THE RELATIONSHIP BETWEEN FINANCIAL RISK AND THE FINANCIAL PERFORMANCE OF LICENSED COMMERCIAL BANKS IN SRI LANKA

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INTRODUCTION

The financial sector in Sri Lanka is a crucial driver of economic development, and the country's financial sector has diversified across various fields. Reforms in the financial sector aimed at enhancing economic growth and market efficiency, focusing on the dominant banking sector. However, the banking sector faces internal and external risks. Effective risk management strategies are essential to mitigate financial risks and ensure the stability of banks. Strong financial performance is important for banks as it contributes to national economic development. Return on assets (ROA) is a financial performance indicator that measures the proportion of a company's assets that generate profitable income (Kawshala & Panditharathna, 2017). A higher ROA indicates more efficient and productive utilization of available resources by management (Trujillo-Ponce, 2012). It serves as a measure of profitability and reflects how effectively a company generates earnings from its total assets. Financial risk can include three types of risk such as credit risk, liquidity risk, and market risk. Numerous researchers have conducted on the relationship between these kinds of risk and the financial performance measured by ROA (Ex: Kodithuwakku, 2015; Inshira & Jahfer, 2019; Kaushik, 2013; Wijekoon & Jameel, 2021; Ekinchi, 2016; Kelvin, 2016). Moreover, Kodithuwakku (2015) conducted a study to investigate the impact of credit risk management on the performance of Licensed Commercial Banks (LCBs) in Sri Lanka. The study found that non-performing loans (NPL), as a measure of credit risk, had a negative relationship with profitability. Wijekoon and Jameel (2021) investigated the impact of credit risk on the financial performance of LCBs in Sri Lanka. Based on the study, financial performance only had relationships with bank size and management effectiveness. The relationship between size and financial performance was significantly negative. Amjath and Shahnaz (2022) investigated the impact of liquidity risk on LCBs in Sri Lanka. According to prior researchers, loan to deposit (LTD) and ROA had a positive relationship. Statutory liquid asset ratio (SLAR) and ROA had a positive relationship with return on equity (ROE) and net interest margin (NIM). In contrast, ROE and NIM had a negative relationship with SLAR. The relationship between liquidity risk and the financial success of LCBs in Sri Lanka was investigated by Inshira and Jahfer in 2019. The results of the regression study showed that while bank size raises liquidity risk, the capital adequacy ratio, ROA, and LTD considerably decrease it. Liquidity risk and ROE did not significantly correlate with one another. The study stressed the significance of asset liability management in LCBs in Sri Lanka for managing liquidity risk (LGR). Madhuwanthi and Morawakage (2019) investigated the impact of liquidity risk on licensed commercial banks' performance in Sri Lanka using secondary panel data. They revealed a negative and significant impact on the commercial banks' bottom-line metrics of return on average assets (ROAA) and return on average equity (ROAE), whereas a positive impact on NIM. Kaushik (2013) examined the market risk policy of banks in Sri Lanka and found that the country's definition of capital adequacy does not explicitly include market risk. The study highlighted the need for attention and implementation of the 1996 Basel Capital

Accord modification regarding market risk in Sri Lanka. Ekinchi (2016) studied the effect of credit and market risk on bank performance: Evidence from Turkey. According to empirical studies, credit and market risk positively and significantly impact conditional bank stock return volatility. Kelvin (2016) investigated the effect of market risk on the financial performance of commercial banks in Kenya and found a negative and significant relationship between financial leverage, interest rates, foreign exchange exposure, and bank profitability. These studies ignore the impact of financial risk on financial performance and only focus on each risk separately. Hence, it is necessary to have a broad perspective. Therefore, this study aims to investigate the relationship between financial risk and the financial performance of licensed commercial banks in Sri Lanka.

METHODOLOGY

The study employed a quantitative research design to investigate the relationship between financial risk and the financial performance of LCBs in Sri Lanka. The study population consisted of all 24 LCBs operating in Sri Lanka, with a sample size of 14 LCBs selected for analysis. A random sampling procedure is used to determine the sample. The remaining banks are removed based on the time series and data availability. Data for the study were collected from secondary sources, including annual reports, financial statements, and regulatory reports of the selected LCBs. The dataset encompassed the time frame spanning from 2016 to 2021, offering a longitudinal vantage point on the variables for the study. The study collected data related to financial risk variables, including credit, liquidity, and market risks. The financial performance was measured using ROA. Statistical techniques, such as descriptive, correlation, and panel regression, were utilized to analyze the data.

Figure 1
Conceptual Framework
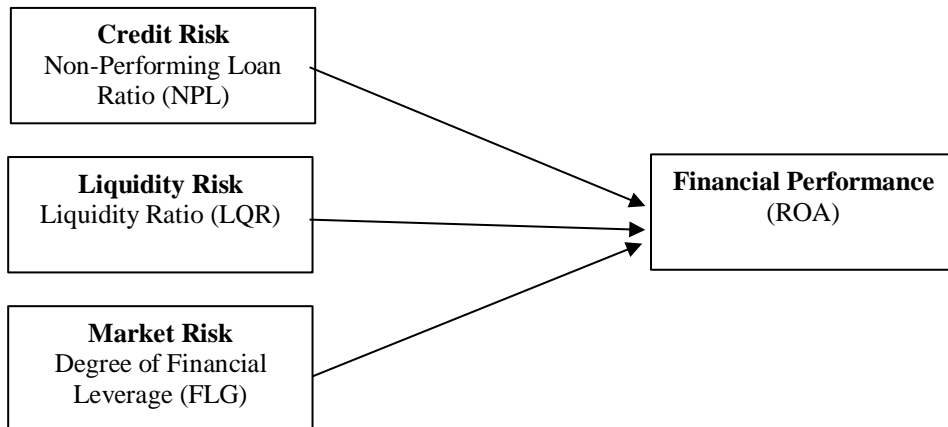
DATA ANALYSIS

Table 1 shows the results of descriptive statistics. According to the table, the mean ROA value of 0.03 suggests competition among banks for profits, but their ability to generate profits varies. The NPL ratio exhibits volatility, ranging from 0.01% to 5.98%, indicating varying credit risk management. Sri Lankan banks face significant liquidity and market risks, as reflected by high Loan and Advance to LQR and FLG values. The degree of financial leverage shows left-skewness, indicating potential financial instability. The LQR, a commonly used

liquidity metric, has an average value of 0.97 and exhibits substantial skewness and heavy-tailed distribution. Emphasizing lending activities may involve accepting higher credit risk, necessitating robust credit risk management.

Table 1

Descriptive Statistics

	Mean	Median	Max	Min	SD	Skewness	Kurtosis
ROA	0.030	0.020	0.110	-0.040	0.020	1.050	7.650
NPL	2.870	2.790	5.980	0.010	1.750	0.010	1.960
LQR	0.970	0.890	3.690	0.050	0.460	3.070	17.130
FLG	-0.760	-0.530	12.680	-51.130	5.300	-6.440	61.370

Table 2 shows the results of the Pearson correlation analysis. Table shows a weak negative correlation between ROA and the NPL ratio (-0.04), suggesting that higher NPL ratios may have a slight adverse relationship with ROA. Similarly, a weak negative correlation is observed between ROA and the LQR (-0.13). On the other hand, a weak positive relationship is found between the FLG and ROA (0.03), indicating that higher leverage may have a slight positive effect on ROA. Furthermore, no significant correlations are identified among the independent variables, indicating the absence of multicollinearity issues.

Table 2

Pearson Correlation Analysis

	ROA	NPL	LQR	FLG
ROA	1			
NPL	-0.040	1		
LQR	-0.130	-0.160	1	
FLG	0.030	0.030	-0.170	1

Table 3 shows the results of ordinary least squares regression (OLS) with pooled data and panel data analyses. The results of pooled data analysis show that the independent factors accounted for 17% of the variation in ROA. The presence of positive autocorrelation was observed through the Durbin-Watson statistic. Under the panel data analysis, the results of the Hausman test indicate the fixed effect model is more suitable than the random effect model for investigating the relationship between financial risk and the financial performance of LCB in Sri Lanka. In the fixed effect model, the R-squared value is 0.76, indicating that the independent factors explained a larger proportion of the variation in ROA than the other two models. The Durbin-Watson statistic value of 1.6 suggests a relatively low presence of autocorrelation in the model. Therefore, the researchers selected the results of the fixed effect model for the analyses of the relationship between study variables and financial performance. According to the results, there is a significant negative relationship between NPL and ROA, suggesting that higher NPL adversely affects the banks' financial performance. This finding is consistent with the findings of Wijekoon and Jameel (2021) and the result of Kodithuwakku (2015), whose studies focused on Sri Lankan data. On the other hand, there is a significant negative relationship between LQR and ROA, suggesting that higher LQR adversely affects banks' financial performance. This finding supports the finding of Madhuwanthi and Morawakage (2019), who found a significant negative relationship between LQR and the

financial performance of LCBs in Sri Lanka. Similarly, the variable FLG has a significant negative relationship with ROA. This finding also supported the study done by Ekinchi (2016) and Kelvin (2016).

Table 3
Regression Analysis

Method	Pooled (OLS)		Random Effect		Fixed Effect	
Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	0.047	0.029	0.024	0.481	-0.056	0.652
NPL	-0.001	0.261	-0.003	0.006	-0.004	0.002
LQR	-0.027	0.002	-0.019	0.005	-0.019	0.004
FLG	-0.003	0.553	-0.008	0.012	-0.009	0.013
R^2	0.169		0.200		0.767	
Adj. R^2	0.127		0.160		0.707	
F-statistic	4.016		4.952		12.803	
Prob. (F-stat)	(0.005)		(0.001)		(0.000)	
Durbin-Wats	0.470		1.130		1.600	
Hausman Test			15.004 (0.005)			

Dependent Variable is ROA.

CONCLUSION AND IMPLICATIONS

The study investigated the relationship between financial risk and the financial performance of LCB in Sri Lanka. According to the results, NPL, LQR, and FLG have a negative significant relationship with ROA. This finding will support various stakeholders, including bank management, regulatory bodies, policymakers, and investors. Regulatory bodies can utilize the findings to develop tailored policies and guidelines for managing financial risk and enhancing banks' financial performance. Bank managers can employ the study's insights to devise strategies and improve core competencies, customer relationships, and geographic expansion. Mitigating credit risk through thorough customer investigations and implementing restrictive covenants is advised. Attention to liquidity management and capacity building for market risk management is recommended. Investors can use the findings to make informed investment decisions based on financial risk and performance. The study provides a foundation for future research and exploration of additional factors influencing the relationship between financial risk and performance in Sri Lankan licensed commercial banks.

Keywords: Credit risk, financial performance, liquidity risk, market risk

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