



Nexus Between Risk Management And Financial Performance Of Conventional Bank In Pakistan

Riffat Mughal¹  | Asad Ali^{2*}  | Maha Tariq³  | Taha Bin Saleem⁴ 

Abstract

The study investigates the nexus between risk management and performance of Habib Bank Limited using the annual financial time series data from 2005 to 2021. The dependent variable is the bank performance measured by using return on equity. The independent variables are the financial risks, which include credit risk, liquidity risk, and operational risk. The findings suggest that the credit risk and liquidity risk negatively impact the performance of Habib Bank Limited, which means that the increase in credit risk and liquidity risk would result in declining the profitability of Habib Bank Limited. Moreover, operational risk has a significant positive effect on the bank's performance. The study concludes that Habib Bank Limited needs to control its credit and liquidity risks to perform well in the market. It is recommended that Habib Bank Limited adopt strict policies and do a risk analysis of each borrower before issuing the loan. Habib Bank Limited must offer attractive financial products to motivate the depositors to deposit more in the account to control the liquidity risk.

Keywords: Financial Risk, Bank Performance, Credit Risk, Liquidity Risk, Operational Risk.

JEL: C32, F65, G21

Author's Affiliation:


Institution: Shaheed Zulfiqar Ali Bhutto Institute of Science & Technology¹ | Bahria University, Karachi²⁻³⁻⁴

Country: Pakistan

Corresponding Author's Email: *asadali.bukc@bahria.edu.pk

The material presented by the author(s) does not necessarily portray the view point of the editors and the management of the ILMA University, Pakistan.

(Online) 2409-6520 (Print) 2414-8393 ©2022, published by the ILMA University, Pakistan.

This is open access article under the  license. <https://creativecommons.org/licenses/by/4.0/>

1. INTRODUCTION:

In this dynamic business world, new businesses are being found daily, competing with well-established enterprises; consequently, for a business to thrive, it must be lucrative in the long run. Profit is the primary predictor of a company's financial performance because its profitability enables it to pursue new opportunities, such as expansion, generating increased profitability. This continuous cycle makes a company successful and relevant in this volatile business market; however, companies try to modify the financials illegally to show high profits. Banks have a tight connection to economic expansion through financial services. Banks' ability to act as an intermediary is thought to speed up economic growth. As a result, it is believed that the banking industry must be stable for the economy to be stable and expand. Profitability and adequate capital are two factors that determine how challenging the banking industry is. Banks are vulnerable to several risks because of their flexible organizational culture and the complex economic situation in which they function.

According to Saleh (2020), following the 2007 financial crisis, the majority of financial institutions around the world focused on risk management. Market risk is the risk that every bank has to face because none of the companies can ignore the market risk. The current study focuses on the leading bank, Pakistan Habib Bank Limited, to analyze the three significant risks of the bank. However, the market risk has been eliminated because the market risk is unavoidable, and the current study focuses on only one bank. If the researchers were doing a comparative analysis of the bank at that time, it would be necessary for the researcher to consider the market risk as recommended by the researchers (Lassoued et al., 2016; Ng & Roychowdhury, 2014). The primary revenue stream for the banking sector is commercial bank loans. As a result, one of the main threats banks confront is credit risk. The creation of credit is the primary source of revenue for banks. However, this process involves substantial dangers for both the lender and the borrower. The bank's operations may be seriously jeopardized by a risk resulting from a trading partner's failure to meet its contractual obligations on time or in the future. Conversely, a bank with a high insolvency risk jeopardizes its depositors (Ekinici & Poyraz, 2019).

It is true that banks, and banking sectors, have a fundamental influence in the monetary area of any economy as they play out many basic exercises on both the flanks of the accounting report. An effective banking sector is vital for the economic development of any country (Saghir et al., 2020). Additionally, the divisions in the financial area worldwide are becoming more coordinated as time passes. It is, consequently, bringing about an expanded complexity of the operational functions of the economic sectors. Considering that a similar pattern will follow accordingly, controllers are currently consistently dealing with tracking down methods for better risk management (Wanjohi, 2013; Tafri et al., 2009). It is thought to limit the impact of different dangers that could affect the financial institutions' public benefit and financial performance (Saghir et al., 2020).

The State Bank of Pakistan effectively oversees the banks due to the financial system in Pakistan facing several challenges over the past few years. The State Bank of Pakistan (SBP) works to create practical banking policies and procedures. However, the management of the banks makes every effort to alter the SBP criteria according to particular interests (Rafique et al., 2020). To address this issue, the authority has also developed strict rule-related instructions. SBP is more concerned about financial dangers since financial institutions are currently more exposed to them than at any previous time in recent memory (Baum et al., 2020). In any case, in terms of balancing cost minimization and benefits expansion for the bank's risk, management adopts a middle ground, which affects the institution's financial performance. In Pakistan, most banks have risk management divisions whose primary duties are evaluating financial risks and developing measures to eliminate these bets (Rafique et al., 2020).

1.1 Background:

According to the quantitative transformation function, banks perform two significant roles; risk transformation and liquidity creation. The current study has focused on the risk transformation function of the bank. Financial institutions generate liquidity by utilizing liquid liabilities to finance illiquid assets. Banks reduce risk by issuing riskless deposits in exchange for risky loans (Shoaib, 2020; Berger & Bouwman, 2006). Risk is the possibility that the firm financial statements do not portray an accurate and fair view of the company's economic performance. Financial risk is the risk that comes with borrowing money (Oikonomou et al., 2012). Debt financing creates earnings before taxes are more variable, which raises business risk and unpredictability of net earnings and earnings per share. Risk management is how organizations use appropriate tools to manage and mitigate risk.

In organizations, the risk is crucial because it forces management to pay close attention to financial trends. However, institutions need to manage risk to avoid ambiguity regarding the returns and profits to be anticipated. Since every company in the world is subject to financial risk, necessary should be taken to reduce it. For example, banks should take the required steps to prevent financial crises resulting in clientele loss. These will allow the banks to operate without incurring debt for extended periods. Financial risk is classified into four sub-categories: Market risk, Credit risk, Operational Risk, and Liquidity Risk.

If the financial risk is not adequately addressed, banking sectors frequently break down and perform poorly. It typically leads to monetary calamities if not managed efficiently, prompting hideous performance by the banks and bringing down a nation's economy and, subsequently, the expectations for everyday comforts of individuals (Lassoued et al., 2016; Ng & Roychowdhury, 2014). These risks ought to be overseen and managed by firms to develop benefits further and lessen misfortunes. Financial institutions frequently collapse and perform poorly if the financial risk is not addressed. If financial troubles are not managed, they often result in financial crises, which lower business performance, a nation's economy, and, ultimately, people's living standards.

Companies and institutions should manage and control these risks to increase profitability and lower losses. Financial performance refers to a company's ability to execute key strategies and decisions in order to meet its goals and objectives while generating high returns. Banks play a significant role in a nation's economic development since they are a vital component of the financial system. Therefore, banks' financial health is crucial since it raises overall societal living standards. Numerous studies on the performance of financial institutions like banks have been conducted (Gontarek & Belghitar, 2018).

1.2 Problem Statement:

Financial risk in any firm reflects the weakness of internal control and ineffective management that fails to mitigate risk from the firm. Consequently, it makes the company and its financial statements unreliable as they need to portray an accurate and fair view of its financial position and performance. Its results in investors drawing off their investments from the firm as they find it risky to hold the shares. They either prefer hiring external auditors or demand external confirmations because making decisions depending on the firm's financial statements is usually unacceptable as they are unwilling to rely on the information provided in the firm's books (Kamran et al., 2016; Muriithi, 2016).

Although the management holds mitigating the financial risks from the firms as one of their primary purposes, however, this is a fact that you cannot eliminate the risk. It is because there is a probability of inherent risk and human error. Inherent risk is defined as an error may exist in financial statements due to any reason other than weak internal controls. Financial risk exists in every business in different shapes and sizes (Leung et al., 2015). Some companies hold very high financial stakes, while others have a much lower level. This risk can arise from uncontrollable factors, including macroeconomic factors, uncertainty, or sudden economic recession. It is sometimes difficult to handle and overcome and can penetrate rapidly into other markets and linked sectors.

1.3 Research Objective:

The research questions mentioned above led the researcher to raise the following research objectives:

1. The first objective is to test the nexus between financial risk and bank performance of Habib Bank Limited.
2. Another objective is to recommend measures that need to be taken by Habib Bank Limited to mitigate the financial risks and improve the bank's performance.

1.4 Research Question:

The following are the research questions the researcher like to answer in the current study.

1. What is the influence of financial risk on bank performance?
2. What measure must be taken by HBL to remove or mitigate the identified hazard?

Financial performance is our dependent variable, whereas credit risk, operational risk, and liquidity risk are our independent variables. Financial risk, as well as a company's financial achievement, are inversely proportional. If the financial risk is managed, the firm's performance could improve, and the internal controls could be more robust.

1.5 Research Gap:

After doing the thorough literature, researchers identify the research gap that most studies have covered in the financial risk areas from a broader perspective. They have usually analyzed banks based on regions such as the South Asia Region, overall banks of Pakistan, or Europe. However, in the current study researcher will perform the financial risk analysis of Habib Bank Limited, registered on the Pakistan Stock Exchange. Habib Bank Limited has been the leading financial bank in Pakistan for the past few years, for which more specific research has not been performed yet. The researcher will try to fill the research gap by conducting this study.

1.6 Significance of the study:

The financial risk window dresses the company's financial statement, which results in not providing an accurate and fair view of the company. Shareholders and investors cannot make a justifiable and reasonable decision based on available information on the financial statement. Moreover, it is essential to find ways to manage and reduce the financial risk to a lower rate so that investors and shareholders can rely on the company's financial statements without external verification. When the risk is higher, investors and shareholders cannot rely on the company's financials and require external confirmation and proof, which are costly, complex, and time-consuming.

2. LITERATURE REVIEW:

2.1 Theoretical Background

According to Financial Intermediation Theory banks act as an intermediary between the lender and borrower. The banks channelize and facilitates the savings and investments. Risk is the possibility that the firm financial statements do not portray an accurate and fair view of the company's financial performance. According to quantitative transformation function; banks perform two critical roles in the economy; risk transformation function and liquidity creation. The current study has focused on the risk transformation function of banks (Chou & Buchdadi, 2016; Ezike & Oke, 2013). Financial risk arises due to debt financing. Risk harmfully affects the cash flows of the banks. This report will illustrate three linked risk categories: operational risk, liquidity risk, and credit risk (Kelvin, 2016). These risk types can have an unfavorable impact on cash flows and profitability, which in turn can negatively affect shareholders' wealth.

Hunjra et al., (2020) investigate the effects of operational, liquidity, and credit risks on South Asian banks' performance. According to the report, evaluations of the

liquidity risks indicate that the current and loan-to-deposit (LTD) ratios have both positive and negative effects on performance of the conventional banks. Financial performance is positively impacted by operational risk. The authors also discuss how the co-occurrence of liquidity and credit issues substantially affects financial performance.

2.2 Bank Performance:

Bank performance is defined as the bank's overall profitability or the comprehensive work over time. Return on Assets (ROA) and Return on Equity (ROE) are two metrics that can be used to determine. Return on assets shows the banks' profitability in light of total assets held, while on the other hand, return on equity indicates the profitability concerning shareholder's equity. However, exposure to financial risks, such as credit, liquidity, operational, and market risks, does have a significant negative impact on the ROE of banks.

2.3 Credit Risk

Credit risk is the risk that the borrowers will not execute their contractual commitments or default. Financial institutions are currently in the borrowing stage, which they use to finance corporate growth or product development. However, the firms should think twice before lending a specific loan whether they will be able to meet the payment policies or not because this might adversely affect their credibility and expose a firm to severe consequences. If the advances are not made appropriately, it might threaten banks' operations, according to one definition of the link between CR and performance. The Risk Management Committee works with the Board to get approval for the credit risk policies that the Credit Policy Committee (HOK) develops for HBL. The Bank has a system of checks and balances regarding credit extensions, including multiple credit approvals, an independent audit and risk assessment role, and a separate risk management function.

2.4 Liquidity Risk

Liquidity risk is a firm unable to fulfill its short-term/ day-to-day obligations. Here, the financial risk limits the ability of the firm to hold enough cash to survive in extreme situations. Seasonal businesses that often face downtimes must be well-aware and prepared for harsh circumstances, as sudden exposure to these risks may even result in businesses shutting down. On the other hand, Operational Risk (OR) was brought about by individuals, processes, and technology. With a concentration on non-financial enterprises, operational hazards on the likelihood of insolvency and default risk increasing in a developing economy like Taiwan are rare (Ko et al., 2019).

2.5 Operational Risk

Operational risk may be expensive for banks since it is challenging to reduce yet has a solid short-term adverse influence on cash flows. The Bank's internal control and compliance section, along with others tasked with managing this risk, has

been overseeing and monitoring activities. As a result, Habib Bank Limited has built a comprehensive, integrated operational risk management system. The Bank computed the capital charge against operational risk under Basel-II using the Basic Indicator Approach (BIA) by the Bangladesh Bank Guidelines.

2.6 Market Risk

Market risk is the portion of an investment's overall risk that diversification cannot reduce. It's determined using the beta coefficient. . In today's era, technological advancements and uncertain changes in market rates have made the overall markets volatile. From a financial risk perspective, the default rate has increased where the debt obligations are not met on time or, at times, borrowers fail to repay, adversely affecting the investors. Secondly, random fluctuations in interest rates often result in a dramatic decline in stock prices leading to low profitability and lower or negative rates of return.

The exchanging exercises expose the organization to market risk, which is done through Treasury and speculations. Market risk additionally emerges from market making, the help of client business, and exclusive positions. The risk management team at the Bank's prime aim is to minimize exposure to these risks. Under the oversight of the Global Asset and Liability Committee, the Market Risk for the Bank is monitored (ALCO). The Board takes into account the market risk of the Bank;

- Keeping a balanced methodology towards risk-taking.
- Utilizing instruments like Value at Risk, sensitivity analysis, different limits, and Management Actions.
- Performing stress testing to appraise the influence on profitability, the market value of the equity, & the Bank's capital adequacy.

2.7 Hypothesis Development:

2.7.1 Credit Risk and Performance:

Credit risk is the probability that a bank loan won't be fully or partially repaid when due (Saleh & Afifa, 2020). The most significant risk that banks face is credit risk. Credit risk and its associated issues frequently lead to higher degrees of prominent notifications depending on how the risk is perceived. Banks usually keep an estimate of losses that average earnings could cover; however, unexpected losses may cause massive damage to the bank's overall profits. The recurring emergence of non-performing loans is one of the critical causes of banking system collapse. Because depositors' deposits account for more than 85% of banks' liabilities, the banking industry is extremely vulnerable. Despite the fact that banks primarily rely on lending for revenue, they are also vulnerable to a number of risks that, if not effectively detected and addressed, could put the company at risk. While effective risk management strategies are critical to the survival of most banks, some bank executives disregard this duty in favor of self-serving goals. Using risk management techniques will assist banks in mitigating the credit risk (Psillaki et al., 2010).

H1: The performance is very adversely affected by the credit risk.

2.7.2 LIQUIDITY RISK AND PERFORMANCE:

Banks are particularly vulnerable to liquidity risk. When customers withdraw excess cash from banks, the financial industry faces a high liquidity risk. Disappointing potential customers and buyers has a negative impact on the bank's performance. As a result, the bank's utility dropped dramatically (Saleh & Afifa, 2020). The liquidity risk of a banking organization can be significantly influenced by its cash flow, both in excess and deficit. As a result, even when banks attempt to reduce their liquidity risk by increasing their cash position through the issuance of long-term debt, liquidity still arises as a result of the contradiction between long-term assets and short-term liabilities. It has been observed that banks with greater liquidity earn higher profits (Chen et al., 2018).

H2: The liquidity risk has a negative significant impact of performance

2.7.3 Operational Risk and Performance:

Operational risk has negatively affected the financial performance of a bank (Saeed, 2015). This risk occurs due to low or failed internal controls. Many other perils are included in operational risk, which is not easy to measure. Moreover, increasing operational risk leads to credit default and poorer performance. Mathuva (2009) examined how Capital Adequacy and Cost Income Ratio influenced the profitability of Kenyan commercial banks. The profitability of the bank was determined by return on equity. The cost-income ratio was also negative, which has an impact on profitability.

H3: The operational risk has a significant impact of performance

2.8 Conceptual Framework:

In our analysis, we will account for the fact that several financial risks, such as credit risk, liquidity risk, and operational risk, may affect the bank's overall performance. The sample we have chosen for our research is Habib Bank limited, one of the well-known banks in Pakistan and contributes to a significant portion of Pakistan's economy. However, no study hasn't been conducted so far that focuses solely on this bank's financial risk exposures and management. Therefore, the sole purpose of this research is to cover the research gap and perform the financial risk analysis and the relationship of these risks with the bank's performance (Ahmad et al., 2018).

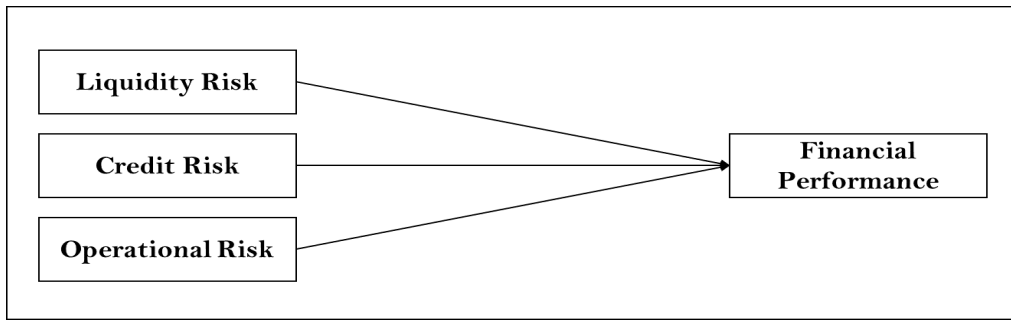


Figure-1: Conceptual Framework

3. RESEARCH METHODOLOGY:

3.1 Research Design:

This study examines how financial risk impacts Pakistan Habib Bank Limited’s performance. The examination of quantitative data is the foundation of the study. Secondary sources, such as the financial statements of Habib Bank Limited, are used to collect the data. Financial performance is the dependent variable, while financial risk, such as credit risk, liquidity risk, and operational risk, is the independent variable. Credit risk was estimated using the leverage ratio (Total Debt/Total Equity). Unlimited cash to total assets is the metric we use to measure liquidity risk. We utilize Return on Total Assets (EBIT/Average Total Assets) to assess operational risk. ROE, which is determined by (Net income/Equity), Shareholder is the dependent variable. On time series data, our study will be based. Econometric Equation:

$$\text{RoE } t = \beta_0 t + \beta_1 \text{ CR } t + \beta_2 \text{ LR } t + \beta_3 \text{ OR01 } t + e$$

Where,

β_0	=	Coefficient
RoE	=	Return on Equity
CR	=	Credit Risk
LR	=	Liquidity Risk
OR01	=	Operational Risk
e	=	Error Term

3.2 Research Methodology:

The researcher used Saunder et al., (2007) research onion. The positivism philosophy is adopted, leading the researcher to use the deductive approach. The quantitative research methodology is adopted to achieve the research objectives. The research is supported by secondary data. Data for time series are obtained during 17 years, from 2005 to 2021. The multiple research technique predicts the dependent variable by using the independent variables. In this regression, our population is the commercial banks operating in Pakistan, and our sample is the

HBL. We have seventeen years' worth of Habib Bank Limited's financial statement data that we have acquired from the banks' official websites. Return on Equity (RoE) is a dependent variable, whereas operational risk, liquidity risk, and credit risk are independent factors.

3.3 Data Analysis:

The researcher used multiple regression techniques for the data analysis. The time-series data is collected over 17 years from 2005-2021. The researchers did the data analysis using the regression model. We then tested the relationship between the variables to test the hypothesis, and different statistical tools were applied to the data to check the authenticity.

3.4 Measure of Variables:

Table-1: Measures of Variables

CONCEPT	VARIABLES	INDICATOR	MEASUREMENT
FINANCIAL RISK	CREDIT RISK	CR	TOTAL DEBT/TOTAL EQUITY
	LIQUIDITY RISK	LR	TOTAL CASH/TOTAL ASSETS
	OPERATIONAL RISK	OR	EBIT/AVERAGE TOTAL ASSET
	RETURN ON EQUITY	ROE	NET INCOME/SHAREHOLDER'S EQUITY
FINANCIAL PERFORMANCE			

4. FINDINGS:

To test the relationship between the dependent variable and independent variables, the researcher used multiple regression techniques to predict the dependent variable by using the time series data of independent variables. To test the hypotheses developed by the researcher regression technique is used; however, before running the regression analysis there are some issues such as multi-collinearity, auto-correlation, & heteroscedasticity, and several statistical tests are run to check the existence of the said problems and their severity. While estimating econometric models, some issues may emerge. To investigate these issues, we used some tests. The centered variance inflation factor is calculated to determine whether the model has a multi-collinearity issue. If the values of the centered VIF are less than 10, the model does not have a multi-collinearity issue. We can conclude from the data that the independent variables do not correlate with one another since the values are less than 10. Therefore, we accept the null hypothesis (Ho: No Multi-collinearity in the Model).

Table-2: Breusch-Godfrey Serial Correlation LM Test

BREUSCH-GODFREY SERIAL CORRELATION LM TEST	
F-STATISTIC	0.272336
OBS*R-SQUARED	0.377248
PROB. F(1, 12)	0.6113
PROB. CHI-SQUARE (1)	0.5391

We used Durbin Watson to analyze the auto-correlation issue, and the value of 1.637, which ought to be equal to 2, indicates positive autocorrelation in the model. However, to check the severity of auto-correlation, we use the LM test with a null hypothesis ($H_0 = \text{No Auto-correlation}$). We shall accept the hypothesis if the prob value is larger than 0.05 and reject it otherwise. Since our model’s prob value is greater than 0.05 and is 0.6113, we may conclude that there is no auto-correlation in the data.

We use the Heteroscedasticity White Test to examine the heteroscedasticity of the model. The heteroscedasticity white test result is equal to 0.7347, which is greater than 5%. Therefore, it implies that the model has no heteroscedasticity issues.

Table-3: Heteroscedasticity Test: White

HETEROSCEDASTICITY TEST: WHITE	
F-STATISTIC	0.646077
OBS*R-SQUARED	7.713787
1PROB. F(1, 12)	0.7347
PROB. CHI-SQUARE (1)	0.5632

We use the Heteroscedasticity White Test to examine the heteroscedasticity of the model. The heteroscedasticity white test result is equal to 0.7347, which is greater than 5%. Therefore, it implies that the model has no heteroscedasticity issues.

4.1 Regression Analysis:

Table-4: Regression Analysis

VARIABLE	COEFFICIENT	STD. ERROR	T-STATISTIC	PROB.	CENTERED VIF
C	0.521	0.054	9.726	0.000	NA
LR	-0.025	0.004	-6.440	0.000	1.450245
CR	-1.383	0.637	-2.172	0.049	1.28283
OR01	4.012	0.933	4.298	0.001	1.245951
R-SQUARED			0.839		
ADJUSTED R-SQUARED			0.802		
F-STATISTIC			22.58349		
PROB(F-STATISTIC)			0.00002		
DURBIN-WATSON STAT			1.638979		

The Ordinary Least Square estimation technique was implemented to evaluate the relationship between the dependent and explanatory variables. There were a total of 17 observations utilized to run the regression model. The constant parameter has a positive value of 0.521921, indicating that if all the independent variables are maintained constant, an increase in any other variable than LR, CR, and OR would result in an increase in Return on Equity of 0.521921 units. Holding other factors constant, OR is positively related to ROE, such that a unit rise in OR leads to 4.03125 units increase in ROE. Conversely, LR and CR have a significant but negative relationship with ROE. It implies that if all other factors are held constant, a unit increase in LR and CR will bring about a 1.38492 and 0.02515 decline in ROE, respectively. The results show that all explanatory variables significantly impact ROE as the prob. Value is less than 5%. The explanatory variables in the model are able to explain 84.11 percent of the variation in the dependent variable. The model incorporates the joint impact of the explanatory variables.

4.2 Correlation Analysis:

Table-5: Correlation Analysis

	ROE	CR	LR	OR01
ROE	1	-0.757472813	-0.517660489	0.081556036
CR	-0.757472813	1	0.459536495	0.433388741
LR	-0.517660489	0.459536495	1	0.286064784
OR01	0.081556036	0.433388741	0.286064784	1

The correlation between the dependent and independent variables is stated in table above. The relationship between the same variables shows value 1 which means the

variables are 100% correlated. The relationship between ROE and LR is negative as the value is -0.51766 . The negative sign indicates the negative association. The CR has a negative relationship with ROE as value is -0.75762 . The OR has the positive relationship with ROE as the value is 0.083232 . In simple words, LR and CR have a negative impact on ROE while OR has a positive effect on the ROE of the Bank. The entire explanatory variables have positive relationships among themselves (Prematunga, 2012).

4.3 Stability Analysis:

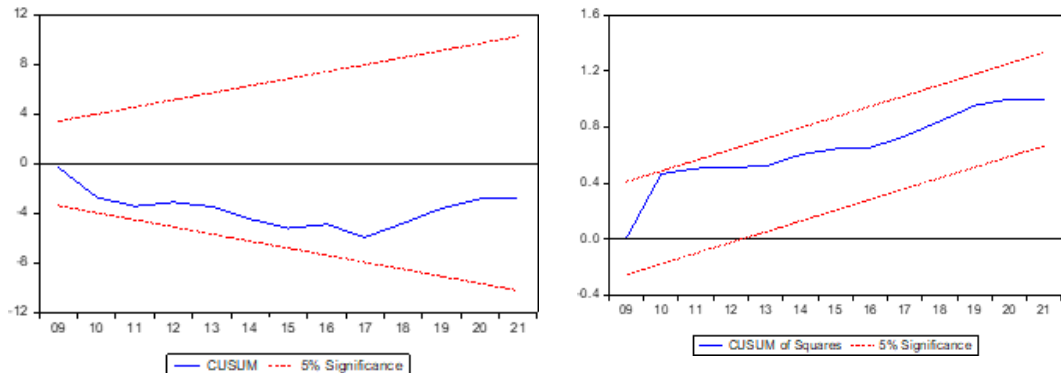


Figure-2: Cumulative Sum & Cumulative Sum of Square

The CUSUM test, which determines whether or not the model is stable based on a blue line, is used for the sensitivity studies (if it crosses the red line, the model is unstable). We use the CUSUM Sum of Square test to determine if the model is unstable, and if it is, it demonstrates stability. The Chow breakpoint test, which demonstrates that the model is stable, is used by the researcher if the results of the tests dispute. The blue line does not cross the red line, however, indicating that the CUSUM test in our model indicates that the model is stable

5. DISCUSSION:

The goal of this study was to examine the impact of operational risk, liquidity risk, and credit risk on profitability as measured by ROE using empirical data. From 2005 to 2021, the current study examined time series data from a commercial bank in Pakistan, Habib Bank Limited, an emerging bank in Pakistan. The model was estimated using a multiple regression model. The findings shed light on the relationship between profitability and the aforementioned bank-specific characteristics of credit risk, liquidity risk, and operational risk. Credit and liquidity have been shown to have a significant negative impact on bank profitability; however, operational risks have a significant positive impact on bank performance. (Saleh & Afifa, 2020). Our data was subjected to three types of analysis: regression analysis, correlation analysis, and stability analysis. According to regression analysis, operational risk is significantly positively related to return on equity, with a unit increase in operational risk resulting in a 4.01 unit increase in return on

equity.

Liquidity risk and credit risk, on the other hand, have a significant but negative relationship with return on equity. The findings show that all explanatory variables have a significant impact on Return on equity as the prob. The worth is less than 5%. When estimating econometric models, a variance inflation factor is calculated to determine whether the model has a Multi-Collinearity problem. Because the values of VIF are less than 10, we conclude that the independent variables do not correlate with one another. As a result, we accept the null hypothesis (Ho: No Multi-collinearity in the Model). We used Durbin Watson to analyze the auto-correlation issue that the model has positive auto-correlation; however, we used Durbin Watson to check the severity of the auto-correlation problem in the model. We perform a BGF Serial Correlation LM test to check the severity of the Auto-correlation, which says no Auto-correlation exists in the model.

Moreover, to check the heteroscedasticity, we perform a Heteroscedasticity White Test that shows the model has no heteroscedasticity issues. The correlation analysis shows the correlation between the dependent and independent variables. The relationship between the same variables shows value 1, which means the variables are 100% correlated. The relationship between ROE and LR is negative as the value is -0.51766. The negative sign shows the negative connection. The CR has a negative association with ROE as the value is -0.75762. The OR has a positive relationship with ROE as the value is 0.083232. In simple words, LR and CR have a negative impact on ROE while OR has a positive effect on the ROE of the Bank. The entire explanatory variables have positive relationships among themselves. Lastly, the stability test shows whether the model is stable. After running this test on our data, we concluded that the CUSUM test shows that the model is regular because the blue line is not crossing the red line.

6. CONCLUSION & RECOMMENDATIONS:

Habib Bank Limited is a well-named bank in Pakistan that remarkably manages its performance and risk. However, there is no end to improvements and innovations. Similarly, HBL requires certain amendments to improve its risk management further. Our findings suggest that credit regulations, various financial institution forms, and their financial constraints can have distinct consequences on financial investment behavior. To meet future financial investment objectives, the government and policymakers should pursue independent credit policies and change the credit risk structure (Kioko et al., 2019).

Banks must take appropriate steps to improve their financial performance in order to meet future targets. Policymakers should strengthen practical exchange credit, reduce financial institutions' financial reliance on them, and expand investment opportunities as a result of favorable economic development arrangements. The findings also revealed a significant inverse relationship between credit risk and financial performance. As a result, listed banks and all banks in general should strive to improve asset quality by implementing measures such as stringent customer screening and other controls. Bank management must assess, manage, and reduce

firm-specific risks for the benefit of all stakeholders.

Top management at banks must provide appropriate and understandable instructions so that risk managers can use them to properly manage credit risk. Furthermore, we recommend that bank management ensure that long-term borrowers are timely monitored and controlled in order to repay loans on time and avoid credit risk. Furthermore, we urge banking executives, policymakers, and practitioners to establish clear guidelines for loan issuance and prompt consumer repayment of loan installments. To ensure that banks address the risks they face in their daily operations.

Financial institutions must collectively adapt to and anticipate deterministic and realistic credit risk scenarios. These preparations are made in the context of a bank's risk appetite, in order to avoid incompetence and poor financial performance, which would have a negative impact on returns. If banks are unable to manage their long-term borrowers, the credit risk could worsen into a liquidity crisis. To manage liquidity risk, bank management should regularly monitor the liquidity position to ensure that there are enough current assets to cover current liabilities and that the essential balance between loans and deposits is maintained.

Furthermore, they must adhere to the strict liquidity risk management policy that the Board has duly adopted. This policy will lay out the groundwork for creating a solid framework for managing liquidity risk. This framework will identify the Bank's primary funding and liquidity risks, describe how these risks are identified, measured, monitored, and reported, and specify the management and mitigation strategies to be used. Furthermore, the policy should outline the maintenance of various ratios, funding preferences, and an assessment of the bank's liquidity in both normal and emergency scenarios.

The bank should have a contingency funding plan in place to deal with liquidity issues during emergencies. This strategy should identify early warning signs in order to avoid unexpected liquidity crises. As a result, the liquidity position of the banks will improve. Each bank should maintain a healthy level of capital charge for managing operational risk in order to avoid bank failure. As a result, if banking management successfully implements these policies, they can mitigate the negative effects of credit, liquidity, and operational risks while potentially improving financial performance. Because of the uncertainty in the banking environment in developing countries, management must be cautious and focus more on these risks in order to maintain profitability and keep a strategic distance from bank failure and insolvency.

DECLARATION OF INTEREST

It is declared that authors of this research work have no competing interest.

REFERENCES:

- Ahmad, U., Ibrahim, Y., & Minai, M. S. (2018). Malaysian public-private partnerships: Risk management in build, lease, maintain and transfer projects. *Cogent Business & Management*, 5(1), 1550147.\
- Baum, C. F., Caglayan, M., & Xu, B. (2021). The impact of uncertainty on financial institutions: A cross-country study. *International Journal of Finance & Economics*, 26(3), 3719-3739.
- Chen, Y. K., Shen, C. H., Kao, L., & Yeh, C. Y. (2018). Bank liquidity risk and performance. *Review of pacific basin financial markets and policies*, 21(01), 1850007.
- Ekinci, R., & Poyraz, G. (2019). The effect of credit risk on financial performance of deposit banks in Turkey. *Procedia Computer Science*, 158, 979-987.
- Gontarek, W., & Belghitar, Y. (2018). Risk governance: Examining its impact upon bank performance and risk-taking. *Financial Markets, Institutions & Instruments*, 27(5), 187- 224.
- Hassan Al-Tamimi, H. A., Miniaoui, H., & Elkelish, W. (2015). Financial risk and Islamic banks' performance in the Gulf Cooperation Council Countries. *The International Journal of Business and Finance Research*, 9(5), 103-112.
- Hunjra, A. I., Mehmood, A., Nguyen, H. P., & Tayachi, T. (2020). Do firm-specific risks affect bank performance?. *International Journal of Emerging Markets*.
- Kamran, H. W., Chaudhry, N., Murtaza, M. M., Zafar, N., Yousaf, A., & Nazish, H. (2016). Financial market development, bank risk with key indicators and their impact on financial performance: A study from Pakistan. *American Journal of Industrial and Business Management*, 6(03), 373.
- Kelvin, N. N. (2016). The Effect Of Market Risk On The Financial Performance. 1-35.
- Kioko, C., Olweny, T., & Ochieng, L. (2019). Effect of financial risk on the financial performance of commercial banks in Kenya listed on the Nairobi Stock Exchange. *The Strategic Journal of Business & Change Management*, 6(2), 1936-1952.
- Ko, C., Lee, P., & Anandarajan, A. (2019). The impact of operational risk incidents and moderating influence of corporate governance on credit risk and firm performance. *International Journal of Accounting & Information Management*.

- Manu, E. K., Xuezhou, W., Paintsil, I. O., Gyedu, S., & Akowuah, I. N. (2020). The dynamic effect of risk management on financial profitability of banks in Africa: An analytical panel quantile regression method. *Journal of Corporate Accounting & Finance*, 31(4), 99-120.
- M., K. C., T., O., & L., O. (2019). Effect Of Financial Risk On The Financial Performance Of Commercial Banks In Kenya Listed On. 1936-1952.
- Muriithi, J. G. (2016). Effect of financial risk on financial performance of commercial banks in Kenya. (Doctoral dissertation, COHRED, JKUAT).
- Oikonomou, I., Brooks, C., & Pavelin, S. (2012). The impact of corporate social performance on financial risk and utility: A longitudinal analysis. *Financial Management*, 41(2), 483-515.
- Prematunga, R. K. (2012). Correlational analysis. *Australian Critical Care*, 25(3), 195-199.
- Psillaki, M., Tsolas, I. E., & Margaritis, D. (2010). Evaluation of credit risk based on firm performance. *European journal of operational research*, 201(3), 873-881.
- Rafique, A., Quddoos, M. U., Akhtar, M. H., & Karim, A. (2020). Impact of financial risk on financial performance of banks in Pakistan; the mediating role of capital adequacy ratio. *Journal of Accounting and Finance in Emerging Economies*, 6(2), 607-613.
- Saeed, M. H. (2015). Examining the relationship between operational risk, credit risk and liquidity risk with performance of Malaysia banks (Doctoral dissertation, Universiti Utara Malaysia).
- Saghir, G., & Ch, E. T. (2020). Risk management and financial performance of commercial banks in Pakistan. *Risk Management*, 9(1), 87-103.
- Saleh, I., & Abu Afifa, M. (2020). The effect of credit risk, liquidity risk and bank capital on bank profitability: Evidence from an emerging market. *Cogent Economics & Finance*, 8(1), 1814509.
- Saunders, M., Lewis, P. H. I. L. I. P., & Thornhill, A. D. R. I. A. N. (2007). Research methods. *Business Students 4th edition* Pearson Education Limited, England.

- Tafri, F. H., Hamid, Z., Meera, A. K. M., & Omar, M. A. (2009). The impact of financial risks on profitability of Malaysian commercial banks: 1996-2005. *International Journal of Social, Human Science and Engineering*, 3(6), 268-282.
- Wanjohi, J. G. (2013). The effect of financial risk management on the financial performance of commercial banks in Kenya (Doctoral dissertation, University of Nairobi).