Impact of Bank Specific Factors on Credit Risk: Evidence from Islamic and Conventional Banks of Pakistan

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ARTICLE INFO	ABSTRACT
	The impact of credit risk (CR) on bank-specific factors (BSF's) and banks in the event of conventional and Islamic banks of Pakistan is an essential motivation behind this learning. These banks are chosen by their value commitment. The financial explanation investigation of chosen Islamic and conventional banks is contemplated from 2007 to 2017. Relapse examination of non-performing loan (NPL) proportion and Z-Score is utilized to discover the connections of BSF's on chosen banks. The Islamic banking system consists of (return on equity (ROE), ROA, liquidity, spread and bank size) having a significant relationship toward credit risk. Therefore, the impact of the Z-score is less for Islamic banks relatively compared to conventional banks. The increased risk of bank debt reflects a strong NPL. In this examination bank, certain factors, for instance, efficiency, return on assets (ROA) and bank dimension, have a significant liaison through credit card risk in the conventional selected banking system, and this process affects overall banking performance. These findings provide valuable insights for policymakers, regulators, and banking professionals to manage credit risk effectively in the context of Pakistan's banking system. The originality of this study lies in its focus on the comparison between conventional and Islamic banks in Pakistan, which has yet to be extensively explored in the literature.

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1. Introduction

By distributing financial resources throughout various locations, depository institutions are critical in promoting financial stability and economic progress worldwide(Accornero, Cascarino, Felici, Parlapiano, & Sorrentino, 2018). The advertisement acts as a middleman by collecting the extra amount. Borrowing money from depositors, and giving loans to users. Banks might get a high rate of return in exchange (Ghosh, 2015; M. A. Khan, Siddique, & Sarwar, 2020). Banks attempt to improve their financial performance (FP) by extending credit while acting as a middleman; yet, banks are highly susceptible to credit risk. Accornero et al. (2018) state that the country's banking sector primarily fails due to excessive credit risk. It may sometimes result in the collapse of the whole financial system. Credit risk is anticipated to materialize when an investor cannot fulfill their commitment to future financial flows. Both external and internal variables have an impact on the financial performance of commercial banks. Internal and capable of controlling variables of the commercial banks are bank-specific factors. According to Ofori-Abebrese, Pickson, and Opare (2016) , improper management of internal

variables resulted in moral hazards and unfavorable choices. The aforementioned financial issues are causing turbulence in the banking and financial industries.

Banks face numerous dangers, i.e., credit, liquidity, operational, shariah, administrative and reputational (Dai et al., 2022). The real threat that banks confront emerging due to non-performing advances is an acknowledging hazard, as the fundamental capacity of banks is to loan cash or expand credit (Hunjra, Mehmood, Nguyen, & Tayachi, 2022).

Islamic banks have developed much as of late over the globe. Islamic banks (IBs) vary from conventional banks (CBs) in resources and obligations (Arshad, 2022; Khawaja, Nawaz, & Aman, 2023). On the obligation side, Islamic banks gather the store from open based on Mudariba and Musharika. On the resource side, Islamic banks offer resource-based or resource-supported items through regular banks, i.e., running money, requesting funds, organizing back, and so on, founded on the premium (Faisal & Nuryatno, 2023; Haider, Zubair, Tehseen, Iqbal, & Sohail, 2023).

As unmistakably, Islamic banks likewise present credit chance like conventional banks; regardless of how funds have been acquired, the borrowers must pay it back. Investors (clients) will be unfit to meet their dedication when it tumbles to be paid. Credits from money-related foundations like banks are an essential base of the outer hotspots for business and for speculators to meet their monetary needs, for the most part for inside assets and particularly the individuals who have incomplete methods for raising capital, so as not to construct their capital structures with small firms (Ariyani, Pangestuti, & Raharjo, 2019).

Numerous research has been carried out since the recent Covid-19 epidemic and the worldwide economic downturn of 2007/2008 to reveal the various aspects that account for the financial stability of the banking industry (Adusei, 2015; Diallo, Fitrijanti, & Tanzil, 2015; Feghali, Mora, & Nassif, 2021; Gupta & Kashiramka, 2020; Kim, Batten, & Ryu, 2020; Lesmana, 2021; Malik, bin Md Isa, bin Jais, Rehman, & Khan, 2022; Mutarindwa, Schäfer, & Stephan, 2020; Nair & Anand, 2020). As determinants of bank stability, these studies looked at a variety of variables, including funding risk (Adusei, 2015), credit, liquidity, and operational risk (Diallo et al., 2015; Zaghdoudi, 2019), corporate governance (Subhani & Zeb, 2021), governance quality and financial inclusion (Malik et al., 2022), bank size (M. Ali, Sohail, Khan, & Puah, 2019), and accounting (Bischof, Laux, & Leuz, 2020). In addition to these variables, several studies have found that macroeconomic variables, such as political stability (Djebali & Zaghdoudi, 2020), bank market structure (Feghali et al., 2021), fiscal policy (Nair & Anand, 2020), fraud (M. Ali et al., 2019), and ambiguity in economic policy, are also significant drivers of bank stability (Phan, Narayan, Rahman, & Hutabarat, 2020). These studies are crucial for helping bank management understand how these issues affect banks' capacity to maintain their financial stability. Due to its importance in bank stability, risk management is one of these characteristics regulators are most concerned about (Lassoued, Sassi, & Attia, 2016). Most studies consider loans, liquidity, and operations as essential threats to financial stability (Djebali & Zaghdoudi, 2020). Divergent findings from this research kept the open-ended discussion on the connection between risk characteristics and financial stability. From Pakistan's viewpoint, this research reveals the relationship between risk variables and financial stability.

Pakistan is an emerging nation, and banks comprise about 95% of its financial industry (Husain, 2005). Banks are crucial for providing money and promoting economic progress in emerging nations (Djebali & Zaghdoudi, 2020; Waqar et al., 2023). Therefore, the nation's development is influenced by the financial sector's better state (Husain, 2005). The current research aims to identify the variables that contribute to Pakistan's banking sector's financial stability. To do this, we employ bank-specific risks to gauge the banks' financial soundness. Financial institutions are often exposed to functioning, loans, and liquidity risks (Hunjra et al., 2022), risks particular to banks (Hussain & Al-Ajmi, 2012). Therefore, it is essential to look at these risks in connection to a bank's financial stability. Credit risk, liquidity risk, funding risk, and the combination of credit and liquidity risk are used in the current research as bank-specific hazards concerning the banks' financial stability. The traditional banks were the only ones employed in the current investigation, and the chosen timeframe had no missing data. However, prior research included conventional and Islamic banks (M. Ali et al., 2019). By examining the effect of bank-specific risks on the monetary stability of Pakistan's conventional banking system, this research adds to the body of knowledge.

Credit risk is a prevailing danger for keeping the money portion (Moradi & Rafiei, 2019). Awful credits (advances), nonattendance of managing some account abilities, store protection, blunder, nonappearance of directions and defilement factors were caused due to banks' disappointments (Ahmad & Ullah, 2019; Mastoi, 2022). Powerlessness to meet its legally binding duties by the potential loss of imperative assets of counterparty reliability is described as a credit hazard (Anita & Liliana, 2008). It has been shown that financial accelerators and the business cycle have a strong link, and this theory is prominent in linking NPL to business cycles (Asghar, Khan, Alyousef, Javed, & Ali, 2023; Demid, 2021). The research, which Pesaran, Pettenuzzo, and Timmermann (2006) recently carried out, makes a structure that combines the shift in the significance of a credit assortment with a dynamic global macro-economic model and concludes that the liaison among companies and the trade phase is the key driver of the risk of evasion. Several models show that political instability leads to economic inefficiencies. These models also proved that an unstable political environment reduces productive investment and increases consumption and capital flight (Achu & Edet, 2020).

The consequence of BSF on credit risk in two banking sectors and by adjusting methodologies, credit risk (CR) also differs from which sector has more credit risk. The research aims to assess the comparison between Islamic and conventional banks in Pakistan to categorize credit risk stemming from Micro-economy and a new dimension. It will also recommend structural, strategic and regulatory changes to financial regulators and banks. Regarding microeconomic fragility, non-performing loans (NPL) elements were studied in theoretical and empirical literature models. This study has been conducted in the context of theories of risk, Business cycle theories, Life cycle consumption Theory, and financial accelerator theory. There are some theories of risk, i.e., the Portfolio Theory of Markowitz (1991); Sharp (1963) Model for the Valuation of capital assets and Hamads Risk and Leverage theories (1972). Both theories claim that the anticipated return on an asset is based on anticipated risk-free cost, systemic risk and risk premium. Conventional Banks also create assets when they lend money, and banks, according to theories of risk, diversify their portfolio to decrease risk. Pricing of banks loan is also according to the risk involved in lending the money. According to these theories, asset return depends upon unavoidable systematic risk. Banks create assets when they lend money to businesses and consumers. Banks' asset returns are also sensitive to the systematic risk stemming from the economy. Business cycle theories and models are the primary connection between loan quality and the Credit Risk and Economic environment. Williamson (1987) has given a general equilibrium model where the role of financial intermediation has been determined in the context of changes in actual output, business failure, intermediary loans and prices. Another interpretation of the business cycle theory presented by Gertler and Bernanke (1989) is the theory of financial accelerators.

2. Literature Review
2.1. Bank Size with Credit Risk
Banna and Alam (2021); Salman, Ayaz, Riaz, and Riaz (2022) originate an adverse association amid the dimension of the bank, and the NPL maintains the size of the bank is more excellent into consideration extra diversifications, and it will be connected with loan quality and a negative relation is expected amongst diversification and NPL's, as diversification t brings down credit risk. A well-known, namely Hasan, in 1994, found that size and diversification are adversely concerned with CR.

2.2. Leverage with Credit Risk
Muhamad Yusuf, Mohamad Shamsudin, Mohd Abdoh, Badri Shah, and Shekh Zain (2021) have examined that the leverage in Canada and Mexico is substantially and positively linked to bank risk. Another study found conflicting results for the U.S. Operating leverage is wholly correlated to risk in the pre-deregulation period; adversely in the deregulation period. It is positively linked to risk during post-regulation or re-regulation (Galloway, Lee, & Roden, 1997).

2.3. Efficiency with Credit Risk
S. Ali (2013) analyzed risk and effectiveness in Islamic Banking Structures (MENA Picked Islamic Banks Case). It also observed that Islamic banks are associated with risk and productivity as credit losses negatively affect performance.

2.4. Liquidity with Credit Risk

Moreover, Ariff, Skully, and Ahmad (2007) found significant liquidity with a negative coefficient. As a result, the banks may have held a more significant proportion of their capital in financial reserves, less credit. Moreover, Iqbal, Shafiq, Singh, and Afzal (2023); Muhamad Yusuf et al. (2021); Rahman and Shahimi (2010); Sufian (2009) found that larger traditional banks have the potential to diversify their asset portfolio efficiently and; therefore, lower credit risks. Moussa (2015) found that liquidity is an essential variable for the bank and the managing an account framework parts. Advance misfortune arrangement keeps banks from expected credit misfortunes that might be realized later.

2.5. ROA with Credit Risk

Louzis, Vouldis, and Metaxas (2012) indicated that the productivity metrics (ROE and ROA) were found to be substantial and adversely linked to NPLs for mortgages and personal loans but irrelevant for business loans. The severe ROA CRs found by M. Ali et al. (2019); T. KHAN (2003) are also being measured, with lower productivity estimated.

2.6. ROE with Credit Risk

Prasad and Espinoza (2010) found similar findings. He argued that US Big Bank data focused on macro variables and detailed bank elements (BSV), capital size, market strength, ROA and ROE, which had a substantial and negative consequence on non-performing loans (Ramzan, Abbasi, Iqbal, & Adebayo, 2023).

2.7. Solvency with Credit Risk

According to Abedifar, Molyneux, and Tarazi (2013), credit and insolvency risk is defined and measured by using three different accounting ratios to calculate credit risk and various types of Z-scores to calculate insolvency risk. According to another investigation, small Islamic banks were more resilient than traditional ones (Čihák & Hesse, 2010; Shafiq, Arshad, Mehmood, & Hayyat, 2022).

2.8. Bank spread with Credit Risk

Ariff et al. (2007) spread has emerged as a significant credit risk factor. Nonetheless, the indication was inconsistent for the connection between spread and credit risk, i.e., adverse for the banks in India and Thailand but optimistic for the French banks (Gul, Leong, Mubashar, Al-Faryan, & Sung, 2023). This inverse relationship indicates that a bank that charges its borrower greater interest to maximize its spread would deprive less qualified borrowers (future borrowers) of borrowing, thereby reducing the bank's risk of loan exposure. For selected banks in Pakistan, there is a negative correlation between expansion and credit risk for conventional and Islamic banks.

3. Data and Methodology

In the investigation, optional quantitative information is gathered from various sources. Information is gathered from the SBP official site, FSA of the inspected banks decided for this investigation over the time 2007 to 2017. The examination explored the particular components of banks and their effect on the layaway danger of chosen banks. Before directing the examination, all the chosen banks' information is gathered as the test is picked on information accessibility. Add up to no of perceptions of the investigation are 90.

Following are the banks chosen for the present investigation.

1. Meezan Bank Limited
2. Dubai Islamic Bank Limited
3. Bank Islami Pakistan Limited
4. AL-Baraka Bank Pakistan Limited
5. JS Bank Limited
6. Silk Bank Limited
7. Samba Bank Limited
8. Soneri Bank Limited

3.1. Hypothesis

To identify the BSFs of credit risk in Islamic and conventional banks, that study hypothesizes that:

H1: Efficiency is positively connected to credit risk.
H2: Leverage is negatively related to credit risk.
H3: Liquidity is adversely correlated to credit risk.
H4: ROA is positively related to credit risk.
H5: ROE is adversely related to credit risk.
H6: Solvency is adversely related to credit risk.
H7: Banking spread is positively interrelated to credit risk.
H8: Bank size is positively related to credit risk.

3.2. Expected Sign of Variables from Model

In the following Table we have reported the expected sign of the variables based on literature;

3.3. Model Specification

Panel data regression analysis applied here in very research, the model used in concerned research is to scrutinize the liaison among the given dependent and independent variables.

$$CR\_it = \beta\_0 - \beta\_1\,EFF\_it - \beta\_2\,LIQ\_it - \beta\_3\,ROE\_it + \beta\_4\,ROA\_it + \beta\_5\,LEV\_it - \beta\_6\,SOLV\_it + \beta\_7\,SPRD\_t - \beta\_8 SIZE\_t + \varepsilon\_it$$

Table:1 Variables Description

Sr no	Variables	Descritipns
1	CR_{it}	credit risk for the current time t
2	β_0	intercept
3	$\beta_1 EFF_{it}$	Bank efficiency for the current time t
4	$\beta_2 LIQ_{it}$	Bank Liquidity for the current time t.
5	$\beta_3 ROE_{it}$	Bank Return on asset for the current time t
6	$\beta_4 ROA_{it}$	Bank Return on equity for the current time t
7	$\beta_5 LEV_{it}$	Leverage of it bank for time period t.
8	$\beta_6 SOLV_{it}$	Bank Solvency for the current time t
9	$\beta_7 SPRD_t$	Bank Spread for the current time t
10	$\beta_8 SIZE_t$	Bank Size for the current time t.
11	ε_{it}	Error term

3.3. Z – Score

As a result of its excellent expectation control, Z-Score is a standard proportion of credit chance. Z-Score is a huge estimation instrument for estimating the soundness of banks or steadiness. Its fame comes from the way that it is identified with the likelihood of a bank's bankruptcy, topsy turvy, which implies there is the likelihood that its benefits esteem moves toward becoming lower than the obligation esteem. The z-score can be communicated as $Z = (k+\mu)/\sigma$.

Source: Fitch's Bank Scope Database (Hesse-Biber, 2010).

Where k is the return on resources, μ is the value to resources, and σ is the standard deviation of profit for resources, an intermediary for profit instability. Higher Z esteem brings down bankruptcy hazard because a higher estimation of Z is related to higher value levels concerning a potential stun to the bank's income. Along these lines, banks with hazardous advance portfolios can manage a low bankruptcy chance if they are fitly promoted (Sinha, Taneja, & Gothi, 2009).

Table: 2 Z -Score = (ROA+E/A) / S.D of ROA

S NO	Parameters	Proxy
1.	Return on Assets	Net income / Total Assets
2.	Equity to Assets	Total Equity / Total Assets
3.	SD of ROA	Square root of ROA variance

3.4. NPL Ratio

For credit hazards in managing an account, NPL is utilized as an intermediary.
We gauged the NPL proportion by NPL partitioned by gross advances. An expanded likelihood of bank bankruptcy signifies high NPL. It is an immediate estimation of bank dissolvability, so it is an or more purpose of NPL and one troublesome for administration to control.

$$NPL\ ratio = NPL/\ Gross\ Advances$$

4. Results and Discussion

The slightest sign of credit risk is 0.02, the extreme significance is 0.34, and the mean of credit risk is 12%; conversely, the standard deviation of credit risk is 0.07, which shows a minimal deviation from its mean.

Table: 3 Descriptive Statistics for Conventional Bank

Variables	No of observation	Minimum	Maximum	Mean	Std. Deviation
CR	44	0.02000	0.34000	.123309	.07932
EFF	44	.006900	.03000	.013177	.00504
ROE	44	-.18450	.18000	.028377	.06934
ROA	44	-.06000	.01000	-.002700	.01945
LEV	44	0.67000	.97430	.870688	.08238
SOLV	44	-.26000	0.52000	.117693	.16436
SPRD	44	.009800	0.47000	.327170	.100119
LIQ	44	0.13000	0.61060	.438302	.109697
SIZE (Million Rs)	44	7.21000	8.59000	7.91601	0.35400

Table: 4 Correlation Matrix for Conventional Banks

		CR	EFF	ROE	ROA	LEV	SOLV	SPRD	LIQ	SIZE
CR	Pearson Correlation	1								
	Sig. (2-tailed)									
	N	44								
EFF	Pearson Correlation	-.291	1							
	Sig. (2-tailed)	.055								
	N	44	44							
ROE	Pearson Correlation	-.513**	.170	1						
	Sig. (2-tailed)	.000	.271							
	N	44	44	44						
ROA	Pearson Correlation	-.740**	.258	.545**	1					
	Sig. (2-tailed)	.000	.091	.000						
	N	44	44	44	44					
LEV	Pearson Correlation	-.187	.127	.098	.272	1				
	Sig. (2-tailed)	.224	.411	.529	.074					
	N	44	44	44	44	44				
SOLV	Pearson Correlation	.068	.223	-.151	-.164	-.003	1			
	Sig. (2-tailed)	.662	.146	.329	.286	.983				
	N	44	44	44	44	44	44			
SPRD	Pearson Correlation	-.518**	.141	.510**	.596**	-.345*	.019	1		
	Sig. (2-tailed)	.000	.361	.000	.000	.022	.902			
	N	44	44	44	44	44	44	44		
LIQ	Pearson Correlation	.156	-.213	-.312*	.039	.465**	-.145	-.209	1	
	Sig. (2-tailed)	.311	.165	.039	.802	.001	.348	.172		
	N	44	44	44	44	44	44	44	44	
SIZE	Pearson Correlation	-.455**	.126	.503**	.530**	.812**	-.034	.136	.281	1
	Sig. (2-tailed)	.002	.417	.001	.000	.000	.825	.380	.064	
	N	44	44	44	44	44	44	44	44	44

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Relationship indications are the degree of liaison existing between two or more variables. So, efficiency has a negatively moderate insignificant association with CR. ROE negatively strong fundamental association with CR. ROA has a negative. Also, the bank size is negatively moderate and substantial liaison with credit risk at 0.01 significant levels.

4.1. Descriptive Statistics for Islamic Banks

The lowest value of credit risk is 0.00, and the extreme value is 0.19, the means of credit risk is 0.064 and the Std. The deviation of CR is 0.0497, which is a minimal deviation from its mean.

Table: 5 Correlation Matrix for Islamic Banks

		CR	EFF	ROE	ROA	LEV	SOLV	SPRD	LIQ	SIZE
CR	Pearson Correlation	1								
	Sig. (2-tailed)									
	N	44								
EFF	Pearson Correlation	-.302*	1							
	Sig. (2-tailed)	.047								
	N	44	44							
ROE	Pearson Correlation	-.326*	.277	1						
	Sig. (2-tailed)	.031	.068							
	N	44	44	44						
ROA	Pearson Correlation	-.191	.150	.910**	1					
	Sig. (2-tailed)	.213	.332	.000						
	N	44	44	44	44					
LEV	Pearson Correlation	.222	-.118	.541**	.571**	1				
	Sig. (2-tailed)	.147	.445	.000	.000					
	N	44	44	44	44	44				
SOLV	Pearson Correlation	-.231	.133	-.562**	-.599**	-.989**	1			
	Sig. (2-tailed)	.132	.390	.000	.000	.000				
	N	44	44	44	44	44	44			
SPRD	Pearson Correlation	-.522**	.329*	.405**	.325*	-.029	.015	1		
	Sig. (2-tailed)	.000	.029	.006	.031	.853	.921			
	N	44	44	44	44	44	44	44		
LIQ	Pearson Correlation	-.212	.189	-.099	-.003	.111	-.057	.249	1	
	Sig. (2-tailed)	.168	.218	.523	.987	.475	.714	.103		
	N	44	44	44	44	44	44	44	44	
SIZE	Pearson Correlation	.055	-.043	.673**	.577**	.748**	-.763**	.315*	-.035	1
	Sig. (2-tailed)	.722	.782	.000	.000	.000	.000	.037	.823	
	N	44	44	44	44	44	44	44	44	44

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Association shows the degree of relationship existing between two or more variables. So the efficiency has a negatively weak substantial connection with credit risk at 0.05 levels. ROE has a negatively weak and substantial liaison with credit risk at 0.05 levels.

4.2. Regression Analysis

The outcomes end and examination concerning the acknowledgment or dismissal of speculation are joined in this segment. This area included elucidating insights and the Hausman test. Besides, relapse and t-measurements are likewise included. Connection is utilized to distinguish the level of relationship among all factors under thought.

Table: 6 Regression Model for Conventional and Islamic Banks

Variables	Model 1(RE) CB	Variables	Model 2 (RE) IB	Sig level for M 1	Sig level for M 2
EFF	-1.104	EFF	2.941	0.043	0.122
ROE	0.061	ROE	-0.735	0.914	0.001
ROA	-2.349	ROA	4.248	0.003	0.015
LEV	0.031	LEV	0.132	0.544	0.860
SOLV	0.011	SOLV	-0.069	0.867	0.931
SPRD	-0.082	SPRD	-0.176	0.968	0.039
LIQ	0.155	LIQ	-0.165	0.239	0.031
SIZE	-0.054	SIZE	0.057	0.001	0.026
Hausman					
P-value:	0.5983		0.2559		
N	44	N	44		
R2	0.71	R2	0.591		
AdjR2	0.65	AdjR2	0.498		
F	10.80	F	6.328		
Fp	0	Fp	0		

Numerous relapse examinations evaluate the effect of various intermediaries on the Credit Risk of chosen BOPs. So also, examining the critical impact of defining factors, t-insights and likelihood esteems are utilized.

Table: 7 Calculation of Z-Score for All Banks

Banks	Values
JS Bank Limited	7.881
Silk Bank Limited	7.073
Samba Bank Limited	19.536
Soneri Bank Limited	16.206
Meezan Bank Limited	28.419
Dubai Islamic Bank Limited (DIBPL)	17.601
Bank Islami Pakistan Limited (BIPL)	20.704
Albaraka Bank Pakistan Limited (ABPL)	9.467

Table: 8 NPL Ratios for Comparative Analysis

Banks	NPL Ratios
JS Bank Limited	0.17208
Silk Bank Limited	0.31237
Samba Bank Limited	0.13
Silk Bank Limited	0.13
Meezan Bank Limited	0.05
DIBPL	0.09
BIPL	0.05
ABPL	0.05

In a close examination of this investigation, it is uncovered that on account of regular banks (Model 1) for CB, certain factors, Efficiency, ROA and size, are contrarily noteworthy at a 5% significant level. ROE, solvency, spread, leverage and liquidity are noteworthy at a 10% significant level. However, on account of Islamic Banks (Model 2), ROE, ROA, spread, liquidity and bank size are significant at a 5% significant level. In contrast, solvency, leverage and efficiency are significant at a 10% significant level.

Non-intrigue pay is contrarily related because low financing cost prompts more non-intrigue salary, thus prompting low intrigue spread (Samahiya & Kaakunga, 2014). The investigation of Ahmad and Ullah (2019) announced that around remain similitudes and contrasts between credit hazard elements for CBs and IBs.

The outcomes for Z SCORE for Conventional banks are 10.14 for Islamic banks is 19.21 (mean esteem), demonstrating that the credit risk for Islamic banks is not compared with ordinary banks. (The more prominent the esteem, the lower the credit chance will be). Also, the outcome for NPL proportion in Conventional banks is 0.189and for Islamic banks is 0.066 (mean esteem), demonstrating less credit chance in Islamic banks when contrasted with conventional banks. Furthermore, these outcomes are reliable with Beck, Demirgüç-Kunt, and Merrouche (2013) for Z score and NPL proportion.

5. Conclusions

The consequences of this investigation appear that CBs have confronted high CR from the IBs. In terms of performance, ROA and bank size, three banks have a substantial connection with credit menace in the case of conventional banks. In contrast, in Pakistan's Islamic banking system, five banks have certain factors, which include ROE, ROA, investment, liquidity and bank size; in both banking systems frameworks, ROA and bank size matter. Additionally, the consequences of NPL and Z-Score demonstrate credit risk for IBs less than CBs.

The study indicates that the fundamental correlation with the CR remains for IBs, ROE and ROA. This is primarily because the returns of the Islamic banks are connected to the portfolio of their properties, i.e., When one of these properties is listed as NPL, Ijarah Murabaha, Salam, Istisna etc., it will harm Islamic banks ' profitability and earrings. For conventional banks, ROA is a fundamental factor of CR; however, return on equity is not meaningfully connected to credit risk. The reason can be that conventional banks have sufficient avenues to invest treasury, and any loss on investment activities is unrelated to credit risk. However, the significant result of the return of assets with credit risk is justified as the assets portfolio mainly comprises a lending portion of the banks and any loss on the asset portfolio is directly related to the credit risk.

Banking spread has a fundamental association with CR for Islamic banks. The conclusion justifies that a higher spread can increase the financial burden on the borrowers, resulting in a

rise in non-performing loans. Liquidity is also a substantial element of credit risk. Islamic banks generally have excess liquidity as there are very few options for Islamic banks to invest in treasury. Hence due to the lack of investment avenues, Islamic banks rely primarily on lending, increasing NPL and CR.

Banking size is the fundamental factor of CR as conventional banks are significant, as associated with Islamic banks. The larger size means conventional banks have a more significant lending portion, which can increase CR. The other remaining variables are insignificant determinants of credit risk for conventional banks. The results show that Islamic banking system, the central bank needs to provide short-term investment options in terms of Sukuk so that Islamic banks can place their excess liquidity in the government back Sukuk, which can reduce the credit risk for Islamic banks.

Central banks shall also keep this in consideration while increasing the discount rates. Any rise in discount rates can enhance lending rates. This can lead to increased loan ineffective and higher credit risk.

This study suggests that professional credit rating agencies, better management, adequate screening of lenders and a responsible government can improve credit risk management. The study's results provide contrasting insights into the competition between IBs and CBs. Because both banking systems are philosophically different, the operational mechanism is also different in both types of banking. This paper focuses primarily on internal bank risk factors, and in future work, this area could include an external factor that could influence bank risk. Further exploration of this dimension should be needed to explore.

5.1. Theoretical Implications

Firstly, the study contributes to the literature on the determinants of credit risk in the banking industry. By examining the effect of bank-specific factors such as capital adequacy, liquidity, and size on credit risk, the study sheds light on the mechanisms through which these factors influence the likelihood of default by borrowers.

Secondly, the study highlights the differences in credit risk between Islamic and conventional banks. Islamic banks operate under a different set of principles and regulations than conventional banks, which may affect their risk profile. The findings of the study can inform policymakers and practitioners on the unique characteristics of Islamic banking and the potential implications for credit risk management.

Thirdly, the study provides insights into the relationship between credit risk and financial stability. Credit risk is a key driver of financial instability, as it can lead to significant losses for banks and contagion effects in the financial system. By identifying the factors that affect credit risk in banks, the study contributes to the broader debate on how to enhance financial stability and mitigate systemic risks.

Overall, the study has important theoretical implications for the understanding of credit risk in the banking industry and its implications for financial stability.

5.2. Practical Implications

The practical implications of studying the impact of credit risk on bank-specific factors and banks in Pakistan can be significant for various stakeholders, including policymakers, regulators, investors, and banks themselves. Some possible implications are:

Policy and regulatory interventions: The findings of this study can inform policymakers and regulators about the factors that influence credit risk in banks and how it affects bank-specific aspects. They can use this knowledge to design and implement policies and regulations that mitigate credit risk and improve the stability and resilience of the banking sector. For instance, they may require banks to maintain higher capital adequacy ratios, enforce stricter lending standards, or adopt risk management practices that can help detect and mitigate credit risk.

Investment decisions: Investors can use the insights from this study to make informed investment decisions in the banking sector. They can analyze banks' credit risk exposure and risk management practices to assess their potential returns and risks. This can help investors diversify their portfolios and reduce their exposure to credit risk.

Management decisions: Banks can benefit from this study by using the findings to improve their risk management practices and decision-making processes. For instance, they may use the insights to identify the factors contributing to credit risk in their portfolios and take measures to mitigate them. They may also use the insights to optimize their lending practices and improve profitability.

Social and economic impact: The stability and resilience of the banking sector have significant social and economic implications. A stable and well-functioning banking sector can facilitate economic growth and development, while a banking crisis can have severe consequences for the broader economy. Therefore, this study's findings can contribute to society's overall well-being by improving the stability and resilience of the banking sector.

In summary, studying the impact of credit risk on bank-specific factors and banks in Pakistan can have practical implications for various stakeholders. It can inform policy and regulatory interventions, investment decisions, and management decisions and contribute to society's social and economic well-being.

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