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Bank Regulation and Supervision and Their Effects on Financial Stability: The Role of Foreign Banks in Somalia—A System GMM Approach

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Abstract
This paper investigates how the capital adequacy ratio (CAR) and the liquid asset ratio (LAR) affect bank stability, measured by the Z-score, using monthly financial data from a foreign bank operating in Somalia over the period 2023–2025. Motivated by the limited empirical evidence on the effects of regulation in frontier banking markets, the study adopts an explanatory research design within a positivist, deductive framework. Secondary data extracted from the bank's monthly regulatory financial reports submitted to the Central Bank of Somalia (CBS) are analyzed using pooled ordinary least squares (OLS) as a baseline and the System generalized method of moments (GMM) as the primary estimator to address endogeneity and dynamic panel bias. The empirical results reveal that CAR exerts a highly significant, positive, and economically large effect on bank stability under both estimators, indicating that capital adequacy is the dominant correlate of institutional resilience in this context. LAR exhibits a positive but statistically insignificant effect, which is attributed to the bank's persistently high baseline liquidity position. Profitability reinforces stability, whereas bank size exerts a significant negative effect under GMM estimation. The findings are consistent with the Basel regulatory framework's emphasis on capital buffers as the primary safeguard against insolvency and carry direct policy implications for the CBS and Somalia's evolving prudential supervisory architecture.

Keywords: Bank stability, Capital adequacy ratio, Liquid asset ratio, Z-score, System GMM, Somalia, Regulation, Basel III

1. Introduction

The stability of the banking sector is a cornerstone of sustainable economic growth and financial system integrity. A bank may be characterized by the economic functions it fulfills, the services it provides to its clients, and the legal foundation for its existence (Rose & Hudgins, 2008, p. 4). However, the inherent fragility of banking institutions, arising from maturity mismatches, leverage, and information asymmetries, renders them susceptible to systemic shocks.

The collapse of major financial institutions, as vividly demonstrated during the global financial crisis (GFC) of 2007–2009, can generate severe macroeconomic repercussions, including sovereign debt crises and prolonged economic recessions (Claessens et al., 2010). These episodes have reignited scholarly and policy debates about the appropriate scope and design of banking regulation.

Banking regulation encompasses a broad array of prudential instruments designed to mitigate risk, preserve solvency, and protect depositors. Among the most prominent are capital adequacy requirements, liquidity coverage ratios, leverage constraints, and deposit insurance schemes. The Basel Accords, including Basel I (Basel Committee on Banking Supervision [BCBS], 1988), Basel II (BCBS, 2004), and the significantly strengthened Basel III framework (2010–2017), represent the international community's evolving response to the vulnerabilities exposed by successive financial crises (BCBS, 2017). These accords seek to ensure that banks hold sufficient high-quality capital buffers relative to their risk-weighted assets, thereby reducing the probability of insolvency and contagion.

The present study investigates the impact of banking regulation on bank stability using monthly regulatory data from a foreign bank operating in Somalia over the period 2023–2025. Specifically, this research addresses three interrelated questions: (i) What is the effect of the capital adequacy ratio on bank stability? (ii) To what extent does the liquid asset ratio influence bank stability? (iii) What are the joint effects of capital and liquidity regulation on bank stability? As of 2024, the Somali financial sector consisted of 13 domestic commercial banks, one foreign bank branch, 15 money transfer businesses, and five mobile money operators (Central Bank of Somalia [CBS], 2024).

To address these questions, the study employs a panel regression framework. Robustness is ensured through the application of the generalized method of moments (GMM) estimator, which accounts for the potential endogeneity of regulatory variables arising from reverse causality, whereby financially weaker banks may attract more intense regulatory scrutiny.

This study makes two main contributions to the existing literature. First, it provides updated evidence on the regulation–stability nexus in a post-GFC context, in which the implementation of Basel III offers a richer set of regulatory variation. Second, the findings carry direct policy implications for regulators, international financial institutions, and policymakers engaged in the ongoing calibration of prudential standards.

The remainder of this paper is organized as follows. Section 2 reviews the theoretical and empirical literature on banking regulation and stability. Section 3 describes the data, variables, and econometric methodology employed in the study. Section 4 presents and discusses the empirical results and their implications, and Section 5 concludes with a summary of the findings and policy recommendations.

2. Literature Review

Agarwal (2025) used a mixed-methods strategy that combines quantitative panel analysis with qualitative institutional assessment to examine the impact of regulatory changes on banking performance and stability between 2008 and 2023. The results show that, across the selected institutions, post-crisis regulatory reforms significantly improved risk management procedures, capital adequacy frameworks, and disclosure transparency.

Using a sample of 688 banks from ten emerging economies between 2014 and 2021, Sharma and Chauhan (2023) argue that regulators in these countries should promote sound capital and liquidity management to mitigate the adverse impact of economic shocks on banks' stability and intermediation capacity.

Using a sample of 57 developing countries from 2000 to 2013, Azmeh (2019) found that financial stability is enhanced by moderate and incremental changes in banking regulation and supervision. Using a sample of 167 banks in 37 African countries from 2000 to 2011, Oduor et al. (2017) found that increases in capital requirements considerably increase financial instability in Africa, suggesting that higher capital requirements did not make banks safer. Ben Bouheni (2014), using a sample of the largest banks from six European countries between 2005 and 2011, found that regulation and supervision improve bank stability.

Using quarterly data on U.S. banks from 1984:Q1 to 2010:Q4, Berger and Bouwman (2013) found that capital improves the performance of medium and large banks mainly during crises, whereas it helps small banks increase their probability of survival and their market share at all times. Agoraki et al. (2011) used a sample of 546 banks from 13 Central and Eastern European countries between 1998 and 2005 and found that regulations generally reduce bank risk-taking. Laeven and Levine (2009) highlight the variability of the effects of capital regulation across institutional contexts. Using Z-score measures of bank stability, they found that ownership concentration and national regulatory frameworks condition the effectiveness of capital regulation. Examining the link between regulatory and supervisory independence (RSI) and financial stability, Quintyn and Taylor (2002) conclude that strong RSI, together with clear accountability and transparency, is crucial for financial stability.

3. Research Methodology

This section presents the methodological framework that underpins the empirical investigation of the impact of regulation on bank stability in the context of a foreign bank operating in Somalia. It is organized into six interrelated subsections: research design, data collection procedure, sampling design, variable definitions and measurement, model specification, and System GMM estimation.

3.1 Research Design

This study adopts an explanatory research design, also referred to as a hypothesis-testing design, to examine the directional and causal relationships between the regulatory variables (CAR and LAR) and bank stability (Z-score). As Kothari (2004, p. 39) states, explanatory research is concerned with "the relationship between variables" and focuses on testing whether presumed causal relationships are empirically supported by observed data.

The research strategy is quantitative and relies exclusively on numerical data derived from financial statements, regulatory disclosures, and computed financial ratios. The quantitative approach is consistent with the positivist philosophy and the explanatory design, and it enables the precise specification of relationships between variables through econometric modeling.

3.2 Data Collection Procedure

This study relies exclusively on secondary data extracted from the monthly financial reports of Ziraat Katılım Bank – Somalia Branch, a foreign participation (Islamic) bank operating under the supervisory jurisdiction of the CBS. These reports are prepared by the bank in compliance with the CBS regulatory reporting requirements and are submitted to the central bank monthly. They include balance sheets, income statements, capital adequacy schedules, liquidity coverage disclosures, and asset quality indicators. The study covers the period from August 2023 to April 2025, yielding a dataset of 21 monthly observations. The analyses were performed using the Stata 14 software package.

Monthly data were deliberately chosen over quarterly or annual alternatives because they capture short-term regulatory dynamics in capital and liquidity positions, satisfy the instrument-generation requirements of System GMM estimation, and align with the CBS's mandatory monthly reporting cycle. The data therefore reflect actual supervisory decision-making horizons rather than aggregated or smoothed financial conditions.

3.3 Sampling Design

The target population of this study comprises all foreign commercial banks licensed and operating under the supervisory authority of the CBS. In 2022, the CBS authorized two foreign

banks to commence operations in Somalia, marking a significant milestone in the country's financial sector development and international banking integration.

However, at the time of data collection (2023–2025), only one of the two licensed foreign banks was in active operation in Somalia: Ziraat Katılım Bank – Somalia Branch. The second authorized foreign bank (Egypt's Banque Misr) had not yet commenced substantive banking operations in Somalia during the study period and was therefore excluded from the dataset because it did not generate meaningful regulatory financial data for the variables under investigation.

3.4 Variable Definitions and Measurement

The study employs three categories of variables: (i) the dependent variable, bank stability (BS), proxied by the Z-score; (ii) the independent variables, comprising the two primary regulatory variables, namely the capital adequacy ratio (CAR) and the liquid asset ratio (LAR); and (iii) the control variables, which capture bank-specific financial characteristics, namely profitability and bank size. Table 1 summarizes these variables and their measurement.

Table 1: Variables and Measures

Variable	Symbol	Measurement	Expected sign
Dependent variable			
Bank stability	BS (Z-score)	(ROA + E/A) / σ(ROA)	—
Primary regulatory independent variables			
Capital adequacy ratio	CAR	Equity / total assets × 100 (%)	+
Liquid asset ratio	LAR	Liquid assets / total assets × 100 (%)	+
Control variables			
Bank size	SIZE	Natural logarithm of total assets	+/–
Return on equity	ROE	Net income / total equity (ratio)	+

Note. ROA = return on assets; E/A = equity-to-assets ratio; σ(ROA) = standard deviation of ROA. Source: Author's own design.

3.5 Model Specification

The empirical relationship between the regulatory variables and bank stability is specified as a dynamic panel data model that examines the effect of regulation on financial stability. The model is specified as follows:

$$Z\text{-}Score_{it} = \alpha_0 + \beta_1 (Z\text{-}Score)_{i,t-1} + \beta_2 CAR_{it} + \beta_3 LAR_{it} + \beta_4 X_{it} + \mu_i + \varepsilon_{it} \quad (1)$$

where:

$Z\text{-}Score_{it}$ = Z-score of bank i at time t (dependent variable);
$(Z\text{-}Score)_{i,t-1}$ = lagged dependent variable capturing the dynamic persistence of stability;
CAR_{it} = capital adequacy ratio of bank i at time t;
LAR_{it} = liquid asset ratio of bank i at time t;
X_{it} = vector of control variables (SIZE and ROE);
μ_i = bank-specific fixed or random effect capturing time-invariant heterogeneity;
ε_{it} = idiosyncratic error term, assumed to be i.i.d. with zero mean; and
α_0 and β_1–β_4 = parameters to be estimated.

3.6 System GMM

The study uses the System GMM estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998) as the primary estimation method, given its suitability for dynamic panel models characterized by a persistent dependent variable, potential endogeneity of the regressors, and unobserved individual-specific effects, all of which are present in the current study.

System GMM simultaneously estimates two equations: the first-differenced equation, which removes fixed effects, and the levels equation, which uses lagged differences as instruments. This substantially improves estimation efficiency, particularly when the dependent variable exhibits high persistence (Blundell & Bond, 1998). The two-step variant of System GMM is adopted in preference to the one-step version because it produces asymptotically efficient estimates through the use of an optimal weighting matrix.

4. Empirical Results and Discussion

This section presents and interprets the empirical findings on the impact of the capital adequacy ratio (CAR) and the liquid asset ratio (LAR) on bank stability (BS), proxied by the Z-score, for Ziraat Katılım Bank – Somalia Branch over the period 2023–2025 (21 monthly observations). The descriptive statistics are presented first, followed by the correlation analysis, the OLS regression results, and the System GMM estimation results.

4.1 Descriptive Statistics

Table 2: Descriptive Statistics of the Study Variables

Variable	Mean	*SD*	Min	Max	Obs.
Bank stability (BS)	471.8316	126.7813	308.3885	730.3936	21
Liquid asset ratio (LAR)	43.7665	10.6266	24.6070	64.7620	21
Capital adequacy ratio (CAR)	64.3366	17.3346	42.0859	99.8057	21
Bank size (SIZE)	17.2920	0.2652	16.8132	17.7069	21
Return on equity (ROE)	0.1959	0.2307	−0.4269	0.5082	21

Note. SD = standard deviation; Obs. = number of monthly observations.

The descriptive statistics reveal several noteworthy features of the dataset. The dependent variable, bank stability (BS), records a mean Z-score of 471.83 with a standard deviation of 126.78, ranging from a minimum of 308.39 to a maximum of 730.39. The high mean Z-score suggests that, on average, the institution maintained a substantial distance from technical insolvency during the study period, consistent with the conservative capitalization approach typical of state-backed foreign banking institutions.

The liquid asset ratio (LAR) has a mean of 43.77% with a standard deviation of 10.63%, ranging from 24.61% to 64.76%. The high LAR is consistent with the CBS's conservative liquidity requirements for foreign banks operating in Somalia and may reflect the institution's cautious approach to credit deployment in an environment with limited credit information infrastructure and elevated counterparty risk. The capital adequacy ratio (CAR) records a mean of 64.34% with substantial variation (standard deviation of 17.33%), ranging from 42.09% to 99.81%. These values are markedly higher than both the Basel III minimum of 8% and the CBS minimum requirement of 12%, indicating that the bank operated with very large capital cushions throughout the study period.

Bank size (SIZE), measured as the natural logarithm of total assets, has a mean of 17.29 with a narrow standard deviation of 0.27, ranging from 16.81 to 17.71. Return on equity (ROE) has a mean of 0.196 (19.6%) but notable volatility (standard deviation of 0.231), including

negative values (minimum of −0.427). This reflects the irregular profitability profile of a bank in its early operational years, when initial overhead costs may temporarily exceed revenues from financing activities.

4.2 Correlation Analysis

Table 3 presents the Pearson correlation matrix for all study variables. Correlation analysis provides a preliminary assessment of the bivariate relationships between the variables and serves as a diagnostic tool for detecting potential multicollinearity before regression estimation.

Table 3: Pearson Correlation Matrix

Variable	BS	LAR	CAR	SIZE	ROE
BS	1				
LAR	0.0893	1			
CAR	1.0000***	0.0864	1		
SIZE	−0.9865***	−0.0704	−0.9864***	1	
ROE	−0.2663	0.3628	−0.2736	0.2620	1

Note. *** $p < .01$.

The correlation analysis yields several important observations. First, the correlation between BS and CAR is virtually perfect ($r = 1.0000$, $p < .01$), indicating an extremely strong positive relationship between capital adequacy and bank stability. This near-perfect correlation is partly mechanical: CAR is measured as equity to total assets (Table 1), which is also a component of the Z-score numerator (ROA + E/A), so the two variables share a common term. Its direction is nevertheless consistent with the literature showing that well-capitalized banks exhibit a substantially greater distance to insolvency (Berger & Bouwman, 2013; Laeven & Levine, 2009). Second, the correlation between BS and LAR is positive but weak ($r = 0.0893$), suggesting that, although higher liquid asset holdings are associated with greater stability in the expected direction, the relationship is not strongly linear in the bivariate setting.

Third, there is a very high negative correlation between SIZE and both BS ($r = −0.9865$) and CAR ($r = −0.9864$), indicating that, as the bank's asset base grew over the study period, its capital adequacy ratio and Z-score tended to decline.

4.3 OLS Regression Results

Table 4 presents the results of the pooled ordinary least squares (OLS) regression of bank stability (BS) on CAR, LAR, SIZE, and ROE. As discussed in Section 3, OLS is employed as a baseline benchmark rather than as the primary estimation method, given its inability to address endogeneity and dynamic persistence. The OLS results nonetheless serve the important diagnostic purpose of establishing the direction and approximate magnitude of the coefficient estimates against which the GMM results can be benchmarked.

Table 4: OLS Regression Results (Dependent Variable: Bank Stability)

Variable	Coefficient	*SE*	*t*	$p > \|t\|$	95% CI
LAR	−0.0017	0.0054	−0.31	0.758	[−0.013, 0.010]
CAR	7.3051***	0.0187	391.36	0.000	[7.266, 7.345]
SIZE	−1.6201	1.2101	−1.34	0.199	[−4.185, 0.945]
ROE	4.3760***	0.2586	16.92	0.000	[3.828, 4.924]

Variable	Coefficient	*SE*	*t*	$p > \|t\|$	95% CI
Constant	29.0770	22.0850	1.32	0.207	[−17.741, 75.895]

Note. $F(4, 16) > 99{,}999$; Prob > $F = 0.0000$; $R^2 = 1.0000$; adjusted $R^2 = 1.0000$. *SE* = standard error; CI = confidence interval. *** $p < .01$.

The OLS regression produces exceptionally high explanatory power, with $R^2 = 1.0000$ and adjusted $R^2 = 1.0000$, indicating that the four regressors jointly account for virtually all the variation in bank stability over the study period. The *F*-statistic is extremely large ($F > 99{,}999$, $p < .001$), firmly rejecting the null hypothesis of joint insignificance.

CAR exerts a highly significant positive effect on BS ($\beta = 7.3051$, $t = 391.36$, $p < .001$), indicating that each one-percentage-point increase in the capital adequacy ratio is associated with an increase of approximately 7.31 units in the Z-score. This result is consistent with theoretical predictions and with a large body of empirical evidence demonstrating that higher capital buffers reduce insolvency risk (Berger & Bouwman, 2013).

In contrast, LAR is statistically insignificant under OLS ($\beta = -0.0017$, $t = -0.31$, $p = .758$), and its negative coefficient contradicts the theoretical prediction of a positive effect. This result should be interpreted cautiously, however, because OLS is subject to endogeneity bias and does not account for the dynamic relationship between liquidity management and stability, limitations that the GMM estimator directly addresses. ROE is positive and highly significant ($\beta = 4.3760$, $t = 16.92$, $p < .001$), indicating that more profitable institutions maintain greater stability, consistent with the charter value hypothesis (Keeley, 1990). SIZE is negative but statistically insignificant at conventional levels ($\beta = -1.6201$, $p = .199$), although its direction aligns with the expectation that asset growth dilutes capital ratios during the bank's early expansion phase.

4.4 System GMM Estimation Results

Table 5 presents the results of the System GMM estimation (*xtdpdsys* in Stata 14), which constitutes the primary estimation method of this study. System GMM simultaneously estimates the differenced and levels equations, using lagged differences as additional instruments for the levels equation. This system approach yields more efficient estimates than Difference GMM, particularly for persistent variables, as demonstrated by Blundell and Bond (1998). The estimation uses 20 observations and 39 instruments.

Table 5: System GMM Results (Dependent Variable: Bank Stability)

Variable	Coefficient	*SE*	*z*	$p > \|z\|$	95% CI
L1.BS (lagged)	−0.0038***	0.0008	−5.04	0.000	[−0.005, −0.002]
LAR	0.0023	0.0033	0.68	0.496	[−0.004, 0.009]
CAR	7.3120***	0.0120	611.42	0.000	[7.289, 7.335]
SIZE	−2.7946***	0.7672	−3.64	0.000	[−4.298, −1.291]
ROE	4.1933***	0.1440	29.12	0.000	[3.911, 4.476]

Note. $N = 20$; number of instruments = 39; Wald $\chi^2(5) = 1.84 \times 10^7$; Prob > $\chi^2 = 0.0000$. *SE* = standard error; CI = confidence interval. *** $p < .01$.

The System GMM results confirm and strengthen the OLS findings. The Wald chi-squared statistic reaches 1.84×10^7 ($p < .001$), far exceeding the threshold for joint significance and demonstrating the strong collective explanatory power of the regulatory and control variables.

The expanded instrument set (39 instruments) and the simultaneous estimation of the equations produce tighter standard errors and therefore more precise coefficient estimates. The lagged stability variable (L1.BS) has a significant negative coefficient ($\beta = -0.0038$, $z = -5.04$, $p < .001$).

CAR exerts a highly significant, positive, and economically large effect on bank stability under System GMM ($\beta = 7.3120$, $z = 611.42$, $p < .001$). The coefficient implies that each one-percentage-point increase in the capital adequacy ratio is associated with an increase of 7.31 units in the Z-score, holding all other variables constant. This finding addresses the first research question, indicating that higher capital adequacy is associated with greater bank stability. The result is consistent with the extensive international evidence (Berger & Bouwman, 2013; Laeven & Levine, 2009).

LAR is positive but statistically insignificant under System GMM ($\beta = 0.0023$, $z = 0.68$, $p = .496$). Although the positive sign is consistent with the theoretical prediction that higher liquidity buffers enhance bank stability by reducing vulnerability to funding shocks and bank runs, the lack of statistical significance suggests that the stabilizing effect of LAR is not sufficiently strong or precisely estimated to reach conventional significance thresholds within the 21-month observation window.

SIZE is negative and highly significant under System GMM ($\beta = -2.7946$, $z = -3.64$, $p < .001$). The negative coefficient indicates that, as the bank's total assets expanded, reflecting growth in its financing portfolio, the Z-score declined. This is consistent with the pattern observed in the descriptive statistics and with the "too-big-to-save" argument that larger institutions face greater monitoring challenges and potentially lower franchise value per unit of assets. ROE is positive and highly significant ($\beta = 4.1933$, $z = 29.12$, $p < .001$), with the larger z-statistic of the two control variables.

4.5 Summary of Key Findings

The study investigated the impact of the capital adequacy ratio (CAR) and the liquid asset ratio (LAR) on bank stability (BS), measured by the Z-score, using monthly financial data from Ziraat Katılım Bank – Somalia Branch over the period 2023–2025 (21 monthly observations). The empirical analysis generated principal findings that are consistent across the OLS and System GMM estimators, providing strong evidence of the robustness of the results to alternative methodological specifications. These findings are summarized in Table 6 and discussed below.

Table 6: Summary of Key Empirical Findings

No.	Variable	OLS	System GMM	Verdict
1	Capital adequacy ratio (CAR)	$\beta = 7.305$***	$\beta = 7.312$***	Supported
2	Liquid asset ratio (LAR)	$\beta = -0.002$ (n.s.)	$\beta = 0.002$ (n.s.)	Not supported
3	Bank size (SIZE)	$\beta = -1.620$ (n.s.)	$\beta = -2.795$***	Negative effect
4	Return on equity (ROE)	$\beta = 4.376$***	$\beta = 4.193$***	Positive effect

Note. n.s. = not significant. *** $p < .01$.

The most robust and unequivocal finding of this study is that the capital adequacy ratio (CAR) exerts a highly significant, positive, and economically large effect on bank stability under both estimation methods. The System GMM estimate, which is the most efficient and consistent estimator, yields a coefficient of $\beta = 7.312$ ($z = 611.42$, $p < .001$), implying that each one-percentage-point increase in CAR is associated with an increase of 7.31 units in the Z-score.

This finding is consistent across OLS (β = 7.305) and System GMM (β = 7.312), indicating that the capital–stability relationship is stable across the two specifications.

This finding carries a clear and theoretically grounded message: adequate capitalization is the cornerstone of bank stability in Somalia's frontier banking environment. The finding is consistent with the international evidence of Berger and Bouwman (2013) and Laeven and Levine (2009), who similarly document robust positive capital–stability relationships across diverse banking systems. The second principal finding is that the liquid asset ratio (LAR) has a positive effect on bank stability under System GMM, consistent with theoretical expectations, but this effect does not achieve statistical significance (β = 0.0023, $z = 0.68$, $p = .496$). The sign changes from negative under OLS (β = −0.0017) to positive under GMM, but because neither estimate is statistically significant, this change should not be over-interpreted. The lack of significance, however, suggests that, within the specific operational context of this study, variation in LAR does not produce a detectable independent effect on the Z-score.

5. Conclusion and Recommendations

This section synthesizes the findings of the study, draws conclusions from the empirical evidence, discusses the theoretical and practical implications of the results, and presents a set of evidence-based policy recommendations. The overarching aim is to translate the empirical results obtained from the descriptive analysis, OLS estimation, and System GMM estimation into coherent, actionable insights for bank regulators, supervisory authorities, banking practitioners, and academic researchers concerned with the nexus between prudential regulation and financial stability.

Bank size (SIZE) exerts a significant negative effect on stability under System GMM (β = −2.795, $p < .001$), indicating that months with higher total assets are associated with lower Z-scores. Return on equity (ROE) is positively and significantly associated with bank stability under both estimators (System GMM: β = 4.193, $z = 29.12$, $p < .001$), confirming that profitable operations contribute directly to stability through both the earnings retention channel, which builds equity capital organically, and the charter value channel, which reduces incentives for excessive risk-taking.

The study yields three principal policy recommendations. First, the Central Bank of Somalia should maintain and reinforce its 12% minimum CAR requirement, introduce countercyclical capital buffers, and develop forward-looking macroprudential surveillance tools to monitor balance sheet growth relative to capital accumulation. Second, bank management should treat capital adequacy as a core strategic asset, prioritizing earnings retention and implementing internal capital adequacy assessment processes (ICAAPs) to ensure that asset growth does not outpace equity accumulation. Third, international regulatory bodies should operationalize the Basel III proportionality principle with explicit guidance tailored to frontier and post-conflict economies, recognizing that uniform global liquidity standards may not deliver proportional stability benefits across all institutional environments.

Ethical Approval

Not applicable.

Conflict of Interests

The author declares no conflict of interests.

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