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Evaluating the Financial Performance of Nepalese Banks through the CAMELS Framework: A Theoretical Review

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Abstract
This study proposes a contextualized CAMELS rating framework for evaluating the financial performance of Nepalese banks in light of recent sectoral reforms. Given the banking sector's pivotal role in sustaining economic stability and growth, the framework incorporates the six core CAMELS dimensions-Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, Liquidity, and Sensitivity to Market Risk-while simultaneously addressing gaps identified in the existing literature. By incorporating Nepal-specific factors such as post-merger dynamics, regulatory changes, macroeconomic shocks, and digital transformation, the proposed model offers a comprehensive tool for assessing bank soundness. This framework aims to guide regulators, bank managers, and stakeholders in enhancing financial resilience and sustainable development within Nepal's evolving banking environment.

Key Words: *Capital Adequacy, Assets Quality, Management, Earning Quality, Liquidity and Sensitivity*

Introduction
Evaluating an organization's policies and operations regarding monetary worth is known as financial performance (Hunjra et al., 2010; Malgwi & Dahiru, 2014; Robert et al., 2023). The company's profitability, liquidity, or leverage are indicators of these outcomes (Nirmal, 2004; Ramlan & Nodin, 2017; Bintara, 2020). For any country's economic progress, the financial sector is crucial. Financial institutions, particularly depositary banks, gather savings from those who have savings and offer loans to people who need money (Iqbal & Subhan, 2022; Molla, 2025). The variables that primarily affect an economy's economic development include industrial development, agricultural modernization, the increase of domestic commerce, and international trade (Nugroho, 2021; Liu & Wang, 2022; Nguyễn & Phan, 2023; Utouh & Kitole, 2024). A sound financial system is necessary to develop a robust and dynamic economy (Pradhan et al., 2021; Usman et al., 2022; Challoumis & Eriotis, 2024). The necessity of a cautious banking system and its function in the globalized economic situation for the economic development of an economy cannot be understated (Hou et al., 2023; Yu, 2024; Naveed, 2024; Dragomir-Constantin, 2025). The banking industry supports the current economic system, a crucial part of the financial system (Marcu, 2021; Chen, 2022; Challoumis & Eriotis, 2024). Several joint venture banks were founded as a result of measures for financial deregulation that were put in place in the late 1980s (Su, 2021; Kumari & Devi, 2022; Challoumis & Eriotis, 2024). As a result, many domestic investors began investing in the banking sector.
Following the adoption of merger and acquisition regulations and the obligation to boost paid-up capital, financial institutions began to combine and acquire one another. This led to a decline in banks, financial institutions, or BFIs (NRB, 2018). One of the most established financial organizations in the financial

system, banks are essential to the mobilization of deposits and the distribution of credit across the many economic sectors (Bernard Azolibe, 2022; Zhavoronok et al., 2022; Bozic & Bozic, 2025). By mobilizing funds and directing them to high-return investments, a strong banking system works as a fuel injection to boost economic efficiency (Levine, 2021; Hourcade et al., 2021; Zattler, 2024). International monetary organizations like the International Monetary Fund and the World Bank urged its member nations to regularly assess the financial well-being of FIs to improve the banking system (Nanda & Banerjee, 2021; Othman, 2024; Iddrisu et al., 2025). The World Bank continuously offers technical and financial help to reorganize Rastriya Banijya Bank, Nepal Bank Ltd., and Nepal Rastra Bank to overhaul the financial system (NRB, 2016). Numerous studies have shown that nations with strong banking systems prosper more quickly than nations with poor ones (Berbenni, 2023; Everts, 2025; Iuga, 2025). There is a substantial association between economic growth and the development of the financial system, according to research studies that have focused on the role of the financial sector in economic development (McKinnon, 1973; Van, 2021; Hunjra, 2022; Challoumis & Eriotis, 2024). According to different research, the financial sector plays an important supply-side role in the shift of resources from conventional, low-growth sectors to high-growth sectors and encourages entrepreneurship in the latter (Patrick, 1966; Kumar, 2022; Li et al., 2023; Ran et al., 2023; Zhuang & Fu, 2025). It is evident from the discussion above that the banking system plays a key and essential role in the nation's capital production, necessitating closer monitoring of banks' economic performance and efficiency (Hung, 2023; Al Frijat & Elamer, 2025).

Bank supervision using the CAMELS (capital adequacy, asset quality, management quality, earnings, liquidity, and sensitivity) grading methodology to evaluate the Bank's performance and financial soundness has recently been proposed by banking regulators and policymakers (Dang, 2011; Abusharbeh, 2020; Ganesh & Sreeramulu, 2024; Emonena, 2025). The Federal Financial Institution Examination Council (USA) adopted the CAMELS rating system in 1979 as a valuable internal supervisory tool for assessing and classifying financial organizations (Dang, 2011). Banking sector regulators continually monitor bank performance to guarantee a CAMELS ratio-based efficient financial system (Luo & Ran, 2019; Bhadeshiya & Thakrar, 2024; Joshi, 2024). The research gap exists due to the lack of a CAMELS rating model designed explicitly for the Nepalese banking sector. Current research utilizes the conventional CAMELS framework, neglecting Nepal-specific elements such as post-merger effects, changing regulatory policies, macroeconomic disturbances, and digital transformation. This makes performance evaluations less accurate and less valuable. The study fills this gap by proposing a CAMELS model tailored to Nepal's banking sector, which takes into account its unique dynamics.

Research Methodology

The current study is mostly qualitative and does not analyze data using statistical methods. It was mostly conducted through secondary sources, including a review of the literature, data from conferences, and reports from professional organizations.

Objective of the Study

The primary objective of this study is to examine and critically discuss the theoretical ratio components of the CAMELS rating model as tools for evaluating the financial performance of the banking sector.

Banking Sector Performance Evaluation

Financial analysis is assessing a company's financial statements using various approaches to identify the firm's strengths and shortcomings (Kuchhal, 2008). So, a financial health check-up of any business concern is also known as a financial performance analysis (Parida, 2023). Any financial institution must regularly assess its financial health to preserve and safeguard the interests of its stakeholders, including shareholders, lenders, and depositors (Viswanathan et al., 2025).

The CAMEL approach is still used as a valid technique to evaluate the performance of the banks, despite having easy access to various financial data. In addition to its evaluation, it is also a predictive framework of bank failure (Gunonu et al., 2024; Guzmán-Garzon et al., 2025). Both quantitative and qualitative measures of bank performance are integrated in the framework (Barker et al., 1993). In Nepal, property banking is one of the dominant sectors of the national economy and Baral (2005) used the CAMEL model to study the institutional soundness in the banking sector and found that joint venture banks have better financial health than others commercial banks. In another study, Liu (2011) examined the Chinese banking sector with CAMEL factor of capital adequacy, asset quality, management, earnings and liquidity as an independent variable and the dependent variables were return on assets (ROA) and return on equity (ROE). Using multiple linear regression, the authors found that capital adequacy, non-performing loans to total loans, costs-to-income, net interest margins, and loans to deposits ratio were the significant predictors of ROA, whereas costs-to-income, operating expenditures-to-assets, and loans-to-deposits ratios were the predictors of ROE. Research that has incorporated the CAMEL model to test the performance of the different banks in India has also been used with similar results (Carter, 2024; Ganesh and Sreeramulu, 2024) with findings indicating high intensity of competition that eventually benefits the consumers by improving the quality of the services, innovative products and better financial services (Prasuna, 2004).

According to an investigation, using these ratings, the Reserve Bank of India might identify the banks whose performance requires further supervision. The primary goal of the CAMEL system is to identify issues that the banks themselves are facing and to complete a comparative examination of the performance of other banks (Bodla, 2006). A framework for evaluating the performance of Jordanian brokerage businesses has been proposed by creating a banking rating system based on CAMELS. Researchers, investors, clients, stakeholders, and supervisory authorities would all benefit from this approach, according to Dahiyat (2012). Azizi and Sarkani (2014) used the CAMEL model to analyze the financial performance of Mellat Bank. They concluded that earnings, managerial caliber, and liquidity are positively and substantially associated with the Bank's profitability. However, there is no connection between enough capital, high-quality assets, and the financial success of banks. There is a considerable need to comprehend how banks operate and what to do when anything goes wrong, yet many banks are unaware of how to evaluate their ratings. It is essential to evaluate the stability of banks and financial institutions using the CAMELS rating system employed by federal and state authorities (Milligan, 2002). Only the Bank's top

management and the necessary supervisory employees have access to the Bank's CAMEL rating, which is kept in the strictest of confidence to project business strategies (Solikhawati et al., 2024). CAMEL stands for capital adequacy, asset quality, management quality, earning ability, and liquidity, which comprise the five elements of bank safety and soundness (Hirtle & Lopez, 1999). Due to its efficacy, the CAMELS model is quite popular among regulators.

The CAMEL model has been very popular in the evaluation of bank performance. Its effectiveness was highlighted by Gaytan and Johnson (2014), as 14 CAMEL variables were used by Karri et al. (2015) to compare the Bank of Baroda and Punjab National Bank, where both banks applied CAR above the 10 percent threshold with six (Bank of Baroda) and five (Punjab National Bank) of them respectively. On the same note, profit per employee, debt to equity ratio, total advances to deposits ratio and net NPAs to advances ratio were found to be major determinants of return on assets (ROA) with a positive correlation of the former three with ROA and negative correlation between NPAs and ROA which highlight the significance of operational efficiency and the capital structure (Meena, 2016). The CAMEL study conducted by Singh and Rastogi (2017) showed varying performance of both the public and private banks in the five-year period and the rankings changed between HDFC, PNB, Axis, and SBI.

The evaluation of CAMEL in Nepal is scarce. Baral (2005) discovered that joint venture banks had sufficient capitalization but poor risk-weighted capital bases but showed good asset quality, better management efficiency and higher earnings as compared to local counterparts. Maharjan (2016) also established that profitability was largely affected by the capital adequacy and liquidity with positive correlations found between capital adequacy, credit risk, bank size, and the performance measures of ROA, ROE, and NIM. In the same vein, Pradhan and Parajuli (2017) calculated the capital adequacy and the cost-to-income ratio impact on the bank results and determined that the bank size was positively linked to ROA, but capital adequacy showed a negative correlation with ROA. Bhattarai (2018) also used regression models in a later contribution to examine the comparative effect of macroeconomic and bank specific variables on the performance of banks. The research determined that the influence caused by bank-specific characteristics was more important and powerful in terms of their effect on ROA as compared to macroeconomic factors. All these findings put emphasis on the role of internal financial and operational metrics in the formation of the bank performance in Nepal. In a broader sense, a good financial position does not only augment institutional resilience, but it also provides stability to stakeholders and the overall economics (Challoumis and Eriotis, 2024; Jan et al., 2025).

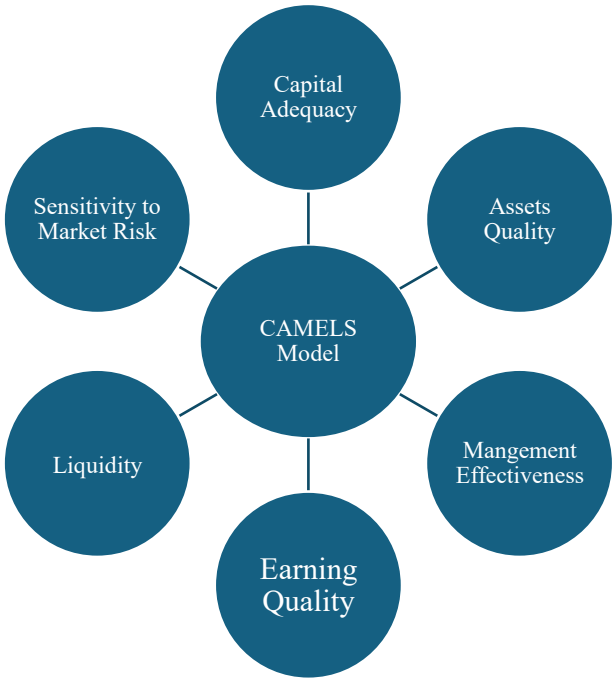
CAMELS Rating System

The CAMELS rating system was initially introduced as the Uniform Financial Institutions Rating System in 1979 in the United States by the Federal Financial Institutions Examination Council (FFIEC) as a regulatory tool to assess the general well-being of the banks. Under this model, banks are already subjected to on-site inspections along six main dimensions, namely capital adequacy, quality of its assets, efficiency of its management, quality of its earnings, its liquidity and its sensitivity to market risk (Oppen, 1999; Joshi, 2024; Wu and Lin, 2025). Ever since its introduction, the CAMELS had been greatly used by researchers,

policy-makers, regulators to observe the performance and stability of the banking and financial institutions in various countries and within various times. The model is based on the systematic assessment of the financial institutions as reflected in their balance sheets and profits and losses statements, each of which is a determinant of the financial soundness (Deyoung, 2001; Mashayekhi et al., 2024; Jarbou et al., 2024). Due to its systematic nature, the CAMELS rating has turned out to be a short and mandatory tool of analysis among the regulators, policymakers and academics. It guarantees a check of the banking health by including various factors, such as financial statements, sources of funding, macroeconomic factors, budget allocations, and cash flow management (Barr, 2002; Maude and Dogarawa, 2016; Ibrahim, 2024; Guzmán-Garzon et al., 2025).

Practically, the CAMELS approach has a long-standing practice by the bank regulators of North America in order to determine the financial strength and management dependability of commercial lending institutions. Multiplicity of sources of information that evaluators use in order to utilize the model include financial statements, capital and funding structure, macroeconomic indicators, budgetary frameworks, cash flow projections, operational data. This multidimensional analysis enables the thorough analysis of the strengths and vulnerabilities of a bank hence a certain mechanism that can be trusted as a tool of supervisory controls and formulating policies. This model assesses the Bank's overall financial position and performance (Sarker, 2005). Using the CAMEL model, Prasad and Ravinder (2012) assessed nationalized banks in India from 2006 to 2010. In order to assess the financial stability of the Nepalese banking industry, Baral (2005) used the CAMEL (capital adequacy, assets quality, management quality, earnings, and liquidity) model. The study discovered that CAMEL scanning assists banks in identifying their financial health and notifies them when necessary to take preventive action to ensure their long-term viability. The following is a description of the several financial ratios that make up the CAMELS grading model:

Figure 1: Camels Rating Systems



Sources: FFIEC (1979)

Capital Adequacy: Capital adequacy is generally considered as one of the most determinant signs on the financial stability of a bank. Sufficient capital is a guarantee of institutional resilience, protection of stakeholder trust, and insurgency against sudden shocks, thus enhancing long-term sustainability and efficiency. It provides a thorough examination of the financial status of a bank in terms of leverage and absorbing capacity of losses. Capital as a regulatory standard is divided into Tier I (core) and Tier II (supplementary). The most secure source of funds is Tier I, which comprises paid up capital, share premium, non-redeemable preference shares, general reserve, accumulated profit, capital redemption reserve, capital adjustment fund, and other distributable reserves. In order to maintain integrity, goodwill, fictitious assets, investments above the threshold provided by Nepal Rastra Bank are deductible. Tier II capital consists of general loan-loss provisions, revaluation reserves, hybrid instruments, exchange equalization reserves, excess loan-loss provisions and investment adjustment reserves (NRB, 2019).

The combined sum of Tier I and Tier II is the total capital of commercial banks, and capital adequacy is measured by the following ratios. *a) Capital to Risk-weighted Assets Ratio*- One of the most important elements of the regulation is the Capital to Risk-Weighted Assets Ratio (CRAR) which makes sure that banks have enough capital to mitigate losses, protect depositors and continue operations. An increase in the CRAR is associated with increased resilience and shock-absorbing capability. Commercial banks in Nepal must have 10 percent CRAR, which is in line with the international prudential requirements. CRAR is computed as a division of Tier I and Tier II capital by the total risk-weighted assets. Tier I (core) capital consists of stock capital, non-cumulative preference shares, disclosed reserves and innovative instruments

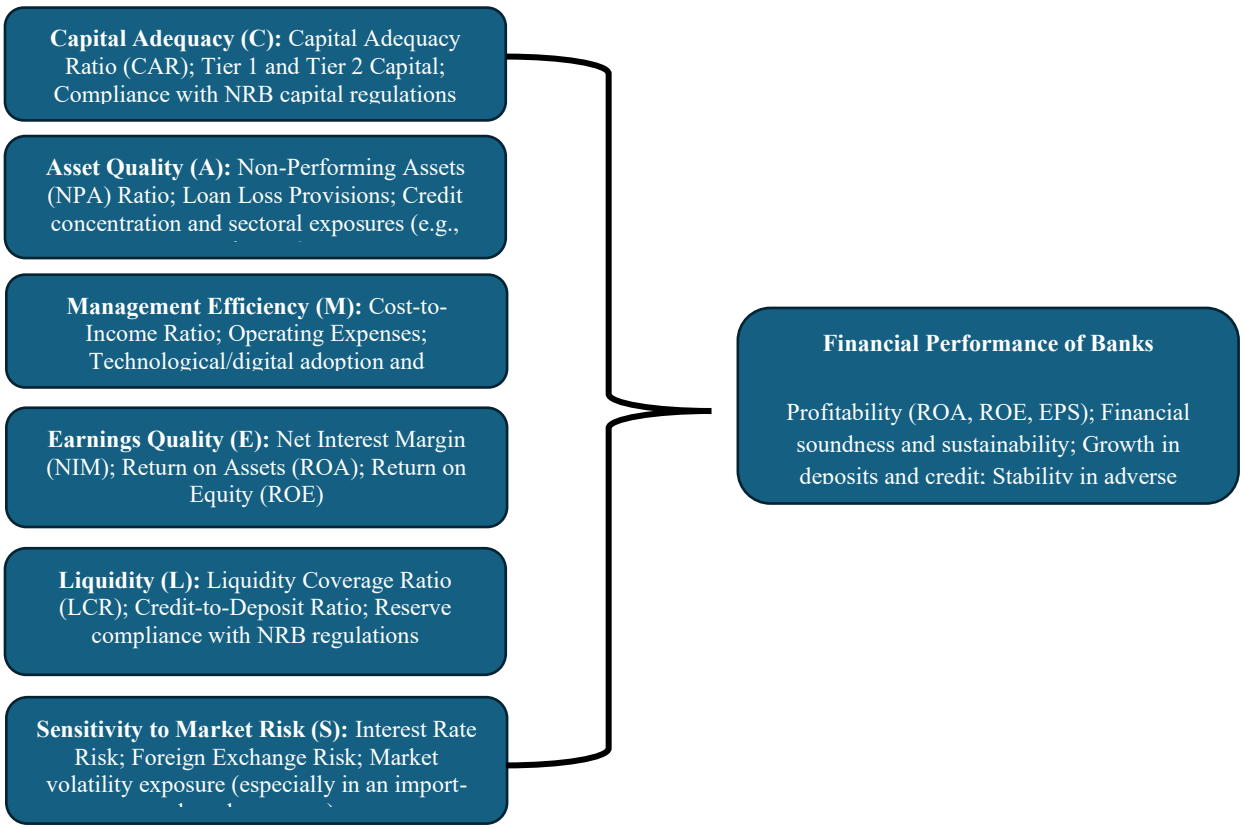
whereas Tier II (supplementary) capital includes undisclosed reserves, long term equity, revaluation reserves, loan-loss provisions, and hybrid debt as well as subordinated debt. A combination of these elements would provide an overall gauge of the capacity of a bank to survive sudden shocks. *b) Debt-Equity Ratio*-The debt-to-equity ratio is a significant metric of the financial leverage of a bank because it shows the ratio of debt and equity capital in the overall financing structure of the bank. This ratio is calculated by taking the total borrowings over the net worth by the bank shareholders. In this case, net worth comprises of equity share capital in addition to reserves and surpluses. An increased debt to equity ratio indicates that it is heavily dependent on borrowed capital and hence low degree of protection granted to depositors and creditors. On the other hand, low ratio implies that it has a greater equity base, and this implies that it is financially stable and has much security to the stakeholders. *c) Government Securities to Total Investments Ratio*-The risk involved in banks' investments is reflected in this ratio. It is calculated by dividing the total amount of bank investment by the amount invested in government securities. The most safe and risk-free debt instruments are thought to be government securities. This implies that risk will decrease with increasing investment in government securities and vice versa. *Assets Quality,* the quality of assets is a determinant of financial soundness of a bank, which is normally measured by the percentage between non-performing assets (NPAs) and overall assets. The profitability of a bank directly depends on the quality of credit portfolio. According to NRB Bank Supervision Report (2005), the asset quality is measured in terms of the non- performing loan to total loan ratio, net non- performing loan to total loan ratio and total asset composition. The NRB requirements to reduce loan concentration risks have a core capital of 25 and 50 percent limit of fund-based lending and non-fund-based exposure to a single group or borrower respectively. Moreover, banks are supposed to categories loans as performing and non-performing.

As a high proportion of NPAs lead to a decline in profitability, a low ratio of non-performing loans is a major concern to commercial banks (Sangmi, 2010). *a) Net NPAs to Net Advances:* The most common metric for assessing the quality of assets is this ratio. The net nonperforming assets are represented as a proportion of net advances. The formula for calculating Net NPAs is to deduct Gross NPAs from the Net of provisions on NPAs and interest on suspense accounts. Growing nonperforming assets (NPAs) concern banks and will negatively impact their performance. *b) Secured Advances to Total Advances:* According to the Banking Regulation Act, advances must be issued against adequate security, with the market value of collateral equal to or exceeding the loan amount. To mitigate credit risk, banks generally prioritize secured advances. A higher proportion of secured advances indicates lower lending risk, whereas a lower proportion suggests greater exposure to default. ***c)*** *Priority Sector Advances to Total Advances****:*** Priority sector lending has a more active role in ensuring that the banking system is better adapted to the demands of economic planning (Uppal, 2009). As per the guidelines of the Government of Nepal, the banks are required to make advances to the priority sector which include agriculture, small-scale and micro-industries, export credit and furthermore loans to the weaker sections of the society. This ratio is calculated as a ratio of total advances in the priority sector to total advances which shows the contribution of the banks to inclusive growth of the economy. Management Efficiency: Management efficiency can be defined as the ability in which the management of the bank can run the operations efficiently hence having a direct impact on institutional performance. Managerial capability cannot be totally measured using one indicator, but

numerous measures have been used in previous studies (Lane, Looney and Wansley, 1986; Wheelock and Wilson, 2000). These typical ones are the cost/core capital ratio, earnings per worker, cost/loan, and average size of loans to deposits. Specifically, the credit-to-core capital and deposits (CCD) ratio will indicate the capability of the bank to convert the deposits and core capital into productive and income-generating advances. These ratios are thus essential in measuring efficiency of management. *a) Total Advances to Total Deposits:* - This ratio illustrates how well the Bank's management uses its available deposits, including receivables, to fund advances that yield the highest possible returns. Deposits from other banks, demand deposits, term deposits, and savings accounts are all included in total deposits. Better things have higher ratios, and vice versa. *b) Business per Employee*-Business per employee reveals the overall business contributed by each bank employee (Kalakkar, 2012). It highlights the productivity and efficiency of the Bank's human resources. It is calculated by dividing the total number of workers by the entire business. The Bank benefits more from a higher ratio, and vice versa. *c) Return on Advances*-This ratio is used to state how the net profit after tax (interests) relates to the amount of advances issued to customers of a bank. An increase in returns on advances shows increased productivity and profitability of the funds and the decrease in returns on advances indicates low efficiency in the use of the advances. Earning Quality- High earnings quality indicates the present running performance of the bank and is a valid sign in estimating the future profitability (Dechow, 2004). It indicates that the institution would be able to make reasonable returns to meet the requirements of the capital providers and sustainable growth. Continuously rising and steady earnings enhance the confidence of the stakeholders (Grier, 2007).

Working as a ratio of such a great significance, the quality of earnings points out the profitability and future returns stability. According to the NRB Bank Supervision Report (2005), one of the main measures of profitability is the return on assets, as well as the non-operating, noninterest infrastructure, net profit, and net interest income, respectively. Such ratios play a critical role in assessment of quality of earnings. *a) Operating Profit to Revenue*-This is a ratio that is calculated as operating profit (net operating income)/average total assets and measures the ability of the management to maintain the increase in revenue compared to expenses. Provisions and contingencies are contained in operating profit (Sarkar, 1998). It is the ratio of the efficiency with which a bank uses its assets in producing earnings, the higher the ratio the greater is the profitability. *b) Net Interest Margin/Total Assets*- The net margin of interest is the difference between revenues of interest taken and expenditures paid in the form of interests and is expressed with reference to total assets (Gul, 2011). It shows the efficiency of the assets of a bank to produce net interest earnings and a higher ratio will show an increased profitability in comparison with the size of assets. ***c)*** *Interest Income to Total Income*-The ratio represents the percentage of total income of a bank earned through lending within one financial year. The interest income comprises of interest or discounts on advances and bills, returns on investments, and balances earnings with the central bank or a currency or other interbank funds. The total Income includes the interest income as well as non-interest incomes, like commissions, profit or loss realized on sales and revaluation of investments and assets, and miscellaneous incomes. An increase in the ratio shows the greater dependence on core lending activities.

Liquidity, Liquidity is one of the main decisive factors of the financial performance of a bank that assesses the capability of the bank to fulfill the depositors and achieve credit demand. Although, greater liquidity enhances the ability to access cash in the short run, it may also limit the ability of the management to commit to long-term investment policy that safeguard the investors (Myers, 1998). Sufficient liquidity can be sustained by either raising current liabilities or turnover of assets into cash thus securing the necessary amount of cash to sustain cash flow needs. *a) Liquid Assets to Total Assets*-It is a ratio that evaluates the liquidity status of a bank in general. The liquid assets include money in hand, balances with Nepal Rastra Bank, money at call and short notice and deposits with other financial institutions. Proper management of liquidity is important because any idle money will not yield any interest, whereas lack of adequate liquidity will subject the bank to risk. *b) Liquid Assets to Demand Deposits*-Under the CAMELS approach, bank liquidity is measured by liquidity ratios based on accounting data, such as liquid assets to total assets or total loans to total deposits (Uppal, 2009). The ratio shows the ability of a bank to satisfy the demands of the depositors during a specific year; thus it has to keep funds in the most liquid form to satisfy the needs when due. *c) Credit-Deposit Ratio*-Credit-deposit ratio- credit is the amount of loans which are given out compared to customer deposits. It is an indication of the effectiveness of a bank in mobilizing deposits into credit.



This ratio emphasizes the lending capacity as influenced by credit-deposit growth, cash reserves and statutory liquidity. A high ratio implies that it relies more on deposits to generate credit as compared to a low ratio, which implies that the practice is conservative in lending. Sensitivity Ratios- Sensitivity is a term that is used to mention the risk associated with the changes in the market conditions that would have a negative impact on the earnings of a bank or its capital. Market risk includes exposures associated with fluctuation in the interest rates, foreign exchange rates, commodity prices and equity prices with interest rate risk normally being the most important (Gonzalez, 1999). Any changes of these factors directly depend on the profitability and the financial stability of a bank.

The trading, non-trading and foreign exchange operations give rise to market risk, and sensitivity measures how the changes would impact performance. Such ratios are necessary to evaluate the market risk exposure. *a) Price-Earnings Ratio*-Price-earnings (P/E) ratio measures the level of market valuation of bank earnings made as the market value per share/earnings per share. High P/E ratio will be an indication that investors believe in an increase in the earnings in future, or a low P/E will provide a feeling that there is skepticism in the market (Shiller, 2005). The predictive power of P/E ratio is shown in emerging markets, which is helpful in predicting returns and the time to invest. *b) Total Securities/Total Assets Ratio*-This ratio is the ratio of securities in the total assets of a bank and is computed by dividing the total securities by total assets. Higher ratio puts the portfolio at risk of higher market risk whereas lower ratio means that the portfolio is well conducted in terms of interest rate and issuer-related risks (Christopoulos, 2011).

The previous literature focused on the comparison of domestic and joint venture banks as well, leaving out the inter-sector differences arising due to consolidations, digitalization, and the integration of fintech. Moreover, previous studies have paid more attention to internal measures and little consideration to external shocks, which are the COVID-19 pandemic, inflation, or foreign exchange fluctuations, all of which affect CAMELS measures. Lastly, there are the qualitative factors, especially governance practices and innovation The CAMELS framework, which consists of Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, Liquidity and Sensitivity to Market Risk, is commonly used by regulators like Nepal Rastra Bank (NRB) to measure financial health. CAMELS is a powerful instrument of analyzing the flexibility of banks to regulatory, technological, and macroeconomic fluctuations in the context of Nepal. Nevertheless, there is a lack of thorough and fresh research especially during the post-merger and capital-strengthening era of the industry. The current literature, including Baral (2005) and Maharjan (2016) can offer valuable information but very old and usually omitting significant policy shifts, like the 2018 NRB directive to increase paid-up capital and the consequent series of mergers. Responsiveness which has not been explored in Nepalese context. This research proposes a Nepal-specific CAMELS framework to better reflect current realities. It emphasizes reassessing capital adequacy in the context of post-merger financial buffers, examining sectoral exposure risks in asset quality, evaluating governance and digital transformation under management efficiency, and analyzing profitability trends in an increasingly competitive market. Moreover, it addresses liquidity gaps through the lens of deposit-credit mismatches and studies external vulnerabilities like interest and forex risks under sensitivity.

The conceptual framework (shown in Figure 1) for evaluating Nepalese banks' financial performance uses the CAMELS model as independent variables: Capital Adequacy (CAR, Tier 1 & 2 capital, NRB compliance), Asset Quality (NPA ratio, loan loss provisions, sectoral exposures), Management Efficiency (cost-to-income ratio, operating expenses, digital adoption), Earnings Quality (net interest margin, ROA, ROE), Liquidity (liquidity coverage ratio, credit-to-deposit ratio, reserves), and Sensitivity to Market Risk (interest rate, forex risk, market volatility). Apart from direct relationship, there are several mediating and moderating variables (See Table 3) that can helps clarify the mechanisms and conditions under which the CAMELS factors impact financial performance. It helps to clarifies how and under what conditions CAMELS factors influence outcomes.

Table 1: Potential Mediating and Moderating Variables for CAMELS Rating Model Framework

Variable Type	Examples	Role in Framework
Mediators	Operational Efficiency, Risk Management Practices, Technology Adoption, Capital Deployment Efficiency	Explain *how* CAMELS factors influence financial performance.
Moderators	Macroeconomic Environment, Regulatory Environment, Bank Size/Ownership, Market Competition, Technological Infrastructure	Influence *when* or *to what extent* CAMELS affect financial performance.

The dependent variable is the banks' financial performance, measured by profitability, soundness, credit growth, and stability during economic challenges. This conceptual framework hypothesizes that each of the CAMELS components directly influence the financial performance of banks in Nepal. However, the strength and direction of this influence are moderated by broader macroeconomic and institutional factors such as inflation, COVID-19, or regulatory changes introduced by NRB. By analyzing these relationships, the framework allows for a holistic evaluation of financial soundness and helps identify key areas of policy and management improvement. Mediating variables explain the mechanisms linking CAMELS components to performance, such as operational efficiency improving through better management and liquidity, risk management practices shaped by asset quality and market sensitivity, technology adoption driven by management and earnings, and capital deployment efficiency influenced by capital adequacy. Moderating variables affect the strength or direction of these relationships and include macroeconomic conditions (e.g., inflation, COVID-19), regulatory changes (NRB policies, Basel III), bank size or ownership, market competition, and technological infrastructure, all shaping the impact of CAMELS on financial results.

Conclusion

The banking industry within Nepal forms the mainstay of the financial system which promotes economic growth, intermediation of financial activities, and mobilization of investments. Since it is systemic, it is essential to evaluate the financial stability and performance of Nepalese banks in the name of stability and sustainable development. In this research, the conceptual CAMELS rating model is presented based on Nepal banking environment after the reform and includes Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, Liquidity, and Sensitivity to Market Risk. By relating these elements, the framework fills the research gaps and includes the current regulatory changes, industry issues, and new dangers. Key insights reveal that Nepalese banks have bolstered capital adequacy following NRB's 2018 mandates, yet challenges remain in Tier-II capital and risk-weighted asset management, particularly in sectors vulnerable to defaults. Asset quality concerns persist due to rising NPAs, especially in agriculture and small industries, underscoring the need for diversified credit portfolios and stronger recovery practices. Post-merger management efficiency has improved scale but exposed governance and digital adoption gaps, calling for greater investment in automation and skilled personnel. Earnings quality faces pressure from fintech competition, emphasizing the importance of non-interest income growth. Liquidity mismatches and market sensitivities, including foreign exchange volatility, highlight ongoing risks despite improved regulatory safeguards. This conceptual model fills critical gaps by integrating macroeconomic shocks, governance factors, and fintech adaptation—areas often overlooked in traditional CAMELS assessments. The study recommends that regulators enhance supervisory frameworks with dynamic stress testing and promote digital transformation, while bank management should optimize capital deployment and adopt advanced risk management tools. For investors and depositors, the model encourages evaluating long-term stability through comprehensive CAMELS metrics. Overall, this Nepal-specific CAMELS framework aims to support regulators, banks, and stakeholders in fostering a resilient, efficient, and sustainable banking sector aligned with the country's evolving financial landscape.

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