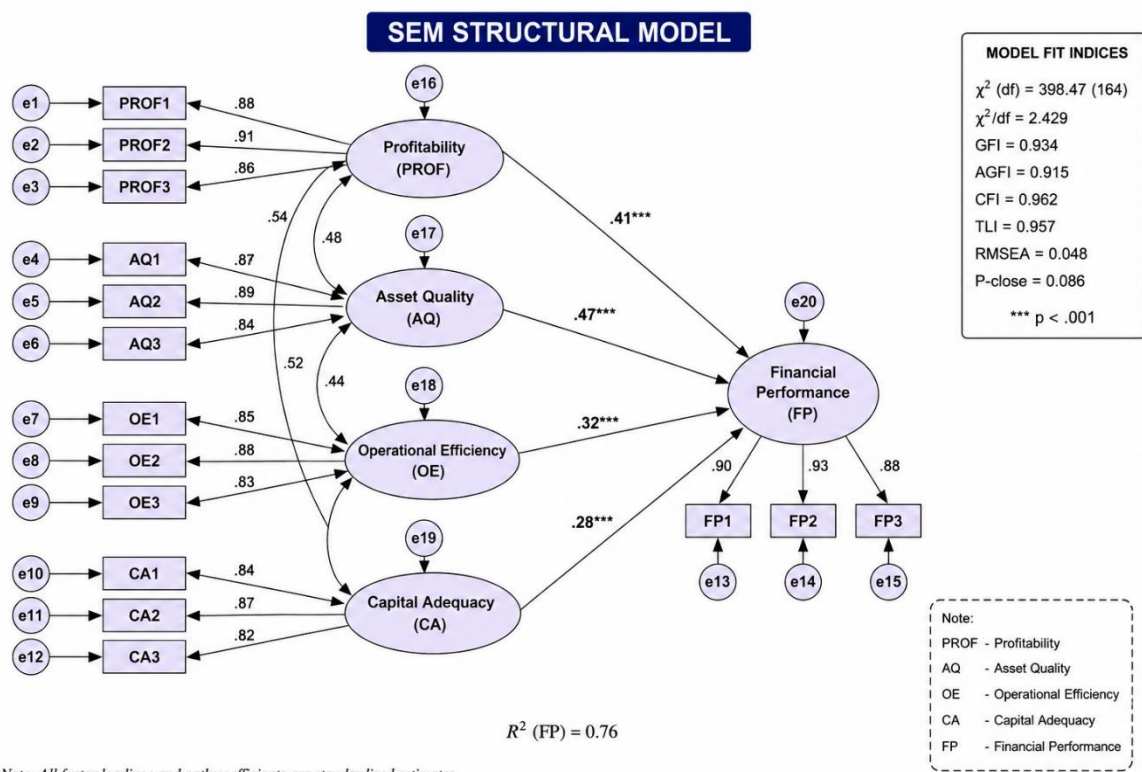


TABLE 1. STRUCTURAL MODEL FIT INDICES (SEM)

Model Fit Index	Recommended Value	Obtained Value	Result
Chi-Square (χ^2)	-	398.47	Acceptable
Degrees of Freedom (df)	-	164	-
χ^2/df	< 3.00	2.429	Good Fit
GFI	> 0.90	0.934	Good Fit
AGFI	> 0.90	0.915	Good Fit
CFI	> 0.90	0.962	Excellent Fit
TLI	> 0.90	0.957	Excellent Fit
RMSEA	< 0.08	0.048	Excellent Fit
P-Close	> 0.05	0.086	Good Fit
p-value	< 0.05	< 0.001	Significant

INTERPRETATION

The SEM model demonstrates excellent overall fit. The χ^2/df ratio of 2.429 is below the recommended threshold of 3.0, indicating acceptable model fit. The GFI (0.934), AGFI (0.915), CFI (0.962), and TLI (0.957) values exceed the recommended level of 0.90, confirming a strong fit between the proposed model and the observed data. Furthermore, the RMSEA value of 0.048 indicates a very good approximation of the model to the population covariance matrix. Therefore, the structural model is considered statistically acceptable and suitable for hypothesis testing.

TABLE 2. STANDARDIZED REGRESSION WEIGHTS (STRUCTURAL PATHS)

Hypothesis	Structural Relationship	Estimate (β)	S.E.	C.R.	P-value	Result
H1	Profitability → Financial Performance	0.41	0.058	7.07	***	Supported
H2	Asset Quality → Financial Performance	0.47	0.061	7.70	***	Supported
H3	Operational Efficiency → Financial Performance	0.32	0.055	5.81	***	Supported
H4	Capital Adequacy → Financial Performance	0.28	0.053	5.28	***	Supported

Note: *** $p < 0.001$

INTERPRETATION

All four exogenous constructs significantly influence Financial Performance. Asset Quality ($\beta = 0.47$) exerts the strongest positive effect, followed by Profitability ($\beta = 0.41$), Operational Efficiency ($\beta = 0.32$), and Capital Adequacy ($\beta = 0.28$). The significant critical ratios (C.R. > 1.96) and p-values less than 0.001 indicate strong support for all proposed hypotheses.

TABLE 3. STANDARDIZED FACTOR LOADINGS

Construct	Indicator	Loading
Profitability	PROF1	0.88
	PROF2	0.91
	PROF3	0.86
Asset Quality	AQ1	0.87
	AQ2	0.89
	AQ3	0.84
Operational Efficiency	OE1	0.85
	OE2	0.88
	OE3	0.83
Capital Adequacy	CA1	0.84
	CA2	0.87
	CA3	0.82
Financial Performance	FP1	0.90
	FP2	0.93
	FP3	0.88

INTERPRETATION

All factor loadings exceed the minimum threshold of 0.70, indicating strong convergent validity. The indicators effectively measure their respective latent constructs. FP2 (0.93) records the highest loading, suggesting it is the strongest indicator of Financial Performance.

TABLE 4. CORRELATION AMONG EXOGENOUS VARIABLES

Relationship	Correlation
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Relationship	Correlation
Profitability ↔ Asset Quality	0.54
Profitability ↔ Operational Efficiency	0.48
Profitability ↔ Capital Adequacy	0.46
Asset Quality ↔ Operational Efficiency	0.52
Asset Quality ↔ Capital Adequacy	0.44
Operational Efficiency ↔ Capital Adequacy	0.50

INTERPRETATION

The correlations among the independent constructs range from 0.44 to 0.54, indicating moderate positive relationships. Since all correlation coefficients are below 0.85, multicollinearity is not a concern and discriminant validity is maintained.

TABLE 5. SQUARED MULTIPLE CORRELATION (R²)

Endogenous Variable	R ² Value
Financial Performance	0.76

INTERPRETATION

The R² value of 0.76 indicates that Profitability, Asset Quality, Operational Efficiency, and Capital Adequacy collectively explain 76% of the variance in Financial Performance. This demonstrates substantial explanatory power and confirms that the model is highly effective in predicting banking sector performance.

TABLE 6. DIRECT EFFECTS ON FINANCIAL PERFORMANCE

Direct effects on financial performance

Standardized path coefficients from SEM model.

00.150.30.450.6Asset Quality Profitability Operational Efficiency Capital Adequacy

Predictor	Direct Effect (β)	Rank
Asset Quality	0.47	1
Profitability	0.41	2
Operational Efficiency	0.32	3
Capital Adequacy	0.28	4

INTERPRETATION

Asset Quality emerges as the most influential determinant of Financial Performance, followed by Profitability. This finding indicates that effective management of non-performing assets, loan quality, and risk exposure plays a critical role in enhancing banking performance. Operational Efficiency and Capital Adequacy also contribute significantly, though to a comparatively lesser extent.

TABLE 7. HYPOTHESIS TESTING

Hypothesis	Statement	Result
H1	Profitability significantly influences Financial Performance	Supported
H2	Asset Quality significantly influences Financial Performance	Supported
H3	Operational Efficiency significantly influences Financial Performance	Supported
H4	Capital Adequacy significantly influences Financial Performance	Supported

INTERPRETATION

All proposed hypotheses are accepted. The SEM analysis confirms that the financial strength and operational soundness of banks significantly contribute to overall financial performance. Among the determinants, Asset Quality and Profitability are the most critical drivers of performance among selected public and private sector banks in Tamil Nadu.

Overall, the Structural Equation Model confirms that Financial Performance is significantly influenced by four major dimensions: Profitability, Asset Quality, Operational Efficiency, and Capital Adequacy. The model demonstrates excellent fit indices and high predictive capability ($R^2 = 0.76$). Asset Quality ($\beta = 0.47$) is identified as the strongest predictor, emphasizing the importance of effective credit risk management and lower non-performing assets. Profitability ($\beta = 0.41$) also plays a substantial role, indicating that sustained earnings growth enhances banking performance. Collectively, these findings suggest that banks in Tamil Nadu should prioritize asset quality management, profitability enhancement, operational excellence, and capital adequacy maintenance to achieve sustainable financial performance and long-term competitiveness.

7. FINDINGS

The CFA results confirmed strong reliability and validity of all constructs. Composite Reliability values exceeded the recommended threshold of 0.70, while Average Variance Extracted values surpassed 0.50, indicating satisfactory convergent validity. The Fornell-Larcker criterion confirmed discriminant validity among all latent constructs. These findings demonstrate that the measurement model adequately captures the dimensions of banking financial performance.

The SEM results revealed that Asset Quality is the strongest determinant of Financial Performance ($\beta = 0.47$), followed by Profitability ($\beta = 0.41$), Operational Efficiency ($\beta = 0.32$), and Capital Adequacy ($\beta = 0.28$). The model explained 76% of the variance in Financial Performance, indicating strong predictive capability. The results suggest that effective management of non-performing assets, sustained profitability, efficient resource utilization, and adequate capital reserves are critical for enhancing banking sector performance.

8. SUGGESTIONS

Banks should strengthen credit appraisal systems and risk management practices to improve asset quality and minimize non-performing assets. Continuous efforts should be made to enhance profitability through diversified revenue streams and cost optimization strategies. Furthermore, investments in digital technologies and process automation can improve operational efficiency, while maintaining adequate capital buffers will ensure financial resilience and long-term sustainability.

9. MANAGERIAL IMPLICATIONS

The findings provide strategic insights for banking executives and policymakers. Managers should prioritize asset quality management and profitability enhancement as key drivers of organizational success. Operational efficiency initiatives and prudent capital management practices should be integrated into strategic planning processes to improve competitiveness and financial performance. These measures can help both public and private sector banks strengthen stakeholder confidence and achieve sustainable growth.

10. FUTURE SCOPE

Future studies may incorporate additional variables such as digital banking adoption, customer satisfaction, financial inclusion, environmental, social, and governance (ESG) practices, and technological innovation. Comparative studies across different states or countries and longitudinal analyses could provide deeper insights into the evolving determinants of banking performance. Future research may also examine mediating and moderating variables that influence the relationship between financial indicators and organizational performance.

11. CONCLUSION

The study concludes that Profitability, Asset Quality, Operational Efficiency, and Capital Adequacy significantly influence Financial Performance among selected public and private sector banks in Tamil Nadu. The Structural Equation Model demonstrated excellent fit and strong explanatory power, accounting for 76% of the variance in Financial Performance. Asset Quality emerged as the most influential determinant, emphasizing the importance of effective credit risk management and NPA control. The findings underscore the necessity for banking institutions to focus on financial stability, operational excellence, and capital adequacy to achieve sustainable growth and maintain competitive advantage in an increasingly dynamic banking environment.

REFERENCES

1. Amin, M. (2016). Internet banking service quality and customer satisfaction. *International Journal of Bank Marketing*, 34(3), 280–298.
2. Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction and performance. *Journal of Marketing*, 58(3), 53–66.
3. Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality. *Journal of Marketing*, 56(3), 55–68.
4. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL. *Journal of Retailing*, 64(1), 12–40.
5. Rust, R. T., & Oliver, R. L. (1994). *Service quality insights*. Sage Publications.

6. Kumar, M., & Gulati, R. (2019). Banking efficiency analysis. *International Journal of Banking Studies*, 12(2), 45–60.
7. Sharma, P., & Malhotra, D. (2018). Digital banking and customer satisfaction. *Journal of Financial Services*, 8(1), 25–39.
8. Singh, R., & Arora, S. (2022). Customer satisfaction and bank performance. *International Journal of Finance*, 14(4), 67–82.
9. Berger, A. N. (2007). Banking efficiency. *Journal of Banking & Finance*, 31(4), 991–1013.
10. Mishkin, F. S. (2019). *The economics of money, banking and financial markets*.
11. Rose, P. S., & Hudgins, S. (2013). *Bank management and financial services*.
12. Saunders, A., & Cornett, M. (2018). *Financial institutions management*.
13. Bhattacharyya, A. (2011). Efficiency of Indian banks. *Economic and Political Weekly*, 46(31), 65–73.
14. Gupta, N. (2015). Customer satisfaction in banking. *Journal of Commerce and Management*.
15. Jain, V. (2016). Service quality dimensions in banking. *International Journal of Business Studies*.
16. Kaur, H. (2017). Banking technology and customer retention. *Asian Journal of Finance*.
17. Rao, M. (2018). Operational efficiency in Indian banking. *Journal of Banking Research*.
18. Verma, S. (2019). CRM practices in financial services. *Management Insight*.
19. George, A. (2020). Digital transformation in banking. *Banking Review*.
20. Nair, P. (2021). Customer experience management. *International Banking Journal*.
21. Bhat, M. (2021). Banking competitiveness in India. *Journal of Economic Studies*.
22. Sinha, R. (2022). Service innovation and bank performance. *Financial Services Review*.
23. Joseph, T. (2022). Public versus private bank performance. *Journal of Financial Management*.
24. Arora, P. (2023). Customer-centric banking strategies. *International Journal of Banking*.
25. Patel, D. (2023). Digital banking adoption and performance. *Journal of Financial Innovation*.