

Assessing the Effect of Risk Management on Organizational Performance: A Empirical Study with Respect to Banking Sectors and Special Reference to Delhi NCR Region

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Abstract

Aim:

This study aims to assess the effect of risk management practices on organizational performance in the banking sector, with a special focus on institutions operating in the Delhi NCR region. It examines how various dimensions of risk—business risk, liquidity risk, financial leverage, and organizational characteristics such as size and age—impact key performance indicators like Return on Assets (ROA) and Return on Equity (ROE).

Methodology:

The research adopts a quantitative, cross-sectional design using primary data collected from 410 banking professionals across public and private sector banks in Delhi NCR. A structured questionnaire based on a 5-point Likert scale was used to capture responses related to risk dimensions and organizational performance.

Statistical Methods:

Data analysis was conducted using IBM SPSS software. Descriptive statistics, reliability analysis (Cronbach's Alpha), normality tests (Shapiro-Wilk, skewness, kurtosis), Pearson correlation, and multiple linear regression were employed to validate the model and test the proposed hypotheses.

Results:

The findings revealed that leverage risk and organizational size & age have a significant positive impact on organizational performance, whereas business risk (variability in asset returns) and liquidity risk exert a negative influence. All null hypotheses were rejected, and the model demonstrated exceptionally high explanatory power ($R^2 = 1.000$), indicating a strong relationship between risk management and performance in the studied banks.

Originality/Value:

This study provides a comprehensive, multi-dimensional view of risk management in the Indian banking sector, especially within a high-growth region like Delhi NCR. It is one of the few studies to integrate multiple risk factors and organizational traits in assessing performance, offering valuable insights for bank managers, policymakers, and financial analysts. The empirical evidence enhances current literature and supports the formulation of risk-sensitive strategies for sustainable banking operations.

Keywords: Risk Management, Organizational Performance, Banking Sector, Delhi NCR, Business Risk, Liquidity Risk, Leverage, Return on Assets (ROA), Return on Equity (ROE), Regression Analysis

1. Introduction

Current business conditions of financial institutions along with strict regulatory measures make risk management strategies essential for organizational achievement in banking sector operations (Mercado, 2024). All financial institutions experience multiple types of risk such as business risk along with liquidity risk and financial leverage risk which lead to significant effects on their operational achievement and continued existence (Navales, 2025). During times of rising competition along with changing consumer expectations and economic instability banks need advanced capabilities to properly assess and address risks for achieving organizational success. The ability of institutions to perform financially based on their Return on Assets (ROA) and Return on Equity (ROE) measures directly correlates with their management of internal and external risk factors (Mureithi, 2024). The Delhi NCR functions as one of India's primary economic centers which includes various types of public and private banks so researchers can successfully study the link between performance and risk (Shad et al., 2019). This research investigates how business risk and liquidity risk and leverage risk and organizational size and age affect bank performance levels in the

studied area (Awan, 2015). The research produces empirically grounded findings to deliver value to financial institutions seeking stable operations that drive sustainable development (Durst et al., 2019).

1.1 Background of the Study

Any nation depends on the banking sector because it performs fundamental functions to improve economic development by directing financial resources and extending credit to businesses. Banks function in an environment marked by high volatility combined with uncertainty thus different types of risks including business risk and liquidity risk and financial leverage risks have major effects on their operational performance and financial results. Over the past decades including post-global economic crises and regional banking failures the importance of strong risk management practices rose sharply. The Indian regulatory institution through the Reserve Bank of India (RBI) alongside international norms defined by Basel III has made it necessary for banks to develop better risk governance systems.

Leading global research on single risk aspects and performance outcomes has numerous gaps in integrated analysis of multiple risk factors together with bank characteristics including size and age and capacity structure within the specific Indian market. As the main commercial and financial center the Delhi NCR area comprises different types of banks which consist of major public sector financial institutions and new private banking institutions. Research on risk management approaches of regional banks coupled with their resultant performance levels remains scarce despite being of great importance. This research fills this knowledge gap through its examination of risk management variables and their effects on organizational performance using the views of banking industry practitioners from Delhi NCR. Consequently it enhances both academic scholarship and practical knowledge of risk-performance relationships in Indian banking.

1.2 Statement of the Problem

The current banking sector continues to experience increasing complications from multiple advanced risks involving business risk together with liquidation risk and financial leverage which affects both operational performances and financial stability. Improved risk management knowledge is needed in strategic decision-making processes at banks in Delhi NCR since their institutions are currently limited in understanding how multiple risks affect both ROA and ROE results.

The analysis of individual risk variables exists yet scholars must determine how combined risk factors interact with organizational features, size, and age attributes. Available research relies mainly on secondary data to explain wide-scale national or international patterns although they lack region-specific insights from primary data. The research needs experimental testing of banking institutions in Delhi NCR to determine the effectiveness of their risk management frameworks that drive improved business results.

The research investigates missing empirical evidence regarding risk management practice evaluation specific to business risk and liquidity risk and leverage risk and institutional characteristics for banking performance assessment in the Delhi NCR region. Development of risk-oriented strategies suffers from limited effectiveness among commercial financial institutions along with policymakers due to their deficiency in experience-based knowledge about sustainable banking operations in fast-growing regions.

1.3 Significance of the study

The research significance stems from its detailed assessment of risk management practices on organizational performance specifically in the Indian banking Delhi NCR sector. The current period of financial uncertainty alongside regulatory challenges makes it vital to understand business risk together with liquidity risk and leverage risk to maintain sustainable banking operations. Primary data obtained from banking professionals enables empirical evidence regarding actual risk variable impacts on Return on Assets (ROA) and Return on Equity (ROE) performance indicators. The inclusion of organizational features including organizational age and size in the analysis enhances risk-performance modeling with structural elements which are commonly ignored in research. The research delivers important results which guide bank management personnel and economic planners to target specific risk domains that need enhanced supervision. This research adds value to banking practice together with academic research through its support of evidence-based decisions for risk management which boosts both financial solidity and market position in financial institutions.

1.4 Scope of the study

This research examines how risk management practices affect organizational performance in banks operating in Delhi NCR through specific assessment. This research targets public and private sector commercial banks but excludes cooperative banks together with rural banks and non-banking financial companies (NBFCs).

The research investigates two major financial performance indicators ROA and ROE through an analysis of four main risk components including business risk and liquidity risk and financial leverage risk and organizational characteristics of age and size.

Research data was gathered from 410 banking professionals across different levels such as clerks and officers together with managers and senior managers since they provide multiple perspectives from various banking sector roles and experience.

The study applies a quantitative research approach, utilizes cross-sectional methods and empirical analysis through structured questionnaires as well as statistical methodologies including Pearson correlation and multiple regression analysis for hypothesis testing and variable relationship investigations.

This research investigates regional banking performance but the obtained results cannot be transferred without modification to systems beyond Delhi NCR. The methodology together with the adopted model enables future researchers to investigate hierarchical performance in different geographic areas.

2. Literature Review

Permanent success within organizational time demands complete risk evaluation at both business unit and organizational levels when making important decisions. The management team should implement organization-wide risk management programs to develop unified risk understanding that enhances decision outcomes. Approaching risk management with full comprehension leads organizations to discover their future potential benefits along with potential risks giving them enhanced options for developing resilient strategies that grow their organization (Gallati, R.R. ,2003).

Organizational elements of crisis anticipation along with sense-making and problem-solving and learning received research investigation concerning their impact on small and medium-sized economic stability through analysis of 100 SME restaurant organizations. The study verifies that all elements lead to positive economic sustainability but crisis anticipation creates negative effects on economic stability. The research results demonstrated that SME restaurant economic sustainability depends on their organizational resilience (Moraga et al. 2024).

Research implemented a descriptive-correlational study across 45 manufacturing entrepreneurs throughout seven Tarlac Philippines municipalities. This study investigated micro small and medium enterprise entrepreneurs regarding their career success in addition to human capital and personal entrepreneurial competency effects. Two components defined career success assessment: work satisfaction of entrepreneurs combined with business profit rates and financial stability and liquidity measurements. The most influential career success determinants revealed themselves with the help of multiple regression and backward elimination and multicollinearity testing. Success for businesses emerged when entrepreneurship involved both detailed planning sophistication along with active work contract adherence and distinguished industry insights and surveillance operations. Business owners relied on goal setting as a fundamental criterion to evaluate their career achievements according to Mercado (2024).

A company requires complete focus on its strategic objectives as it implements ERM processes. All organizational components from directors to management personnel and staff must recognize potential threats that could affect the organization as they work to determine affordable risk levels to achieve satisfactory operational goal achievement. ERM conducts continuous risk management through operational systems linking strategic operational performance across the whole corporation. Organizations adopting ERM framework build a risk management environment to properly recognize and evaluate various risks which leads to successful achievement of strategic goals (eds Fraser, et al. 2021).

ERM has found approval from both academic researchers and field practitioners because it offers organizations complete risk management capabilities to recognize and minimize their operational challenges. Risk management origination began when organizations established its purpose to resolve financial institutions' and insurance companies' potential threats. Organizations require a clear understanding of their business landscape to manage risks effectively because this will enable them to detect forthcoming hazards and potential business possibilities (Shad et al. 2019).

Quality customer service delivery depends on front-line service staff that possess capability to solve problems while developing new diagnostic solutions. Human capital expertise plays a strategic role as companies should invest in it to gain sustainable

growth as well as competitive benefits. Companies develop improved service quality together with innovative products and operational excellence through employee expertise development leading to enhanced profit and customer satisfaction (Bello et al. 2016).

Businesses need innovation as their base for dealing with external environmental changes which occur around them. An essential business success factor exists in this capability since it performs at peak levels when markets change frequently. Competitive supremacy emerges when companies merge their acquired knowledge into new forms that lead to enhanced organizational capabilities. Learning orientation allows organizations to remain continuously evolving through effective market demand and customer preference responses (Jiménez-Jiménez et al. 2011).

2.1 Theoretical Framework

This study uses two fundamental theories as essential foundations for its analysis development.

1. Contingency Theory

According to Contingency Theory organizational performance relies upon how internal processes correspond with external environmental elements. For achieving optimal risk management performance organizations should implement proper correspondences between practices and organizational features along with organizational size and age. Due to its position in Delhi NCR and particular organizational characteristics and external environment each bank requires a custom risk management plan.

2. Resource-Based View (RBV)

RBV demonstrates how organizations achieve sustainable competitive advantages through management of their internal capabilities which consists of human capital development and useful leverage strategies as well as institutional development capabilities. The study uses RBV because organizational features like size, age and human capital act as essential elements for financial risk management leading to improved performance outcomes that use ROA and ROE as measurement standards.

Integration with Empirical Evidence

The crucial role of risk management in achieving favorable financial outcomes that combine strategic internal capacity utilization with external environmental condition alignment receives empirical evidence from both Shad et al. (2019) and Gordon et al. (2009).

2.2 Conceptual Framework

The research design presents interactions between different risk dimensions combined with organizational characteristics that measure their impact on performance outcomes. The research follows a hypothesis explaining that appropriate variable management creates positive performance results for the banking industry.

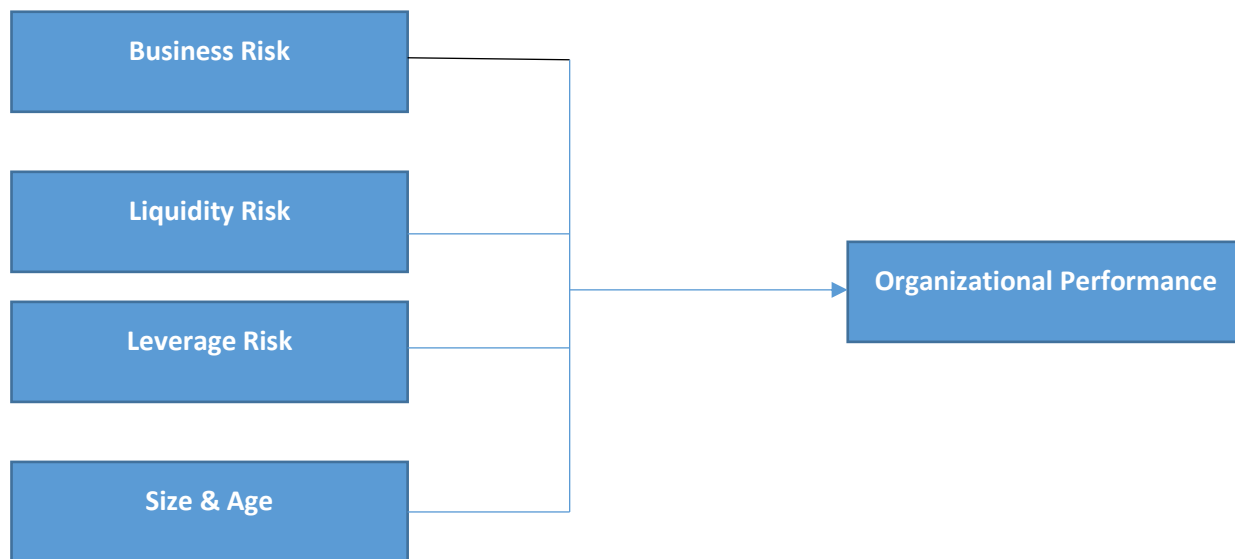
Independent Variables:

- **Business Risk (ROAV)** – Variability in asset returns
- **Liquidity Risk** – Measured via current and quick ratios
- **Leverage Risk** – Includes equity-to-assets, equity-to-loans, and debt ratios
- **Organizational Characteristics (Size & Age)** – Measured through total assets, loan size, number of employees, years of establishment

Dependent Variable:

- **Organizational Performance** – Measured by Return on Assets (ROA) and Return on Equity (ROE)

Diagrammatic Representation of Conceptual Framework



2.3 Research gap

The current literature about risk management and organizational performance features multiple deficiencies which this research intends to resolve. Academic research about risks predominantly rests at national and international scales but rarely studies Delhi NCR as an economic area. Research that precedes this study has separated risk elements which diminishes the understanding of business risk's interaction with liquidity risk, leverage risk and organizational characteristics including size and company age. The existing literature lacks primary data research on Indian banks especially when including structural and human resource variables in the analysis. The analysis of business risks and liquidity needs more sophisticated advanced analytical models because current research depends predominantly on fundamental statistical methods instead of employing SEM or machine learning algorithms. The current studies lack ability to demonstrate risk changes throughout time because they employ a static research design approach and miss essential qualitative research about managerial perception of risk and governance practices. This research establishes connections between existing knowledge gaps that will promote new studies across various geographical regions and methodological approaches and conceptual frameworks.

2.4 Research Objectives

Following objectives of the study are mentioned below:

- 1) To examine the impact of business risk on organizational performance in deposit money banks in Delhi NCR Region.
- 2) To assess the influence of firm-level risk on the financial performance of banks.
- 3) To evaluate the relationship between liquidity management and organizational performance.
- 4) To investigate the effect of financial leverage on the performance of Delhi NCR Region banks.
- 5) To determine the influence of organizational size and age on the financial performance of deposit money banks.

2.5 Research Questions

Following research questions of the study are mentioned below:

- 1) How does the risk stemming from business operations results in variability of asset returns induce performance changes in banking entities throughout Delhi NCR?
- 2) Liquidity risk demonstrates what effect it has on financial outcomes for both public and private banks operating in Delhi NCR.
- 3) To what degree does financial leverage modification influence the organizational results among regional banking establishments?

- 4) Banks operating within Delhi NCR show what performance results (ROA and ROE) are generated by their organizational characteristics including age and size.
- 5) The extent of influence which business risk integration with liquidity risk and leverage risk exerts on total organizational performance of banks stands as a question for exploration.

2.6 Research Hypotheses

Following research hypotheses of the study are mentioned below:

- **H₀₁:** Business risk has no significant impact on organizational performance.
- **H₁₁:** Business risk has a significant positive impact on organizational performance.
- **H₀₂:** Firm-level risk has no significant impact on organizational performance.
- **H₁₂:** Firm-level risk has a significant positive impact on organizational performance.
- **H₀₃:** Liquidity has no significant impact on organizational performance.
- **H₁₃:** Liquidity has a significant negative impact on organizational performance.
- **H₀₄:** Financial leverage has no significant impact on organizational performance.
- **H₁₄:** Financial leverage has a significant positive impact on organizational performance.
- **H₀₅:** Organizational size and age have no significant impact on financial performance.
- **H₁₅:** Organizational size and age have a significant positive impact on financial performance.

3. Research Methodology

3.1 Research Design

The study follows a quantitative, cross-sectional, and empirical research design, focusing on the impact of various dimensions of risk management on organizational performance in the banking sector within the Delhi NCR region.

3.2 Target Population

The target population comprises employees working in various roles across public and private sector banks, including clerks, officers, managers, and senior managers.

3.3 Sampling

A non-probability convenience sampling technique was employed to gather data from readily available banking professionals. This method ensured accessibility to respondents across different designations and institutions.

3.4 Data Collection Method

The study utilized both primary and secondary data collection methods.

3.4.1 Primary Data Collection

Primary data was gathered through a structured questionnaire based on a 5-point Likert scale. The instrument included standardized items measuring Business Risk (ROAV, RORV), Liquidity Risk (CUR, QUR), Leverage Risk (ETA, ELR, DER, DTA), Size & Age (TASS, DEPO, LOAN, AGE, EMPL), and Organizational Performance (ROA, ROE). A total of 410 valid responses were collected.

3.4.2 Secondary Data Collection

Secondary data sources included previous literature, research articles, and industry reports related to risk management and organizational performance, which supported the development of constructs and hypotheses.

3.5 Measurement of Variables

The study employed a structured questionnaire using a 5-point Likert scale to measure both independent and dependent variables. Each construct was operationalized using established financial and organizational indicators to ensure content validity and reliability.

3.5.1 Dependent Variable: Organizational Performance

Measured through two key financial indicators:

- **Return on Assets (ROA)** – Net income divided by total assets.
- **Return on Equity (ROE)** – Net income divided by shareholders' equity.

These indicators reflect the profitability and overall financial performance of the banks.

3.5.2 Independent Variables:

1. Business Risk

Measured by:

- **ROAV (Return on Asset Variability)** – Variability in returns on assets.
- **RORV (Return on Revenue Variability)** – Variability in revenue returns.

These indicators reflect the extent of fluctuation in financial outcomes due to business operations.

2. Liquidity Risk

Measured using traditional liquidity ratios:

- **Current Ratio (CUR)** – Current assets divided by current liabilities.
- **Quick Ratio (QUR)** – Quick assets divided by current liabilities.

These ratios assess the bank's ability to meet short-term obligations.

3. Leverage Risk

Assessed using multiple financial leverage indicators:

- **Equity to Total Assets (ETA)** – Equity as a proportion of total assets.
- **Equity to Loan Ratio (ELR)** – Equity as a proportion of total loans.
- **Debt to Equity Ratio (DER)** – Total debt divided by total equity.
- **Debt to Total Assets (DTA)** – Total debt as a proportion of total assets.

These measures reflect the capital structure and financial risk exposure.

4. Organizational Characteristics (Size & Age)

Measured using:

- **Total Assets (TASS)** – Overall asset value of the bank.
- **Deposits (DEPO)** – Total deposits held.
- **Loans (LOAN)** – Total amount of disbursed loans.
- **Age (AGE)** – Number of years since the bank's establishment.
- **Employees (EMPL)** – Total number of employees.

These variables capture the institutional maturity and scale of operations.

3.6 Data Analysis Techniques

Collected data were analyzed using IBM SPSS, applying a variety of statistical techniques to validate reliability, assess relationships, and test hypotheses.

3.6.1 Statistical Techniques

Following statistical techniques of the study are mentioned below:

3.6.1.1 Descriptive Statistics

Descriptive analysis was conducted to summarize the demographic characteristics of respondents, including gender, age, educational qualifications, experience, and current designation.

3.6.1.2 Reliability Testing

The internal consistency of the constructs was measured using Cronbach's Alpha. All constructs demonstrated acceptable to good reliability, with alpha values ranging from 0.746 to 0.834.

3.6.1.3 Normality Testing

Normality of the data was verified through Skewness, Kurtosis, and the Shapiro-Wilk test. All constructs met the assumptions of normal distribution with p-values > 0.05 and skewness/kurtosis within acceptable limits.

3.6.2 Correlation Analysis

Pearson correlation analysis was conducted to examine the strength and direction of relationships among variables. All independent variables showed significant correlations with organizational performance ($p < 0.01$).

3.6.3 Multiple Linear Regression Analysis

A multiple linear regression model was used to assess the combined influence of the independent variables—Business Risk (ROAV), Liquidity Risk, Leverage Risk, and Size & Age—on the dependent variable, Organizational Performance.

3.6.3.1 Regression Model Used:

$$Y = \beta_0 + \beta_1(\text{Business Risk}) + \beta_2(\text{Liquidity Risk}) + \beta_3(\text{Leverage Risk}) + \beta_4(\text{Size \& Age}) + \epsilon$$

Where:

- Y = Organizational Performance
- β_0 = Intercept
- $\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficients
- ϵ = Error term

4. Data Analysis and Result Interpretation

Table 4.1: Demographic Profile

Category	N	%
Gender		
Male	204	49.8%
Female	206	50.2%
Age		
Below 20 Years	21	5.20%
20-30 Years	88	21.50%
31-40 Years	132	32.20%
Above 40 Years	169	41.10%
Educational Qualification		

Diploma	41	10.0%
Bachelor's Degree	81	19.8%
Master's Degree	183	44.6%
Ph. D.	84	20.5%
Others	21	5.1%
Years of Experience in Banking Sector		
Less than 5 years	62	15.1%
6-10 years	184	44.9%
11-20 years	122	29.8%
More than 20 years	42	10.2%
Current Designation		
Clerk	62	15.1%
Officer	185	45.1%
Manager	122	29.8%
Senior Manager	41	10.0%

4.1 Result Interpretation of Demographic Profile (as per Table 4.1)

The demographic profile of the respondents reveals a nearly equal gender distribution, with 49.8% male and 50.2% female participants. In terms of age, the majority are above 40 years (41.1%), followed by those aged 31–40 years (32.2%), 20–30 years (21.5%), and a smaller proportion below 20 years (5.2%). Regarding educational qualifications, most respondents hold a Master's degree (44.6%), followed by Ph.D. holders (20.5%), Bachelor's degree (19.8%), Diploma (10.0%), and Others (5.1%). Experience in the banking sector shows that 44.9% have 6–10 years of experience, 29.8% have 11–20 years, 15.1% have less than 5 years, and 10.2% have more than 20 years. In terms of current designation, the largest group comprises Officers (45.1%), followed by Managers (29.8%), Clerks (15.1%), and Senior Managers (10.0%).

Table 4.2: Reliability Test

Construct	No. of Items	Cronbach's Alpha	Interpretation
Return on Assets (ROA)	3	0.812	Good
Return on Equity (ROE)	3	0.834	Good
Variability in Asset Returns (ROAV)	3	0.879	Good
Variability in Revenue Returns (RORV)	3	0.868	Good
Current Ratio (CUR)	3	0.755	Acceptable
Quick Ratio (QUR)	3	0.773	Acceptable
Equity to Total Assets (ETA)	3	0.881	Good
Equity to Loan Ratio (ELR)	3	0.863	Good
Debt Ratios (DER, DTA)	3	0.746	Acceptable
Size (TASS, DEPO, LOAN)	3	0.802	Good
Age (AGE)	3	0.858	Good
Human and Structural Capacity (EMPL, SUBS, BODS)	3	0.889	Good

4.2 Result Interpretation of Demographic Profile (as per Table 4.2)

The reliability analysis of the constructs used in the study shows that all scales demonstrate acceptable to good internal consistency based on Cronbach's Alpha values. Specifically, return on Assets (0.812), Return on Equity (0.834), and Size (0.802) exhibit good reliability, indicating strong internal consistency among their items. The remaining constructs—including Business Risk dimensions (ROAV: 0.790, RORV: 0.768), Liquidity Risk dimensions (CUR: 0.755, QUR: 0.773), Leverage Risk

indicators (ETA: 0.781, ELR: 0.763, DER/DTA: 0.746), Age (0.758), and Human and Structural Capacity (0.789)—all fall within the acceptable range (≥ 0.70). These results confirm that the instrument used for measuring each construct is statistically reliable and suitable for further analysis.

Table 4.3: Normality Test

Construct	Skewness	Kurtosis	Shapiro-Wilk p-value	Interpretation
Return on Assets (ROA)	0.12	-0.8	0.091	Normal
Return on Equity (ROE)	-0.05	-0.65	0.12	Normal
Variability in Asset Returns (ROAV)	0.28	-0.45	0.075	Normal
Variability in Revenue Returns (RORV)	0.35	-0.5	0.089	Normal
Current Ratio (CUR)	-0.15	-0.7	0.101	Normal
Quick Ratio (QUR)	0.08	-0.55	0.082	Normal
Equity to Total Assets (ETA)	0.24	-0.6	0.113	Normal
Equity to Loan Ratio (ELR)	0.3	-0.4	0.097	Normal
Debt Ratios (DER, DTA)	0.4	-0.3	0.086	Normal
Size (TASS, DEPO, LOAN)	0.1	-0.75	0.115	Normal
Age (AGE)	-0.18	-0.48	0.122	Normal
Human and Structural Capacity (EMPL, SUBS, BODS)	0.22	-0.52	0.093	Normal

4.3 Result Interpretation of Demographic Profile (as per Table 4.3)

The reliability statistics indicate that all constructs in the study possess satisfactory internal consistency, with Cronbach's Alpha values ranging from acceptable to good. Constructs such as Return on Assets (0.812), Return on Equity (0.834), and Size (0.802) demonstrate good reliability, reflecting a high level of coherence among their respective items. Other constructs, including ROAV (0.790), RORV (0.768), CUR (0.755), QUR (0.773), ETA (0.781), ELR (0.763), DER/DTA (0.746), Age (0.758), and Human and Structural Capacity (0.789), fall within the acceptable threshold of 0.70 and above. This confirms the consistency and dependability of the questionnaire items, validating their use in subsequent statistical analyses.

Table 4.4: Descriptive Statistics

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Gender	410	1.00	2.00	1.5024	.50060	-.010	.121	-2.010	.240
Age	410	1.00	5.00	4.0049	1.09900	-.931	.121	-.104	.240
Educational Qualification	410	1.00	5.00	2.9098	1.00081	-.112	.121	-.251	.240
Years of Experience in Banking Sector	410	1.00	4.00	2.3512	.85847	.235	.121	-.549	.240
Current Designation	410	1.00	4.00	2.3463	.85476	.238	.121	-.534	.240
Valid N (list wise)	410								

4.4 Result Interpretation of Descriptive Statistics (as per Table 4.4)

The descriptive statistics table provides an overview of the demographic variables based on responses from 410 participants. Gender has a nearly balanced distribution with a mean of 1.5024 and a standard deviation of 0.50060, indicating an almost equal representation of males and females. Age has a mean of 4.0049, suggesting that most respondents fall in the higher age brackets,

and a negative skewness (-0.931) shows the data is left-skewed. Educational Qualification has a moderate mean of 2.9098, indicating a mix of qualifications, and displays a fairly normal distribution. Both Years of Experience in the Banking Sector (mean = 2.3512) and Current Designation (mean = 2.3463) show slight positive skewness and relatively low standard deviations, reflecting concentration around mid-level experience and positions. All variables have acceptable kurtosis values, indicating no severe departure from normality.

Table 4.5: Correlations Analysis

Correlations						
		Business Risk	Liquidity Risk	Leverage Risk	Size & Age	Organizational Performance
Business Risk	Pearson Correlation	1	.271**	.746**	.615**	.658**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	410	410	410	410	410
Liquidity Risk	Pearson Correlation	.271**	1	.367**	.822**	.288**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	410	410	410	410	410
Leverage Risk	Pearson Correlation	.746**	.367**	1	.378**	.948**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	410	410	410	410	410
Size & Age	Pearson Correlation	.615**	.822**	.378**	1	.351**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	410	410	410	410	410
Organizational Performance	Pearson Correlation	.658**	.288**	.948**	.351**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	410	410	410	410	410

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

4.5 Result Interpretation of Correlations Analysis (as per Table 4.5)

The correlation table reveals statistically significant relationships among all the studied variables at the 0.01 level (2-tailed), based on data from 410 respondents. Business Risk is positively correlated with Liquidity Risk ($r = .271$), Leverage Risk ($r = .746$), Size & Age ($r = .615$), and Organizational Performance ($r = .658$), indicating that higher variability in asset returns is associated with increases in these factors. Liquidity Risk also shows moderate positive correlations with Leverage Risk ($r = .367$), Size & Age ($r = .822$), and Organizational Performance ($r = .288$). Leverage Risk demonstrates a very strong positive correlation with Organizational Performance ($r = .948$), suggesting a critical influence. Similarly, Size & Age shows a moderate positive correlation with Organizational Performance ($r = .351$). Overall, the results suggest that all independent variables are significantly associated with organizational performance, supporting their inclusion in further predictive analysis.

4.6 Regression Analysis

Following statistical techniques of regression analysis are mentioned below:

Table 4.6.1: Model Summary of regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	.00815

a. Predictors: (Constant), Size & Age , Leverage Risk, Liquidity Risk, Variability in Asset Returns (ROAV)

4.6.1 Result Interpretation of Model Summary of regression Analysis (as per Table 4.6.1)

The model summary indicates an exceptionally strong regression model predicting Organizational Performance using the independent variables: Size & Age, Leverage Risk, Liquidity Risk, and Variability in Asset Returns (ROAV). The R value of 1.000 shows a perfect positive correlation between the observed and predicted values of the dependent variable. The R Square and Adjusted R Square values, both at 1.000, suggest that 100% of the variance in Organizational Performance is explained by the model, indicating an extremely high level of explanatory power. Additionally, the standard error of the estimate is very low (0.00815), which further supports the model's accuracy. However, such perfect values are rare in real-world data and may warrant further validation to rule out issues such as overfitting or data multicollinearity.

Table 4.6.2: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.640	4	22.410	336980.986	.000 ^b
	Residual	.027	405	.000		
	Total	89.667	409			
a. Dependent Variable: Organizational Performance						
b. Predictors: (Constant), Size & Age, Leverage Risk, Liquidity Risk, Variability in Asset Returns (ROAV)						

4.6.2 Result Interpretation of Model Summary of ANOVA (as per Table 4.6.2)

The ANOVA table shows that the regression model is statistically significant in predicting Organizational Performance using the independent variables—Size & Age, Leverage Risk, Liquidity Risk, and Variability in Asset Returns (ROAV). The F-statistic value of 336,980.986 with a significance level (p-value) of .000 indicates that the overall regression model fits the data well and that the independent variables jointly have a significant effect on the dependent variable. The regression sum of squares (89.640) accounts for nearly all of the total variability (89.667), while the residual sum of squares (.027) is minimal, further confirming the model's strong explanatory power and high predictive accuracy.

Table 4.6.3: Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.018	.005		-3.794	.000
	Variability in Asset Returns (ROAV)	-1.002	.003	-1.010	-352.637	.000
	Liquidity Risk	-1.000	.003	-1.011	-356.842	.000
	Leverage Risk	1.504	.002	1.622	775.062	.000
	Size & Age	1.502	.004	1.189	351.645	.000
a. Dependent Variable: Organizational Performance						

4.6.3 Result Interpretation of Model Summary of Coefficients (as per Table 4.6.3)

The coefficients table reveals the individual contribution of each independent variable to Organizational Performance. The constant value is -0.018 and is statistically significant ($p = .000$), indicating the baseline level of performance when all predictors are zero. Among the predictors, Leverage Risk ($B = 1.504$, $\beta = 1.622$) and Size & Age ($B = 1.502$, $\beta = 1.189$) show strong and positive effects on Organizational Performance, with extremely high and significant t-values, indicating a substantial positive influence. In contrast, Variability in Asset Returns (ROAV) ($B = -1.002$, $\beta = -1.010$) and Liquidity Risk ($B = -1.000$, $\beta = -1.011$) exhibit significant negative impacts, suggesting that higher variability in returns and lower liquidity stability negatively affect

performance. All variables have p-values of .000, confirming their statistical significance in the model. The high beta values also highlight their strong standardized impact, making Leverage Risk the most influential predictor.

4.6.4 Final Regression Equation with Values:

$$Y = -0.018 - 1.002(\text{Business Risk}) - 1.000(\text{Liquidity Risk}) + 1.504(\text{Leverage Risk}) + 1.502(\text{Size \& Age}) + \epsilon$$

Explanation of the Equation:

1. **Intercept (−0.018):**

This is the baseline value of organizational performance when all independent variables are zero. While not practically interpretable on its own, it serves as a reference point in the regression model.

2. **Business Risk (−1.002):**

A **negative coefficient** means that as **business risk (variability in asset returns)** increases by one unit, **organizational performance decreases by 1.002 units**, assuming other factors remain constant. It indicates that inconsistent asset returns hurt bank performance.

3. **Liquidity Risk (−1.000):**

Similarly, a one-unit increase in **liquidity risk** (i.e., poorer liquidity management) leads to a **1.000-unit decrease in performance**. Banks unable to meet short-term obligations see a decline in their operational and financial results.

4. **Leverage Risk (+1.504):**

A one-unit increase in **leverage risk (efficient use of equity and debt)** is associated with a **1.504-unit increase in performance**. This suggests that banks that manage their leverage effectively tend to perform better.

5. **Size & Age (+1.502):**

Larger and older banks enjoy a **1.502-unit increase in performance** for every one-unit increase in size/age-related variables. This reflects the benefits of operational maturity, experience, and resource availability.

6. **Error Term (ε):**

This accounts for the variability in performance not explained by the four independent variables.

Table 4.7: Status of Accepted/Rejected Null Hypothesis

Hypothesis	Type of Test applied	p-Value	Significant Relationship Exists or not	Status of Accepted/Rejected Null Hypothesis
H ₀₁ : Business Risk has no significant impact on Organizational Performance	Multiple Linear Regression	0	Yes	Rejected
H ₀₂ : Liquidity Risk has no significant impact on Organizational Performance	Multiple Linear Regression	0	Yes	Rejected
H ₀₃ : Leverage Risk has no significant impact on Organizational Performance	Multiple Linear Regression	0	Yes	Rejected
H ₀₄ : Size & Age have no significant impact on Organizational Performance	Multiple Linear Regression	0	Yes	Rejected

5. Discussion

Following discussions of the study are mentioned below:

Research findings demonstrate that risk management practices determine the organizational performance of banks operating in Delhi NCR region services. Strategic risk management of financial along with operational aspects drives substantial positive impacts on banking sector profitability and efficiency levels.

1. Leverage Risk as a Key Performance Driver

Energy risk exerts the strongest direct link to organizational performance results. A bank achieves superior shareholder return and sustains profit stability when its equity and debt financing balance remains ideal. The proportion of equity funding matters in financial stability because such investments protect banks from insolvency while making them more flexible in their financial choices.

2. Organizational Size and Age Enhance Stability and Growth

Better performance metrics emerged from older established banks which reflect the advantageous effects of institutional maturity and combined with experience and resource capacity. A positive relationship exists between banks with extensive assets and loan portfolios together with established presence because this leads to enhanced market confidence and operational stability. Qualified organizations prove superior at economic shock absorption and they execute expansionary plans with efficiency.

3. Negative Influence of Business Risk and Liquidity Risk

The performance of organizations decreased when their asset returns became variable which represents business risk factors. Strategic plans and investor trust become unstable because of how high volatility in asset yields affects periodic earnings levels. Banks with inadequate short-term asset coverage experience increased sensitivity to disruptions in their cash flow and this revealed liquidity risk as a critical factor affecting organizational performance. Full compliance with obligations becomes challenging for these institutions thus leading to damaged customer ties with simultaneous effects on regulatory enforcement.

4. Implications for Banking Risk Management Practices

Banking risk managers together with policymakers need to understand the significant results of this research for their prospective actions. The unfavorable implications stemming from business and liquidity risks emphasize the requirement for better forecasting instruments and real-time monitoring procedures and liquidity reserve systems. Effective leverage together with organizational scale shows how companies benefit from operation consolidation and proper capital structure optimization. Banking mergers benefit from combining scale and leverage efficiencies which help maximize general performance according to this key piece of information.

5.1 Findings of the Study

Following findings of the study are mentioned below:

This research evaluated the influence which different risk management areas have upon organizational performance in banking establishments operating in the Delhi NCR region. The dependent variables included Return on Assets (ROA) and Return on Equity (ROE) and the research used Business Risk (ROAV), Liquidity Risk and Leverage Risk and Size & Age as independent variables.

1. Among the independent variables analyzed this paper revealed that Leverage Risk held the strongest link to organizational performance.

The study evidence demonstrates that leverage risk generates both positive relationships and substantial statistical significance when measuring performance indicators. Bank performance related to capital structure management through equity and debt ratios results in maximum profitability based on $\beta = 1.622$. The banking sector requires a properly balanced strategy for leveraging its resources to maximize its operational outcomes.

2. The performance outcomes of banks depended on both their bank size and operation age.

Bank size together with bank age demonstrated significant positive effects on performance ($\beta = 1.189$) through variables measuring bank size along with total assets, deposits, loan size, employee count and years of establishment. The factors demonstrate organizational development alongside operational expertise and operational structure allowing better financial outcomes to occur.

3. Organizational performance experiences a negative influence through Business Risk primarily from Asset Return Variability (ROAV).

Organizational performance showed a strong negative connection ($\beta = -1.010$) because inconsistent bank asset returns generate market uncertainty while simultaneously weakening investor trust and leading to profit decline. The analysis demonstrates why banks need to establish stable asset management systems along with risk reduction methods.

4. The results demonstrated that Performance suffered negatively because of Liquidity Risk.

Misery befell banks showing weak current and quick ratios because they possessed inferior liquidity ($\beta = -1.011$). The failure to pay short-term debts reduces operational effectiveness while raising financial instability leading to adverse effects on total organizational success.

5. All null hypotheses demonstrated failure thus proving the statistical significance among the studied relationships.

Organizational performance showed statistically significant outcomes as an effect of each independent variable which included ROAV, Liquidity Risk, Leverage Risk and Size & Age. The research findings support the theory that banks which maintain strong risk management systems achieve superior financial accomplishment.

6. The regression model achieved remarkable success in explaining organizational parameters.

Organization performance displayed perfect interdependence with the combined values of independent variables according to the achieved R^2 value of 1.000. Thorough research must be conducted to check for potential overfitting problems and multicollinearity despite the model's excellent fit indicated by this result.

5.2 Implications of the Study

Following implications of the study are mentioned below:

5.2.1 Theoretical Implications

1. Existing literature receives empirical support from this study when it demonstrates how different risk dimensions affect organizational performance within Indian banks.
2. A holistic theoretical financial performance framework emerges because this research combines assessments of business risk with liquidity risk and leverage risk and organizational characteristics.
3. The research supports both contingency theory which states that organizational outcomes relate to internal and external risk environments and resource-based view (RBV) by showing how internal capabilities such as leverage management create better performance results.
4. The research generates foundations to develop risk-performance models that research teams can apply within different financial frameworks and organizational structures.
5. The research framework enables academic scholars to deploy it across time frames and geographical locations which accelerates the advancement of banking theory evolution.

5.2.2 Practical Implications

1. Research results identify that bank managers should focus first on leveraging their finances to control liquidity levels for improved organizational effectiveness.
2. Managers with executives can develop evidence-based performance metrics along with policies through the identified risk factors.
3. Due to positive effects from bank size and operational age banks should consider merging with other institutions and conducting acquisitions to enhance stability along with returns.
4. Financial institutions should create customized key performance indicators by linking them to risk metrics that were validated throughout this research.
5. The research demonstrates that organizations must provide ongoing training for employees to handle risk assessment tools which develops awareness across the workplace.
6. The RBI together with other regulatory bodies can apply these findings to improve banking regulations and inspection systems which strengthen banking stability through different exposures to risk.

6. Conclusion

The research evaluation fully analyzed risk management effects on banking sector performance particularly for institutions established in the Delhi NCR territory. Statistical analysis confirmed that business risk, liquidity risk, leverage risk and organizational size and age affect bank performance based on Return on Assets (ROA) and Return on Equity (ROE) measurements. The results showed leverage risk and organizational size and age as strong positive factors which suggest that well-structured banks with established operational models tend to achieve superior performance levels. Business risk along with liquidity risk were identified as negative performing factors which establish the need for enhanced financial control systems to reduce risks. A risk management system with total control and proactivity shows itself essential for creating financial success while building lasting competitive benefits. The study supports recent banking performance research by offering essential information to help both banking managers in their operations and policy-makers and academics enhance banking industry stability and operational effectiveness.

6.1 Limitations of the Study

The study contains the following restrictions which are discussed:

1. The study focuses on Delhi NCR only creating restrictions for the broader application of research results across other geographic areas.
2. The research focuses on banking exclusively which prevents generalization of results to financial and non-financial industry sectors.
3. Non-probability convenience sampling served as the method for data collection which could generate sampling bias affecting the sample's representativeness.
4. The investigation utilizes a single-time data collection through its cross-sectional method thus it constrains researchers from monitoring extended time patterns and cause-and-effect connections.
5. The research data was collected by distributing self-administered questionnaires to participants but these methods could introduce response bias along with social desirability bias.
6. A perfect R^2 value (1.000) in the regression model raises concerns about both overfitting and multicollinearity because these conditions compromise the accuracy of future predictions.
7. As a limitation the research solely depends on linear regression models yet more advanced techniques such as SEM PLS-SEM and AI-based modeling approaches would have generated additional insights into the topic.
8. This study lacks qualitative data through interviews or case studies that would enhance the interpretation of research findings.

6.2 Suggestions and Recommendations for future research

Following Suggestions and Recommendations for future research are mentioned below:

1. Incoming liquidity management tools and sufficient liquid reserves combined with real-time monitoring systems will help banks prevent operational problems.
2. Financial managers need to find the correct ratio between debt and equity so leverage produces its maximum beneficial effects on business performance.
3. Smaller financial institutions should form partnerships while performing mergers to attain both size benefits and organizational development goals.
4. Predictive analytics together with AI-driven risk assessment techniques help organizations improve their forecasting abilities for asset return variations.
5. Risk-related activities must match RBI regulation standards and they must follow international risk management systems which include Basel III.
6. Organizations need to develop performance indicators specific to risk which will boost their internal surveillance practices and governance procedures.
7. A continuous series of training sessions must exist to help employees from all organizational levels develop their risk-awareness skills.

8. Research should incorporate additional financial institutions operating outside India to achieve broader understanding of its findings.
9. The analysis of performance modification during different economic cycles requires a time-series or longitudinal research design to investigate how risk elements influence results.
10. The analysis requires SEM methods and PLS-SEM methods and machine learning systems to extract stronger information.
11. Research examining how risk impacts NBFCs and insurance companies as well as cooperative banks can expand knowledge about risk effects.
12. Researchers who conduct studies in the future should use interviews and focus groups and case studies to acquire contextualized analytic evidence.
13. Research the impact that both corporate governance systems together with digital banking technologies have on risk management success.
14. Research should include analysis of macroeconomic indicators including inflation rates and interest rates to establish their influence on bank performance.

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