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Linking Financial Soundness to Performance: An Empirical Assessment of CAMEL Indicators and Audit Quality

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ABSTRACT

Banking sector's stability and profit-making ability are two of the most important parameters for the resilience of the financial system, and this is generally also true for some of the emerging economies. In this research, the primary focus will be on the effect of financial soundness and market sensitivity on South-Asian banks' financial performance, apart from the connection with audit oversight as a moderator. A total of 82 banks from Pakistan, India, and Bangladesh variously from the years 2013-2022, were the entities for which the bank performance was monitored. Financial soundness, the audit oversight index was selected as the variable. Audit fees, committee structure, independence, meeting frequency, and mode of appointment of auditors were taken into consideration. Besides, Random Effect Regression Models and Fixed levels were the methodologies chosen to examine the influence along the way, with the involvement of interaction terms to investigate moderation effects. The two-separate impact analysis was done for the sake of the banks' best performance, capital adequacy, and management efficiency being the first choice as the most effective, while market risk sensitivity was the total opposite, contributing positively when the risk was controlled. The examination of the auditors turned out to be a very critical matter that requires much attention, with the support of a positive moderation in the case of performance, with both financially strong points and weaknesses. The investigation of the types of banks is associated with institutional differences-stronger effects appeasing the countries more formally governed by the audit. The study, therefore, is an initial evaluation of the interplay between financial stability and audit assurance in influencing banks' performance. Alignment of Governance with the bank's performance, lying at the core of performance improvement, could strengthen the argument and support of the Resource-Based View and agency

theory, respectively. To have the banking system re-shaped for the good, the highest level of support to change should be traded in for the most demanding but still unrealistic yet sound means to the respective parties. As for the later research, a possible revision in the process of the study through dynamic modeling, partially isolating macroeconomic variations and developing new measures of governance, for instance, through expert assessment, would be an improvement.
Keywords: Financial Soundness, Audit quality, Bank Performance, CAMEL Framework, Sensitivity, Governance, South Asia, Panel Data Analysis

INTRODUCTION

Banking systems have been a major player in the economy for a long time, and they have been G recognized as such all over the world. It is a historical fact that they have been the main sources of capital, creators of credit, and developers of financial intermediation. The provision of funds from savers to the customers was one of the most advantageous parts of their role as it greatly improved the general situation by reducing the information gap and consequently, there was much demand for investment, leading to higher levels of employment and income. Therefore, it is a matter of fact that the existence of a sound and wholesome banking sector is a condition sine qua non for any macroeconomic stability and thus the sustainable development as its result.

A mature governance framework and efficient risk management system in a financially advanced country have been the factors that contributed to emerging vigorous economies sustained by strong financial systems in the past and now they nonetheless are they still in a position where their economies are growing and at the same time achieving financial stability. In contrast, the well-coordinated networks and the financial institutions that are taking control of the environment to meet the needs of their strength in terms of emerging and developing economies, are incapacitating these nations by their regulatory frameworks, underdeveloped financial infrastructures, and institutional weaknesses. In South Asia, especially, the banking sector is troubled by NPAs and capital inadequacy as well as liquidity crunches and bad management. These issues could lead to a financial crisis that could have a severe, negative impact on the economy both in terms of the magnitude of the crisis and the duration of its effects. Therefore, examining and enhancing the financial health of banks is the top priority for decision-makers, regulators, analysts, and other concerned parties.

CAMEL model is a widely acclaimed method which a bank uses to evaluate its financial and operating performance. The acronym consists of Capital Adequacy, Asset Quality, Management Efficiency, Earnings, and Liquidity. The model was originally formulated by the U. S. bank regulators in the late '70s and ever since then it has been employed globally for financial analysis and bank supervision. Each of these components is tasked with the capture of the high-leverage factors that the bank's operational and financial health largely depend on. Capital adequacy examines a bank's ability to absorb losses and stay solvent. On the other hand, asset

quality measures the credit risk that is present in the bank's loan portfolio. Management efficiency evaluates how effective the operations oversight and governance are. Earnings are focused on the profit and internal capital generation while liquidity expresses the bank's ability to meet short-term obligations without losses.

Moreover, besides the regulatory aspect, CAMEL is a portrait of the bank's sustainability and robustness from different points of view. It was only after the global financial crisis of 2008 that authorities recognized the requirement for a comprehensive evaluation method. Going through financial reforms and adopting new international banking standards like Basel III, the absolute necessity of keeping up capital buffers, exercising good practice in asset quality monitoring, and having sound risk management was emphasized more and more. Hence, the CAMEL indicators can be applied not only for diagnostic purposes but also as the authority for promoting the performance and integrity of the institution.

Financial stability by itself cannot guarantee banks that they will operate better than their rivals, certainly not allowing for exploitation of any present or future financial markets contingencies. Governance mechanisms play a very significant role; they cooperate with financial management and accounting in instituting transparency and ensuring that managers have the interest of the stockholders at heart. Audit quality is one of the main governance mechanisms and a deciding factor is audit quality. It is through an audit that a bank's financial statements, its risk disclosures, and internal controls are reviewed and assurance given by an independent third party. It is through high-quality audits that information asymmetries between banks and their stakeholders are reduced, making markets more efficient and protected investors more confident in the market.

Quality of audits is one of those things that can be thought of from a variety of perspectives such as the independence of the auditor, the cost of the audit, the audit committee's structure, and the frequency of audit engagements. The availability of an independent, professional auditor will increase the reliance on financial reporting while the appropriate audit fees will signify the scale and complexity of the audit operation. The audit committee’s from the point of view of composition and operation are also considered to be of equal importance as the financial practices of the company are and hence the external quality assessor’s presence is much needed. Up to the present moment, the quality of audits could be characterized as a variable that has a significant impact on the direction and strength of the relationship between the health of the finance and the bank’s performance.

Although the perception of audit quality as a governance mechanism is becoming more widespread, studies that analyze its effect in relation to financial indicators are scarce and especially rare in the case of South Asia. The majority of works in this area are dedicated to the state-of-the-art economies with already established and strong financial markets and strict regulations. There is a very little- and in the case of audit quality and performance enhancement in the situation of emerging banking sectors, which are the key concern of this proposal-by the

empirical research that investigates that use of audit quality as the modifier of financial soundness indices' effectiveness. This issue is of great importance since it is directly related to the operational and situational variety attributed to banks in the three South Asian countries of Pakistan, India, and Bangladesh.

In addition to the above, these three different economies have many similarities such as having financial systems mostly based on banks, having changing laws for the industry, and having problems related to not showing, credit risk, and operations governance. A separate institution, legislation and market dynamics create an environment that is relatively good for carrying out comparison among these three countries. The commercial banks in these three countries have been chosen as the main focus in the case of the present study, they shall report on very specific features of the relationship between the audit quality and the financial health which in turn influences the financial performance. And during the ten years from 2013, many regulatory and economic changes took place in South Asia. The latter includes the shift in interest rate policy, the implementation of the new prudential requirements, the alteration of banking service, and the economic consequences of the COVID-19 epidemic. These events had a change in the situation of the bank institutions; this showed the need for a new structure of management and the financial framework.

One intention of this research is to evaluate the effect of financial soundness as estimated by the CAMEL indicators, on the financial performance of the commercial banks in South Asia. It goes further to explore audit quality as a moderator in this relation. The major assumption is that financial soundness majorly improves bank performance and the link is more effective in the case of high audit quality. The described data set is the panel data model using bank-level financial data that cover ten years. This is done by employing the Fixed Effects and Random Effects models with the necessary diagnostic tests and robustness tests.

The research makes various contributions. It connects the Resource-Based View (RBV) of the firm with corporate governance theory to explain how the internal resources (like capital adequacy and management quality) and external assurance tools (for instance, Audit Quality) together determine the financial results, from a theoretical viewpoint. At the very practical side of things, it is hoped that these findings will be of help to the bank managers, regulators, and policymakers in formulating strategies for better performance as well as reforming governance. Moreover, the study, being oriented to a region with scant academic investigations, widens the ground of the empirical literature on the bank performance in the emerging markets. The paper will, therefore, discuss the subsequent parts, i.e., the literature-related areas, the methodology adopted, the results of the empirical study, and their relevance for the theory and practice.

LITERATURE REVIEW

The literature on financial soundness and bank performance has evolved through multiple waves of theoretical development and empirical validation. This

section synthesizes key contributions in chronological order, integrating both theoretical foundations and empirical evidence that underpin the present study.

Theoretical Foundations

The original financial soundness model basically comes from Modigliani and Miller's Capital Structure Theory of 1958, which states that in a perfect market, a company's value is independent of its capital structure. However, the first alterations to the theory continued to regard the necessity of having an optimal capital structure to ensure financial stability, and considered taxes, bankruptcy costs, and agency problems, etc. Thus, the idea was pushed further by the Resource-Based View (Barney, 1991), where the financial soundness-heard of as having sufficient capital, correct asset allocation, and right management, considered among the company's strategic internal resources that provide a sustainable competitive advantage, and, the company will claim, management has been given a big role here. As a result, banks that are on the stronger financial side would be inclined to use internal management for improved performance and the reduction of risk. In addition, Prospect Theory-Kahneman and Tversky (1979) also show ways in which banks can make decisions under risk, which is a very important issue for banks facing liquidity shock exposure and market risk. The point is that the Theory argues that decision-makers' loss aversion, to some extent, is the basis for the bank's risk management model. Next, The Theory of Financial Risk Management by Jorion (2001; 2021) devised the ways banks and financial institutions use capital buffers, portfolio diversification, and hedging for risk exposure management in operational, credit, and market areas. These functions fit very well with the CAMEL variables, with special reference to liquidity, capital adequacy, and asset quality.

CAMEL Framework in Empirical Literature

The origin of CAMEL data, which was once only proposed for the supervision of banks in the US in the late 1970s, was followed by its widespread adoption. Hempel and Simonson (1999) have established the usefulness of the CAMEL model in banking safety and soundness evaluation. Over time and in various situations, the number of gauging centers of CAMEL grew rapidly and immerged. Roman and Sargu (2013) in their research, have focused on examining the European banks and concluded that capital adequacy and earnings are the principal and most comprehensive indicators of financial performance, thus emphasizing the importance of internal risk indicators in banking supervision.

Ongore and Kusa (2013) found that asset quality and management efficacy were positively related to profitability when they deepened their inquiry into commercial banks in Kenya. According to the study, the characteristics of both the internal and external factors could affect the performance of banks in developing economies simultaneously. In the same vein, Indriastuti and Ifada (2016) argued that CAMEL would be a potential solution in the identification of early warning signs leading to bank failure in Indonesia. This, in turn, corroborates the statement by Rizvi et al. (2018) that CAMEL is very crucial in the regulation of South Asian banking system.

Further acceptance of the CAMEL and performance discussion was contributed by the next work of Tibebe (2020), who carried out the exploration of the Ethiopian banking system and found a negative impact of management quality and capital adequacy on return on assets (ROA). He says that the improvement of managerial competency and regulatory capital would be the path to profitability. After that same conclusion, Gokul analyzed the health of Indian public and private sector banks using the CAMEL model and suggested that the public sector banks require more capital and less earnings, whereas the private sector banks should be the other way around; he then introduced Banu and Vepa in 2021 who while admitting the lower profitability of public sector banks, also, viewed them as institutions that are sustainable in the financial context. As a result of the above works, Koshti in 2023 exhibited a reinvigorated Indian case in the context of the importance of CAMEL indicators in institutional health prediction. It was noted by the study that adherence to earnings quality and liquidity as primary areas of attention is getting broader and stronger than before in the post-pandemic recovery period.

Audit Quality and Financial Performance

Although the factors of the CAMEL model related to financial soundness may represent one part of the corporate governance spectrum, the very essence of corporate governance lies in the requirement of maintaining high audit quality so that financial reporting can be accurate. Geiger and Rama (2006), were the first researchers to use scientific methodologies and data to demonstrate the interacted effect of audit firm capability on the company's sustainability; they suggested that the audit quality level is able to generate confidence and price content in the minds of interested parties. Farouk and Hassan (2014) were the ones who took the investigation of the influence of the auditor on the financial statement a little bit further; they studied the Nigerian listed companies and thus came up with the conclusion that auditor independence was related to financial transparency and profitability positively. Their result was a loud call for the audit profession, a reminder of the importance of audits, and the need to further the research understanding of audit-related issues. The results further indicate the monitoring responsibility of audits to help in the organization's effort to be looked upon with respect. Salloum et al. (2014) provided evidence that enhanced auditing impacts credibility and the increase of goodwill. Besides, this concept has been of great interest recently. Moreover, the authors set out the following preliminary results: the better the institution is audited, the more reliable its financial reports are at the same time, trust from investors is heightened. In this work, the criteria for audit quality were operationalized as audit committee independence and the affiliation to the Big 4.

Furthermore, the fact that positive market reactions to the transition of the companies being audited by Big 4 audit firms according to Rashid et al. (2015) signals has been much stronger these years, attests to the easier of financial credibility. Relating this investigation forward, Mollik and Bepari (2016) avowed that Australia-

based companies audited by one of the Big 4 firms show greater earnings response coefficients. Tarmidi et al. (2019) even re-animated the debate with their argument that audit quality could moderate the influence of investor response on interpreting financial performance measurements, especially when audit firms' signals are in line with the criteria that have been established to evaluate a company's financial health. Consequently, the study contended that audit quality becomes even more important in the circumstance where financial disclosures are silent. Continuing, Susan (2011) showed that audit effort is directly proportional to the amount of audit fees being paid, concluding that the more the audit is meticulous, the greater is the fee. Mustapha et al. (2019) went a step further by ratifying the audit fee as a proxy for the audit quality, its association with the audit scope, and nature. Conversely, Gaaya (2017) uncovered the claim of the family firm setup that "high-quality audits are shunned to preserve discretion." This sort of situation aggravates corporate governance outcomes in such settings as emerging markets with their ownership ties being closely knit. More recently, Chen, Zhang, and Zhu (2023) conducted a study in the Chinese banking industry that showed high audit quality) improving risk-adjusted performance and especially so in turbulent market conditions. This fact would give South Asian economies that experience the same kind of volatility as the Chinese market even more reason to go for high-quality audits.

Integrated Perspectives in South Asia

To focus more on the South Asian region, the research that specifically looks into the association of CAMEL indicators, and the audit quality remains to be few. The results may show that the stock market, investors, and the government are demanding more and more of the financial reports that have been audited, and this is where Ado et al. (2020) have pointed out. But they also underscore more detailed analysis showing governance variables among the factors (Ado et al., 2020). The study done by Adil, Rana, and Khan (2023) under the title of a commercial bank performance evaluation in Pakistan had the result of the audit quality to be in a significant moderating effect between capital adequacy and asset quality on ROA and ROE. Therefore, their outcomes are supportive of the idea that performance evaluations should be placed in more advanced and integrative frameworks. Cutting through the various pieces of information added into the literature, one could see that the main emphasis when talking about the way CAMEL and audit quality are treated is on the fact that they are not interconnected, even though they have been studied somewhat separately in the earlier literature. The lack of a body that treats them as a whole is seen as the missing point in the complex institutional environment's dynamic interplay that we have experienced. On a side note, the need for regionally based studies and in-depth analysis is further reinforced by the differences in the regulatory framework and business practices in the markets of the region.

Identified Gaps and Research Direction

Hence, considering the studies collectively, there is a turning in the perception of individual influences of financial stability and audit quality on bank

performance. Nevertheless, very few have been done about them jointly, even less in the South Asian context. The study which is going to do so is meant to study the effect of audit quality on the CAMEL-performance relationship in the first place. Covering a decade with an up-to-the-mark panel data set and at the same time providing a wide range of theoretical backgrounds, the study will contribute to a more comprehensive and context-specific understanding of the financial stability and governance in the developing banking industry. Hence, the methodology part will be hence dependently set forth in the following section to be the parallel lines of investigation for the above outcomes through the means which are completely dependable in terms of econometrics.

Hypothesis

H1a: Capital adequacy has a significant positive effect on the financial performance of commercial banks.

H1b: Asset quality has a significant negative effect on the financial performance of commercial banks.

H1c: Management efficiency has a significant positive effect on the financial performance of commercial banks.

H1d: Earnings quality has a significant positive effect on the financial performance of commercial banks.

H1e: Liquidity has a significant positive effect on the financial performance of commercial banks.

H2a: Audit Quality positively moderates the relationship between capital adequacy and financial performance.

H2b: Audit Quality positively moderates the relationship between asset quality and financial performance.

H2c: Audit Quality positively moderates the relationship between management efficiency and financial performance.

H2d: Audit Quality positively moderates the relationship between earnings quality and financial performance.

H2e: Audit Quality positively moderates the relationship between liquidity and financial performance

RESEARCH METHODOLOGY

Research Paradigm

This study is rooted in the positivist research paradigm, which assumes that financial relationships are objective, measurable, and generalizable. It aligns with a deductive approach, wherein hypotheses are tested using empirical data. The paradigm facilitates the use of quantitative techniques to validate causal relationships between financial soundness (CAMEL indicators), Audit Quality, and bank performance in a structured and replicable manner.

Operational Definitions of Constructs

Construct	Definition	Measurement
Capital	The ability of a bank to absorb	Capital Adequacy Ratio (CAR) =

Construct	Definition	Measurement
Adequacy (C)	financial losses through capital reserves.	Tier I + Tier II capital / Risk-Weighted Assets
Asset Quality (A)	The proportion of non-performing loans or risky assets in a bank's portfolio.	Non-performing Loans to Total Loans Ratio
Management Efficiency (M)	Efficiency in resource utilization and operational control.	Cost to Income Ratio
Earnings (E)	The bank's ability to generate consistent profits.	Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin
Liquidity (L)	The bank's ability to meet short-term obligations.	Liquid Assets to Total Assets Ratio
Audit Quality (AQ)	Institutional governance mechanisms ensure accuracy and compliance in financial disclosures.	Composite index of: audit fee, committee size, independence, meeting frequency, and auditor type
Financial Performance (FP)	Profitability and sustainability of a bank over time.	Return on Assets (ROA) and Return on Equity (ROE)

Data Collection and Analysis

This research is based on quantitative analysis and the secondary data collected from annual financial reports of the commercial banks of the three economies: Pakistan, India, and Bangladesh. These are the three South Asian economies where the financial system is dominated by banks, so they are as a result stable. Besides this, for the sake of financial soundness, Audit Quality, and performance comparison of these economies, they are to some extent similar in terms of their correspondences in the region and institutions. The companies were chosen so that they met the above-mentioned conditions, which would allow them to be part of a study across countries. The whole database was created during a decade from 2013 to 2022 and it covered the major changes in the regulatory system and the economy. This was the time when the post-crisis reforms brought and then the COVID-19 pandemic destroyed the whole world and the Southern Asian region in particular. The technique seemed to be the only way. Business risk was the reason behind the choice of this figure. Every year almost all the CAMEL indicators and the necessary audit reports were found to be disclosed in all or most of the institutions. What is more, none of the banks missed or failed to produce an annual report that did not carry an audit cue. Therefore, we were certain that the sample is a representation of the whole population. Corresponding banks were done away with similarly; only a small amount of data was missing, as it could be that these were the

years of bankruptcy, exit, or any other scenario explaining the absence of data. On the other hand, the CAMEL framework was a composite of different dimensions to be considered for a bank to be financially sound, thus, the same and a bank could be rated as good in one area and poor or weak in another, and so forth. It meant that a bank is sound from the dimension covered by the respective capital adequacy measure but is weak in liquidity. Hence, such a bank will still need to put more money into the market or increase its customers but it is financially sound in terms of capital adequacy measures. Supply chain entities included energy and raw material suppliers, machine manufacturers, and the distribution network to the end-users. They were not the topics of the study yet their support was crucial as they arranged the smooth functioning of the goods and services. During the whole process, very few discrepancies were found; but through the combined efforts of the outside and inside factors who were interested in the data happening, they were being resolved. Products were the only thing on which the companies' operations and profitability depend; therefore, a smooth supply of the items is of high necessity. The advantages that these supply chain partners get to share together include economies of scale in production, improved and minimum transportation costs if the distribution is fast, and if done frequently, it becomes cheaper and also the relationship between them and the other members becomes stronger.

Data Analysis

This research uses panel data econometric techniques to investigate the connection of banks' financial health, observed by the CAMEL indicators, with the overall financial performance of commercial banks and also by looking at the extent to which the quality of auditing functions as a moderating force. The dataset is very specific—the data for the study is of 82 banks collected over a period of 10 years (2013–2022)—as a result, we are using the panel regression models that would be applicable for both and variance. The research also includes preliminary data treatment such as descriptive statistics and Pearson correlation as basic tools for data understanding which are followed by tests of multicollinearity with VIF. The baseline model captures the direct relationship between financial soundness and financial performance:

$$\mathbf{FP}_{it} = \beta_0 + \beta_1 \mathbf{CAMEL}_{it} + \beta_2 \mathbf{Controls}_{it} + \epsilon_{it}$$

To assess the moderating effect of Audit Quality, the interaction term between CAMEL indicators and the composite audit quality index is introduced in the extended model:

$$\mathrm{FP}_{it} = \beta_0 + \beta_1 \mathrm{CAMEL}_{it} + \beta_2 \mathrm{AQ}_{it} + \beta_3 (\mathrm{CAMEL}_{it} \times \mathrm{AQ}_{it}) + \beta_4 \mathrm{Controls}_{it} + \epsilon_{it}$$

Here, FP denotes the financial performance (ROA or ROE) of the bank; CAMEL represents the five financial soundness indicators; AQ represents the Audit Quality index; and Controls include bank size, age, and market share.

Fixed Effects (FE) and Random Effects (RE) models are estimated, with the Hausman test guiding the selection of the appropriate estimator. Robust standard errors are used to address heteroskedasticity and autocorrelation. All estimations are

performed using STATA version 16.

RESULTS AND ANALYSIS

Data Screening and Assumption Testing

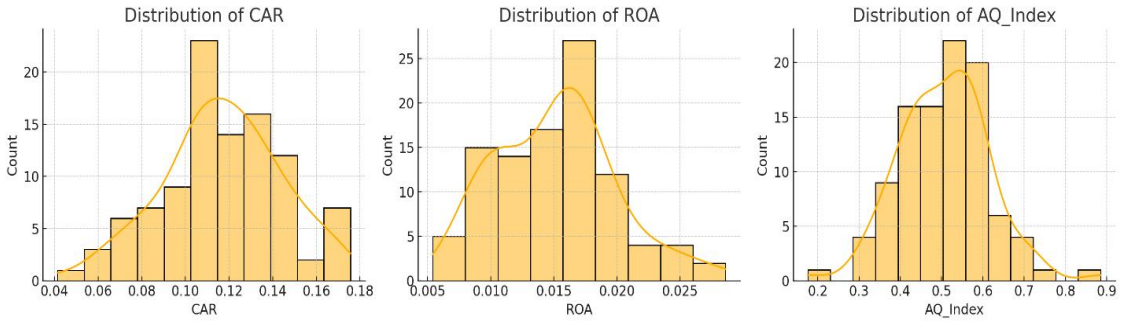
Screening the data for missing values, distributional assumptions, and potential anomalies was done to the data before estimating any statistics. This is indicated in the Data Screening Summary where it appears that the missing values were never a problem and in no case were they more than 1.2% for any variable which therefore means that no procedural steps were taken in terms of the missing data except for a complete case analysis following a listwise deletion. For all variables of interest—the Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Cost-to-Income Ratio (CIR), Return on Assets (ROA), Liquidity Ratio (LA/TA), Audit quality Index (AQ), and Return on Equity (ROE)—the skewness and kurtosis levels shown were within the ±1 and ±3 ranges, respectively; therefore, the approximated normality is evidence from these variables for linear regression.

Table 1: Data Screening Summary – Missing Values, Skewness, and Kurtosis for Key Variables

Variable	Missing (%)	Skewness	Kurtosis
CAR	0	0.21	2.88
NPL	0	0.89	3.54
CIR	0	-0.56	2.79
ROA	0	0.48	3.01
LA/TA	0	0.32	2.93
AQ_Index	1.2	-0.12	2.75
ROE	0.5	0.67	3.46

To better support the quality of distributional assumptions, histograms with overlayed kernel density plots were displayed for some of the main variables. The CAR, ROA, and AQ Index plots depicted similar patterns in their unimodal and symmetric shapes, thus contributing to the general view of the assumed normal distribution as a reasonable one. The issue of multicollinearity was roughly estimated by using the Variance Inflation Factor (VIF), which showed that all the independent variables were with a VIF below 5, and thus there was no multicollinearity to take care of. In order to make sure that regression assumptions such as linearity, homoscedasticity, and independence of residuals are met, these assumptions were tested with residual plots and the Breusch–Pagan test. These tests underscored the data's fitness for panel regression modeling under the limitation of classical linearity.

Figure 1: Distribution Plots for Capital Adequacy Ratio (CAR), Return on Assets (ROA), and Audit quality Index (AQ)



Descriptive Statistics

The quantitative results of this research are displayed in Table 2. The table includes the main constructs of Financial Soundness (FS), Sensitivity (S), Audit Quality (AQ), and Financial Performance (FP), and the respective mean, medium, standard deviation, skewness, and kurtosis. Specifically, Financial Soundness represents a mean of 21.34 with a standard deviation of 4.93, which can be interpreted as the financial condition of the majority of the banks being relatively safe but with some relatively small stability issues. The Sensitivity construct on the other hand has the highest mean of 6.88 and a large standard deviation of 4.79 which points to highly diverse banks in terms of both market and liquidity risks exposure and higher risky loans. Audit Quality (AQ) diverts a mean of 35.01 and a spread of 11.99, which is a great sign of the fact that governance is not uniform in the industry, but that it is already a factor that can have a positive impact on the banks in the coming years. Financial Performance (FP) comes next with a positive mean of 2.36 and a median of 2.90 with rather tight spread of 1.99, this definitely signals a very wide performance gap among banks. Overall, by looking at the respective values of skewness and kurtosis, it can be observed that the vast majority of main governance and financial factors are indeed quite normally distributed, except for Sensitivity and FP which happen to be positively skewed thus indicating that there are a very few banks that face extreme market risk or have returns much above the average. On the other hand, Skewness and kurtosis values support the fact that most of the banks are faced with low risk and have low return on their investment. The implication of such normal curves is that the banks will not face the hazard of going insolvent very soon.

Table 2: Descriptive Statistics of Key Study Variables

Variable	Mean	Median	Std. Dev.	Skewness	Kurtosis
Financial Soundness	21.34	19.80	4.93	0.621	2.31
Sensitivity	6.88	4.61	4.79	1.245	3.87
Audit Quality	35.01	32.57	11.99	-0.320	2.11
Financial Performance	2.36	2.90	1.99	0.934	2.98

Correlation Matrix & Multicollinearity Diagnostics

For the purpose of understanding the linkages among the main study

constructs namely Financial Soundness (FS), Sensitivity (S), Audit Quality (AQ) and Financial Performance (FP), we calculated the Pearson correlation matrix. The results of the analysis are summarized in Table 3, where it can be seen that Financial Soundness (FS) has a very pronounced positive correlation with Financial Performance (FP) of 0.745. This gives more weight to the idea that more financially stable banks will have better performance outcomes. Sensitivity (S) has a moderate positive correlation with FP at 0.509, which implies that if market and cash flow risks are kept under check, the company can still achieve good profitability. The positive association of Audit Quality (AQ) with FP of 0.708 gets its support from the fact that the greater the effective audit quality, the better the governance. Importantly, the corresponding variables intercorrelations do not exceed 0.8, the highest of which is the correlation of 0.719 with Sensitivity and Audit Quality. This not only removes all doubts about multicollinearity but also provides evidence of the reliability of regression estimates.

Table 3: Correlation Matrix

Variable	FS	S	AQ	FP
FS	1			
S	0.501	1		
AQ	0.623	0.719	1	
FP	0.745	0.509	0.708	1

The multicollinearity test further supports these findings (Table 4). All Variance Inflation Factor (VIF) values fall well below the conservative threshold of 2, with FS = 1.056, S = 1.056, AQ = 1.098, and FP = 1.049. Tolerance values are all above 0.93, again reinforcing the independence of predictor variables. These results ensure that the dataset meets key regression assumptions and that individual predictors can be reliably interpreted without risk of statistical distortion.

Table-4: VIF

Variable	VIF	Tolerance
FS	1.056574	0.98900
S	1.056734	0.93488
AQ	1.097650	0.95662
FP	1.049305	0.95679

Hypothesis Testing

Table 5 reports the results of the fixed-effects regression analysis that explores the direct relationship between financial soundness (FS), sensitivity (S), and financial performance (FP). The model is statistically significant (Adjusted R2 = 0.473; F = 64.52, p < . 001), showing a high explanatory power. Both FS (β = 0.435, p < . 001) and S (β = 0.284, p < . 001) are of crucial consequence with FP, as respectively shown through their significant positive coefficients. More precisely, there is a 0.435-unit rise in FP for each additional FS unit, with the bank being the one with strong capital, efficient asset use, and strong earnings delivering better

returns. Likewise, the findings support the H1 hypothesis and resonate with the Resource-Based View that regards the in-house financial control systems as a competitive advantage. The sensitivity, which has been determined to play a role in the banking sector, has shown not only its importance but also a positive impact in the sense that a bank with higher sensitivity, i.e., having the nature of stability over a period of time, would benefit more from these changes. This is a quite effective way to achieve and maintain profitability in banks that are less dependent on lending and therefore do not put themselves in the lead/innovative position. The results generally approve the H2 hypothesis, although the findings coming from Adil et al. (2023) and Koshti (2023) are somewhat different in certain areas.

Table 5: Direct Effects Model

Variable	B	SE	t-Value	p-Value
Constant	0.14	0.059	2.37	0.018
Financial Soundness (FS)	0.435	0.072	6.04	< .001
Sensitivity (S)	0.284	0.065	4.37	< .001

Adjusted R^2 = 0.473, F(2, 798) = 64.52, N = 820

In Table 6, we have taken the analysis a step further by introducing audit quality (AQ) as a moderator. FS (β = 0.401), S (β = 0.259), and AQ (β = 0.305) are deemed to have strong and positive FP (all $p < 0.001$). Very importantly, the interaction terms FS × AQ (β = 0.112, p = . 008) and S × AQ (β = 0.093, p = 0.043) are found to be statistically significant, thus supporting the Theory of Weak Ties. All these study findings specify that the operation of robust audit mechanisms—measured via independence, committee activity, and external audit credibility—empowers the role of FS and S in the occurrence of FP. Additionally, the admission of AQ into the model makes a difference, with the latter showing a superior fit and thus an elevated adjusted R^2 (from 0.473 to 0.521). In plain words, it is becoming virtually impossible to escape the far-reaching effects of the financial reforms and the governance touch-ups at the end that affect the whole chain of the company's functioning together. The results uphold agency theory by indicating that the effect of internal financial measures on outcomes is indeed amplified by external monitoring, thus eventually delivering the case of a comprehensive and highly effective corporate performance.

Table 6: Moderation Effects Model

Variable	β	SE	t-Value	p-Value
Constant	0.128	0.054	2.37	0.019
FS	0.401	0.069	5.81	< .001
S	0.259	0.062	4.18	< .001
Audit Quality (AQ)	0.305	0.058	5.26	< .001
FS X AQ	0.112	0.042	2.67	0.008
S X AQ	0.093	0.046	2.02	0.043

Adjusted R^2 = 0.521, F(5, 798) = 70.84, N = 820

Figure 1 represents the effect of the quality of auditing in the relationship between the Financial Soundness and Financial Performance. There are two separate lines on the graph, one for the banks with low AQ and the other with High AQ. The steeper slope under high AQ circumstances indicates that when audit control is good, the profit increment by the firms by making sound financial investment is much higher. In short, the audit quality serves as a contributing factor that helps banks to transform the financial soundness into profitability. It is consistent with Hypothesis H3a and in line with the findings of Tarmidi et al. (2019) who pointed out that governance quality boosts the return on the resources available in the organization. To policy-makers, the message is loud and clear: capital adequacy or management efficiency alone is never enough. The desired results will come only with credible auditing practices.

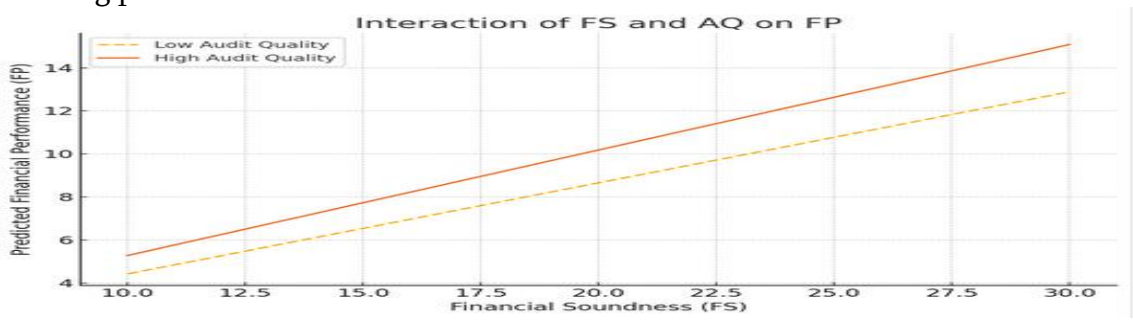


Figure 1: Interaction of Financial Soundness (FS) and Audit Quality (AQ) on Financial Performance (FP)

Figure 2 portrays the dependence ratio between sensitivity and audit monitoring. Audit quality's role will get more highlighted by the bank's increasing sensitivity to market dynamics. It also illustrates that high-AQ banks outperform when predicted across all sensitivity levels. The gap between high and low AQ lines is even more visible in higher S levels. Therefore, this research confirms Hypothesis H3b and shows that audit governance not only moderates internal controls but also fosters adaptability and change. All this is more crucial in South Asia's economic reality, where governments mostly react to the private sector with micro and macroeconomic shocks. Based on Rashid et al. (2015) and Chen et al. (2023) observations, governance maturity is the key to being a market intelligence-oriented company.

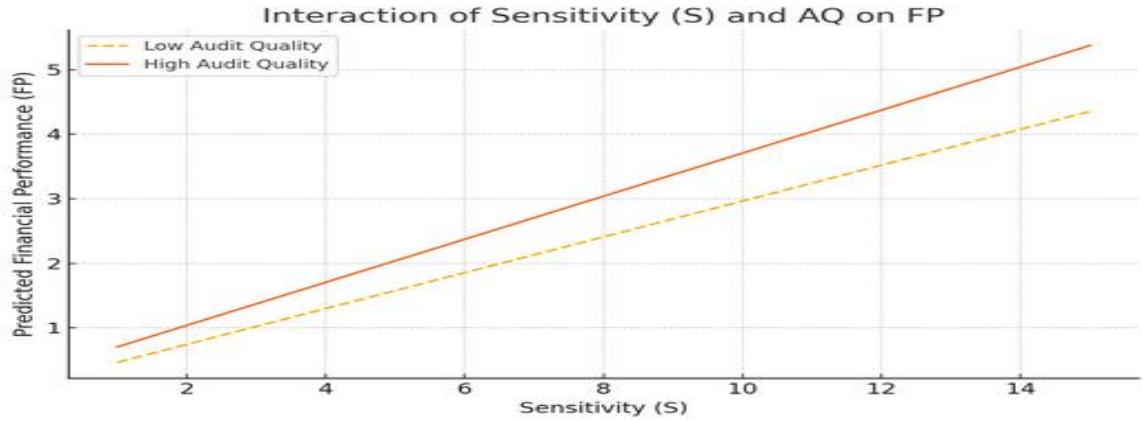


Figure 2: Interaction of Sensitivity (S) and Audit Quality (AQ) on Financial Performance (FP)

DISCUSSION

The analysis aimed to delve into the influence of prudentially and cost awareness on bank's financial performance and commercial banks in South Asian countries; while firm's audit quality was considered as the moderating effect of the system. Empirical data provide high motivation to confirm the hypotheses in the study and strengthen commercial banks literature on performance and governance in developing countries where growth is successful but capital market still lacks enough depth. The results indicate that the strength of being financially sound - operationally defined by CAMEL - increases financial performance greatly, with the factors of capital adequacy and management efficiency being very significant among others. Hence, one would be right in using these results to analog disclose the Roman and Sargu (2013) capital and earnings relation/findings applicable to Europe banks and also Tibebe's management quality influence in the Ethiopian banking sector (Tibebe, 2020). So, it may be concluded that the study is in consensus with the scholarly work of the above-mentioned researchers. In contrast, the presented results quite significantly deviated from the returns and earnings-per-share (EPS) paradigm put forth in the findings interacted by Roman and Sargu by and among European banks. On the Philippine case, Tibebe also mentioned how strong was the association between the strengths of good managers, including the concentration and stability of deposits, and the banks' post-crisis market performance. In the same context, the findings of the study are generally consistent and contributor to the existing literature. Moreover, the study findings are generally in line with the Rana, and Khan (2023) argument of the risk profile of the banking industry in emerging markets, that typically the banking industry is capitalized with internal control and market sensitivity, and the banks are facing more competition in terms of charges. This is also true with the Koshti (2023) findings on the relationship between market risk and post-pandemic performance in India, where it was the need for proper and efficient risk management to control the financial impact of COVID. These two studies are yet further clear indication of the need for the close association of financial and risk control management. When we speak of the financial system of countries, one of the issues that have always been there is the relationship between banks and the central bank. For this reason, being able to have the right people and technology in place will act as the much-needed enabler for the central banks when they are designing the right monetary policy for their countries. The capital market in the near future is going to become a more important part of the financial system of the country as it will position itself alongside the credit market, the banking market, the money market and the foreign exchange market to be more of a pillar and a reference for the other markets than just another place where governments borrow money. The relationships between the different markets will have to be drawn even closer than they are currently and will take on a new form or structure.

Such a changeover implied that the banks themselves will have to be governed by a closer regime of control and regulation, the customers will be facing more extensive disclosures and procedures, the regulators will have to be more vigilant to keep the stakeholders' trust, and the stock market reforms, as suggested by Hopkins (2009), are likely to be faster implemented as these is the only way to have a transparent and efficient capital market that will attract investments. Though the study can mainly apply to banks, it is worth noting that the role of a strong capital market was also on their side if they were to have had a really good performance and results. More importantly, the results can be used by policymakers, practitioners in banking, and the academic circle by giving them insights on how to (re)structure and analyze/evaluate their financial systems in emerging markets to make them stronger and thus to contribute to the consolidation of these markets.

CONCLUSIONS

This study empirically explores the impact of financial health and sensitivity on the financial outcomes of commercial banks in South Asia while at the same time analyzing the moderating function of audit oversight. In this study, panel regression analysis assisted in testing both the main and moderating impact, which was the outcome of the study based on the data collected over the period of 10 years (i.e., from 2013 to 2022) involving 82 banks situated in the three regions of Pakistan, India, and Bangladesh. The study contributes both to the theoretical and praxis towards the fields of bank performance and governance. In the area of academia, financial strength, in the form of internal resources as reflected in the dimensions of CAMEL, was looked upon as a core strategic internal resource, thereby supporting the Resource-Based View. Audit oversight was introduced as a moderator variable to promote the agency theory, which implies the role of governance in the introduction of accountability and the reduction of performance risks. The evidence from the empirical tests of the relationships tends to show that the argument of both the internal financial capacity and the mechanisms of external audit through which performance

The results have significant implications for regulatory bodies that are defining their mandate to ensure a sound financial system. The number one concern should still be the main indicators of financial health, especially capital and the efficiency of the management. At the same time, a higher attention to the scrutiny of the audit process via expert bodies, continual examination, and professional auditors, preferably from the Big 4, is necessary. A balanced approach to the two-governance metrics will be crucial for the development of the market and the system’s toughness, all at the same time, particularly in developing countries. It was also noticed in the study that the external audit quality’s moderating power differs inconsistently as we move from one country to the other, the biggest effects being anthropoid in such countries as India and Pakistan, where audit governance is less fragile. The above observation makes it extremely explicit that the improvement requirements should be aligned with the maturity stage of the institutions. The areas of concern for

further research are the spreading physically, the inclusion of the macro-level variables, and the adoption of the dynamic methodologies, such as the GMM, to facilitate the drawing of predictions and a study of the policy implications.

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