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Credit Risk Management and Mortgage Performance in the Islamic Banking Sector in Pakistan

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ABSTRACT

This study examines the relationship between credit risk management and mortgage performance in the Islamic banking sector of Pakistan, focusing on risk mitigation strategies and risk management techniques. This study uses a cross-sectional explanatory design to examine the link between credit risk management and mortgage performance in Islamic banks. Data from 55 respondents at Meezan Bank and Bank of Islami were collected via questionnaires and analyzed using SPSS. Reliability (Cronbach's Alpha > 0.6) and validity (Content Validity Index) ensured accuracy. The analysis highlights significant relationships between various factors and mortgage performance in Islamic banks. A strong positive correlation exists between risk mitigation and mortgage performance ($r = 0.771$, $P < 0.01$). Similarly, credit scores show a robust link with provisions to total advances and non-performing loans to total advances ($r = 0.373$, $P < 0.05$). Financial stability correlates positively with mortgage performance indicators ($r = 0.311$, $P < 0.001$). Risk management techniques—transfer risk ($r = 0.253$, $P > 0.05$), analysis risk ($r = 0.343$, $P < 0.05$), and diversification risk ($r = 0.399$, $P < 0.01$)—demonstrate significant positive effects on mortgage performance. These findings underscore the importance of credit evaluation and effective risk management in enhancing mortgage outcomes. The findings suggest that effective credit risk management practices contribute positively to mortgage performance in Islamic banks, highlighting the importance of robust risk mitigation strategies. Enhanced credit risk management can potentially lead to improved financial stability for borrowers and lenders in the Islamic banking sector, thereby promoting economic resilience. This study contributes to the understanding of how credit risk management impacts mortgage performance specifically within Islamic banking contexts in Pakistan, offering insights for practitioners and policymakers.

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1. Introduction

For financial institutions (FIs) to survive and expand, credit risk oversight must be sufficient. Credit risk is of significantly greater concern to banks because of the higher levels of credit risks that emerge from certain aspects of client characteristics and business circumstances. Islamic banks protect their clients' money and other resources. Additionally, they provide financial records, cash orders, and cashier's checks, as well as loans, credit, and installment services. According to the Financial Services Modernization Act passed by the US legislature, banks are now permitted to provide a wide range of additional financial services that they were previously prohibited from providing under the Akram et al. (2018) in the US. Banks create credit as their main source of revenue. However, this activity entails enormous risks for both the borrower and the bank. The possibility of an exchange partner failing to fulfil their obligation in accordance with the agreement on the due date or at any time after that might seriously bank's procedures (Hanif et al., 2012). On the other hand, managing an account with high credit risk entails significant bankruptcy risk, which endangers depositors. Bank authorities and saving money regulators are quite concerned about credit risk, one of the risks banks confront. This is because credit risk is a danger that often results in bank dissatisfaction. Credit risk management is a structured approach to managing uncertainties that involves assessing risk, developing control methods, and mitigating risk with managerial resources. The methods include moving to a different gathering, avoiding danger, reducing the risk's negative impacts, and enduring some or most of the repercussions of a particular risk (Saiful et al., 2019).

Some historical risk management strategies concentrated on risks with legal or economic origins (such as typical disasters or fires, accidents, fatalities, and litigation). Financial risks management, on the other hand, focuses on hazards that may be monitored using traded financial instruments. The objective of CRM is to reduce the consequences of numerous hazards detected in a chosen sector to a level that society will accept. It may refer to a variety of hazards brought on by politics, businesses, engineering, human beings, and the environment. However, it involves all humanly possible measures, or more precisely, human, staff, and association-accessible risk control techniques (Al Rahahleh et al., 2019). In addition to briefly examining banking and credit risk management, this thesis also looks at bank risk exposure, assessment, management, and control. The usage of some risk management, assessment, and estimation methods, models, and techniques may be attempted (Kusnandar, 2022).

The accomplishment and continued existence of growth finance and Islamic banking sector in Pakistan is significantly hampered as a result of poor performance. Both Meezan Bank and HBL Islamic of Pakistan have non-performing loan portfolios. The two organizations were exposed to significant credit risk due to low loan quality. In the unlikely event that this fails to be stopped, it would lead to the capital base's loss, which would cause the financial system to fail (Sobarsyah et al., 2020; Siddique et al., 2021 and Mardiana et al., 2018). The relationship between credit risk management and loan performance in Islamic banking financial institutions is examined in this study. To investigate the association among mortgage performance and risk mitigation. To determine the association among mortgage performance and risk management techniques. Is there an association among mortgage performance and mitigation risk? Is present any association among risk management techniques and mortgage performance?

This research could encourage current knowledge of how to create and use a credit risk management technique to improve forward mortgage performance. For a few Islamic banking

organizations, the results should also aid in the development of a risk management technique. Additionally, it needs to increase experts' perspectives on credit risk management while improving mortgage performance. Locational settle: Pakistan was the setting of the study. Subject area: The study focuses on mortgage performance in relation to risk mitigation, credit score, financial stability, technical sustainability, transfer risk, analysis risk, and diversification risk.

2. Literature Review

This portion specifies an outline of the relevant literature research. The portion discusses according to the variables used in the study. Beginning with a discussion of and exposure to CRM, it discourses risk mitigation such as (credit score, financial stability, technical sustainability). The second section focuses on additional risk management techniques such as (transfer risk, analysis risk and diversification risk (Lassoued, 2018; Honey et al., 2019 and Iqbal et al., 2023).

2.1 Credit Risk Management

Credit risk refers to the potential decrease in the absolute risk of a benefit, affecting security value in the business-to-market sector. Banks and financial institutions have developed sophisticated frameworks to assess and aggregate credit risk across products and land offers. This allows customized and flexible value estimation and risk management (Chamberlain et al., 2020; Khan et al., 2023 and Iqbal et al., 2023).

This literature discusses how models affect and respond to credit quality, market factors, and the environment. They help banks differentiate between small and large risk obligations and represent a fixed risk in loan portfolios, influencing credit risk management culture. Model integration varies across account establishments. Companies use various systems to capture exposures, ranging from simple to complex, within specific business lines or legal content. These applications include fixed and introduction limit setting, syndicated advances setting, risk-based valuation, portfolio risk/return profile improvement, risk-balanced profit for capital, and risk-balanced execution evaluation (Nugroho et al., 2018; Jaafar et al., 2023 and Iqbal et al., 20224). Organizations use model assessments to establish or approve advanced disaster holds. Quality at risk (VAR) is a significant indicator of credit risk, while needed financial capital for credit risk is assessed using methods similar to value at risk (VAR) distribution (Jimale et al., 2017). Wahyudi et al., (2019) suggests that banks use an institutionalized approach to risk evaluation, dividing corporate advances into multiple risk categories. Investors assess credit risk using internal evaluation-based methods. Olalekan et al., (2018) suggests that inaccurate information about advance applicants increases credit risk and causes credit apportioning. Regulation of credit value-at-risk (Cvar) mitigates high-risk loans but does not evaluate Var's credit portfolio. Credit markets are distorted by capital, risk models, and Cvar legislation, which contribute to credit allocation.

2.2 Risk Mitigation

Credit risk mitigation involves credit score, financial stability, and technical sustainability exposures, measuring them, choosing appropriate methods, implementing them, evaluating decisions, and adjusting. As part of the process, various steps are involved, including credit start-up, assessment, transactions, and office relationships.

Banks should visit potential clients to gather information about their business, operation, management, and financial situation. The five Cs of lending, including client character, financial capacity, and credit stability, protect the credit office. To predict and report credit risk, a structured rating plan for all speculation openings should be integrated into the credit evaluation process. Credit scoring should be incorporated to predict prospective borrowers' creditworthiness. External factors like competition, financial cycles, disasters, technological advancements, and demographic changes can impact credit evaluation (Sihotang et al., 2021; Isnurhadi et al., 2021 and Iqbal et al., 2023).

2.3 Credit Score

Credit risk management in major US banks and development money institutions is increasingly reliant on credit risk scores, as positive credit reduces the likelihood of bad luck. However, each organization's risk mitigation frameworks differ in structure, operational strategy, and purpose, due to bank employees often not disclosing assessments to consumers (Ariyanti et al., 2022; Iqbal et al., 2024). Insider appraisals are crucial for credit risk management in major banks, as they indicate risk and provide a downward indication of risk. Credit score agencies analyze financial data to rate security characteristics, aiding financial professionals in making investment decisions. Ashraf (2018) research highlights the importance of evaluations in predicting debt failure and guiding negative outcomes. Mohan et al. (2021) supports the free risk mitigation office perspective, arguing that stake managers and insurance underwriters can limit their risk by using evaluations. This framework can constrain and compel supporters in a positive way, although it is not ideal. Understanding appraisal frameworks is crucial for understanding development banks' operations and risk exposures. Developing rating frameworks requires considering factors like cost, data accuracy, consistency, operations, and intended applications for internal evaluations.

The validity of evaluation frameworks depends on their application. Credit score offices assess an organization's creditworthiness, long-term capability, and willingness to pay obligations. They should base their assessments on financial statements, reputation, management calibre, and competitive position within the industry. They also predict credit execution under various macroeconomic and credit conditions, including anxious ones. Critical credit analysis findings are used to classify credit risk and are crucial for the development of a development fund (Hassan et al., 2022; Iqbal et al., 2022). A credit score is a crucial indicator of credit risk and is an accurate and unbiased predictor of default probability. However, they don't always capture all riskiness associated with a specific economic activity. Research shows that appraisals contribute to understanding cross-sectional disparities in yield spreads of securities. Other factors, such as expected duty treatment, are also crucial. Junejo et al. (2023) confirmed that losses resulting from anticipated defaults came in last. Thoyib et al. (2022) examined variation across occurrences without focusing on company-specific elements or managing variance across smaller geographical areas. Mawardi et al. (2022) examined corporate credit assessments' default prediction ability, focusing on publicly available data and accuracy. The findings suggest that assessments can be improved by using publicly available data, industry descriptions, and assessments. Although ex-post appraisals are not entirely predictable across commercial ventures, this finding supports Iqbal et al. (2022), Iqbal et al. (2023) and Iqbal et al. (2024) findings and suggests that the CRA movement has value.

2.4 Financial Stability

Rashid et al. (2017) argues that corporate financial statements are widely disregarded, with speculators and advance officers using different methods to assess an organization's appeal or creditworthiness. However, individual financial stability is often overlooked, with few guidelines for evaluating their implications. Tabash & Dhankar (2014) frequently modifies the information he provides in his financial stability dissection. It is possible to identify significant connections in an organization's economic information using systems like percentage analysis, rate examination, and correlation to industry information. Because most organizations report two years' worth of relative business announcement information at each report date, it is ideal for these segmentation systems to be connected to data over several accounting periods. According to their research, the profitability, capital position, and liquidity situation of the firm may be divided into three categories when examining financial stability. However, it appears that the aforementioned level of analysis ignores some of the financial institution's (financial expert's) assumed risks (Iqbal et al., 2024; Iqbal et al., 2023). Financial condition analysis should focus on long-term risk indicators from financial records. Credit risk management uses power proportions to determine an organization's profitability from present and long-term obligations. Capital structure analysis focuses on total liabilities to assets and premiums earned (Pambuko et al., 2018; Iqbal et al., 2023). Economic research involves quantitative and qualitative evaluation of financial information at various levels, parts, and companies. The Asian Development Financial Institution mandates economic research, strategic strategies evaluation, and limited assessment of control frameworks for project performance and operation. This includes financial performance indicators, economic evaluation, and a review of monetary control frameworks (Rizvi et al., 2020; Erfani et al., 2018 and Iqbal et al., 2023).

2.5 Technical Sustainability

A critical component of credit risk management that determines the generating limit of any business is the evaluation of a project's technical viability. This includes the suitability of creation engineering, and equipment accessibility. Sangham (2017) says technological advancements impact creativity. Actually, identifying benefit pick-ups before competitors implies being the first to learn of an improved and more effective method. Profit is ultimately driven by specialized change. In this way, understanding the rate of selection of new advances is extremely valuable from the perspectives of businesses, financial institutions, and arrangement creators in order to assess the potential impact of specialized change on gainfulness, which has an impact on advance adjusting productivity. Its R&D movement is a different firm-level trademark frequently analyzed for engineering reception. R&D, according to Waobikeze (2018), provides a gauge to indicate an organization's capacity to take in and analyze original inventive data at any price. Mixed results show a significant positive influence of R&D activity on product fusion, but no significant coefficients were found in other studies. This suggests that R&D activity is crucial for learning and developing new techniques (Alsamani, 2019; Iqbal & Fikri 2023; Iqbal et al., 2023 and Iqbal et al., 2024).

2.6 Transfer Risk

The International Association of Insurance Supervisors and Financial Services Authority examined the exchange of credit risks between banks and non-bank financial divisions, including the protection sector. Banks transfer credit risks to insurance agencies, while

insurance agencies issue catastrophe securities. Risk transfer markets may increase credit stability by spreading exposures but encourage more concentrated and transfer risks (Aldaas et al., 2019). Muneeza et al. (2019) explored the importance of guarantors for monetary stability, highlighting the blurring of boundaries between security and financial foundations. Mustapha et al. (2022) analyzed the factors underpinning banks' use of credit risk transfer. They highlighted the critical role of subsidiaries in the financial sector. Hasan et al. (2020) suggested that banks and insurers face various credit, business sector, and security threats during operations. They have three options to handle these threats: prepare alternative materials in advance, create a client to self-protect, or create a security problem for a corporate customer. Businesses can record risks on their accounting reports and control them through checking, evaluating, and expansion. They can support these risk transfers with balanced transactions or repackaging for sale or support. Risk-transfer tactics help businesses disperse risks, making them less vulnerable to local, sectorial, or industry shocks. Credit risk is the most significant risk banks handle in term lending. The following risk-exchange markets and techniques have emerged in the past decade, including: (i) loan trading (ii) portfolio securitization (iii) derivatives and credit-enhancement mechanisms (Galizia et al., 202; Iqbal & Fikri 2024).

2.7 Analysis Risk

In today's corporate environment, risk analysis is crucial for waste-free, cost-effective operations. By selecting significant levels of risk analysis, organizations can reduce their financial impact. Risk analysis models help evaluate tolerance levels and promote financial competence. Understanding the ideal level of risk is essential for assessing credit structure danger (Bustamam, 2017; Iqbal & Fikri 2024). A risk analysis limit for an association or financial organization is determined by factors like past financial information, economic future estimates, and economic trends. The investment rate should be adjusted to reflect risk analysis level. Risk analysis depends on materiality, consistency, and avoiding exchange costs (Rafiq et al., 2018; Iqbal & Fikri 2023). Risk financing firms' success depends on their ability to react quickly to events, such as increased revenue. Risk analysis groups, formed during uncertain periods, offer more accurate estimates and control over guaranteed guarantees. However, risk analysis is expensive compared to risk assumptions. Expanding risk management could reduce premium payments, but a thorough analysis of return rates is crucial to a company's financial standing (Alsamhi et al., 2023; Iqbal; Fikri 2023; Rana et al., 2024a, 2024b; Saeed et al., 2024; Qamar et al., 2023; Mohammed et al., 2024 and Eyitayo et al., 2023).

2.8 Diversification Risk

Expanding, according to Brahmana et al. (2018), is the primary tool moneylenders use to manage client risk. He also described how risks manifest themselves long before a default occurs. He warned against "projectile confirmation" portfolios that fall short of targets. This was supported by Gafrej et al. (2022) discussion of the value placed on improving credit score domain portfolios and the methods for determining this value. Despite the fact that a few criteria influence how much a credit score profile might expand. Because these features can vary, it can be challenging to assess how a credit score has improved. Ammar et al. (2019) argued that enhanced credit score portfolios have a significant difference in performance compared with portfolios that are categorized into different financial systems. He emphasized the growth of advanced portfolios in countries with higher earnings. Maghyereh et al. (2022) refuted this, stating that the widening depends on factors like size and development diversity concerns.

2.9 Mortgage Performance

Mortgage performance refers to the percentage of non-performing mortgages in a portfolio. Defaulted loans are those with interest and principal repayments still owed at least six months after due. A Financial Institution of Pakistan study found that 10% of assets are non-performing, with higher percentages indicating lower performance. Credit score risk and quality indicators can be calculated using methods like enhanced drops, net losses, ineffective levels, return on net holdings, and profit on value. Rapid development of the money score profile and high total characteristics indicate enhanced high-quality difficulties, suggesting potential displeasure (Kalu et al., 2021; Iqbal et al., 2023). Balemi et al. (2021) suggests that key connections between debtors' events may be misleading if they don't indicate a proportionate appropriation of projected returns. Factors affecting credit score quality, such as non-minority borrowers' advanced qualifications, may affect market prices. However, this discovery only represents variations in credit reliability for the two events of debtors and does not specifically highlight various ensuring criteria. Client, location, and credit score attributes influence standard possibilities. Higher standard costs are associated with higher credit score esteem levels, lower wages, and moderate pay increases. It's critical to note that separation enhances credit score performance. This is based on the idea that lending propensity expresses itself in different standards of credit dependability for different groups.

Recent action research has shown significant variation in the link between mortgage performance and assessment of mortgage loans given to community and non-community debtors in the US. It is the primary objective of predisposition banks to anticipate benefits for community debtors and keep community applicants updated. Bhatt et al. (2023) found that segregation through assessment resulted in lower expected standard expenses for beginning projects for scarcely eligible non-minority debtors. This suggests that lenders who prefer community applicants may subject them to stricter vetting standards than applicants with different preferences. This theory excludes the possibility that separation is unrelated to risk mitigation, as it assumes privileged victimization occurs at the advantage, affecting those on the edge of creditworthiness. It is speculatively predicted that these distinct progressions will improve performance to the benefit of the user. Normal and limited performance scores must be recognized in separation derivations made using enhanced performance information. Abid et al., (2021) supported this argument by demonstrating how simple comparisons of two debtors' credit scores can be deceptive if they don't consider the comparative spread of expected returns without distribution.

Obae et al. (2022) examined the relationship between regional expansion since 1994 and Bank Holding Company portfolio decisions and execution using geo-coded information. They found that regional growth across industries leads to a shift in risk/return trade-offs banks must consider. Improvement does not necessarily mean more secure banks. Bank managers may respond to increased speculation by taking risks, enhancing influence, acquiring hazardous assets, or both. Karanja et al. (2022) found that expanding credit beyond mechanical credit groups is associated with poorer bank returns. Siddique et al. (2021) concluded that adding risk and financial capital to the creation of outskirts approaches leads to a larger evaluation of actual returns through capital funds. The largest bank holding companies were better diversified across regions and advanced types, which decreased stock returns unpredictability and improved credit execution. Rao

et al. (2023) found that inefficiencies tend to increase with the distance between a bank holding company's home office and its subsidiaries, possibly due to mismanagement among subsidiary extension supervisors. It is challenging to distinguish between scale effects and improvement effects, as they often occur simultaneously. As banks grow in size, new markets open up, and the costs associated with scale changes may obscure the effects on investment and risk anticipated through improvement across company sectors.

1. **H1:** Mortgage performance and risk mitigation are significantly and positively linked.
2. **H2:** Risk Management Techniques and Mortgage have a significant and positive linked.

Table 1: format should help present a clear overview of the literature reviewed, organized by authors purpose, sources, framework highlighted of the study, and findings.

Authors	Purpose	Source	Framework	Highlighted Study	Findings
Lassoued (2018); Honey et al., (2019); Iqbal et al., (2023)	Credit Risk Management	Academic Journals	Credit risk assessment frameworks	Explores models affecting credit quality, differentiation of risk obligations, VAR in credit risk management.	VAR and other credit risk models are essential in assessing and managing credit risk across diverse portfolios.
Sihotang et al. (2021); Isnurhadi et al. (2021); Iqbal et al. (2023)	Risk Mitigation Techniques	Academic Papers	Risk mitigation strategies	Discusses credit scoring, financial cycles impact, and external factors influencing credit evaluation.	External factors significantly impact credit evaluations alongside traditional credit scoring methods, affecting risk mitigation strategies.
Ariyanti et al. (2022); Iqbal et al. (2024)	Credit Score	Scholarly Articles	Credit scoring models	Analyses the role of credit scores in risk management frameworks and their impact on loan portfolios.	Credit scores are crucial in predicting default probabilities and guiding risk management decisions across financial institutions.
Rashid et al. (2017); Tabash et al. (2014); Iqbal et al. (2024); Iqbal et al. (2023)	Financial Stability	Research Papers	Financial stability indicators	Evaluates profitability, capital positions, and liquidity ratios in assessing financial stability.	Profitability and liquidity ratios play a critical role in determining a firm's financial stability and creditworthiness.
Sangham (2017); Waobikeze (2018); Iqbal & Fikri (2023)	Technical Sustainability	Academic Journals	Technological impact on credit management	Discusses the role of technological advancements in credit risk management and sustainability.	Technological advancements significantly influence credit risk management practices, enhancing operational efficiency and risk assessment capabilities.
Aldaas et al. (2019); Muneeza et al. (2019); Mustapha et al. (2022); Iqbal & Fikri (2024)	Transfer Risk	Academic Articles	Credit risk transfer strategies	Examines methods like loan trading, securitization, and derivatives in mitigating credit risks.	Risk transfer strategies help in dispersing credit risks but also introduce concentrated risks in financial markets.

Bustamam (2017); Rafiq et al. (2018); Iqbal & Fikri (2023)	Analysis Risk	Scholarly Journals	Risk analysis models	Discusses models for assessing risk tolerance and financial impacts, promoting efficiency in risk management.	Effective risk analysis models aid in reducing financial impacts and enhancing financial institution's risk management strategies.
Brahmana et al. (2018); Gafrej et al. (2022); Iqbal & Fikri (2023)	Diversification Risk	Academic Papers	Portfolio diversification strategies	Analyses the impact of portfolio diversification on risk management and loan performance.	Diversification of loan portfolios helps mitigate risks associated with non-performing loans and improves overall loan portfolio performance.
Kalu et al. (2021); Balemi et al. (2021); Iqbal et al. (2023)	Mortgage Performance	Research Articles	Non-performing loan indicators	Examines factors influencing mortgage performance and loan quality.	Non-performing loan rates are influenced by credit score quality and economic conditions, impacting mortgage performance metrics.
Bhatt et al. (2023); Obae et al. (2022); Siddique et al. (2021); Rao et al. (2023)	Link Among Risk Mitigation Techniques and Mortgage Performance	Academic Papers	Impact assessment of risk management techniques	Studies the relationship between risk mitigation strategies and mortgage loan performance.	Effective risk management techniques improve mortgage loan performance by mitigating default risks and enhancing loan quality.

3. Research Methodology

This section describes the criteria used in the exploration configuration. It includes determination, data sources, and tools for data gather, managing, and investigation. The section concludes using a survey of challenges experienced through the research.

3.1 Theoretical Framework

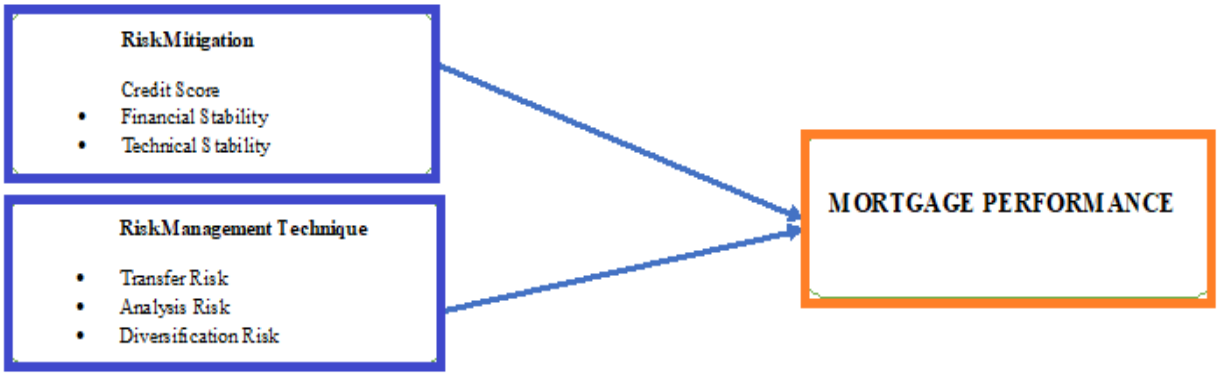

Figure 1: Theoretical Framework

3.2 Research Design

This study was designed cross sectionally and rationally. It recognized aspects of credit risk management and examined their effects on mortgage performance. In both Islamic banks, the relationship between credit risk management and mortgage performance was evaluated. It was a cross-sectional and explanatory study that relied on auxiliary data. Additionally, it was top-to-bottom with critical data collected through credit-related discussions with specialists who work for the two organizations in credit-related roles. The process of measuring variables using primary data sources compared to secondary data involves linking primary

data from questionnaires to metrics from secondary sources like annual reports. This ensures consistency and alignment of variables like credit score, financial stability, and technical sustainability. Cross-verification is also used to verify data from primary sources, comparing reported metrics with questionnaire responses. The study validated primary data measurements against secondary data sources by comparing key metrics and analyzing discrepancies. Adjustments were made to the primary data collection instruments to align with the secondary data. Any discrepancies were addressed through a reconciliation process, involving re-examining data collection methods and discussing with subject matter experts to ensure data harmonization for accurate analysis.

3.3 Population

Meezan Bank and the Bank of Islami were the target populations with 70 and 30 technical staff members respectively of the sum populace of 100.

3.4 Sample size

As a result, a total sample size of 55 people was selected for an interview. Data was collected using a purposive sampling strategy from 15 technical staff members from the Bank of Islami with a credit-related function and 40 from Meezan Bank. Because only technical workers were intended to answer the questionnaire, a purposeful sampling approach was adopted.

Table 2: Sample Size Selection

Level	Total Papulation	Sample Size
Bank of Islami	30	15
Meezan Bank	70	40
Total	**100**	**55**

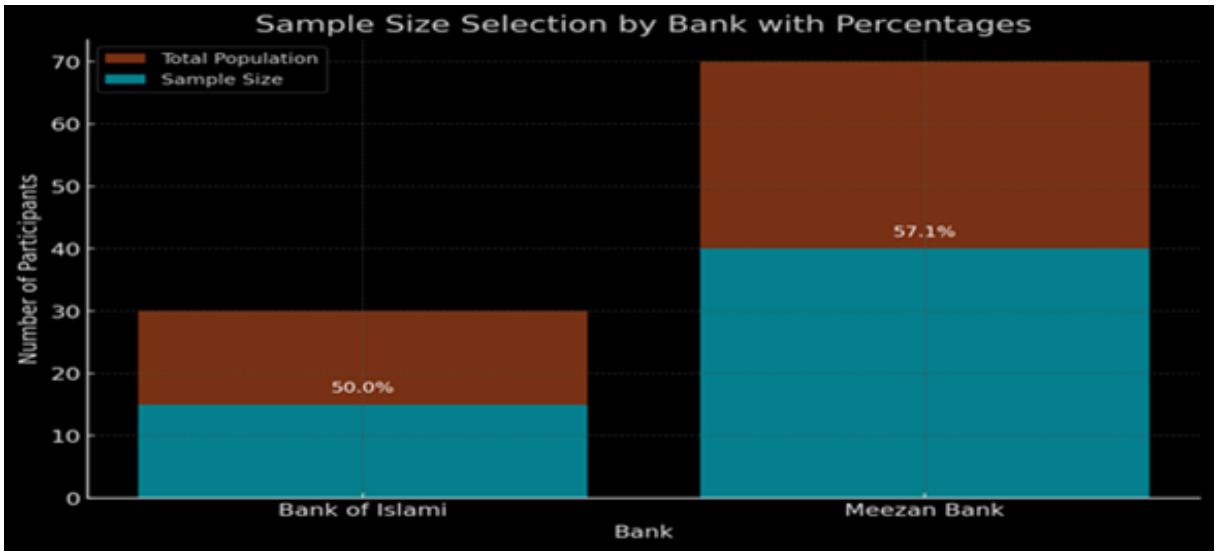

Figure 2: authors chart to include the percentages above each sample size bar, showing the proportion of the sample size relative to the total population for each bank.

The study used a purposive sampling approach to select respondents with relevant expertise in credit-related functions, ensuring a representative sample of 55% of the total population. The sample size was chosen to ensure statistical power and reliability, with a margin of error of ±5%. Robustness checks were conducted by comparing findings with historical data and secondary sources, and sensitivity analyses were conducted to test the impact of excluding

certain respondents. Cross-verification of primary data with secondary sources helped identify and mitigate potential biases, ensuring the study's generalizability and relevance.

3.5 Data Collection Instruments

The relevant data was acquired through surveys distributed to various employees of the two Islamic banks. These surveys were distributed to those with credit capacity, credit operations experience, or capacity connected to credit. Two components make up the survey. The major section focuses on the examination's key components, including credit score, financial stability, and technical sustainability. Transfer risk, analysis risk, and diversification risk are specifically covered in the second section of the article.

3.6 Source of Data

To obtain primary information, questionnaires were distributed to employees of the two Islamic banks, especially those with credit and acknowledgment expertise. To gather secondary data, annual reports from the two Islamic banks spanning 2013-2023 were obtained, focusing on a decade of financial performance and operations. These reports provided valuable insights into the banks' credit policies, acknowledgment practices, and overall financial health.

3.7 Measurement of Variables

Technical feasibility, financial viability, and credit rating were combined to assess appraisal using state-of-mind statements on a 4-point Likert scale ranging from major, very applicable, somewhat pertinent, and not significant. Using a 5-point Likert scale with the options major, very applicable, somewhat significant, and not related, risk management measures were evaluated as a combination of risk growth and risk management. Mortgage performance was assessed using a degree inquiry and auxiliary data from the two Islamic banks' yearly reports. The ratio of procurements to aggregate advances and the percentage of performing mortgage to aggregate advances are the two indicators used.

3.8 Validity and Reliability Test

The reliability of scales used to quantify research variables was assessed using Cronbach Alpha. All of the credit risk management buildings' Cronbach alpha coefficients were more than 0.6, indicating that the scales designed to assess credit risk management developments existed reliable and, consequently, strong, as demonstrated in the table 2 below.

This study used questionnaires adapted from previous research and standardized tools to ensure their validity and reliability. The questionnaires included credit score and financial stability, technical sustainability, risk mitigation, and risk management techniques. They were tested for content validity through expert reviews, construct validity through exploratory factor analysis, and reliability using Cronbach's Alpha. All constructs had Cronbach's Alpha values above 0.6, indicating acceptable reliability. A small-scale pilot study involving 55 respondents from the target population was conducted to refine the questionnaires. The objectives were to enhance clarity and effectiveness before proceeding with the main data collection. The questionnaires were based on the Enterprise Risk Management frameworks by COSO (2017) and ISO 31000 standards for risk management. The results of the pilot study were used to refine the questionnaires.

Table 3: Reliability Coefficient

	Variables	Alpha of Cronbach
Risk Mitigation	Credit Score	0.722
	Financial Stability	0.643
	Technical sustainability	0.753
Risk management	Risk Transfer	0.621
Techniques	Risk Diversification	0.799
	Risk Retention Analysis	0.873

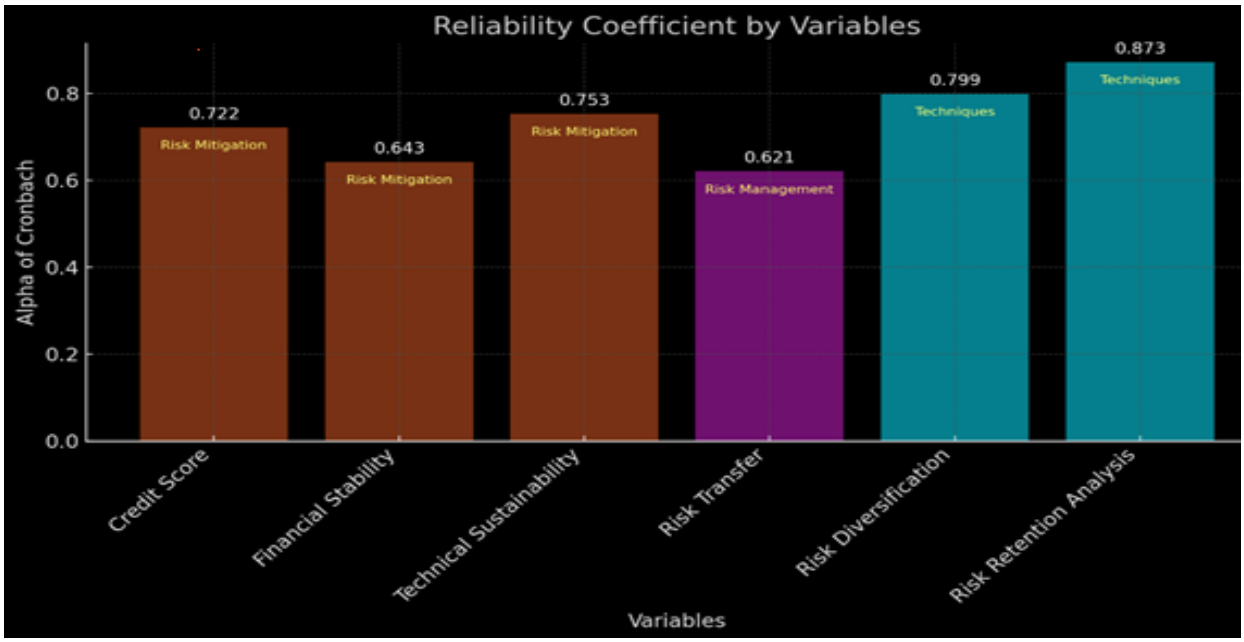

Figure 3: authors bar chart illustrating the Reliability Coefficient (Alpha of Cronbach) for each variable, with distinct colors representing different categories: Risk Mitigation, Risk Management, and Techniques.

3.9 Source: Primary Data

The survey's validity was examined using the Content Validity Index (C.V.I). Two specialists rated the relevance of the survey queries about the research variables on a four-point scale, with relevant, very important, somewhat applicable, and not significant being the lowest scores. The two C.V. Is for the two specialists were both more than 0.5, demonstrating the instrument's usefulness for the investigation. C.V.I (1) = 0.8223 and C.V.I (2) = 0.7281 were the content validity test results.

3.10 Data Analysis

Through software programming, the statistical package for social scientists (SPSS) was used to modify, complete, and customize data. This was chosen since it can determine all the statistical metrics needed to analyze actual data. The correlation coefficient demonstrated the importance of the connections between the two variables, namely credit risk management and mortgage performance. The proportion of independent variables to risk mitigation and risk

management techniques was also employed to gauge the dependent variable (mortgage performance).

4. Data Analysis and Findings

Presentations of the final results and their unique significance are included in that step. The results are often presented in line with the review's objectives, which are:

1. Analyze the connection among risk mitigation mortgage performance.
2. To analyze the connection among risk management techniques mortgage performance.

Your phase starts through a statistical contextual outline, followed by an aspect of analysis that helps to identify variables that measure the credit history threat operations parameters and an inferential statistical analysis that demonstrates the correlations between the review parameters.

4.1 Demographic Data

The following results show the backgrounds of the respondents who took part in the survey. 100 respondents at the two Islamic banks, Bank of Islami, and Meezan Bank, completed questionnaires. The questionnaires obtained 100 responses, representing a response rate of 100 percent as shown in the table below.

Table 4: Response Rate

Islamic Banks	**Frequency**
Bank of Islami	30
Meezan Bank	70
Total	100

Source of Primary Data

4.2 Gender of Respondents

The status of respondent distribution by gender was examined using cross-tabulations, as indicated in the table below.

Table 5: Gender of Distribution

Gender	**Frequency**	**Percentage**
Male	70	70
Female	30	30
Not Response	-	-
Total	100	100

Source of Primary Data

Percent frequency 70 70 Male 30 30 Female Total 0 0 Non-Response 100 100 Performing in your office 5 In the previous shows, around 30% of participants were female, while approximately 70% of those questioned were male.

4.3 Qualification of Respondents

Table 5 below shows the results along with the status of responders in relation to the highest qualification attained:

Table 6: Status Respondents by Qualification

Qualification	Frequency
Bachelor	40
Master	30
MS/MPhil	20
Ph.D.	10
Total	100

Source of Primary Data

Approximately 10 percent of respondents held postgraduate qualifications, as shown in table 5 above.

Table 7: Age Distribution of Respondents

Age	Frequency	Percentage
18-34 Years	45	50
35-to 45 Years	35	30
50 Above Years	20	20
Total	100	100

Source of Primary Data

Table 7 above reveals that almost 50% of the responses were in the 18 to 34 age range. This suggests that adult individuals were used to collect the data.

4.4 Factor Analysis

Factors that analyzed the real credit risk management operations details utilizing the primary aspect research, as well as the varimax process, benefited from elements research. The factors eliminated were thought to contribute little to the factors discarded, elements with Eigen valuations > 1 and items with link coefficients below + 0. 3 were also removed. Table 8 displays the link coefficients for the following factors eliminated: the applicant's track record (credit score, financial stability, technical sustainability, and mortgage performance, which together make up the risk mitigation factor.

Table 8: Rotated Component Matrix: Appraisal

	Components			
	1	**2**	**3**	**4**
We require a business planform every customer or loan.	.741	-	-	-
Company plans are examined to determine risk exposure.	.623	-	-	-
Professionalism is taken into account by the relevant business.	.435	-		-
We consider the loan applicant's relevant experience.	.625	-	-	-
Before funding a project, we consider cash flow estimates into account.	-	.420	-	-
We assess each applicant's long-term planning horizon.	-	-	-	-
Before funding a project, we consider the political and economic environment.	-	.421	-	-
We view collateral as an additional repayment method.	.280	-	-	-
As security, we look at inventory and receivables.	-	.211	-	-
We examined the company's capitalization.	-	-	-	-
We take the company's net worth into account.	-	-	.412	-
We take repayment history into account.	-	-	-	-
We consider the loan applicant's character.	-	.441	.421	-
We check out the credit reliability of advanced candidates.	.334	.553	-	-
We check out the administration quality or limit of chiefs.	-	.680	-	-
We occasionally screen projects to support.	-	.687	-	-
We think about the limit of credit candidates.	-	.663	-	-
We require past financial reports.	-	-	-	-
We are interested in evaluating financial reports.	-	.526	-	-
We break down the monetary reports.	-	.442	-	-
We determine the proportion of benefits, productivity, and influence.	.421	-	-	-

We monitor the development of deals for our clients.	-	.553	-	-
Interest inclusion is important before financing.	-	.412	-	-
We seek sound administrative approaches for our borrowers.	-	-	-	.544
Our firm only undertakes cash projects with sound financial management.	-	-	-	.331
We finance projects through the market/trade.	.824	-	-	-
We look at how the market is used.	.254	-	-	-
We looked at the credit candidate's marketing plan.	.654	.209	.374	-
We fund creative projects.	.524	-	-	-
We have qualified staff to evaluate innovation levels.		-	-	-
We check out at admission to the framework.	.752	-	-	-
We take a look at the accessibility of unrefined substances before financing a task.	-	-	-	.280
We take a look at the execution plan. Everything being equal.	.254	-	-	.547
We consider a venture with particular labour.	.571	-	-	-
The bank has an inside FICO score framework.	.563	-	-	-
We do FICO scores on all undertakings.	.692	-	-	-
I participate in the FICO assessment framework plan.		.477	-	-
The bank measures risk through the FICO score.	.597	-	-	-
We use financial reports to determine our rating.	.672	-	-	-
For cutting edge competitors, we rate as much as possible.		-	-	.335
Our rating framework predicts obligation overhauling limits of credit candidates.	.475	-	-	-
The rating used determines decaying/non-performing credits.	.531	-	-	-
We rate public and confidential data.		-	.581	-
I know how to utilize the rating framework.	.419	-	-	-
The bank screens every advance it issues.		-	-	-
We check out at admission to the framework.	.663	-	.777	-
Eigen of Values	*6.85*	*3.34*	*1.28*	*1.89*
Variance of Percentage	*13.71*	*6.69*	*2.56*	*2.06*

Source of Primary Data

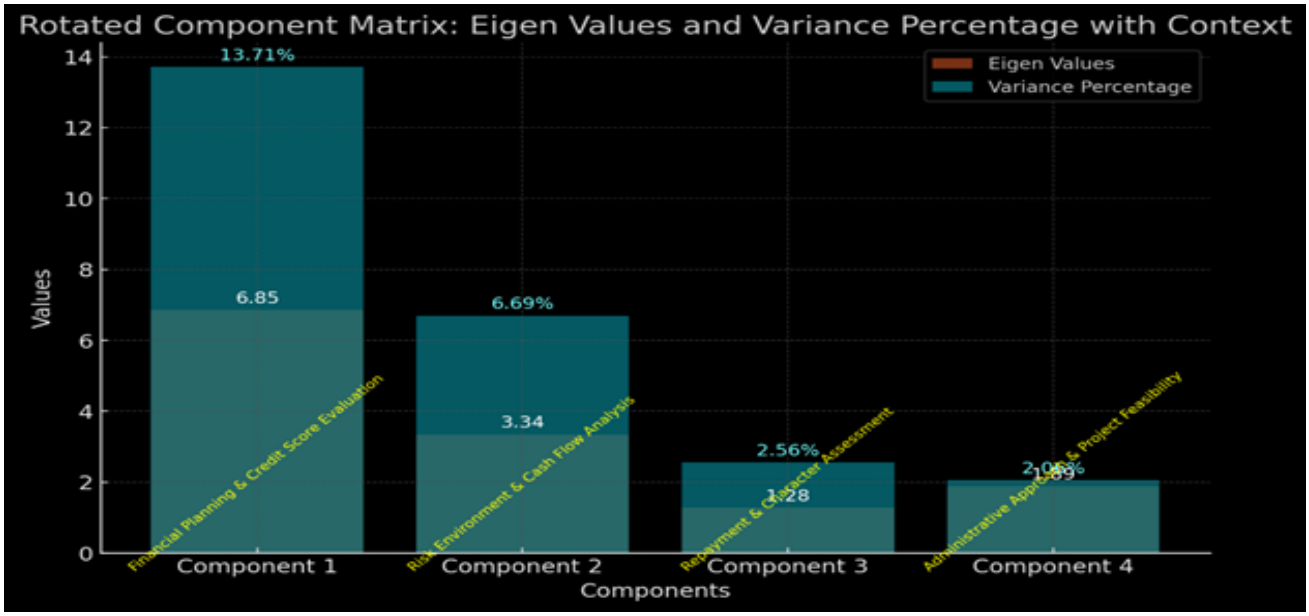

Figure 4: author's bar chart to include brief descriptions beneath each component, providing context for their roles in the appraisal process.

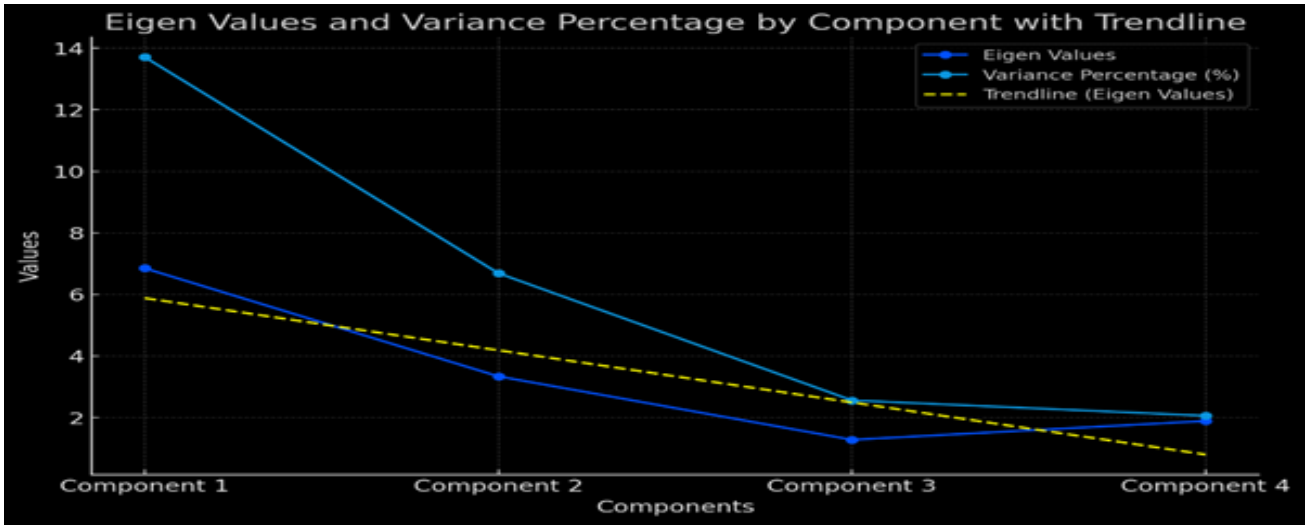

Figure 5: line chart now includes a trendline for the Eigen Values data, represented by a dashed line. This trendline helps illustrate the general direction or pattern within the Eigen Values across components.

Credit score has an Eigen value of 6.85 & a variance% of 13.71, according to the table above. Financial stability has a variance % 6.699 and an Eigen value of 3.34. The Eigen value of technical sustainability is 1.28, while the variance is % 2.56. The Eigen value of the risk mitigation 1.89, while the variance % is 2.06. Transfer risk, analysis risk, and diversification risk are components of different risk management techniques, and their respective variables are extracted from Table 9 below. The table below displays these Eigen values and correlation coefficients.

Table 9: Rotated Co Factor Matrix: Risk Management Techniques

	Components		
	1	**2**	**3**
All of our credit portfolio is guaranteed.	-	-	.551
Clients are expected to supply financial certificates.	-	.771	-
Fixed stores guarantee our credit.	-	-	.344
We regard debentures as guarantees of credit.	.312	-	-
We protect your credit portfolio from risk.	-	.661	-
To protect itself from risk, the bank uses credit subsidiaries.	-	.614	-
The bank has exchanged the charge for credit.	-	.314	-
The bank utilizes a forward conversion scale agreement to support the gamble.	-	.668	-
Risk moves further developing advance recuperation.	-	.312	-
The advanced portfolio puts resources into various areas of the economy.	.641	-	-
We don't focus our credit portfolio on that economy frame of mind.	.543	-	-
The board decides whether to broaden.	-	-	.315
Expansion has reduced risk exposure at this establishment.	-	-	.477
We put resources into various credit items.	.505	-	-
The default level has decreased because of enhancement.	-	.314	-
Maintenance is simply used to cover up a small bit of misfortune.	-	-	.248
Maintenance cores around 5% of the credit portfolio.	-	-	-
We tend to cover misfortune from bank assets.	-	-	-
We have generally maintained our risk management to realize how much exists in our advanced portfolio.	-	-	-
We regularly communicate our advanced maintenance surveys.	.443	-	-
Board strategy is at risk for the bank.	.441	-	.625
There are pre-set focus limits in each of the banks.	.504	-	-
The bank currently has a portfolio limit.	.441	-	-
Staff are being evaluated.	.544	-	-
The bank reacts quickly to market changes.	.514	-	-
Based on risk, we evaluated our advanced portfolio.	.411	-	-
We periodically evaluate Eigen values % of change survey credit nature of our advance portfolio.	-	-	-
Egin of Values	*2.90*	*3.790*	*1.28*
Variance of Percentage	*5.80*	*3.65*	*2.56*

Source of Primary Data

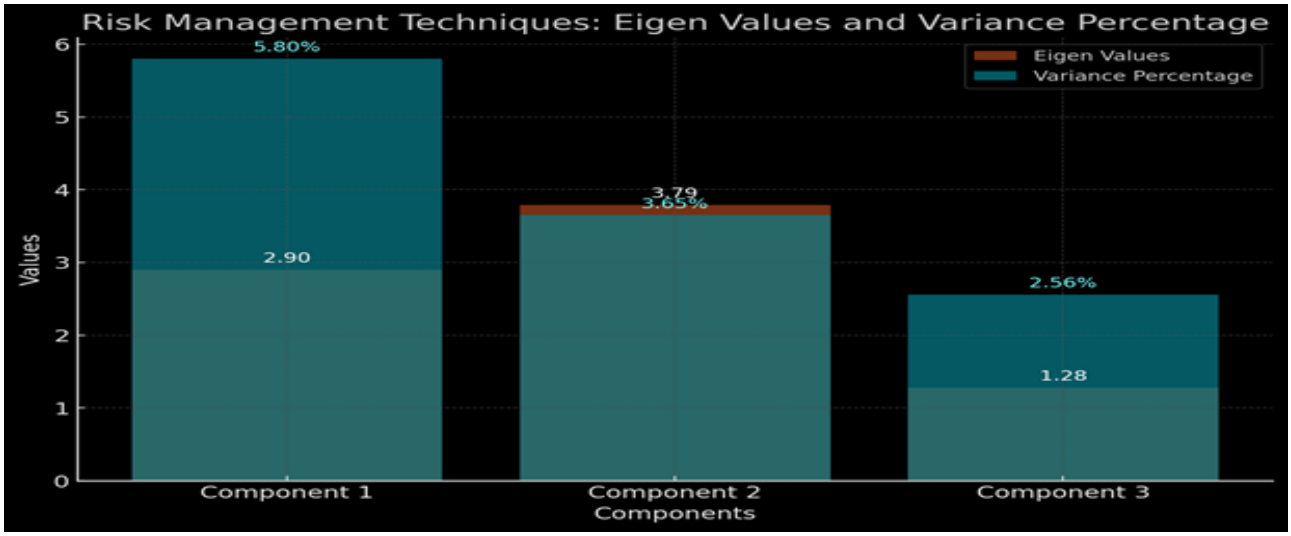

Figure 6: authors bar chart displaying the Eigen Values and Variance Percentage for each component in the "Risk Management Techniques" matrix.

Transfer risk had an Eigen value of 2.90 and a % variance of 5.80, according to the table above. analysis risk has an Eigen value of 1.82 and a variance % of 3.65. The extracted variables are significant for gauging risk management techniques, as indicated by the diversification risk variable's Eigen value of 1.28 and variance % of 2.56.

4.5 Relationship Between Variables

The connection among assessment, credit score, financial stability, technical sustainability, and mortgage was established using a variety of correlations. Two criteria, namely the ratio of non-performing loan to risk mitigation, were used to assess total advance and total assets to provision. The outcomes of the above association are summarized in the table 10 below along including the appropriate relationship measurements.

Table 10: Correlation Matrix

Spearman	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
CS-R-Mitigation-1	1							
FS-2	0.1117	1						
TS-3	0.2244	0.5541	1					
TS-4	44.211	0.5447	0.2778	1				
TR-5	5.2478	0.3222	0.3477	0.3887	1			
AR-6	6.5478	0.3288	0.4772	0.2778	0.3243	1		
DR-7	0.2872	0.0544	0.0112	0.1477	0.2558	0.1147	1	
RMT-8	8.6681	0.4101	0.5117	0.2201	0.3144	0.5541	0.4144	1
Provision/Total Assets	0.771*	0.278*	0.311*	0.373*	0.253*	0.343*	0.399*	0.340*
NPL / Total Advance	0.771	0.278*	0.311*	0.373*	0.253*	0.343*	0.399*	0.340*

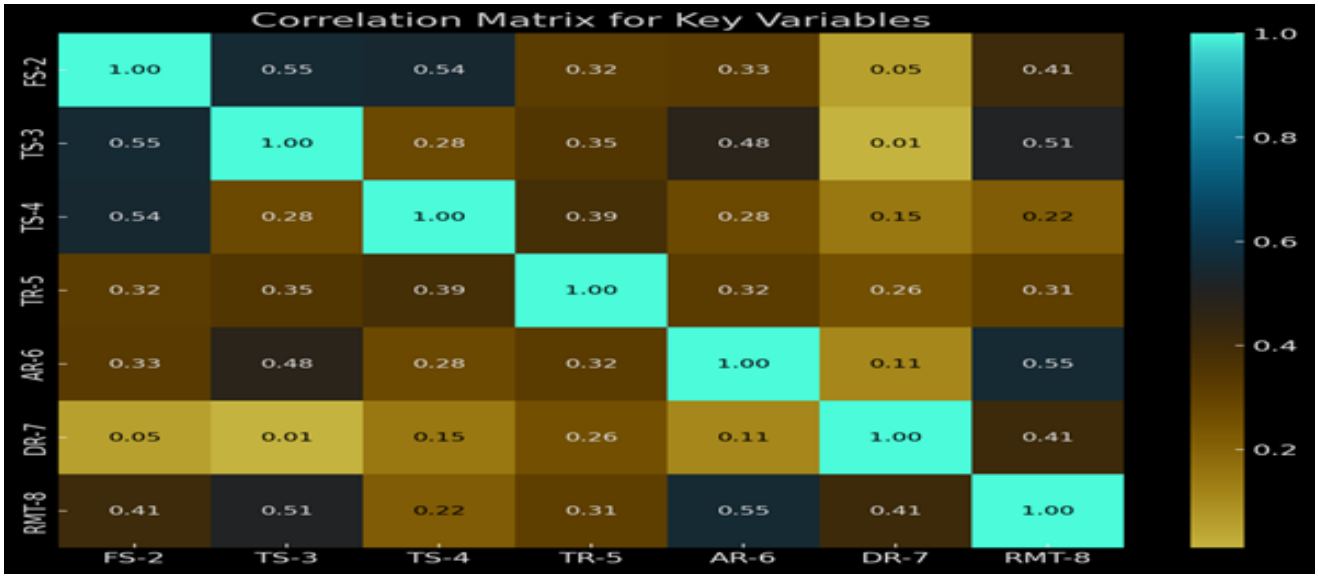

Figure 7: authors correlation matrix heatmap for the selected key variables. The cooler intensity represents the strength of the correlation between pairs of variables, with red indicating stronger positive correlations and blue indicating weaker relationships.

This section focuses on setting up the two Islamic banks' bond loan assessment and mortgage performance objectives. The examiner found a strong positive link (r = 0.771, P-value < 0.01) between the loan evaluation and the Provision/Total development relation. As shown in the above table, there appeared to be a strong positive correlation between mortgage risk mitigation and the link between default mortgage and overall development (r + 0.771, P-value < 0.01). Credit score and the ratio of provision to total advance had a strong positive link (r = 0.278, P-value > 0.005). The ratio of nonperforming mortgage to total advances also showed a strong positive link (r = 0.278, P-value > 0.005). Financial stability to the results shown in the above table, the ratios of provision to total advance & non-performing mortgage to total advance were significantly positive (r = 0.311, P < 0.001, respectively). According to the data shown in the table above, there was a strong link among credit score and the ratio of provisions to total advances (r = 0.373, P < 0.05 for the relationship). The ratio of non-performing mortgage to total advances also showed a significant positive link with credit rating (r = 0.373, P < 0.05 in terms of credit score). This relationship to object two was to determine how risk management techniques and mortgage performance interrelate. Risk management techniques include transfer risk, analysis risk, and diversification risk. A significant positive relationship between risk transfers and 0.253, P > 0.05, can be observed in the above table. The study also found that was significant positive correlation among transfers risk with non-performing mortgage and total advance (r = 0.253, P > 0.05) when analyzing total advances. Analysis risk with provisions to total advances and non-performing mortgage to total advances had a statistically significant positive relationship (r = 0.343, 0.343 P < 0.05), as show in the above table. Diversification risk retention lets you determine how much risk is in the mortgage structure. It gives you an estimate of how much risk each financial institution can retain. Diversification risk with provision for total advance and non-performing mortgage to total advances both had a very significant positive link (r = 0.399, P < 0.01, respectively). Risk management techniques, such as provision for total advances and non-performing mortgage to total advances, generally had a significant positive relationship with mortgage performance (r = 0.340, P = 0.01).

5. Conclusion and Recommendation

5.1 Conclusions

The study's main objective was to identify how mortgage performance is influenced by risk mitigation, credit score, financial stability, technical suitability, transfer risk, analysis risk, and diversification risk. The variables mentioned above make up CRM techniques. Findings showed the following: (1) the risk mitigation was significant and had a positive impact on mortgage performance this shows the value of risk mitigation in ensuring mortgage performance. (2) Historically, mortgage performance has been significantly and positively influenced by credit score. This shows how crucial it is to set up an internal credit score system to assess loss risk linked to financing. (3) Financial stability and mortgage performance have a positive relationship. However, the link strength was weak. This indicates that although technical or technological suitability is a key component that increases productivity, it only slightly affects mortgage performance. (4) Mortgage performance was significantly and positively related to technical sustainability. This indicates the value of financing for organizations with strong financial foundations. The large and positive relationship between transfers risk indicates that Islamic banks should engage insurance companies to assume risk in the form of insurance covers for mortgage. (5) Analysis risk strongly and positively influences mortgage performance. (6) Diversification risk your lending portfolio across various sectors and nations is critical. (7) It is critical to control the amount of risk Islamic banks accept in their mortgage portfolio. This is indicated by the large and positive relationship between risk retention and mortgage performance. (8) The study concludes that there is a positive and significant relationship between mortgage performance and credit risk management at the two Islamic banks.

5.2 Recommendations

The current investigation underscores the importance of comprehensive risk management strategies for Islamic banks. To improve mortgage performance, the bank should establish a robust assessment methodology that identifies, analyzes, and measures all potential credit risks. This includes evaluating factors such as financial stability, liquidity, and operational viability using tools like percentage analysis. Additionally, incorporating innovative and technically feasible projects into the mortgage portfolio can enhance long-term performance. The bank should also diversify its mortgage portfolio geographically and across regions to mitigate risk. Furthermore, engaging in risk transfer strategies, such as utilizing protection firms or financial derivatives like swaps, options, and futures, can help reduce exposure to defaults. In sum, a proactive approach to risk mitigation, combined with strong financial management, technical feasibility, and diversification, is key to ensuring optimal mortgage performance.

5.3 Limitations

Due to time limitations, the study was limited to Meezan Bank and Bank of Islami. It may, however, be extended to include other Pakistani Islamic banks. Determining the link among credit risk management and mortgage performance was another main focus of the study. To establish a link among risk CRM and Islamic banking sector, this should also be increased.

5.4 Future Research

Only two Islamic banks in Pakistan were studied. It may, however, be extended to include other Pakistani Islamic banks. Determine the link among credit risk management and mortgage performance was another main focus of the study. To establish a link among CRM and Islamic banking sector, this should also be improved.

5.5 Policy Recommendation

The study highlights the importance of credit risk management in enhancing mortgage performance in Islamic banks in Pakistan. Given the positive correlation between risk mitigation and mortgage performance ($r = 0.771$, $P < 0.01$), banks should strengthen risk management frameworks and adopt advanced credit evaluation techniques. Policymakers should encourage the use of financial stability indicators ($r = 0.311$, $P < 0.001$) in risk assessments. The significant link between diversification and mortgage performance ($r = 0.399$, $P < 0.01$) suggests that banks should diversify their portfolios to reduce exposure. Additionally, incorporating risk transfer mechanisms will safeguard against defaults, enhancing financial stability and resilience.

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Appendix I

A study has been conducted on the topic of "Credit Risk Management and Mortgage Performance in the Islamic Banking Sector in Pakistan" of the Pakistani Islamic Bank. This institution's employees have been selected as the unit of analysis. I thank you for completing the questionnaire and submit it. The data collected through this questionnaire is only used for academic research, although the advice it produces can be useful to the organization you represent. Your answer will be received confidentially.

General Information - Select the appropriate option.

1. Name of Institution
   a) Meezan Bank Ltd. b) Bank of Islami

2. Gender
   a) Male b) Female

3. Age
   a) 20-30 years b) 31-40 years c) 41 50 years d) above 50 years

4. Education
   a) Matric b) Bachelor c) Master's d) MS/MPhil e) Ph.D.

5. Current Designation?

6. Have you worked in a credit department?
   a) Yes b) No.

7. Working Experience in Islamic Banks

a) Less than 2 years). b) 2-5 years c) 6-10 years d) above 10 years

Section 1: Risk Mitigation

Please indicate your level of agree or disagree with the following statements using the options given.

Sr.	Section 1: Risk Mitigation	5 Strongly Agree	4 Agree	3 Uncertain	2 Disagree	1 Strongly Disagree
1	Were interested in the strategy of all clients/ borrowers’					
2	We break down the field-tested strategy to distinguish risk openness					
3	We think about impressive skills in separate business					
4	We examine the important experience of the credit candidates					
5	We consider income projections for a venture before financing it					
6	We think about the limit of credit candidates					
7	We examine the skyline of each advance candidate					
8	We take a look at the circumstances i.e., monetary, political before we finance an undertaking					
9	We view insurance as an auxiliary source of reimbursement					
10	We think about accounts receivable and stock as security					
11	We examine the capitalization of the business					
12	We think about the business's total assets					
13	We consider the previous reimbursement history					
14	We look at credit candidates' personalities					
15	We check out the credit reliability of advance candidates					
16	We think about chiefs' administration quality or limit					
17	We intermittently screen projects					

Section II: Financial Stability

Please indicate your level of agree or disagree with the following statements using the options given.

Sr.	Section II: Financial Stability and Analysis	5 Strongly Agree	4 Agree	3 Uncertain	2 Disagree	1 Strongly Disagree
1	We require past financial reports from all clients					
2	We look at the nature of the monetary report introduced					
3	We would like evaluated monetary reports					

4	We break down the monetary reports					
5	We devise proportional examinations for productivity, effectiveness, influence					
6	We break down the development of deals for our clients/borrowers					
7	Interest inclusion is important before financing					
8	We search for sound monetary management approaches for our borrowers					
9	We only finance projects with sound monetary administration approaches					
10	An investigation of a client's finances determines the credit strength of a client					

Section III: Technical Sustainability

Please indicate your level of agree or disagree with the following statements using the options given.

		5	**4**	**3**	**2**	**1**
		Strongly Agree	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
Sr.	**Section III: Technical Sustainability**					
1	We finance projects with the expected market/exchange					
2	We check out market utilization ways					
3	We look at the promotion procedure for advanced candidates					
4	We finance projects that utilize fitting innovation					
5	We have qualified staff to evaluate innovation degree					
6	We check out at admission to foundation					
7	We take accessibility into account before we finance an undertaking					
8	We take a look at the execution plan, everything being equal					
9	We consider whether the undertaking has a particular labour supply					

Section IV: Credit Score

Please indicate your level of agree or disagree with the following statements using the options given.

		5	**4**	**3**	**2**	**1**

Sr.	Section IV: Credit Score	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	The bank has an interior credit score framework					
2	We do credit checks on all ventures					
3	I participate in the credit score framework plan					
4	The bank evaluates risk through credit score					
5	We base our rating on financial reports					
6	We rate the administration limit for credit candidates					
7	Our rating framework predicts the obligation serving limit of advanced candidates					
8	The rating decides weakening/non-performing credits					
9	We rate public and confidential data					
10	I know how to utilize the rating framework					
11	The bank screens all issued advances					

Section V: Transfer Risk

Please indicate your level of agree or disagree with the following statements using the options given.

Sr.	Section V: Transfer Risk	5 Strongly Agree	4 Agree	3 Uncertain	2 Disagree	1 Strongly Disagree
1	Our advanced portfolio is completely guaranteed					
2	Clients are required to provide financial assurances					
3	Our credits are ensured by fixed stores					
4	We also consider debentures as credits to ensure					
5	We participate in a credit portfolio that protects against risk					
6	The bank utilizes credit subordinates to fence off risk					
7	The bank has employed loan fee trades on the lookout					
8	The bank utilizes a forward conversion scale agreements to manage					

risk

9 Risk moves further to develop credit recuperation

Section VI: Diversification Risk

Please indicate your level of agree or disagree with the following statements using the options given.

Sr.	Section VI: Diversification Risk	5 Strongly Agree	4 Agree	3 Uncertain	2 Disagree	1 Strongly Disagree
1	The advanced portfolio is invested in various areas of the economy					
2	We don't focus our credit portfolio on that economy frame of mind					
3	Choice to expand is taken simply by executives					
4	Broadening has diminished risk openness in this establishment					
5	We put resources into various advanced items					
6	Default levels have decreased because of broadening					

Section VII: Analysis Risk

Please indicate your level of agree or disagree with the following statements using the options given.

Sr.	Section VII: Analysis Risk	5 Strongly Agree	4 Agree	3 Uncertain	2 Disagree	1 Strongly Disagree
1	Maintenance is simply used to cover a small amount of misfortune					
2	Risk that is covered by maintenance is around 5% of the advance portfolio					
3	We favour covering misfortune with bank assets					
4	We have broadly involved risk maintenance to know how much is in our advanced portfolio					
5	We continually provide our gamble maintenance surveys					

Section VIII: Mortgage Performance

Please indicate your level of agree or disagree with the following statements using the options given.

5	4	3	2	1

Sr.	Section VIII: Loan Performance	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	The bank has a gamble with the executives' strategy					
2	The bank has pre-set fixed limits in each area					
3	The bank has pre-set portfolio limits					
4	All staff are assessed					
5	The bank responds quickly to market changes					
6	We use risk-based estimation in our credit portfolio					