-RESEARCH ARTICLE-

CREDIT RISK AND BANK PROFITABILITY IN ZIMBABWE: AN ARDL APPROACH

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─**Abstract**─

Banks operate in a risky environment, and their performance depends on risk management. Banking systems that are robust and profitable can withstand adversity and contribute more to the expansion of the financial system. Credit risk has the most significant and detrimental impact on a company's viability, systemic stability, and capital allocation efficiency. The literature contains no conclusive evidence of the relationship between credit risk and bank performance. This research aimed to contribute to the ongoing discussion regarding the connection between credit risk and bank performance. It is distinct from other investigations in terms of methodological and contextual perspectives. The research is contextualized in light of the Zimbabwean economic crisis. In contrast to other studies that have used fixed effects, random effects, and generalized methodologies, it utilized an ARDL methodology. The findings indicate that bank profitability is positively affected by capital adequacy, bank size, loan market share, and economic growth, while inflation has a negative impact on profitability. The result indicates that credit risk has a negative and significant impact on banks' short- and long-term profitability. This implies that a rise in credit risk decreases the profitability of banks both in the short and long term. The result implies that instituting policies that reduce credit risk can accelerate bank performance.

Keywords: Banks Operations, Risky Environment, Credit Risk, ARDL

1. INTRODUCTION

Banks operate in a risky environment. The efficacy of a bank depends on how it manages the various risks it faces. Credit risk, operating risk, interest rate risk, regulatory risk, market risk, liquidity risk, insolvency risk, and foreign exchange risk are a few of these risks (Chenga et al., 2020). Different categories of risks have distinct effects on bank performance; therefore, managers are expected to be aware of all types and effects.

Credit risk is regarded as one of the most significant hazards banks face. This results from paying interest on credit (Almekhlafi et al., 2016). It is the failure of bank customers to repay their loans or any other advances (Adekunle et al., 2015). The Basel Committee on Banking Supervision 2001 defines credit risk as the possibility of losing a portion or the entirety of an outstanding loan due to various credit events. According to Serwadda (2018), the Basel 11 accord recommends that banks adhere to appropriate credit risk management to enhance their performance. Effective credit risk management enhances a company's viability, systemic stability, and capital allocation efficiency. Banks should ensure their credit risk exposure remains within acceptable parameters by closely monitoring counterparties and conducting rigorous credit analyses of various products. Sound and profitable banking systems characterize a robust financial system. (Singh and Sharna, 2018) Research indicates that a robust and profitable banking system can withstand negative stress and contribute more significantly to the development of the financial system. As one of the risks that banks encounter, credit directly impacts the

banking system's efficiency. According to Boahene et al. (2012), the quality of credit extended by banks indicates their financial health and stability. Poor loan quality is believed to contribute to bank failures (Singh and Sharna, 2018). According to Abel (2018), credit risk exacerbates uncertainty regarding bank capital, deterioration in the quality of bank assets, and bank profitability. Moreover, a deterioration in the loan book exerts pressure on banks' operational costs, which reduces capital and liquidity, and thus modifies the process of credit expansion and, ultimately, the performance of the banks.

The requirement to minimize credit risk is well-established. Ongoing debate surrounds the relationship between credit risk and bank performance. The empirical evidence regarding the two variables is equivocal, and the debate continues. The relationship between credit risk and bank performance is controversial because the issuance of loans creates uncertainty regarding the potential returns (Mushtaq et al., 2013). This implies a risk associated with issuing loans and other advances, depending on whether clients repay. Banks' risk tolerance determines potential losses (Khemraj and Pasha, 2013). This study aims to contribute to the ongoing discussion regarding the connection between credit risk and bank performance. The study is distinct from others in terms of its contextual and methodological perspectives and is contextualized to Zimbabwe. This country has experienced significant economic challenges, exemplified by 2008's world-record inflation. The research employs an ARDL methodological strategy. It differs from previous studies that employed fixed effects, random effects, and a generalized method. The ARDL method is considered more intelligent than similar methods because it can accommodate smaller sample sizes.

2. BACKGROUND

The Zimbabwean banking industry has experienced both good and terrible times. The performance of banks mirrors the evolution of the economy as a whole. The happy times were characterized by increased profitability and capital growth organically and through shareholder investments. The poor periods were primarily marked by slowed economic growth and bank failures. Bank failures are characterized by insolvency, liquidity issues, undercapitalization, and corporate governance issues, according to the central bank (Reserve Bank of Zimbabwe, 2013). The International Monetary Fund (IMF 2013) reported that the banking sector in Zimbabwe faced challenges due, among other things, to rising NPLs, the absence of a credit reference bureau, the flight of human resources, liquidity challenges, a limited lender of last resort, and decreased interbank market activity. The adverse effects of credit risk on the Zimbabwean banking sector have been a significant cause for concern (Sandada and Kanhukamwe, 2016). They observed that the credit risk in Zimbabwe threatened the survival and profitability of banks, resulting in a decrease in economic growth. Sandada and Kanhukamwe (2016) attributed the economic downturn to poor credit risk management, leading to a lack of affordable financing for productive sectors. Because the macroeconomic environment significantly

impacts credit risk, they recommend that policymakers address the economy's fundamentals to foster a climate conducive to business prosperity.

Zimbabwe's bank failures are not a recent phenomenon. In 2011, the Central Bank was compelled to close the Renaissance Merchant Bank. Due to unethical behavior, an inappropriate shareholding structure, high levels of nonperforming insider loans, and persistent losses, the institution was forced to close (International Monetary Fund, 2012). In 2012, three additional banks failed: Royal Bank (Ltd), Barbican Bank (Ltd), and Trust Bank (Ltd). Poor credit risk management led to the failure of these institutions, according to the Central Bank (RBZ, 2013). The International Monetary Fund (2012) attributed the 2012 failure of the Royal Bank of Zimbabwe Limited to persistent liquidity issues and a high proportion of nonperforming loans. Nonperforming loans (NPLs) in Zimbabwe increased from 1.8% in February 2009 to 20.1% in September 2014 (Reserve Bank Zimbabwe, 2015) as a result of the failure of several institutions, poor credit risk management, and other factors (Figure 1). The Central Bank enacted several measures to combat the threat of escalating credit risk. The Central Bank outlawed insider loans, insisted that banks adequately provide for nonperforming loans, introduced a credit reference system, introduced the Zimbabwe Asset Management Company (ZAMCO), a particular vehicle to purchase all collateralized NPLs from banks, and established commercial courts to handle commercially-related litigations (Abel, 2018).
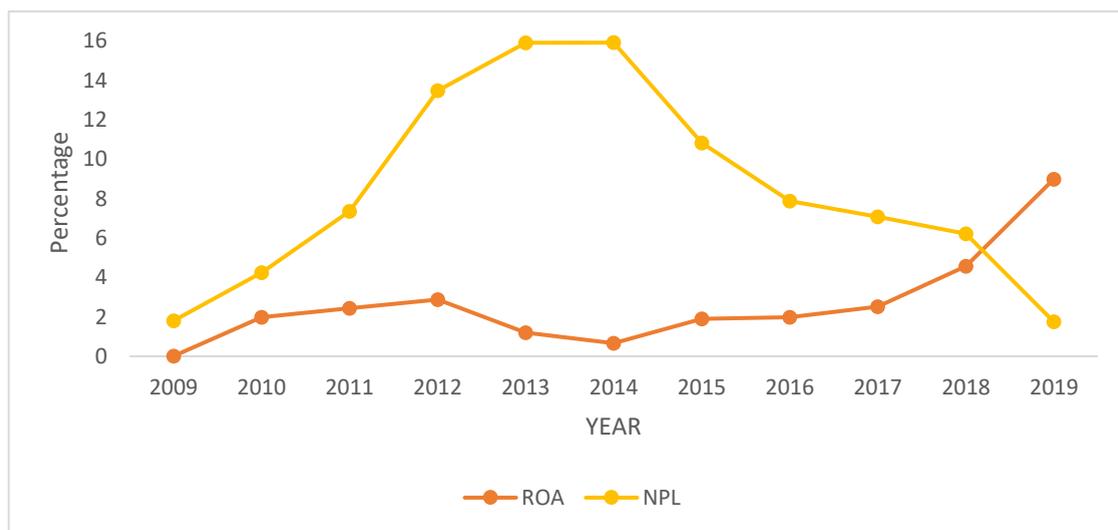

Figure 1: Trends in Credit Risk and Profitability

The trends depicted in Figure 1 regarding profitability and credit risk are intriguing. The fact that total bank profits were never negative between 2009 and 2019 despite periods of rising nonperforming loans is intriguing. Figure 1 demonstrates that during 2009-2012, NPLs and ROA followed a similar trajectory. For example, profitability and nonperforming loans exhibited an upward trend, indicating a positive correlation. During 2013-2014, profitability declined, whereas nonperforming loans rose. In 2015-2019,

many measures to control nonperforming loans were implemented, resulting in a significant decline in nonperforming loans and increased profitability. Figure 1 demonstrates that the relationship between nonperforming loans and profitability during the study period was not predictable. This creates a mystery regarding the nature of the relationship, necessitating an empirical examination using econometric techniques. The study empirically evaluated the relationship between credit risk, as represented by nonperforming loans, and profitability.

3. LITERATURE REVIEW

Sharma and Kaur (2021) investigated the relationship between credit risk management and the profitability of Indian public sector banks from 2009 to 2019. Several methods, including analysis of variance, correlation analysis, and multiple regressions, were employed in the study's methodology. According to the findings, the profitability performance of banks was adversely affected by nonperforming loans, which could expose them to significant volatility and the global financial crisis. The research suggests that banks should strengthen their credit risk management strategies to increase revenue growth and maintain a portfolio of high-quality assets. Additionally, they should focus more on nonperforming loans.

Rahmanullah (2021) analyzed the effects of credit risk on the profitability of commercial banks in Afghanistan. The study used the fixed effects estimator to analyze the balance panel data of six domestic private commercial banks from 2014 to 2018. The research demonstrated a negative correlation between credit risk and profitability. The study recommends that banks increase their profitability by enhancing their credit management, thereby increasing the efficiency of asset management and the efficacy of their business models.

Munangi and Bongani (2020) investigated the impact of credit risk on the financial performance of South African institutions from 2008 to 2018. Several econometric techniques, including aggregated ordinary least squares, fixed effects, and random effects, were utilized in this study. The study uncovered a negative correlation between credit risk and profitability as measured by return on assets and equity. The researchers concluded that banks must adhere to rigorous, prudent credit risk management. Chenga et al. (2020) analyzed the relationship between various risks and profitability for South African banks listed on the Johannesburg Stock Exchange between 2012 and 2018. Among the risks evaluated, credit risk was discovered to correlate with profitability positively. The relationship between credit management and financial performance in the Nigerian financial system was evaluated by Kasali and Fashanu (2020). Data were collected from bank employees and patrons using a descriptive research design. As a robustness test, the study also utilized the regression technique. The findings demonstrated that effective credit management enhances the financial performance of financial institutions. De Leon (2020) evaluated the impact of credit risk and

macroeconomic factors on the profitability of ASEAN banks from 2012 to 2017. The research utilized fixed and random effects panel regression methodologies. The study's findings indicate that credit risk negatively impacts profitability.

Ekinci and Poyraz (2019) analyzed the impact of credit risk on bank performance using information from 26 Turkish commercial banks operating between 2005 and 2017. According to the findings, a negative correlation exists between credit risk and profitability measures such as return on equity and return on assets. The results indicate that credit risk management and the profitability of Turkish deposit banks are strongly related. The study recommends that banks place a greater emphasis on credit risk management, particularly the control and monitoring of nonperforming loans, and implement modern techniques for credit risk management. Ali and Dhiman (2019) assessed the impact of credit risk management on the profitability of Indian public sector commercial banks from 2010 to 2017. The panel regression technique analyzed the relationship between profitability and credit management. They discovered that credit risk positively and significantly influences public sector institutions' financial performance. During 2006-2015, Serwadda (2018) examined the relationship between credit risk management and financial performance among Ugandan commercial banks. Regression methodology was utilized to complete the study. The research revealed a negative correlation between credit risk and bank performance. The study suggests that institutions improve their credit risk management practices. Poudel (2018) examined the impact of credit risk on the profitability of commercial banks in Nepal from 2002 to 2015.

The research employed the panel regression technique with a one-way fixed effect variation. The results verified that credit risk has a substantial adverse effect on the profitability of Nepalese commercial banks. Harahap (2018) investigated the impact of credit efficiency and nonperforming loans (NPL) on the profitability of Indonesian banking companies. The study revealed that nonperforming loans have no negative impact on the profitability of Indonesia Stock Exchange banking companies. Singh and Sharna (2018) analyzed the impact of credit risk on the profitability of India's publicly held banks. The relationship was investigated using a multiple regression approach. There is a significant and negative relationship between profitability and nonperforming loans, indicating that banks should focus on credit risk management to reduce nonperforming loans and achieve maximum profitability.

Mendoza and Rivera (2017) analyzed the impact of credit risk and capital sufficiency on Philippine rural bank profitability. The investigation made use of the Arrellano-Bond estimator. The study revealed a negative and statistically significant correlation between credit risk and profitability. The study recommended that rural banks strengthen internal control measures to assure the strict implementation of internal lending processes.

Isanzu (2017) investigated the impact of credit risk on Chinese banks' financial performance. The investigation utilized secondary data collected from the five largest banks between 2008 and 2014. Using panel data regression methodology, the study determined that credit risk significantly impacts financial performance, thereby recommending that banks regulate nonperforming loans to improve performance. Sheeba (2017) examined the effect of credit risk on the profitability of Indian banks. Multiple regression was used to establish the relationship in this study. The results demonstrated that the non-performing Asset-to-Asset Ratio significantly negatively impacts the return on equity.

In contrast, other credit risk indicators have no significant impact on returns on equity. The study suggested that Indian banks can reduce credit risk by reducing nonperforming assets and implementing stringent loan policies. Using causal-comparative research designs, Bhattarai (2016) evaluated the impact of credit risk on the performance of the Nepalese banking sector from 2010 to 2015. The results demonstrated that credit risk has a negative impact on bank performance, whereas the cost per loan asset has a positive effect. Gizaw et al. (2015) conducted an empirical analysis of the effect of credit risk on the profitability of commercial banks in Ethiopia from 2003 to 2015. Utilizing the panel data regression method, the study determined that credit risk, as measured by nonperforming loans, loan loss provisions, and capital adequacy, significantly impacted bank profitability among Ethiopian commercial banks. They suggested that banks improve their credit risk management to increase their profitability.

4. METHODOLOGY

Previous research influenced the study's methodology (Munangi and Bongani, 2020; Sharma and Kaur, 2021; Chenga et al., 2020; De Leon, 2020). The author altered the various models to produce the one used in this study. Various methodologies, including the fixed effects model, the random effects model, and the generalized method of moments, were utilized in prior research to determine the relationship between banking sector performance and credit risk. Pesaran et al. (2001) used an autoregressive distributed delayed model to establish the relationship between credit risk and bank performance, which is a departure from previous research. The model is selected based on its relevance to small samples. The acceptability of the method depends on whether the variables are integrated into order zero, order one, or a combination of the two orders (Shrestha and Bhatta, 2018). The ARDL method is considered more intelligent than other methods of a similar nature. The method applies to small or finite samples, specifically for thirty or more observations (Ghatak and Siddiki, 2001). The method can be used even when variables are not stationary at the same level, except that variables at levels greater than one are not stationary. In other words, the method can be used confidently when integrating orders one and zero variables, but not higher orders. (Pesaran et al., 2001) The method overcomes the difficulties of serial correlation and

indigeneity when modeled with the appropriate delays. Pesaran et al. (2001) found that the ARDL method is beneficial for estimating long- and short-run relationships.

Equation (1) highlights the determinants of bank performance. The general model adopted for the study is specified below:

$$PRO_t = f\ (NPL_t, SIZE_t, CAD_t, MKT_t, GDP_t, CPI_t\ ) \tag{1}$$

The econometric model adopted is specified as follows:

$$PRO_t = \beta_0 + \beta_1 NPL_t + \beta_2 SIZE_t + \beta_3 CAD_t + \beta_4 MKT_t + \beta_5 GDP_t + \beta_6 CPI_t \tag{2}$$

Where NPL proxies credit risk, size measures the bank's size proxied by the bank's assets, CAD represents the capital adequacy ratio, GDP represents economic growth, and CPI represents the consumer price index measuring inflation in the economy. The dependent variable is bank performance (PRO), approximated by return on assets.

The ARDL method estimate $(P + 1)^k$ Number of regressions to determine the optimal lag for each variable. $P + 1$ shows the highest number of lags to be used, and k is the number of variables in the equation (Shrestha and Chowdhury, 2005). The model is selected based on the Akaike Information Criterion (AIC), which uses the smallest possible lag length.

To evaluate the effect of credit risk on the performance of the banks, the ARDL model captures the short-run and long-run dynamics as specified in Equation 3.

$$\Delta PRO_t = \beta_0 + \beta_1 PRO_{t-1} + \beta_2 NPL_{t-1} + \beta_3 SIZE_{t-1} + \beta_4 CAD_{t-1} + \beta_5 MKT_t$$
$$+ \beta_6 GDP_{t-1} + \beta_7 CPI_{t-1} + \sum_{t=1}^{p} \theta_t \Delta PRO_{t-1} + \sum_{t=1}^{p} \vartheta_t \Delta NPL_{t-1}$$
$$+ \sum_{t=1}^{p} \mu_t \Delta SIZE_{t-1} + \sum_{t=1}^{p} \varphi_t \Delta CAD_{t-1} + \sum_{t=1}^{p} \emptyset_t \Delta MKT_{t-1}$$
$$+ \sum_{t=1}^{p} \omega_t \Delta GDP_{t-1}$$
$$+ \sum_{t=1}^{p} \epsilon_t \Delta CPI_{t-1} \tag{3}$$

Where $\beta_1 to\ \beta_7$ are long-run parameters, and $\theta, \emptyset, \vartheta,\ \mu,\ \varphi, \omega\ and\ \epsilon$ are short-run parameters. The null hypothesis of no cointegration is given as $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7$ and the alternative hypothesis is $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq \beta_7$.

When the null hypothesis is rejected based on the F-statistic implies there is cointegration. The rejection criterion is premised on the cointegration bounds test.

Equation 3 illustrates the long- and short-run relationship between bank performance, credit risk, and the control variables (CAD, SIZE, MKT, GDP, and CPI) according to the ARDL model. When employing the ARDL model in an analysis, it is crucial to comprehend how the short-run effects will adjust to the long-run equilibrium relationship. Consequently, the ARDL model contains an error correction term. We expect the error correction to be negative and statistically significant. The ECT indicates the rate of transition from short-run disequilibrium to long-run equilibrium. In other terms, ECT indicates the proportion by which the independent variable (credit risk) would return to its long-term equilibrium relationship with the dependent variable (PRO). The ECT is read from the Error Correction Model (ECM) after a cointegration test has been conducted to determine the existence of a long-run relationship. If the cointegration test determines no long-term association, the ECM becomes irrelevant. This study's models produce both long- and short-term outcomes simultaneously.

4.1   Justification of the variables

PRO represents the profitability of a bank relative to its assets. It reflects the effectiveness of management in generating revenue from bank assets (Munangi and Bongani, 2020).

Nonperforming loans (NPL) will serve as a proxy for credit risk. NPL refers to loans that have not been repaid to the bank in whole or part (Abel and Le Roux, 2018). NPL and profitability are anticipated to progress in opposite directions (Akbaş, 2012).

Bank size (SIZE) indicates the value of the bank's assets in natural logarithm form. The relationship between bank size and profitability is presumed to be positive due to economies of scale that reduce unit costs (Kamau et al., 2019), as evidenced by the positive correlation between bank size and profitability. In contrast, large banks may experience managerial diseconomies of scale, which ultimately lead to inefficiencies and harm their profitability.

Inconclusive is the effect of capital adequacy (CA) on bank performance. Some studies have found a negative relationship between capital adequacy and return on assets but a positive relationship between capital adequacy and return on equity (Ifeacho and Ngalawa, 2014).

Loan market share (MKT) indicates the relative position of each bank in the total loans advanced on the market. It is anticipated that the greater the loan share, the greater the profitability, as the bank will also generate a more considerable amount of interest income, which is a significant component of bank profitability.

Inflation (CPI) is the general and persistent increase in commodity prices. The impact of inflation on a bank's profitability depends on whether INF is anticipated. The anticipated INF is said to have the opposite effect on profitability, as banks would have sufficient time to adjust their interest rates and other service fees to the inflation rate.

The Gross Domestic Product (GDP) measures a country's economic activity's value during a specified period, typically a year. The level of the gross domestic product influences the demand and supply of loans in the economy. An increase in GDP positively affects loan demand, ultimately leading to a rise in bank profitability (Khrawish, 2011).

4.2   Data types and sources

The study uses panel data from various sources, including Bank Scope, the Reserve Bank of Zimbabwe (RBZ), and ZimStats. The study spans the years 2009 through 2019 and utilizes quarterly data from a total of 15 institutions that were active during the study period.

4.3   Results presentation and analysis

Table 1 presents the descriptive statistics for the variables that assess the relationship between profitability and credit risk. As the standard deviation indicates, there is a slight variation among the variables under consideration.

Table 1. Descriptive Statistics

	PRO	CAD	NPL	MKS	CPI	GDP	SIZE
Mean	0.0039	7.5835	7.5836	0.0673	2.3519	93.3321	8.3887
Median	0.0100	7.6430	7.6430	0.0432	0.0500	92.8000	8.4170
Maximum	0.1610	8.2060	8.2060	0.5000	39.3000	113.2000	9.2920
Minimum	-3.8580	6.0930	6.0930	0.0000	-3.0300	82.8000	6.4530
Std. Dev	0.1543	0.3423	0.3423	0.0715	7.2706	5.9958	0.4290

Correlation analysis was performed to determine whether multicollinearity exists as a consequence of the correlation between variables. The correlation matrix (Table 2) reveals the relationship between the independent variables. Results indicate no significant correlation between the independent variables, ruling out the possibility of multicollinearity. This then allows for regression according to equation 3.

Table 2. Correlation Matrix

	CAD	NPL	MKS	CPI	GDP	SIZE
CAD	1.000	-0.0450	0.5288	0.2114	-0.0438	0.4069
NPL	-0.0450	1.0000	-0.0100	0.0514	0.0040	-0.0513
MKS	0.5288	-0.0100	1.0000	0.0816	-0.0246	0.6587

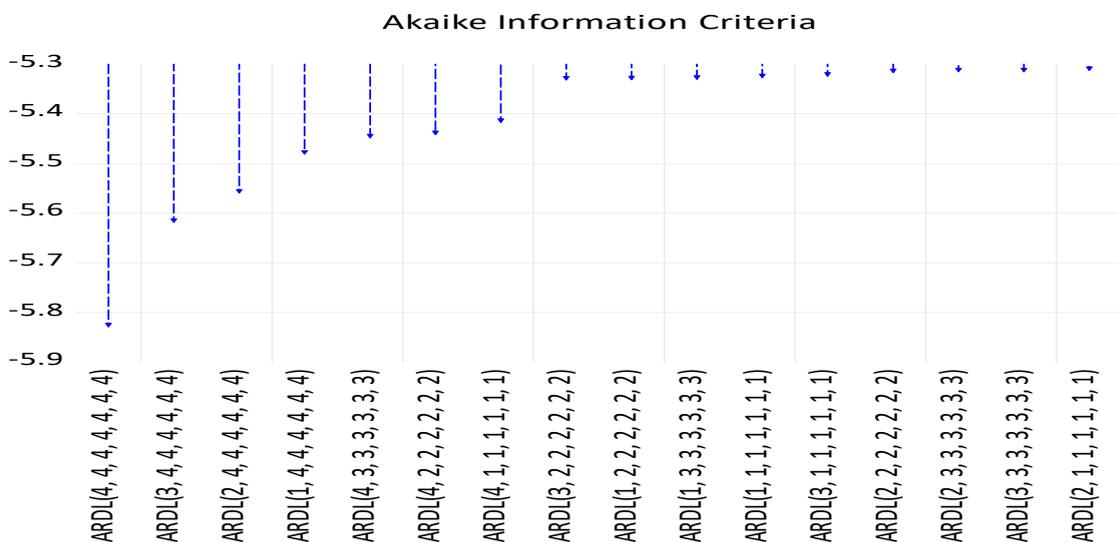| CPI	0.2114	0.0513	0.0816	1.0000	-0.0834	0.1573
GDP	-0.0438	0.0041	-0.0246	-0.0834	1.0000	0.0492
SIZE	0.4069	-0.0513	0.6587	0.1573	0.0492	1.0000

Figure 2: Optimal Lag Length Selection

Figure 2 shows the optimal lag selection for ARDL model. It shows that the optimal lag selection is (4,4,4,4,4,4,4). According to Table 3, there is cointegration between the variables. Following identifying the long-run relationship, the ARDL method is utilized to estimate the coefficients of the long-run relations and the associated error correction model. The results of error correction are shown in Table 3. The coefficient of ECM (-1) is statistically significant and has the correct sign, indicating that the variables of interest (PRO, CAD, NPL, SIZE, MKS, GDP, and CPI) have a long-run relationship. This paves the way for a discussion of the long-term outcomes. According to Table 3, there is a negative and statistically significant correlation between nonperforming loans and profitability. This implies that many nonperforming loans reduce the bank's profitability. This result critically impacts bank managers and policymakers in that policies that reduce credit risk in the banking sector can stimulate improved bank performance. Sharma and Kaur (2021) for India, Rahmanullah (2021) for Afghanistan, and Munangi and Bongani (2020) for South Africa, among others, have found comparable results.

Table 3 demonstrates a positive correlation between adequate capital and profitability. The results indicate that the greater a bank's capitalization, the greater its ability to generate profits. The positive and significant relationship between capital adequacy and a bank's profitability, according to Olatayo et al. (2019), suggests that banks with more equity capital are perceived to be safer. This advantage can result in increased

profitability. Similar results were found in a study conducted by Dao in 2020. The findings indicate a positive correlation between bank size and profitability. This suggests that banks with large asset bases have a greater capacity for lending, which can generate interest income. This subsequently influences the profitability of banks. Increasing bank size enables banks to realize economies of scale, which can increase bank profitability. Gupta and Smitt (2020) observed that the Return on Assets of institutions increases as their size increases.

Table 3. Regression results

Long Run Equation	
Variable	Coefficient
CAD	0.0376***
	(0.0000)
NPL	-0.5151***
	(0.0000)
SIZE	0.1135***
	(0.0000)
MKS	0.2552***
	(0.0041)
GDP	0.0227***
	(0.0061)
CPI	-0.0021***
	(0.0000)
Short Run Equation	
ECT(-1)	-0.3382**
	(0.0292)
D(PRO(-1))	-0.3337**
	(0.0144)
D(PRO(-2))	-0.3130***
	(0.0048)
D(PRO(-3))	-0.3282***
	(0.0016)
D(NPL)	-0.1360*
	(0.0878)
D(CPI(-1))	-0.0004**
	(0.0240)
Constant	-0.2346**
	(0.0314)

For ease of presentation, all insignificant variables in the short run have been omitted

The results indicate a positive correlation between bank profitability and economic expansion. It is assumed that economic growth positively affects profitability due to the higher demand for bank credit during periods of economic expansion and the decreased likelihood of loan defaults. Similar studies (Tan, 2016) have discovered a positive correlation between GDP growth rate and bank profitability.

Table 3 demonstrates further that inflation has a negative correlation with bank profitability. This implies that as inflation rises, so does the profitability of banks. The empirical evidence confirms that inflation has a statistically significant negative and long-term impact on the financial sector (Batayneh et al., 2021). This result contradicts the findings of Mulenga (2017), who discovered a positive correlation between bank profitability and inflation in Zambia. The short-run regression indicates that NPLs negatively and statistically significantly impact profitability. This implies that an increase in short-term credit risk reduces the banking sector's profitability. The research demonstrates that credit risk has both a short-term and long-term impact on profitability. It implies that banks should take steps to reduce the number of non-performing loans due to their negative impact on short- and long-term profitability.

5. CONCLUSION

Sound and profitable banking systems characterize a robust financial system. Such systems are characterized by minimal credit risk, the capacity to withstand negative distress, and a more significant contribution to the financial system's growth. This research aimed to determine the connection between credit risk and bank performance in Zimbabwe. The lack of consensus regarding the relationship between credit risk and bank performance prompted the study. The study determined that both macroeconomic and bank-specific factors determine bank performance. Bank performance is positively explained by capital adequacy, bank size, loan market share, and economic growth, whereas inflation has a negative effect on long-term profitability. The results also indicate that variables such as capital adequacy, bank size, loan market share, and economic growth have no impact on the short-term profitability of banks. Credit risk has a negative and significant impact on banks' short- and long-term profitability. This implies that an increase in credit risk reduces institutions' short- and long-term profitability. The result implies that instituting policies that reduce credit risk can accelerate bank performance.

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