



Nexus Among Financial Risks and Financial Performance: A Moderating Role of Corporate Governance

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Abstract

The research investigates the relationship between financial risk, corporate governance, and their impact on bank financial performance in Pakistan through both conventional and Islamic banking systems. The study uses Tobin's Q to evaluate financial performance while assessing financial risk through various measures that include non-performing loans to total assets and other indicators. The research investigates corporate governance through three indicators, which are board size, audit committee existence, and board member independence. The study uses panel data, which includes yearly bank reports from eleven banks, to assess how six conventional banks and five Islamic banks performed financially from 2010 to 2023. The study shows through basic statistical methods and regression analysis that market value increases when lenders make loans that exceed their total deposit amounts. The results show that improvements in financial intermediation lead to better performance by institutions. The research shows that banks experience severe operational problems when their non-performing loans increase because rising credit risk turns into a major obstacle. Corporate governance functions as the fundamental element that establishes how banks will perform financially. The bank system achieves improved financial performance through the combination of independent board members and effective audit committees. The banking system needs both transparent operations and effective supervisory mechanisms with accountability frameworks to ensure its operational efficiency. The research shows that Pakistan needs to improve its governance systems while maintaining strict financial risk control to achieve better efficiency and effectiveness in its dual banking operations. The study improves current academic research by collecting real-world data that demonstrates how financial risk and governance structures influence banking performance in developing nations. The research provides applicable solutions to the financial sector, which regulators and banking professionals can use to create stability and long-term growth.

Keywords: Financial Performance, Tobin's Q, Financial Risk, Corporate Governance, Liquidity

Article Details:

Received on 02 Jan 2026

Accepted on 25 Jan, 2026

Published on 27 Jan, 2026

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1. Introduction

The banking sector functions as an essential component that enables economic progress in a country, according to the research findings of Chen and Sivakumar (2023), Jahanger et al. (2022), and Dewi and Gunawan (2023). Bank institutions need to demonstrate their operational capacity because their performance directly impacts the economic stability throughout the entire financial system of the nation. The banking system faces instability, which creates disruptions that immediately impact the entire economy by reducing investment levels, production capacity, and financial trust. The economy requires both effective managerial practices and well-designed strategies to manage financial problems across different regions in order to achieve economic stability. Banks function as the primary economic development force because they enable financial resource transfer from households and savers to businesses, which generates economic progress (Khan, 2018; Marc et al., 2022; Quader, 2024). The banking system requires efficient operation because it enables financial surplus units to connect with deficit units that need funds for their investment and production activities.

Banks serve as essential financial intermediaries who distribute excess funds from surplus units to units facing financial shortfalls, which helps drive economic growth and development (Ismail & Saeed, 2019; Audi et al., 2021; Marc & Al Masri, 2024; Ali et al., 2025). Scholars and researchers have studied bank performance because it functions as a key factor for banks that determines their success in the banking industry. Banking performance and stability are subjects that political authorities and policy makers investigate because of their importance to understanding these financial institutions (Wadud, 2022; Iqbal & Abbas, 2024; Audi, 2024; Aziz et al., 2025). The banking sector in its entirety requires advanced protection strategies which will ensure its future stability and operational efficiency and competitive strength according to researchers (Caron and Markusen, 2016; Tan, 2016; Kabir & Rashid, 2019; Buallay et al., 2020; Shair et al., 2021; Raza & Khan, 2023; Marc & Yu, 2024; Khalid et al., 2025). The operations of commercial banks extend beyond their core functions, which involve taking deposits and providing loans to customers. The organizations help control how money moves through the economy by executing policies that the government uses to stabilize financial markets and monitor capital flows throughout the country (Marc, 2016; Ali and Oudat, 2020; Omri, 2022; Alrabei et al., 2022; Marc et al., 2021; Harban et al., 2021; Marc & Ali, 2023; Hasan & Sadat, 2023; Siddique et al., 2025; Ali et al., 2025).

The primary challenge that banks encounter comes from nonperforming loans because these loans pose a major danger to banks, which rely on their ability to extend credit and create loans (Wali, 2018; Hunjra et al., 2022; Kumar et al., 2025). Banks serve a fundamental role as business finance providers, which enables companies to invest and creates value for shareholders through their funding activities. The banking sector performs essential functions that face various financial risks, which result in major difficulties for its everyday operations (Hussain, 2018; Hun et al., 2024; Shahid et al., 2025; Bozic & Bozic, 2025; Shahi et al., 2025). The financial market today requires both regulators and financial institutions to establish effective risk management systems because market integration and technological innovation create permanent changes to the financial sector (Shahbazm 2018; Worku and Asmare, 2019; Singh et al., 2024; Arshad et al., 2025; Iqbal & Hayat, 2025). Financial performance determines how well an organization executes its strategic plans and essential business decisions, which provide necessary support for achieving organizational goals and maintaining long-term financial viability (Khalid & Noot, 2019; Mitra, 2022; Kanwal et al., 2025; Holton & Holton, 2025). The financial performance of commercial banks maintains high importance because

these institutions drive economic growth within the financial system. The financial success of organizations drives their expansion because it creates better economic prospects, which improve societal welfare through enhanced living standards (Khan et al., 2025; Rafique et al., 2025). The financial success of banks has become a primary focus in research studies, which are dedicated to both financial and economic analysis (Khan et al., 2025; Nasir et al., 2025; Ashraf et al., 2025). Banking sector investors use financial performance indicators to locate potential equity investment prospects. The indicators give investors a financial understanding of banking institutions, which helps them evaluate their strengths when making investment decisions (Almagtome and Abbas 2020; Sulehri & Ali, 2024; Ammar et al., 2025). Financial risk describes the chance that actual financial results from market activities will change because of unpredictable movements in the financial markets. The concept consists of multiple risk types, which include credit risk, market risk, liquidity risk, and operational risk. Organizations that use excessive debt in their capital structure face financial risk because they depend too much on debt and have insufficient cash flows to handle repayment requirements (Fali et al., 2020; Ayeni and Emeka, 2021; Batool et al., 2025). Financial institutions face situations that result in financial strain because their financial condition deteriorates, which causes them to experience financial performance decline (Moradi & Mokhatab, 2019; Zahid et al., 2025). Financial institutions face difficulties in their operations because of unpredictable changes in financial results, which create management challenges and operational uncertainty (Thottoli et al., 2019; Rafique et al., 2025).

The stock market serves as a key element that creates financial instability because it experiences sudden market drops when asset prices or financial conditions undergo changes. The situation creates financial problems because people lack knowledge about how their debt obligations will affect their financial responsibilities during times when their debts face unpredictable changes (Alsulmani and Ahmed, 2021). Market changes create financial risk because they cause asset prices to move while investor confidence experiences fluctuations. Existing research studies have mainly concentrated on single types of financial risk assessment instead of assessing multiple risk types at the same time (Pervin et al., 2015; Chen, 2018; Munangi and Sibindi, 2020; Umair et al., 2025). Credit risk emerges when a borrower or contractual counterparty fails to fulfill agreed debt obligations, which can lead to financial losses for lending institutions. Credit risk remains the most critical financial risk for banks and other financial institutions because its occurrence results in multiple borrower defaults that diminish capital resources and endanger institutional survival. Credit risk assessment relies on three main indicators, which include provisions created for nonperforming loans and the percentage of problematic loans in the loan portfolio, as well as the rate at which bad debts occur.

The research conducted by Moradi and Mokhatab (2019) explains how credit risk endangers the monetary stability of financial institutions. The banking sector faces multiple threats to its stability, which arise from bad loan incidents, poor financial management, and the existing flaws in deposit insurance systems, regulatory weaknesses, operational mistakes, and financial system corruption, according to Ullah and Ahmad (2019). Credit risk represents the chance that a loan will lose value through borrower default or the failure to make repayments. The management of credit risk stands as a critical duty that financial institutions must fulfil because banks depend on lending for their primary revenue stream, according to Oluwayemisi and Samson (2022) and Nastiti (2019). A firm achieves asset liquidity when it can rapidly convert its assets into cash to handle unexpected financial emergencies, while operational liquidity shows the firm's ability to fulfill its essential daily cash needs.

Organizations that want to control their cash requirements need to maintain proper liquid assets according to Gessesow and Venkateswarlu (2023). A financial asset is liquid when it can be transformed into cash through normal market operations without significant value loss, according to Yua et al (2020). The category of liquid assets comprises cash holdings, bank deposits, and financial instruments that permit immediate or short-term access, which typically lasts up to three months. The assets list includes securities that can be transformed into cash through sales that maintain their value for business transactions under normal market conditions through means such as repurchase agreement markets, which operate in highly liquid financial markets according to SI-Ardah and Al-Okdeh (2022). The effects of liquidity risk on institutional stability can serve as an early indicator for impending banking system failures, according to Waemustafa and Sukri (2016).

Market risk describes the potential situation in which banks face financial setbacks because of changing market conditions. Banks have to deal with operational risk, which functions as a distinct type of risk that exists outside of credit and market related threat. The risk system encompasses multiple elements, which include both human behavior, technological systems, and organizational processes, as well as external environmental factors. Daily trading activities in financial markets show continuous price changes because of market volatility, which occurs throughout the trading day (Esther, 2021; Naeem et al., 2025). Financial institutions face potential investment income losses from market fluctuations, which can result in decreased financial performance (Kahihu et al., 2021).

An institution becomes insolvent because it has lost all its equity through cumulative financial losses (Cepec and Grajzl, 2020; Patel et al., 2022; Bin et al., 2024; Ali et al., 2025). A banking institution experiences bankruptcy or insolvency when it cannot fulfill its financial and operational duties on time. The institution faces funding costs that exceed its income from profit-generating activities. The bank encounters challenges for debt repayment because its asset value exceeds its liability value according to its balance sheet. The business reaches a state where its liabilities exceed all receivables and ownership claims, resulting in asset value becoming inadequate for financial obligation fulfillment. The banking institution reaches its point of insolvency through this process (Tursoy, 2018; Ali et al., 2025).

The board of directors receives operational control through corporate governance, which functions as a standard framework for monitoring its activities. The board of directors establishes a monitoring system that enables them to oversee managerial performance through their control of executive decisions for the purpose of safeguarding and growing shareholder value, according to Jebran and Chen (2020). The central function of corporate governance in environmental, social, and governance frameworks stems from its capacity to establish organizational legitimacy according to Brammer and Pavelin (2008) while also enhancing stakeholder trust according to Akhtaruzzaman et al (2021) and protecting banking institutions from reputation loss during economic downturns according to Miralles Quirós et al (2019).

2. Literature Review

The contemporary economic framework depends on banking systems because they act as essential components of the financial system. The banking system takes personal savings from people and invests those funds into business projects, which create new capital assets that contribute to national economic development. Banks take in various types of deposits, which include current accounts, recurring accounts, savings accounts, and fixed accounts, before using those deposits to provide loan services to their customers. Banks function as financial intermediaries by matching people who want to save money with individuals who need cash

for their investment or spending needs. The banking industry has implemented digital credit assessment and lending processes as standard operational procedures since technological advancements have changed banking methods in recent years.

Sultan et al. (2021) studied how Islamic banks in Pakistan differ from traditional banks by analyzing their liquidity, efficiency, and profitability performance. The study obtained its data from secondary sources, which included five Islamic banking institutions and five conventional commercial banking institutions. The dependent indicators for the study included cash-to-deposit ratios, which were calculated for both Islamic and conventional banking institutions. The independent indicators included return on assets of Islamic banking institutions, return on deposits of Islamic banking institutions, operating profit margin of Islamic banking institutions, and operating income to assets of Islamic banking institutions. The research study aimed to evaluate the operational performance of two banking systems through a comparative analysis, which would provide essential information for banking policy development. The study results will assist developing banks in enhancing their business operations while creating a competitive advantage in the banking market.

The investigation conducted by Mahmood et al. (2020) examined how banking sector concentration and banking sector development, together with equity market development, affected corporate financial flexibility. The study used an unbalanced panel logistic regression model to analyze annual data from 1991 to 2014. The research used corporate financial fragility as its dependent variable, while the independent variables included banking sector concentration and banking sector development, together with equity market development. The researchers evaluated equity market development by calculating the ratio between total market capitalization and gross domestic product. The research showed that banking system concentration, together with financial institution development and equity market expansion, functioned as crucial elements for businesses to obtain essential funding, which they needed for their growth initiatives. The study recommended that future research should include corporate governance as a moderating variable to improve the understanding of its relationship with financial system development.

The researchers from Ngumo et al. (2020) used a descriptive research design to study the factors that affect microfinance institutions' financial performance in Kenya. The researchers utilized secondary data to examine microfinance institutions' financial statements between 2011 and 2017, which they further analyzed using multiple linear regression techniques. The study found that operational efficiency, together with capital adequacy measured by the equity to total assets ratio and operational scale measured through total assets natural logarithm, all produced positive results that significantly impacted return on assets, which served as the financial performance indicator. The financial performance of microfinance institutions suffered from two factors, which were loan to asset ratio and the nonperforming loans ratio, but these factors did not yield any statistically significant results. The study received criticism because it failed to handle endogeneity problems, and the researchers did not establish a theoretical framework for their work. The researchers proposed that extending the study period would lead to more detailed research outcomes.

Gupta et al. (2020) studied the financial results of specific public sector banks and private sector banks from 2015 to 2019. The researchers used secondary data, which they obtained from multiple sources that included annual reports, newspapers, magazines, and online databases. The research selected six banks, which had large financial resources, three of which were private sector banks, which included Housing Development Finance Corporation Bank and Industrial Credit and Investment Corporation of India Bank and Axis Bank and

three of which were public sector banks which included State Bank of India and Bank of Baroda and Punjab National Bank. The study examined multiple financial metrics, which included business per employee, profit per employee, and net nonperforming assets to net advances and capital adequacy.

Oyerogba and Gbolagade (2023) studied how risk management practices affect the financial success of Nigerian insurance companies. The research specifically examined how operational risk and liquidity problems affected the return on assets of businesses. The researchers obtained secondary data from annual reports and the Nigeria Stock Exchange information book, which covered the period between 2011 and 2017. The research team applied descriptive statistical methods together with inferential statistical techniques to their data analysis. The research showed that operational risk management positively impacted the financial performance of Nigerian insurance companies. The institutions experienced better return on assets when their operational risk management practices were effectively handled.

The research work of Abu-Rumman (2021) studied how risk management practices impact the financial success of banks in Jordan. The study analyzed the risk management standards established by the Basel Committee while demonstrating how proper risk management practices function as crucial elements for banking activities. The authors established that banks need to reduce their financial risks because it leads to better profitability results, while they called for a thorough and methodical risk management system for the entire banking sector. Jordanian banks experienced better financial results because they implemented effective risk management strategies. The research used a quantitative method, which involved sending questionnaires to three hundred people and receiving completed responses from one hundred twenty-three participants. The researchers used regression analysis to study how risk management practices affected financial performance.

Munangi and Sibindi (2020) evaluated the effect of credit risk on the financial performance of eighteen South African banks during the period from 2008 to 2018. The study utilized balanced panel data through which it analyzed secondary data collected from the financial statements of the chosen banks. The researchers applied pooled regression analysis to their data examination process. The financial performance indicators were established through return on equity and return on assets, while credit risk was determined through nonperforming loans to total equity and nonperforming loan ratio measurements.

Mousa et al. (2018) studied how credit risk and capital risk affect bank financial performance between 2009 and 2016. Financial performance was represented through return on equity. The researchers measured capital risk through the capital adequacy ratio, and they assessed credit risk using the nonperforming loans to total loans ratio. The researchers employed t-test statistics and multiple linear regression analysis to test the research hypotheses. The study found that return on equity decreased in response to both capital adequacy ratio and nonperforming loan-to-loan ratio increases. The research revealed that both credit risk and capital risk have a major impact on banking institutions' financial results. The research of Mennawi (2020) studied how credit risk, liquidity risk, and financial leverage risk affected the financial performance of Islamic banks in Sudan using panel data from thirteen banks that operated between 2008 and 2018. The research used balanced panel data together with a longitudinal research design. The study used nonperforming loans and loan loss provisions to assess credit risk, whereas the financial performance assessment used return on assets and net profit margin. The application of generalized least squares regression within a random effects framework revealed that indicators representing credit risk exerted a significant negative influence on the financial performance of the banks. The findings,

therefore, emphasized that credit risk represents an important factor affecting banking performance.

The study by Kaimu and Muba (2021) explored how credit risk affects the financial performance of Tanzanian commercial banks. The research used two different research designs, which included descriptive and explanatory research methods. Researchers used panel multiple linear regression to analyze secondary financial statement data. The study used the nonperforming loan ratio and loan loss provision ratio to measure credit risk, while return on assets served as the financial performance measurement. The analysis evaluated how bank asset size and capital adequacy ratio both functioned as moderating elements. The results demonstrated that the nonperforming loan ratio had a significant negative effect on return on assets, while the capital adequacy ratio, acting as a moderating variable, displayed a strong positive association with the financial performance of commercial banks.

Jerono and Olweny (2023) studied how financial risk management practices affect the financial performance of microfinance institutions in Kiambu County, Kenya. The study used both descriptive and inferential statistical methods to analyze the collected information. The researchers conducted statistical analysis using the Statistical Package for the Social Sciences software, and they used Microsoft Excel to analyze spreadsheet data. The study determined that liquidity risk management practices, operational risk management practices, credit risk management practices, and market risk management practices all positively impacted microfinance institutions' financial performance in the region.

Mutai and Opuodho (2021) examined how financial risk management practices affect microfinance banks in Kenya and their financial results. Financial institutions showed a strong financial performance relationship with their risk management strategy implementation, according to the research results. The study identified four essential risk management domains that had a major impact on financial performance results. The study results demonstrated that organizations need to implement effective risk management practices in order to achieve financial stability while they work on enhancing their overall performance. The financial performance problems of microfinance institutions stem from their implementation of ineffective financial risk management practices.

Worku and Asmare (2019) studied how credit risk management impacts the performance of six private commercial banks in Ethiopia between 2000 and 2013. The researchers based their analysis on audited financial statements and the National Bank of Ethiopia's records. The researchers used panel data regression techniques to analyze the information. The study found that capital adequacy ratio, total loan ratio, nonperforming loan ratio, and bank size and liquidity ratio control the performance indicators, which include return on assets and return on equity. The study examined credit risk only, while it omitted all other financial risk categories from its analysis. The analysis did not include the government-owned commercial bank, which controls a significant market share in the Ethiopian banking sector.

The study by Charles Ayodele and his team conducted research to discover how financial risk management practices affect the financial success of Nigerian deposit money banks, which hold international banking rights. Financial risk management practices that banks implemented effectively obtained positive results according to study findings, which demonstrated financial performance enhancements. Financial risk management practices, which included net interest margin, cost-income ratio, and total regulatory capital and capital adequacy ratio, produced important effects on financial performance indicators, which included Tobin's Q, return on equity, and return on assets. The study results demonstrated that

effective financial risk management practices lead to better financial performance outcomes for Nigerian deposit money banks that operate with international banking rights. The researchers used an ex post facto research design to conduct their study, which involved panel regression analysis of data from 2012 to 2019.

Ali and Oudat (2020) investigated the relationship between financial risk and the financial performance of commercial and investment banks listed on the Bahrain Stock Exchange. The study included eighteen commercial and investment banks that were listed during the period from 2014 to 2018. The researchers conducted their analysis using two regression models. The research used return on assets as the dependent variable, while capital risk, exchange rate risk, liquidity risk, and operational risk functioned as independent variables. The research discovered that capital risk directly affects how well banks achieve their performance targets. The authors established research directions that researchers should follow to create more extensive empirical evidence based on their research results.

The study by Niroula and Singh (2021) examined how liquidity risk affects the financial performance of Nepalese commercial banks during the period from fiscal year 2011 to fiscal year 2021. The researchers conducted their analysis using balanced panel data, which they obtained from ten different commercial banks. The study measured financial performance through return on equity and return on assets metrics. The study used loan to deposit ratio, capital adequacy ratio, and nonperforming loans to gross loans ratio, and total liquid assets to total assets ratio as ratios to show liquidity risk. The research used the total assets natural logarithm as a control variable to demonstrate bank size.

The research conducted by Ismail and Ahmed (2023) investigated how operational risk, credit risk, and liquidity risk affected the financial stability of Jordanian conventional banks between 2016 and 2021. The study used a panel data regression model to analyze how unsystematic financial risks affected financial stability. The measurement of credit risk, liquidity risk, and operational risk utilized three indicators, which included the ratio of nonperforming loans to gross loans, the ratio of total current assets to current liabilities, and the total income generated during the previous three years. The researchers used the Z score, which is derived from return on assets, to measure financial stability.

The researchers Hacini et al. (2021) studied how banks in Saudi Arabia manage liquidity risk to assess their financial performance between 2002 and 2019. The researchers used panel data regression techniques to study secondary information, which they obtained from the annual financial reports of banks. The researchers evaluated financial performance by using return on equity, while they measured liquidity risk through the ratio of cash to total deposits and the ratio of loans to deposits. The analysis included the ratio of equity to total assets as a control variable for its assessment. The researchers Gadzo et al. (2019) studied how credit risk and operational risk impact the financial performance of universal banks that operate in Ghana. The study gathered data from all 24 universal banks in Ghana and used partial least squares structural equation modeling to analyze the data. The researchers used profitability as the dependent variable, while they used credit risk and operational risk as independent variables. The results showed that credit risk hurt financial performance, which contradicted earlier studies but supported the information asymmetry perspective of lemon theory. Operational risk negatively impacted the financial performance of all universal banks operating in Ghana.

The research by Oluwayemisi and Samson (2022) examined how interest rates impact bank profitability in Nigeria through their study of 21 deposit money banks from 2005 to 2014. The results from regression analysis showed that all four tested variables of lending rates,

interbank rates, treasury bill rates, and monetary policy rate positively affected bank profitability in Nigeria. Amira et al. (2023) studied how banks in Pakistan manage their liquidity risk and how it affects their financial results. The State Bank of Pakistan provides financial data for all commercial banks in Pakistan from 2006 to 2019. The study implemented panel data analysis through the ordinary least squares estimation method. Financial performance used return on equity and return on assets as measurement tools, while credit risk and liquidity risk served as explanatory indicators. The research findings showed that higher liquidity levels lead to better banking performance in Pakistan's commercial banks. The research provides valuable information that can help policymakers create minimum liquidity standards for banks in the area.

The research conducted by Alwi et al. (2021) studied how capital adequacy, default risk, and nonperforming assets affected bank performance in Indonesian banks. The researchers used purposive sampling to collect data from 470 Indonesian commercial banks and private commercial banks between 2015 and 2019. The research implemented panel data regression methods under its quantitative research design. The study found that nonperforming assets have a major negative effect on banking performance. The study results demonstrated that solvency represents the primary factor that determines a bank's financial status. A bank reaches financial imbalance when it fails to repay its depositors because its total liabilities exceed its total assets, and this situation leads to substantial profit loss. Rachuba (2023) documented that banking sector interest in corporate governance has grown considerably during the past several years. Researchers have increased their research into how organizations manage their governance systems in both financial and nonfinancial organizations. However, researchers have directed their studies toward understanding how banks implement their corporate governance systems. The study used literature review and descriptive analytical methods to show that bank corporate governance frameworks establish distinct governance features that differ from those found in other industries. The banking sector has undergone extensive research into various elements of corporate governance.

The research conducted by El Chaarani et al. (2022) investigated how internal and external corporate governance systems affected the financial performance of Middle Eastern and North African banks during the COVID-19 pandemic. World Bank reports, together with annual reports of banks and the Orbis Bank Focus database, provided the researchers with financial and nonfinancial data about the banking sector. The analysis used fixed effects regression together with two-stage least squares estimation methods to conduct its investigation. The study used financial performance as the dependent variable, while takeover prevention mechanisms, executive compensation structures, indicators of government effectiveness, and legal protection mechanisms served as independent variables. The research showed that banks achieved better financial results because their legal protection was strong, their ownership structure was concentrated, their board members faced no political pressure, and their boards included independent directors.

Haryetti and Rokhmawati (2021) conducted a study to examine how banks implement risk management practices, which then affect their financial results, while corporate governance functions as a mediator between those two processes. The study employed purposive sampling and included twenty-one banks listed on the Indonesian Stock Exchange. The research adopted a quantitative design method. The study used corporate governance together with financial performance as dependent variables, while risk management implementation functioned as the independent variable. The research demonstrated that enterprise risk management implementation brought about positive results for corporate

governance. The study found no evidence showing that enterprise risk management implementation directly affects financial performance in a statistically significant manner. The researchers recognized several study limitations because they lacked detailed information about potential risks and institutional risk tolerance levels, and bank risk management strategies to handle uncertain situations and their associated costs and benefits.

3. Theoretical Framework

The study's conceptual framework consists of three foundational theoretical perspectives that scientists use to analyze the connections between the studied financial variables. Financial Distress Theory explains how credit risk and liquidity risk interact in financial institutions while demonstrating how financial vulnerability affects organizational stability. Shiftability Theory expands this understanding by emphasizing the management of liquidity risk through the transferability and convertibility of financial assets. Extreme Value Theory uses statistical analysis to demonstrate how financial markets experience rare yet important movements that increase market-related risk. The study uses these theoretical perspectives to create a structured foundation that researchers use to analyze study variables and investigate how various financial risks affect institutional performance and stability.

3.1. Finance Distress Theory

Financial distress occurs when a company experiences financial difficulties that prevent it from fulfilling its payment obligations, according to Mason (1983). The organization needs to handle more financial challenges because its existing resources cannot handle all its current liabilities. The first signs of financial distress appear when a company fails to meet its debt obligations and when it stops or decreases its distribution of dividends to shareholders. The warning signs demonstrate that the company's financial strength is decreasing, which can lead to more serious financial problems. Financial distress begins in the first year that a company's cash flow fails to support its existing long-term debt payments, according to Whitaker (1999). The organization faces an unstable financial situation, which increases its chances of becoming insolvent or needing to restructure its operations.

3.2. Shiftability Theory of Liquidity

The Shiftability Theory of liquidity was established as an official concept through the work of Harold Glenn Moulton, who created it in 1915. The theory asserts that banks use their financial assets, which can be easily sold in secondary markets, to defend against unexpected major deposit withdrawals. The cash requirement perspective states that people need to possess assets that enable them to convert their holdings into cash instantly, not just for maintaining their cash reserves. Financial institutions or investors can trade credit instruments and other financial securities as common financial assets that exist in the market without delay. The theory explains that banking institutions need to have movable assets that they can shift to other lenders and market participants to maintain financial stability. Banks that hold portfolios with valuable transferable assets gain advantages in their ability to navigate liquidity challenges while maintaining their business operations during challenging financial periods.

3.3. Extreme Value Theory

Extreme Value Theory serves as a statistical method that enables researchers to study rare events and extreme events that happen in financial and economic data. The first extreme outcome analysis methods were introduced by Bernoulli in 1709 when he studied the expected maximum distance from the origin that random points would reach on a finite line segment (Johnson et al., 1995). Extreme Value Theory enables financial experts to determine the extreme financial market boundaries that will define the possible minimum and maximum values of financial market extreme events. This analytical approach allows researchers and

financial institutions to evaluate extreme but plausible variations in financial variables. Within banking and financial risk management, the theory is particularly useful for estimating capital requirements needed to protect institutions from severe market movements. In order to manage market-related risk effectively, banks must therefore maintain adequate financial leverage management and capital buffers so that they can withstand unexpected and extreme fluctuations in market conditions.

3.4. Econometric Model

$$TQ_{it} = \alpha + \beta_1 NPLTA_{it} + \beta_2 TATL_{it} + \beta_3 TLTD_{it} + \beta_4 LATA_{it} + \beta_5 IBITTA_{it} + \beta_6 CI_{it} + \beta_7 IITA_{it} + \beta_8 BM_{it} + \gamma_1 SIZE_{it} + \gamma_2 AC_{it} + \gamma_3 BI_{it} + \varepsilon_{it}$$

Where:

- TQ_{it} = Tobin's Q (the financial performance of bank i in year t)
- Independent variables include financial risk measures and corporate governance proxies.
- ε_{it} = error term

This simply states that Tobin's Q (financial performance) is a function of financial risk variables (NPLTA, TATL, TLTD, LATA, IBITTA, CI, IITA, BM) and corporate governance variables (Board Size, Audit Committee, Board Independence).

3.5. Econometrics Techniques

In order to offer an initial comprehension of the data, descriptive statistics are utilized to encapsulate the essential features of all variables involved in the study. In order to investigate the relationships among the variables in the study, a correlation analysis is performed utilizing the Pearson correlation coefficient. To ensure the reliability of the regression estimates, multicollinearity among the independent variables is evaluated using the Variance Inflation Factor (VIF). In order to confirm the assumptions underlying the regression model, this study performed a heteroscedasticity test utilizing the Breusch–Pagan / Cook–Weisberg test. To empirically investigate the influence of financial risk and corporate governance on the financial performance of banks in Pakistan, this research utilizes panel regression analysis.

4. Results and Discussion

The analysis of variable distribution and variation patterns uses 130 firm-year data, which spans from 2011 to 2023. The study examines how banking risk indicators affect company valuation while investigating how corporate governance systems function as moderating elements. Tobin's Q serves as the market-based metric that shows how firms' market value relates to their asset replacement cost through its use as a valuation method. The descriptive results indicate that the average value of Tobin's Q remains below unity, which indicates that markets value banks less than their replacement asset value. Investor caution, plus structural inefficiencies and perceived financial risks within banks, all contribute to this outcome. The total asset to total loan ratio shows that most banks in the sample have significant loan amounts that exceed their total asset value. The operational structure of banking institutions depends on lending activities, which serve as their central operational component. The total asset ratio demonstrates that banks operate with restricted liquidity reserves that operate below their total asset capacity. The pattern demonstrates that banks use lending activities as their main income source despite facing higher financial stress vulnerability from their reduced liquidity levels. Governance elements show banks share common structural patterns that exist together in their operations. The average size of audit committees shows that most institutions operate small yet steady committees that handle financial reporting and internal control supervision. The governance structure enhances monitoring capabilities, and the



differences in committee size between banks affect how the governance systems handle oversight and coordination of their governance processes.

Table 1: Descriptive Analysis

Variables	N	Min	Max	Mean	Std. Dev.
ID	130	1	10	5.5	2.88
Year	130	2011	2023	2017	3.76
TQ	130	0.0008	6.07	0.34	0.75
NPLTA	130	0.007	5.15	1.03	1.22
TATL	130	0.0073	0.54	0.32	0.12
TLTD	130	0.0096	4.35	0.44	0.38
LATA	130	0.0406	0.16	0.08	0.03
IBITTA	130	0.0003	0.0562	0.018	0.011
CI	130	0.13	9.03	1.24	1.36
IITA	130	0.0014	0.1	0.034	0.014
BM	130	0.0079	107.53	7.99	17.87
Size	130	5	13	8.85	1.63
AC	130	3	5	3.66	0.67
BI	130	1	7	3.05	1.03

The Pearson correlation coefficients in Table 2 show the relationships between the study variables, which include Tobin's Q as a measure of firm value and the chosen financial risk indicators and profitability measurements, together with corporate governance characteristics. The correlation analysis describes how the variables relate to each other through their linear relationships by showing both the direction and strength of their links, together with their statistical significance. The results establish several important connections that serve to clarify how financial risk indicators affect banking sector firm value through their relationship with these indicators. The findings show that firm value demonstrates a positive and statistically significant relationship with the ratio of total loans to total deposits and with firm size. The banks that experience greater lending relative to their deposit base, together with those that maintain larger governance structures, establish better market value for their business. The market believes that larger institutions, which maintain active lending operations, will achieve superior growth potential and better financial results.

In contrast, firm value shows a negative and statistically significant association with the book-to-market ratio. The relationship shows that institutions with higher book-to-market values experience lower market-based valuation, which the financial literature shows as a common outcome for value-related measures. The results indicate that banks that possess higher market expectations display a tendency to value their assets at lower book value compared to their market price. The nonperforming loan ratio to total assets displays a statistically insignificant positive connection with firm value. The variable demonstrates a statistically significant negative connection with the total liquid assets ratio against total assets. Banks with higher quantities of defaulted loans maintain lower liquid asset reserves, which indicates their financial troubles or their diminished ability to maintain liquidity reserves.

The total assets to total loans ratio does not show any significant relationship with firm value. The total loans to total deposits ratio shows a positive relationship with the variable because banks with larger loan portfolios relative to deposits tend to keep higher percentages of their loans in their total assets. Banks with larger loan portfolios relative to deposits tend to maintain higher proportions of loans within their asset structure. Higher credit risk exposure may coincide with reduced liquidity positions, according to the negative relationship between



liquid assets and nonperforming loans. Profitability-related indicators show weak connections with firm value. The earnings before interest and taxes, total assets ratio shows a positive relationship with firm value, but the relationship lacks statistical significance, which means market valuation depends more on other profitability indicators. The cost-related measures display a negative but insignificant relationship with firm value because operational efficiency factors may exert only a limited direct influence on the market valuation of banks within the observed sample.

Table 2: Correlation Matrix

Variables	TQ	NPLTA	TATL	TLTD	LATA	IBITTA	CI	IITA	BM	SIZE	AC	BI
TQ	1											
NPLTA	0.071	1										
TATL	0.127	-0.088	1									
TLTD	0.266	-0.035	0.395	1								
LATA	-0.14	-0.207	0.172	-0.05	1							
IBITTA	0.061	0.096	0.054	0.009	0.114	1						
CI	-0.07	-0.026	0.017	0.048	-0.1	-0.387	1					
IITA	-0.08	0.07	-0.15	-0.13	0.122	0.513	-0.3	1				
BM	-0.19	-0.071	-0.34	-0.19	0.062	-0.102	-0.06	0.285	1			
SIZE	0.21	0.278	0.174	0.013	-	0.427	-0.20	0.217	-0.11	1		
					0.088							
AC	-0.12	0.238	-0.24	-0.09	-0.014	0.098	-0.07	0.237	0.299	-	1	
										0.05		
BI	-0.06	0.025	0.017	-0.09	-0.051	-0.169	-0.1	-0.06	0.087	0.01	-0.3	1

The independent variables of the regression model, which assesses the impact of bank-specific risk indicators and governance factors on Tobin's Q as a measure of firm value, show their Variance Inflation Factor values in the multicollinearity diagnostics table. The Variance Inflation Factor serves as a tool to assess the existence of strong correlations between the explanatory variables in a regression model. The presence of serious multicollinearity becomes evident when the Variance Inflation Factor value exceeds ten, while values that fall below five function as acceptable standards for conducting empirical research. The study results demonstrate that all Variance Inflation Factor values remain below two, with the average value standing at approximately one point four six. The finding demonstrates that the regression model does not have multicollinearity problems because the explanatory variables maintain their required level of independence from each other. The regression estimates become more trustworthy because variable relationships show normal patterns, which means that excessive correlation does not affect their connection.

The ratio of income before interest and taxes to total assets demonstrates the highest Variance Inflation Factor value among all model variables. The value of this element is larger than the values of other variables, but it stays below the critical threshold, which would indicate the existence of multicollinearity problems. The variable functions as a key financial performance indicator, and its independent variation enables the assessment of its link to firm value without interference from other explanatory factors. The interest income to total assets ratio shows a Variance Inflation Factor value which meets established criteria for acceptable ranges. The findings indicate that interest income functions as a profitability and asset structure assessment for banks; however, its use as an explanatory variable results in substantial overlap with other model variables. The governance variable, which measures audit



committee size, shows a Variance Inflation Factor value that meets acceptable standards because its governance elements display enough distinction from the financial risk factors used in the study. The ratio of nonperforming loans to total assets shows a low Variance Inflation Factor value. The credit risk indicators show statistical independence because they do not connect with other regression model explanatory variables. The diagnostic results demonstrate that the model variables do not display multicollinearity issues, which enables reliable regression analysis of the connection between financial risk indicators, governance mechanisms, and firm value.

Table 3: *Multicollinearity*

Variable	VIF	1/VIF
IBITTA	1.9	0.5273
IITA	1.69	0.5929
AC	1.64	0.6094
TATL	1.5	0.6655
BM	1.48	0.6741
Size	1.44	0.6947
BI	1.42	0.7036
CI	1.32	0.7574
NPLTA	1.29	0.7781
TLTD	1.25	0.8013
LATA	1.16	0.8596
Mean VIF	1.46	

Since $p < 0.05$, the null hypothesis is rejected, indicating the presence of heteroscedasticity, that is, the error term exhibits non-constant variance across observations.

Table 4: *Heteroscedasticity*

Test	Assumption	Variable	Ho (Null Hypothesis)	χ^2 (df=1)	Prob > χ^2
Breusch-Pagan / Cook-Weisberg Test	Normal error terms	Fitted values of TQ	Constant variance	15.48	0.0001

4.1. Financial Risk and Financial Performance without Moderation

The section shows results from multiple linear regression testing, which studied how financial and governance factors affected company worth as measured by Tobin's Q. The research team used 130 samples to create a regression model, which displayed how banking risk factors and corporate governance elements affected market value. The coefficient of determination shows that the model explanatory variables explain a moderate level of variance in firm value. The model reveals key evidence about how financial risk elements and governance functions affect banking sector market valuation, although it fails to show all market valuation factors. The analysis shows that nonperforming loans as a percentage of total assets have a positive impact on firm value, but the link lacks statistical significance. The study found that credit risk exposure changes, which show through nonperforming loans, have no impact on market valuation through the entire sample period. Investors may evaluate bank performance using broader financial indicators rather than relying solely on measures of loan quality.

The study found that board size increases lead to higher firm value through a positive relationship at statistically significant levels. The result shows that organizations with bigger governance systems achieve better market valuation results. Larger boards may provide more extensive expertise, which results in better monitoring and improved strategic decision-



making abilities that enhance investor trust. Theoretical resource-based view supports this outcome because it shows that institutional resources, managerial capabilities, and organizational scale lead to better competitive advantage and market perception improvement. The research showed that board independence leads to lower firm value through a statistically significant negative relationship. The study found that banking institutions that have more independent boards do not achieve higher market valuation. Independent directors typically improve governance oversight, but their presence establishes stricter monitoring, which results in more cautious strategic decisions that create complex market perception changes.

Table 5: *Financial Risk and Financial Performance without Moderation*

Tobin q	Coefficient	Std. Error	t-value	p-value	[95% Confidence	Interval]
NPLTA	0.0293	0.0307	0.95	0.342	-0.0315	0.0902
TATL	-0.3535	0.4444	-0.8	0.428	-1.2335	0.5265
TLTD	0.5271	0.0629	8.37	0	0.4024	0.6517
LATA	-2.986	2.5201	-1.18	0.238	-7.9765	2.0046
IBITTA	-3.2144	4.145	-0.78	0.44	-11.4227	4.9939
CI	-0.0748	0.0409	-1.83	0.07	-0.1558	0.0061
IITA	-3.5691	2.6474	-1.35	0.18	-8.8116	1.6735
BM	-0.0029	0.0013	-2.18	0.031	-0.0056	-0.0003
Size	0.0847	0.0307	2.76	0.007	0.0239	0.1455
AC	-0.1865	0.0981	-1.9	0.06	-0.3808	0.0078
BI	-0.1132	0.0559	-2.03	0.045	-0.2239	-0.0025
Constant	1.0132	0.917	1.1	0.271	-0.8027	2.8292
Observations	130					
F(11, 118) =	35.54					
Prob > F:	0.001					
R-squared	0.1752					

4.2. **Financial Risk and Financial Performance with the Moderation of Corporate Governance (Board Size)**

The regression analysis investigates how asset quality indicators and governance variables affect the actual corporate value of companies, which researchers measure through Tobin's Q. The coefficient for nonperforming loan to total asset ratio shows a negative association with firm value, but this finding lacks statistical significance. The data indicate that when lenders experience more problematic loans, their market value declines because investors view asset deterioration as a warning of rising credit risk and declining financial health. The lack of statistical significance shows that the evidence for this indicator's effect on firm value remains too weak to establish a reliable effect on company valuation in this population. The relationship between total assets and total loans shows a negative correlation with firm value, but this connection does not achieve statistical significance. This finding shows that banks face financial market evaluation based on their asset and loan structure changes, which happen outside their control. The asset structure contains more loans, and the asset structure shows active lending operations, which generate income that lessens investor risk concerns.

The liquid asset ratio shows a negative relationship with firm value according to its research results. The data shows that banks with high liquid asset levels face difficulties because their funds decrease, which affects their income-generating activities like lending. The banking industry faces a situation where its liquidity reserves directly impact its market valuation through the effect that these reserves create on its potential profitability. The

financial system requires liquidity to support both regulatory compliance needs and its vital role in maintaining financial stability.

The governance structures test their ability to moderate through their interaction terms deliver fresh understanding. The board size, together with the nonperforming loans to total assets ratio, exhibits a positive link that results in increased value for the company. The findings indicate that organizations with larger boards can help counteract adverse effects from declining loan quality because they deliver better governance and oversight. The statistical data prove that this moderating effect fails to reach the level needed for researchers to determine its statistical significance.

The board size relationship with the total assets to total loans ratio shows a positive result, which lacks statistical significance. The result demonstrates that board size fails to produce any substantial moderating effect, which would impact the connection between asset structure and firm value. The board size, together with the total loans to total deposits ratio, forms a negative link that results in diminished firm value, although it only holds slight statistical importance. The evidence shows that board size exhibits restricted power as a moderating factor, which displays uncertain results in this particular situation.

Table 6: *Financial Risk and Financial Performance with the Moderation of Corporate Governance (Board Size)*

Variable	Coefficient	Std. Error	t-value	P-value	[95% conf. interval]
NPLTA	-0.18681	0.13564	-1.38	0.171	-0.45557 0.08195
TATL	-3.99776	5.81201	-0.69	0.493	-15.5135 7.518
TLTD	5.47224	3.15011	1.74	0.085	-0.7693 11.7138
LATA	-20.4636	12.93524	-1.58	0.116	-46.0931 5.1659
IBITTA	-3.48543	37.06789	-0.09	0.925	-76.9307 69.9598
CI	0.56165	0.2082	2.7	0.008	0.14914 0.9742
IITA	-7.92792	31.63493	-0.25	0.803	-70.6085 54.7526
BM	0.00685	0.015	0.46	0.649	-0.02287 0.0366
Size	0.0085	0.13202	0.06	0.949	-0.25309 0.2701
SIZENPLTA	0.02167	0.01409	1.54	0.127	-0.00625 0.0496
SIZETATL	0.50921	0.66508	0.77	0.446	-0.80857 1.827
SIZETLTD	-0.62426	0.38953	-1.6	0.112	-1.39608 0.1476
SIZELATA	2.03968	1.38526	1.47	0.144	-0.70505 4.7844
SIZEIBITTA	0.49395	4.25508	0.12	0.908	-7.93695 8.9248
SIZECI	-0.06963	0.02297	-3.03	0.003	-0.11515 -0.0241
SIZEIITA	0.38014	3.64425	0.1	0.917	-6.84047 7.6008
SIZEBM	-0.00131	0.00173	-0.76	0.45	-0.00474 0.0021
_cons	0.51075	1.39353	0.37	0.715	-2.25035 3.2718
Observation	130				
F(17, 112):	27				
Prob > F:	0				

4.3. *Financial Risk and Financial Performance with the Moderation of Corporate Governance (Audit Committee)*

The regression outcomes show that financial risk indicators together with governance characteristics affect firm value through their impact on Tobin's Q measurement. The nonperforming loan ratio coefficient shows a positive connection to firm value, but the connection lacks statistical backing. The results demonstrate that market valuation of the

studied sample shows no substantial connection to changes in problematic loan amounts. The positive direction of the relationship may reflect circumstances in which increased lending risk accompanies expansion strategies that markets may occasionally interpret as signals of growth opportunities. The relationship between the two variables lacks statistical significance, which requires careful interpretation of the connection between the two variables. The total asset ratio to total loan ratio shows a direct relationship to firm value, although the impact stays extremely insignificant. The finding demonstrates that asset structure in relation to loans serves as an essential factor in explaining market valuation differences. Differences in asset composition across banks do not create sufficient changes that would alter investor views about bank performance, according to this finding. The total loan to total deposit ratio shows a negative relationship to firm value. Higher lending activity instead of deposit growth leads to increased liquidity pressure for banks, which creates detrimental effects on investor trust, according to this relationship. The relationship between the two variables remains statistically insignificant, which limits the market valuation impact of this indicator within the sample.

The ratio of liquid assets to total assets shows a positive relationship with firm value according to the results. Investors perceive better risk management through higher liquidity reserves, which strengthen financial stability according to this pattern. The positive relationship between the two variables shows that liquidity levels do not have a strong impact on bank market valuation.

The profitability indicator, which calculates income before interest and taxes as a proportion of total assets, reveals a negative correlation with firm value, yet the association remains statistically void. The sample market valuation does not show a considerable direct impact from the profitability changes that this indicator shows. The interaction terms, which assess governance structure moderating effects, bring forth new details. The audit committee interacts with the total assets to total loans ratio, but this relationship shows no significant impact on firm value. The audit committee size or presence does not result in major changes to how asset structure affects firm performance. The audit committee shows a positive but non-statistical link to the total loans and total deposits ratio, while its moderating impact remains unimportant. The model predicts that the present factors can explain only a small share of corporate valuation changes. The Tobin's Q prediction errors show a moderate level of discrepancy between actual results and model predictions because the model explains some market value shifts, yet other variables must exist that drive firm value. Financial risk indicators together with governance mechanisms help assess firm value, although investor valuation of banking institutions depends on multiple economic, institutional, and market factors.

Table 7: *Financial Risk and Financial Performance with the Moderation of Corporate Governance (Audit Committee)*

Variable	Coefficient	Std. Error	t-Value	p-Value	[95% conf. intervals]	
NPLTA	0.288	0.223	1.29	0.199	-0.154	0.73
TATL	0.798	4.74	0.17	0.867	-8.594	10.19
TLTD	-1.665	3.445	-0.48	0.63	-8.491	5.161
LATA	7.976	13.011	0.61	0.541	-17.803	33.755
IBITTA	-77.803	49.229	-1.58	0.117	-175.344	19.739
CI	-0.183	0.151	-1.22	0.227	-0.482	0.116
IITA	6.602	44.21	0.15	0.882	-80.995	94.2
BM	-0.049	0.013	-3.67	0	-0.075	-0.022
AC	-0.308	0.42	-0.73	0.464	-1.14	0.524



ACNPLTA	-0.077	0.054	-1.44	0.152	-0.183	0.029
ACTATL	-0.247	1.284	-0.19	0.848	-2.792	2.297
ACTLTD	0.539	0.874	0.62	0.539	-1.193	2.272
ACLATA	-3.339	3.651	-0.91	0.362	-10.574	3.895
ACIBITTA	21.852	12.189	1.79	0.076	-2.298	46.002
ACCI	0.032	0.038	0.86	0.394	-0.043	0.107
ACIITA	-2.23	11.355	-0.2	0.845	-24.73	20.269
ACBM	0.0105	0.003	3.45	0.001	0.0045	0.0165
_cons	1.8579	1.7156	1.08	0.281	-1.5413	5.257
Observations	130					
F(17,112):	24.22					
Prob > F:	0					
R-squared:	0.1748					

4.4. Financial Risk and Financial Performance with the Moderation of Corporate Governance (Board Independence)

The regression results establish a connection between financial risk indicators and governance characteristics and their impact on corporate value, which is measured through Tobin's Q. The nonperforming loan ratio to total assets displays a minor positive correlation with firm value, but the findings lack statistical significance. The data indicate that changes in defaulting loan ratios do not significantly affect market value for the studied group. Investors tend to react more strongly to credit risk when nonperforming loan levels cross a significant threshold, which indicates major financial difficulties.

The relationship between total assets and total loans shows a direct link to firm value, but this connection lacks statistical significance. The asset composition within banking organizations serves as a vital operational function, yet financial markets evaluate a company's worth based on asset composition only. The relationship between total loans and total deposits shows a direct negative connection to the company's worth. The data indicate that banks face greater liquidity risk when they lend more than what their deposit base supports, which leads to decreased investor confidence. The statistical data show no significant impact of this element on Tobin's Q variations within the studied framework because it lacks independent explanatory power. The relationship between liquid assets and total assets shows a direct negative connection to company worth. The data indicate that maintaining larger liquidity reserves leads to decreased money availability for revenue-generating operations, particularly lending activities. The statistical data show no significant impact of liquidity holdings on market valuation because investors assess liquidity together with other financial metrics instead of treating it as a standalone factor affecting company performance.

The interaction terms offer additional information about the way governance characteristics influence the connection between risk indicators and firm value. Board independence interacts with the nonperforming loan ratio to total assets relationship, which shows a negative association that lacks statistical significance. Board independence does not have any substantial effect on credit risk that affects company performance, according to these results. The interaction between board independence and the total assets to total loans ratio displays the same pattern as board independence, yet both remain statistically insignificant, which indicates that governance independence does not affect the link between asset structure and company worth.

The interaction between board independence and the ratio of total loans to total deposits displays a positive but insignificant association with firm value. The interaction between board



independence and the ratio of liquid assets to total assets demonstrates a positive relationship, yet it lacks statistical significance. The positive coefficients might indicate that independent boards have the potential to improve liquidity strategies, yet the research findings do not show they have a strong impact on this relationship. The regression model explains a small portion of firm value variation, which still maintains statistical significance at the model level. The profitability indicator, which measures income before interest and taxes against total assets, shows positive results, although most individual coefficients lack significant statistical strength. The interaction between board independence and this profitability measure shows that governance mechanisms can influence the market valuation of financial performance, yet evidence for this relationship remains limited in the current model.

Table 8: *Financial Risk and Financial Performance with the Moderation of Corporate Governance (Board Independence)*

Variable	Coefficient	Std. Error	t-Value	p-Value	[95%Confidence	Interval]
NPLTA	0.0874	0.1196	0.73	0.466	-0.149	0.3242
TATL	5.604	12.3765	0.45	0.652	-18.9186	30.1265
TLTD	-2.3604	8.8852	-0.27	0.791	-19.9653	15.2446
LATA	-13.055	12.4959	-1.04	0.298	-37.814	11.7041
IBITTA	41.6456	25.1634	1.66	0.101	-8.2124	91.5035
CI	-0.0054	0.1779	-0.03	0.976	-0.358	0.3471
IITA	-52.018	33.1164	-1.57	0.119	-117.634	13.598
BM	0.0047	0.0146	0.32	0.751	-0.0243	0.0336
BI	-0.3703	0.4227	-0.88	0.383	-1.2078	0.4673
BINPLTA	-0.0208	0.0439	-0.47	0.637	-0.1078	0.0662
BITATL	-1.8378	4.014	-0.46	0.648	-9.791	6.1154
BITLTD	0.9389	2.9477	0.32	0.751	-4.9015	6.7794
BILATA	3.4859	3.8318	0.91	0.365	-4.1064	11.0781
BIIBITTA	-12.5197	7.9304	-1.58	0.117	-28.2328	3.1933
BICI	-0.0221	0.0656	-0.34	0.737	-0.1521	0.108
BIIITA	14.2238	9.3654	1.52	0.132	-4.3326	32.7802
BIBM	-0.0031	0.0045	-0.69	0.489	-0.0121	0.0058
_cons	1.788	1.5631	1.14	0.255	-1.3091	4.8851
Observations	130					
F(17, 112)	10.02					
Prob > F	0					
R-squared	0.1561					

5. Conclusion and Policy Recommendations

The research establishes that there exists a small positive connection between firm value and both leverage, measured through the total loan to total deposit ratio assessment, and company size assessment. The findings show that organizations that maintain higher loaning operations compared to their deposit base and those operations that have greater business size, will probably achieve better market valuation results. The company value has a negative connection with both the book-to-market ratio and particular governance features, specifically board independence. The higher book value of banks in relation to their market value results in decreased Tobin's Q value, which matches typical findings found in financial valuation studies. The cost-to-income ratio and the ratio of interest income to total assets act as financial risk indicators, which negatively impact firm value because rising operational expenses combined with increased financial risk will reduce market performance. The multicollinearity

diagnostics further confirm the reliability of the regression analysis. The Variance Inflation Factor results indicate that the explanatory variables are sufficiently independent from one another and that the model does not suffer from multicollinearity problems. The estimated coefficients remain trustworthy for interpretation because the explanatory variables display no excessive correlation between themselves. The Breusch Pagan and Cook-Weisberg diagnostic test confirms the presence of heteroscedasticity within the regression model, indicating that the variance of the error terms is not constant across observations. The model residuals show different dispersion patterns because various firm characteristics create influence over the model, which is a typical pattern in financial panel data analysis. The regression results further indicate that firm value represented by Tobin's Q is significantly and positively influenced by the ratio of total loans to total deposits. The finding demonstrates that banks that maintain higher lending levels compared to their deposit fund base achieve better market valuation because of their financial intermediation activities that generate income for the banking sector. The results demonstrate that although loan quality and leverage, together with liquidity, serve as vital elements of banking operations, they demonstrate only minor connections with firm value within the sample. Banking institutions need to enhance their risk management frameworks and governance practices because their current systems fail to deliver financial stability while maintaining risk control, which leads to increased market performance and better investor confidence.

5.1. Limitations

The research delivers essential understanding about how banking governance elements affect market valuation through Tobin's Q measurement in South Asian banking institutions. The research findings need to be understood through their essential contributions and the existing limitations that affect their interpretation. The research uses secondary data from publicly accessible reports to examine financial and governance information. The sources enable researchers to obtain numerical data, but they do not provide complete information about governance through board activities, leadership performance, internal team discussions, and informal decision-making methods. Organizations need to disclose these elements in their financial statements, which publicize their strategic decisions because they impact both their institutional performance and organizational decision-making process.

The research study investigates only the banking sector through its examination of publicly traded banks. The results from this study become less applicable because the research focused on listed banks, which provide accurate financial reports, while the research delivered complete financial data. Non-listed banks, along with smaller financial institutions, maintain different governance frameworks that operate under distinct regulatory standards and business limitations. The study findings do not represent the unlisted banks and smaller financial institutions that exist in the financial industry because their operational environment differs from the study establishment.

The research design establishes connections that extend between short and medium research durations. The analysis fails to capture long-term causal relationships that establish permanent changes within the banking industry. Governance patterns and market performance experience structural breaks after major external events, which include the Coronavirus disease pandemic, macroeconomic instability, financial crises, and rapid technological advancements in the financial services sector. The governance mechanisms that affect firm value show changes that extend beyond the study period.

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