Risk Governance and Bank Risk-Taking Behavior: Comparative Analysis of Islamic and Conventional Banking in Pakistan

Zufran Ullah Research Scholar, Quaid-i-Azam University, Islamabad Dr. Ilyas Sharif Quaid-e-Azam College of Commerce, University of Peshawar, Pakistan E-mail: <u>ilyasqacc@uop.edu.pk</u> Dr. Syed Hamid Ali Shah Quaid-e-Azam College of Commerce, University of Peshawar, Pakistan Dr. Abid Khan (Corresponding Author)

University of Malakand, Pakistan E-mail: drabidkhan21@gmail.com

Naveed Iqbal

Branch Operation Manager, Askari bank Ltd, Nowshera Road Sheikh Maltoon Mardan Pakistan, <u>naiqball983@gmail.com</u>

Haji Afsar

Islamic University of Madinah, Kingdom of Saudi Arabia, E-mail: hajiafsar313@gmail.com

Abstract:

Objectives of the study are to experimentally discover the dimension where banking industry considers various managing risk methods and practices while trading with diverse risks and to assess managing risk operations of Islamic and conventional banking systems in Pakistan. Moreover, the methods used in analyzing and making comparative study of managing risks operations in Islamic and conventional banking system in Pakistan have been discussed. This research paper is built on quantifiable research methods. It uses primary data for analysis. The facts are collected from senior management of banks in Islamic and conventional banking system in Pakistan. The finding of the discussion shows that identification of risks, estimation of risk; understanding risks and managing risks are the very effective variables in contributing to managing risks operation of both types of banks working in Pakistan. On the contrary understanding risks and managing risk are the very important variables in managing risk operation of both banks. Furthermore, the discussion shows that there is a distinction among both banks regarding identifying risks and managing risks operations. The current study will be valuable for the manager of risks, professionals, conservative banks, Islamic banks and for those make policies, in addition to for the point of view of academics. The outcomes of this research will be valuable for improving the managing risks operations of banking industry working in Pakistan. It is also helpful for researchers and banks staff to have an image about the growth of managing risks operations of banks. While they will utilize the outcomes of this research paper to upgrade their managing risk operations, they will be capable to construct trust of the shareholders and participants of the market, which in return will increase their goodwill and revenue.

Keywords: Risks Management Practices, Risks identification, Risks Assessment and Analysis, Credit Rating Analysis, Banking Sector

Introduction

Banks give liquidity and monetary services to people by receiving amounts from depositors and investing that amount as loan to needy ones. Banks convert short-range credits to long term credits by modifying the interest rate where some portion is given to investors. Islamic banking system is the largest developing sector in banking industry. Islamic banking system reveals an enormous development with respect to financial resources and the number of financial institutions. According to Fitch rating agency the worth of Pakistan Islamic financial industry is approximately 42 billion US dollar. According to State Bank of Pakistan, there are round about 1693 Islamic banking operating in the country by the end of May 2021. Although 11 subbranches of Islamic banking are working in the country. So, the total number of branches and subbranches are 3956.

The banking industry faces multidimensional risks having unfavorable effects on their business. Managing risks lessens the unfavorable consequences of the risks on monetary output and financial resources of a business. Currently the banking industry faces risks of liquidity, foreign exchange, interest rate and other market risks that may lead to failure of banking organizations. Almost 45 years ago the banking industry encountered only credit and market risks, while currently growth in the banking sector has to tackle risks due to fresh products. Due to the crash of Breton Woods's system, the increased unpredictability of foreign exchange rates, the growth of fresh products, transformation of banking industry, survival issue of banks due to increased risk managing costs and numerous catastrophes necessitating regulation and supervision for the whole monetary system the need for managing risks has increased. The objectives of risk management operation are to avoid the upcoming failure of monetary system (Alshater, Khan, Hassan, & Paltrinieri, 2023; Anvarovich, 2022; Meyer & Davis, 2000).

Managing risks help in decreasing organizational losses. It is an essential and highly used tool in the monetary industry (Asif, 2022; Carey, 2001). To improve the value of investors, banks need a long-term plan and regulations for efficiently managing risks. It gives the strength to exist in hard times (Al-Khadash & Feridun, 2006; Asrori, Mukhibad, & Nurkhin, 2023). Therefore, properly managing risk is required for existence and success of the banking industry that comprises of conventional and Islamic banks. Conventional and Islamic banks work simultaneously in economies and receive savings from their clients and advance the collected amount to needy individuals, households and (not) for profit organizations (Belkhaoui, 2023; Bhatt, Ahmed, Iqbal, & Ullah, 2023; CHAPELLE, 2023). However, conventional banks get deposits and give loan on interest basis and cover all their expenses and get their profit from difference of the interest rates (Ariff & Rosly, 2011; Choudhry, 2022).

These banks have only to follow law of the land and may invest in any interest free or interest-bearing business opportunities while, Islamic banks receive deposits and advance asset backed loans to needy individuals and (non)business entities within the parameters of banking laws as well as Islamic jurisprudence (Alshater et al., 2023; Azadarmaki, Asl, Bagheri, & Mousavi; M. K. Hassan, İslam, Ahmed, & Sarker, 2023). Both Islamic and conservative banks face multifaceted risks in their operations. Credit risk is a common concern for both, arising from the potential default of borrowers (Ding & Wei, 2023; Haddad, 2023; M. K. Hassan et al., 2023). Market risk is another shared challenge, as fluctuations in interest rates, foreign exchange, and equity prices affect their investments (Alshater et al., 2023; M. K. Hassan et al., 2023; Kayani, 2023). Operational risk poses threats due to internal system failures, human errors, and fraud (Kibria & Siddiqui, 2022; Mairafi, Hassan, & Mohamed-Arshad, 2022). Moreover, liquidity risk remains significant, affecting their ability to meet short-term obligations (Maroof, Basit, & Khan, 2022). A comparative analysis of these risks can provide valuable insights into the mechanisms required to ensure the stability and sustainability of both banking systems, fostering financial resilience in the face of various economic challenges.

This study examines managing risks operations in the banking industry, which is an evolving process due to difficult business model, risk taking and rules and regulations requirements. The foremost objective of the current research is to experimentally discover

the dimension through which banking industry considers various kinds of managing risk methods and practices of both banks in the country. It tries to plug the gap in the experimental works on managing jeopardy in Islamic and conservative banking system operating in Pakistan. It too accepted that Islamic financial institution system has its special outlooks in handling risks.

This research paper tries to respond to the below queries:

- Does Islamic banking system RMP are different from those of conventional banking system
- How both the banks are managing their risk management operations.

This current study is important for policy makers, shareholders, and academicians of Islamic and conventional banking system operating in Pakistan. This exploratory study fulfills the gap due to dearth of analysis on the managing risk operations of both kinds of banks managing in Pakistan in three diverse ways. First, this study makes comparative analysis of managing risks of both kinds of banks managing in Pakistan. Secondly, the study is grounded on primary statistics which raises trustworthiness of the research findings. Thirdly, this study arises concern over the ignored area of managing risk operations in banking sector as economy of Pakistan is based on Islamic and conventional banking systems. Both types of banks run in parallel directions. It is very amazing and observing to make comparative study of managing risk in both banking systems. Consequently, this study give more power to the existing works in the region of managing risk and bridge the gap between both types of banking systems. As very little research has done so far in this area, therefore we are focusing to develop a platform for the upcoming research.

Research Objectives

- 1. To discover methods for risks measurement and the tools for reducing risks used by both banking systems management in Pakistan.
- 2. To determine the methods and ways through which managing risks operations are determined.
- 3. To study the degree to which both kinds of monetary institutions use managing risks approaches in dealing with the risks and whether there is any major distinction in exercise of both banking systems in Pakistan.

Literature Review

Many scholars studied risks and elements of managing risks in conventional and Islamic banking systems. Researchers widely studied the risks and elements of managing risks in traditional banking system (Abedifar, Molyneux, & Tarazi, 2013; Al-Khadash & Feridun, 2006; Arora & Agarwal, 2009; Arunkumar & Kotreshwar, 2006; Beck, Demirgüç-Kunt, & Merrouche, 2013; Fatemi & Fooladi, 2006; A. Hassan, 2009; Khalid & Amjad, 2012; Khambata & Bagdi, 2003; Niinimäki, 2004; Wetmore, 2004). However, Islamic banking is a new and developing area of research internationally and very little studies conducted on managing risks in Islamic banks(Allyn et al., 1997; A. Hassan, 2009; Y. Hassan & Naser, 2013; Kabir, Worthington, & Gupta, 2015; Khalid & Amjad, 2012). Although there is very slight study specially on how to manage risks in Islamic banks in Pakistan like(Ashraf, Yazid, & Remli, 2021; Khalid & Amjad, 2012), very few studies conducted on making a

comparative analysis of managing risk operations in both banks in Pakistan like(Khurshid, Nazar, Ajmal, & Danish, 2022; Nazir, Tayyab, Sajid, ur Rashid, & Javed, 2012; Shafique, Hussain, & Taimoor Hassan, 2013). Currently, there is instability in Pakistan that has pushed both banks to encounter obstacles to develop.

Therefore, there is a dire demand to discover and examine both banking system with time to time and specifically with respect to managing risk in banks. Risk is the unpredictability owing to fluctuations of revenue and losses. The risks of conservative banks include credit, liquidity, foreign exchange, interest rate and market risks(Al-Tamimi, 2002; W. Ali et al., 2022; Beck et al., 2013; Bhattacharva & Chattopadhyay, 2009). Risks can be split into three main groups: transactional, systematic and operating. Systematic risk is diversified that can be tackled tactfully. Such risks cannot be diversified but can be reduced to the some extent by the use of reducing and transforming methods (Santomero 1997). Whereas transactional risks create problems for persons and firms who deal with foreign currencies. Credit Risk are important in banking organizations as 60% of credit risks are related to conventional banks(Beck et al., 2013; Ding & Wei, 2023; Drzik, Nakada, & Schuermann, 1998). It refers to the potential of borrowers defaulting on their loans, leading to financial losses for the bank. arises from changes in the market prices and the statement of financial position. It includes risks related to interest rates, foreign exchange rates, and equity prices (Bessis, 2011; Ghosh, 2012). Interest Rate Risks arise due to a change in interest rates as interest increases the value of the bond decrease and vice versa. As interest rates increase, the value of bonds decreases, and vice versa.

Foreign Exchange Risk is the jeopardy of losses arising owing to the changes in the exchange rate (Bessis 2011). Liquidity Risks are the main risks in the banking industry as the risk arises when the banks are incapable to pay their debts. It involves the risk of not having sufficient funds to cover liabilities. Transactional risk may include the above-mentioned risks, which encompass credit risk, market risk, interest rate risk, foreign exchange risk, and liquidity risk. While Operational Risks are related to direct or secondary damage due to nonperformance of inside methods, employee and system from outside events. Managing risk is sum of actions planned to reduce possible losses(Akhter, Abdul Halim, Mehzabin, Shahriar, & Azad, 2023; Alazzabi, Mustafa, & Karage, 2023; Anderson & Narus, 1990; Cumming & Hirtle, 2001). Three plans are used to reduce risks: eliminating risk, transferring risk to other person and accepting the risks(M. Ali, Khattak, & Alam, 2023; W. Ali et al., 2022). while, (Alisherovich & Ugli, 2023; Alsamhi et al., 2023), provide four risk treatment to recognize the risk to; avoid, reduce, transfer and accept risk. It is stated that managing risk is a vital part of the company's long-term strategy.

Managing risk practices comprises of numerous factors. Managing risk of conventional banks involves disclosure, identification, collecting, monitoring data on risk, assessing risk, purpose of the management, procedure for products and control, evaluation of managing risk, making of strategy, appraisal of performance, plan implementation, reporting the risk against opportunities, threat, and decision on the risk (Baldoni, Giordano, and Martelli 1998); (Harrington and Niehaus 1999), ; (Bhattacharya and Chattopadhyay 2010); (Rehman, Benamraoui, and Dad 2018)IRM 2002). Ability of banks to recognize, point out, estimate, control and monitor the risks are very efficient for managing risks (Rehman, Benamraoui, and Dad 2018). Though banks need model for estimating and measuring the risks, still some risks like operating risks cannot be quantified. Operating risks can be measured qualitatively, which is more effective and proper way to take any decision (Khalid and Amjad 2012b) SBP, 2003; 2010). The major purposes are dependent on strategic, operational, compliance and reporting. For efficiently managing risk, banks need to make long term planning to tackle the risks in

the portfolio. Banks must decide on a balanced risk tolerance range for controlling risks. Effective risk management makes risk reduction quick and efficient (Bhattacharya and Chattopadhyay 2010).

Conceptual Framework for the Study

Constructed on past studies, the conceptual structure for the study is dependent on linkage among the risk managing operations and practices. Conceptual framework for the study is given below.

RMP= f (URRM, RI, RAA, RM, CRA and bank types)

This model contains dependent, independent and control variables which is take into account in the current research article. All kinds of variables are discussed below in detail.

Dependent Variable

Dependent variable is the one whose value is dependent on the value of independent variable(s). Risk Management Practices (RMP) is dependent variable. Dependent variable examined through senior and expert employee functioning in department of risk of bank, training in managing risk, making risk managing policies, rules and regulations to manage risks.

Independent Variables

These variables are those variables which bring variations in the dependent variables. In this conceptual framework, URRM, RI, RAA, RM, CRA and bank types are independent variables. These variables have a favorable link with the managing risk operations (Rosman 2009); (Al-Tamimi 2002)Below are independent variables.

Understanding Risk and Risk Management (URRM): it is calculated on learning and managing of risks in banks, managing risk responsibilities and the essential of managing risk in banks.

Risk Identification (RI): is estimated to identify and prioritize risk, to identify risks at transitional stages and continuous recognition of speculation prospects.

Risk Assessment and Analysis (RAA): It is measured on examination, occurring of risks, estimation of costs and advantages and analyzing risks' implementation quantitatively and qualitatively.

Risk Monitoring (RM): is assessed through examining of risk management and control system in banking, application of action plan, communication and recording in the banking system.

Credit Risk Analysis (CRA): is estimated on examination of credit worthiness, implementation of the 5 Cs and the counting model of credit.

Control Variable:

Islamic and conventional banking system is taken as control variable. Hypothesis is developed based on the conceptual framework. Past research studies have described managing risk operations and the related functions and duties of higher and lower management. For example, it is the duty of managing the risk department to identify risks and estimations and analyze risks.

Hypothesis Development

After the international monetary catastrophe, managing risk operations in banks have epic worth in researcher interest. Managing risk can be explained as the procedure, through which disclosure to risk is professed, recognized, analyze, assessed, graded, oppressed and revised(Kibria & Siddiqui, 2022; Rahman, Alsmady, Ibrahim, & Muhammad, 2014; Tafri, Rahman, & Omar, 2011). This procedure is preferably adopted by the proper consumption of materials to reduce, perceive and switch the likelihood and the effects of dangerous proceedings)(Tafri et al., 2011). Commonly banks are concerned to various forms of risks, including financial and no financial risks. Monetary jeopardies contain credit risk, foreign exchange risk, market risks, liquidity, interest and bankruptcy risks. The main non-financial risks that banks encounter are the operating risks. Islamic banks due to their some special features faces some special risks such as sharia, noncompliance risk, goodwill risk and assets price risk (Tafri et al., 2011). Past literature point out that there is a great distinction between the Islamic and conservative banking system model and these studies also indicate that how theses dissimilarity are linked to the kinds of risks that each kin of bank facing. There are some principles that make the distinction between the business of Islamic banking system and conservative banking system which are as follow;

Ususry (use of interest) Gharar (uncertainty linked with speculation)

Providing funds for some unlawful schemes which are not allowed in Islamic jurisdiction, for instance it is dependent on the code of profit and loss distribution system and standard of backing deal by actual monetary deal which involve some tangible assets)(Beck et al., 2013; Y. Hassan & Naser, 2013; Jameel & Siddiqui, 2023; Kabir et al., 2015; Kayani, 2023). So the corporate model for Islamic banking system is more risky than the conservative banking system due to profit and loss sharing rules (Maroof et al., 2022; Masduqie, Hardiyanti, & Panjaitan, 2023; Masood, Bellalah, Mansour, & Teulon, 2010; Rahman et al., 2014). Furthermore, due to financial support by physical assets alter the nature of risk in Islamic banking system which generate possession risk and enhance operational risk by bringing a fresh jeopardy component which does not disturb the conservative banking system(Nahar & Azim, 2023; Rahman et al., 2014; Rehman, Benamraoui, & Dad, 2018). Islamic banking system also affected from markets which less developed having minimum quantity of risk hedging methods and state securities which is dependent on profit and loss distribution, the lack of least profit on reserve account that are changing in principal bank (Masood et al., 2010; Rahman et al., 2014; Sajid, Ayub, Malik, & Ellahi, 2023). Some additional features which may upsurge peril together with the complications of agreements, restricted non payments sanctions and ethics peril inducements which are mainly triggered by profit and loss distribution agreements For example, there are(Abedifar et al., 2013; Asif, 2022; Lassoued, 2018). Some kind of monetary products which generate extra credit risks for banking system that follow sharia rules and regulations(Kabir et al., 2015; Lassoued, 2018; Mahmood & Ahmed, 2023). In some specified Islamic banking system cannot reduced the credit risk by made request collateral from the clients because the agreement are dependent the partnership agreement. Furthermore, Islamic system has low switch over the organization of schemes which is funded on the basis of Mudarabah (Abedifar et al., 2013; Ashraf et al., 2021).

On the other hand, the business model which is used by the Islamic banks have some characteristics that can minimize the risk, which include the Islamic point of view of client, which may bring some greater loyalty and put off default, therefore, lessoned the withdrawal risk. There are some other elements which may lessen the risk in Islamic banking system, for instance distributing their fatalities with the investors in form of profit and loss sharing contracts, an option point which is provide to conservative Islamic banking system(Masood et al., 2010; Rehman et al., 2018). So it is contended that the result of risk distributing is very limited is Islamic banking system(Rahman et al., 2014), specifically because these operations tendency to enhance the withdrawal risk(Mahdi & Abbes, 2018). With regards to insolvency risk, there is a special linkage between the Islamic banks and investor account holder may give Islamic banks with high capability to tolerate losses, however simultaneously, the and the risk management practices have operational limitation on investment and managing risk operation may involve Islamic banking system in high risk that conservative banking system. For example, taking and giving interest is strongly forbidden in sharia laws. The Islamic banking system which contends with conservative banking system may be forced to reflect their pricing activities, which in turn may give raise to the interest rate risk (Abedifar et al., 2013).

Furthermore, with drawl peril may encourage Islamic banking system to rupture sharia funded principle. The ethical hazards may be caused due to payment of competitive marketplace return to the speculation account holders, nonetheless of the real presentation (Abedifar et al., 2013). One of the big challenges for Islamic banking system is to using high power to operate their fluidity and in that way to manage liquidity risk (Mahdi & Abbes, 2018; Rehman et al., 2018; Shafiq & Nasr, 2010), since the property of Islamic banking system are not more liquid than those of the conservative banking system. Furthermore, Islamic banking system frequently facing problems in protecting finance from market quickly as the very low growth of monetary instruments, the shorten of Islamic banking system. These elements make stronger the liquidity risk in Islamic banking system and push then to hold high capital reserve (Mahdi & Abbes, 2018b)(Mahdi and Abbes, 2018). The turndown of Ihlas Finans in turkey is very latest instance of letdown of Islamic banking system due to the lack of liquidity.

Shortly, the forecasts of theory do not indicate whether Islamic banking system is more or less firm than conservative banking system (Beck et al., 2013). By contrast, the risk distributing arrangement of Islamic banking system may be act as a risk lessoning factor. Furthermore, ethical hazards and different may be shorten in Islamic banking system. In contrast, the profit loss funding may enhance the whole risk on the bank balance sheet, because it contributes equity risk to debt risk. In addition, in Islamic banking system the operating risk elements may be higher due to the difficulties of sharia rule and lawful conformity managing risks. Consequently, confining Islamic banks to specific kinds of assets, the less using of prevarication tools and the shorting of big worth liquid assets like sharia conformity bonds make Islamic banking system more flexible than conservative banking system. Experimental research which makes comparative analysis of risk kinds and degree in Islamic banking system and conservative banking system also generate different consequences. For example, (Lassoued, 2018)arise question whether Islamic banking system have greater credit risk than the conservative banking system in Malaysia from 2005 to 2015. (Lassoued, 2018)make comparative observation of annually risk level data which is linked to credit risk of twenty-two conventional banks and seventeen Islamic banks. The outcomes of this research indicate that the Islamic banking system in Malaysia is very weak to credit and liquidity risk and in commonly, these banks have a very little level of constancy than the conservative banking system.

In contrast, (Abedifar et al., 2013)made comparative analysis of the liquidity and insolvency measure and consistency characteristics of Islamic banking system with those of conservative banking system, using the previous data of 553 banks from twenty four Countries which mainly related to organization of Islamic countries from 1999 to 2009. The finding of these research shows that Islamic banking system has less credit and

insolvency risk than those conservative banking system in those countries which population exceed than 90 % of Muslim people. But no other great distinction have found in these observations between the Islamic banking system and conservative banking system. Likewise (Abedifar et al., 2013) have find that in some recent experimental research which is based on Islamic banking system and conservative banking system and showed that no great difference have existing between the Islamic banking system and conservative banking system with regard to their efficiency, competency and characteristics of risk. But Islamic banking system is less risky than those of conservative banking system.

A. Hassan, (2009)determine the insolvency risk using a date set of fifty-two Islamic banks and conservative banking system which are selected from organizations of Islamic countries from the period 2007-2015. They determine that Islamic banking system has low liquidity risk due to the reason of their high strength. Although low liquidity risk may firstly enhance stability, manager will also take risk to increase the return of their business, which cancel out beginning effects and may raise bank inconsistency. Definitely, precautionary measures should be taken into account in explaining these different effects because greater differences across various countries, with regard to what is considered and what is not considered by sharia rules and through which methods sharia products are design, specifically as some banks offering conservative goods replenish as sharia acquiescent products. Furthermore, the various kinds of conventional and sharia based produced may make the financial statement JIABR sheet and profit and loss elements not compared between one type of bank and another within the same country (Beck et al., 2013; Lassoued, 2018). Regarding the above analysis and debate it is specified that the risks in Islamic banking system may be more diverse than the conservative banking system. So, the following hypothesis is going to be formulated.

- H_l: Types of risks and their levels are significantly different in Islamic banks and conventional banks in Pakistan.
- H₂: Understanding risk and risk management, risk identification, risk assessment and analysis, risk monitoring, credit rating analysis are the determiners of risk management practices.
- H₃: There is a significant distinction between both types of banks RI, URRM and RMC.

Research Questions

Three main research queries of the study are as follows.

- 1. Are Islamic and conventional banking systems and their level of risk are different?
- 2. Are understanding, management, identification, valuation and analysis, and checking of risk and credit rating analysis are the determiners of managing risk practices?
- 3. Is Islamic banking system RMP different from those of conventional banking system?

Research Methodology

This research is quantifiable where primary data is collected from senior managers of both banks in Pakistan. Quantitative techniques are adopted to collect data through questionnaire for checking hypothesis, drawing inferences and generalizing results(Neuman & Dickinson, 2003).

Collection of Primary Data

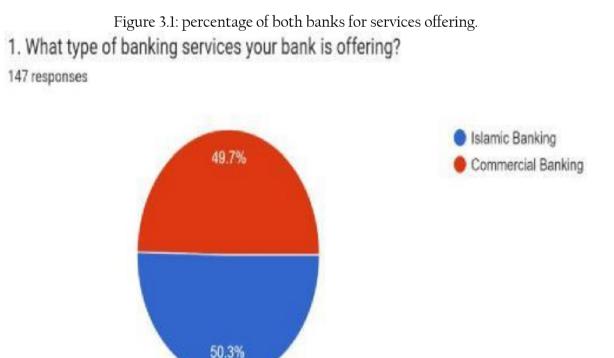
Date for the study was collected through questionnaire. Questionnaire is most suitable

method for gathering primary data (Tufano, 1996). It is a very quick and cheaper way to gather facts from a very large set of people(Miller, 2011; Neuman & Dickinson, 2003; Scheuren, 2004). Researchers on managing risks operations in banks highly use questionnaire(Al-Tamimi, 2002; A. Hassan, 2009; Khalid & Amjad, 2012; Shafiq & Nasr, 2010). The 5-point Likert scale was adopted from (Khalid & Amjad, 2012) to measure the responses of the respondents.

Sampling and Data Collection Methods

Purposive sampling was adopted in the study. Researchers choose the respondents to answer the desired questions(Saunders & Summers, 2011). Data were collected from branch managers, senior credit managers, senior managers, and senior experts from the managing risks department of Islamic and conservative banking system working in regional branches of National Bank of Pakistan, Meezan Bank Limited, Alfalah Bank Limited, Askari Bank Limited, Bank Al Habib, Dubia Islamic Bank, Faisal Bank Limited, Bank of Khyber, Habib Bank Limited in Islamabad. All main branches and Pakistan Stock Exchange are in capital city of Pakistan. The questionnaire was in English and based on variables found in the past study where questions were closed ended and divided into eight portions relating to various risks. Pretesting was done on 10 participants where they were asked not only to answer the questions but also to correct the main problems in the questionnaire beside giving suggestions for more clarity in the survey form. After the testing the questionnaire was improved. In this study 500 questionnaire were personally distributed equally among the Islamic banks and conventional banks where a total of 210 questionnaires were filled and reverted however, only 150 questionnaires were accurate and valid for analyzing that represent effective representation of 71% of the total sample. The survey form was distributed in February 2022 and was collected in May 2022.

The following graph indicates the percentage of respondents from Islamic and conservative banking system working in Pakistan from whom data gathered.



Source: ttps://docs.google.com/document/d/1m6gy7MuPgTB6Tzq7EXAaA2b5nO_DUGbWyQIsdviANkI/edit

619

Research Instruments

Questionnaire survey form was adopted from past studies conducted on managing risk operations(Al-Tamimi, 2002; A. Hassan, 2009). After that it changed by adding some more items, statement and stages in managing risks operations in banks by using Likert scale from 1 to 5 (l= Strongly Disagree, 2=Disagree, 3= neutral, 4= strongly agree, 5= agree). The questionnaire comprised of close-ended questions where Section A was about the types of risks, Section B comprised of methods of risks identifications. The third section is about risk identification while, fourth section is about risk estimation and analysis. In the fifth and sixth sections monitoring risks and credit rating have been inquired.

Reliability and Validity of Primary Data

The survey was designed to motivate respondents to answer the questions by making questionnaire short and clear to reduce vagueness and misperception. Trustworthiness of data was ensured by applying Cronbach's alpha to all types of variables. Cronbach's alpha, aim to measure the inside uniformity of the output within the scales. Statistics is considered consistent and trustworthy if the value is equal to or larger than 0.70 (De Vaus, 2002; Hair, Gabriel, & Patel, 2014; Nunnally, 1978). The whole output was cross-checked from two diverse types of data sources.

Generalization of the Study

It denotes range through which results of the study will be applicable to the population(Ashraf et al., 2021; Neuman & Dickinson, 2003; Ryan & Bernard, 2000). The outcomes of the research are considered generalizable, due to high response rate and amount of information collected from respondents.

Data Analysis

The composed statistics were examined through SPSS; the most widely used software in social sciences for analyzing the quantitative data. Data was coded, then analyzed in three sections where section one comprised of trustworthiness and bank frequency analysis, respondents' profile and descriptive statistics on all managing risks operations and managing risk practices to show the difference among the features of the two types of banks. Section two is about the geographical analysis of the risks existing in the Islamic and conventional banking system, methods to identify risks, types of banks, methods to measure the risks, methods to reduce the risks, tools to operate the risks, involvement of the BOD in the managing risk operations and the application of managing risks regulations in both banking system. Section three explains the inferential statistics which include correlation matrix, scatter plot, regression analysis and Mann-Whitney U test.

This is an experimental study which condensed the results from the primary statistics which is gathered via questionnaire survey form. This section describe the descriptive data output, hypothesis and after that questions would be explained and also bring into account some inferential statistics like regression analysis, scatter plot and correlations. This section classified into three segments. First segments will describe the analysis of reliability, bank frequency analysis, profile of respondents and the descriptive statistics of all aspects of managing risks operations and process. Segment two is based on the presentations of the kinds of risks in both types of banks in graphical bases. Segment three describes the inferential statistics on the whole basis on bank data and stepwise discussion of regression analysis in Islamic and conventional banks. Descriptive output is calculated to know the distinction in the feature and attribute of both banks operating in Pakistan.

Reliability Analysis

The analysis of reliability is estimated on all basis of managing risks operations individually and collectively. Understanding risks and managing risks is estimated on six statements. Although, risks and managing risks operations is estimated on ten statements, identification of risks on five statements, assessment and analysis of risks on seven statements, monitoring of risks on six statements and credit rating discussion on seven statements.

Table 4.1 indicates the analysis of reliability of variables in the study. The examination of reliability is used to know the steadiness of the outputs. Commonly, when the Cronbach's alpha is more than or same to 0.7, then it is considered as acceptable and it is the indications of consistency of the output(Nguyen, 2022; Nunnally, 1978; Rehman et al., 2018). Basically, Cronbach's alpha is applicable to separate features, for instance understanding risks and managing risks, identification of risks, analysis and estimation of risks, managing risks operations, monitoring risks and analysis of credit risks (0.837) (0.923) (0.818) (0.896) (0.896) (0.891). The whole Cronbach's alpha for the six variables of managing risks operations is 5.261. It shows that there exists an acceptance level of uniformity among responses against every variable of managing risks operations.

S. No Variables		Cronbach's Alpha	No. of items	
1	CRA	.837	6	
2	RAA	.923	10	
3	URRM	.818	5	
4	RRMP	.896	7	
5	RM	.896	6	
6	CRA	.891	7	

Table 4.1: Reliability Analysis

Source: SPSS software generated

Frequency Analysis

Sample Characteristics

The first phase of the questionnaire form was constructed to collect information about the responder's demographic features. These features are structured to know the respondent's profile and characteristics. The current study is in line with the past studies, for example (Ariff & Rosly, 2011; Beck et al., 2013; M. K. Hassan et al., 2023) have studies the feature of sample taken in the research studies. They use the demographic questions of the respondents like; position, experience, genderetc. although, (Abu Hussain & Al-Ajmi, 2012)took the types of jobs, higher qualification and various kind of banks as the feature of banks and respondents. The figure shows the profile of both banks. Outcomes of the overall profile reveal that 50% are Islamic banks and 50% are conventional banks.

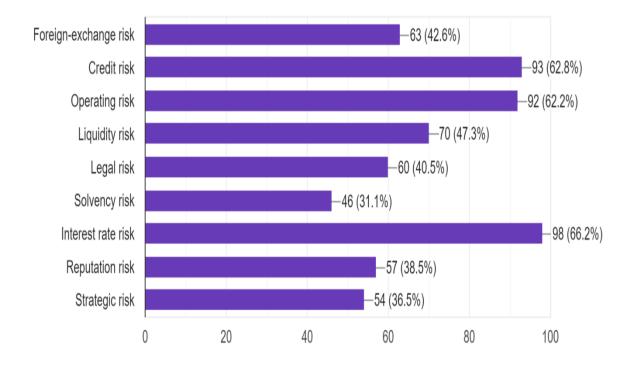
Graphical Representation of Risks and Risk

Types of Risks Banks Facing

The below table 4.2 indicate the outcomes of the various kinds of risks encounter by both banking system operating in Pakistan. The highest risks which are encountered by both banks are the following: interest rate risk, credit risk, operating, liquidity risks, foreign

exchange risks and reputations risks. Like conventional banking system credit risks are looking is more unique kinds of risks which are encounter by the Islamic banking system in Pakistan. This is defending by the accomplishment that the very popular source of finance given by the Islamic banks is mudaraba which highest default level . Islamic banking system are encounter highest liquidity risks there is a lack of sharia complaint money market that deal with the sharia rules and regulations (Abu Hussain & Al-Ajmi, 2012; Alisherovich & Ugli, 2023; Ariff & Rosly, 2011; Iqbal & Mirakhor, 2011; Masood et al., 2010). Collectively there is no distinction between both types of banks in the ranking of kinds of risks encountered by them. The raising operating risk is the illusion of low level of literacy rate, training and fragile internal control system or it may be possible that there may be lack of understandability in the bank personnel. The foreign exchange risks are also higher in both banks. The existence of exchange risks shows the incapacity of Pakistan economic system due to political and economic instability.

Section A: Types of risk. What type(s) of the risk is your bank facing? (Tick as many apply) 148 responses

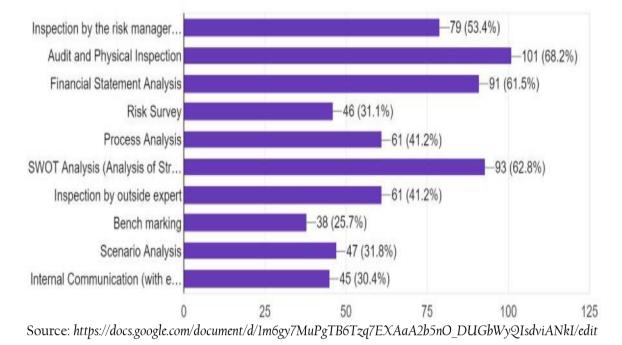


Source: ttps://docs.google.com/document/d/1m6gy7MuPgTB6Tzq7EXAaA2b5nO_DUGbWyQIsdviANkI/edit

Techniques for Identifying Risks

Table 4.3 below indicate the ranks of identifying risks techniques that is used by both banking systems. In accordance with the consequences, audit and physical inspection techniques is most widely used by both banking systems to identify the risks. After that inspection by the manager and SWOT analysis techniques is most widely used by both banks to identify the risks.

Section B: Methods of risk Identification: Which of the following methods your.... is using to identify risk? (Tick as many apply) 148 responses



Descriptive Statistics

This research reveals various factors about the risk of managing operations between both types of banks operating in the country. Keeping in mind the various operational differences, that past study reveals that both banking system faces the same kinds of risks with some little differences. Islamic banking system has more chances of losses due to their strict regulatory compliance and sharia rules and regulations. So, it is predicted that due to their higher risks Islamic banking system have serious managing risk operations as to compare to conventional banking system. The data were analyzed by checking the reliability that is considered for measuring the major construction in the questionnaire survey. Basically reliability measurement tools are used to measure the uniformity of the questions which is responded by the respondents, it show the scale is free from measurement bias (Hair et al., 2014; Lassoued, 2018). The most generally used reliability measurement scale is Cronbach's alpha, it has a minimum acceptance scale is 0.7. The output of the six variables shows that as shown in the table reveal that Cronbach's alpha for the six variables is more than minimum level. Therefore, it is measured reliably. The data were analyzed by considering the descriptive statistics of each variable including mean and standard deviations. Furthermore, regression tools were used to check the relationship among the constructs related to managing risk operations and the ANOVA tools were also used to inspect the differences among the mean scores of the responses from Islamic banks and conservative banking system.

Correlations

Table 4.4 indicates the coefficient correlation among all variables Anderson et al. (1990) propose the rules of thumb method to check that there exists correlation among all variables. In accord with, when correlation coefficient is more than 0.7 then it indicate a problem. Furthermore, (Bryman & Burgess, 2002; Fatemi & Fooladi, 2006; Fishell, Aberle, Judge, & Perry, 1985; Neuman & Dickinson, 2003; Tsang, Lee, Wong, & Chong, 2012;

Wiek, Talwar, O'Shea, & Robinson, 2014)stated that the correlation coefficient among variables should not exceed than 0.8 otherwise it show multicollinearity problem among variables.

The outcomes indicate that there is a favorable and positive linkage among the variables. There is no issue of multicollinearity between CRA and RAA (r=.527), CRA and URRM (r = 0.552), CRA and RM (r = 0.734), CRA and RI (r = 0.689), CRA and RRMP (r = 0.634), RAA and URRM(r = 0.532), RAA and RM (r = 0.648), RAA and RI (r = 0.585), RAA and RRMP (r = 0.547), URRM and RM (r = 0.642), URRM and RI (r = 0.750), URRM and RRMP (r = 0.755), RM and RI (r = 0.718), RM and RRMP (r = 0.678), RI and RRMP (r = 0.760). The output indicates that there available a problem of multicolinerty (Anderson & Narus, 1990) between RI and RRMP (r = 0.760). This issue can be solved by erasing these variables from the model when analysis of regression is applied. Although with regard to (Bryman & Burgess, 2002; Fatemi & Fooladi, 2006; Fishell et al., 1985; Neuman & Dickinson, 2003; Tsang et al., 2012; Wiek et al., 2014) the output of correlation do not indicate any problem of multicolinerty as the correlation coefficient value is lower than 0.80.

Table 4.4 Correlation							
	CRAX	CRAAX	URRMX	RMX	RIX	RRMPX	
CRAX	1						
RAAX	.527**	1					
URRMX	.552**	.530**	1				
RMX	.734**	.648**	.642**	1			
RIX	.689**	.585**	.750**	.718**	1		
RRMPX	.634**	.547**	.755**	.678**	.760**	1	

Regression Analysis

Table 4.5 indicate that the output of analysis of regression on both types of banks. It shows the impact of all explanatory variables on the dependent variable managing risks operations. The output indicates that R square is 68%, it reveal that 69% of the fluctuations in the dependent variables are due to independents variables and the rest 32% is due to other elements. The F value is also significant so we can say that the whole model is a good fit. The Durbin Watson value is 2.186, it indicate that there is negative autocorrelation. Table 4.5 indicates the value of beta. Beta describes the contribution of explanatory variables to the dependent variable. RI, RAA and CRA showing the greatest beta, it means that their contribution is more than other explanatory variables in managing risks operations. The output of t value indicate that URRM (t = 5.136, sig.= .000), RI (t = 3.314, sig = .001), RAA (t = .629, sig = .531), RM (t = 1.342, sig = .182), CRA (t = 1.664, sig = .098), are statistically significant at 1% and 10%.

Table 4.5 Model Summary									
R	R ²	Adj.	St Er	Change Statistics				Durbin	
		\mathbb{R}^2							Watson
.825ª	.680	.669	.50770	R	F	df1	df2	Sig.	
				Change				U	
				.680	60.477	5	142	.000	2.186

a. Predictors: (Constant), CRAX, RAAX, URRMX, RMX, RIX

	Sum of Squares	DF	Mean Square	F	Sig.
Regression	77.943	5	15.589	60.477	.000 ^b
Residual	36.602	142	.258		
Total	114.546	147			

Table 4.6 ANOVA

a. Dependent Variable: RRMPX

b. Predictors: (Constant), CRAX, RAAX, URRMX, RMX, RIX

Conclusion

The outcomes of the discussion shows that identification of risks, estimation of risk, understanding risks and managing risks are the very effective variables in contributing to managing risks operation of both types of banks in Pakistan. On the contrary understanding risks and managing risk are the very important variables in managing risk operation of both banks. Furthermore, the discussion shows that there is a distinction among both banks regarding identifying risks and managing risks operations.

Implication

Regarding what is mentioned in the current research thesis, a variety of policy implication will be proposed for the growth of managing risks in both types of banking industry. The current study will be valuable for the manager of risks, professionals, conservative banks, Islamic banks and for those make policies, in addition to for the point of view of academics. The outcomes of this research will be valuable for improving the managing risks operations of banking industry working in Pakistan. It provides help to researchers and banks staff to have an image about the growth of managing risks operations of banks. While they will use the outcomes of this thesis to upgrade their management risk operations, they will be capable to construct trust of the shareholders and participants of the market, which in return will increase their goodwill and revenue. This research has also significance for the Islamic banking system by highlighting the drawbacks in the managing risks operations of banks. It will also be valuable to make their current operations better and to introduce rules linked to measuring the risks, reducing risks, monitoring the risks and showing the exercise. This study has significance for the conservative banks by accelerating the requirement to make better estimations of risks and analyzing rules for the banking industry.

Recommendations of the Study

This research study state that Islamic, conservative, state banks and the regulatory authority of banking industry should make better their managing risks operations in the banking industry of Pakistan. The current research thesis point out drawbacks and fault in the managing risks operations of both banks in Pakistan. This study is also better for the Pakistani banking industry for managing risks operations based on standard banking concepts. Below are some of the recommendations provided by the current research thesis:

- 1. It will be valuable to provide training to the banking staff regularly, since managing risk is a recurring area. Fresh rules and regulations were presented by monitoring experts specifically after the international monetary catastrophe 2008. There is also a need to revise and evaluate the quality of training regularly.
- 2. The exposure on sharia noncompliance is not visible in the Islamic banks report, it show doubt on the trustworthiness of the Islamic banking industry, while the Islamic banking industry are supposed to conduct their operational activities regarding sharia

rules and regulations.

- 3. It is also highlighted that so many monetary industries has exposed the same outcomes qualitatively from time to time and it is needed to consider risk exposure model, it is the requirement to be update as the monetary industry recurring from time to time.
- 4. Banks should also provide detail on the managing risks operations, governing the risks and culture of the risks in the financial reports. As there is a need of information on this area, it is counted as misleading and improper for the shareholders and for those who invest.
- 5. Both types of banks should focus on, to identify risks and give priority to the operations. While it is stated in the questionnaire survey that it is hard to identify and to prioritize the big risks. There is a requirement to have a system of identification which will be based on decomposition and aggregations of risks.

Research Limitations

The current study enlarges the understating of managing risks operations of banking system and experimental study of managing risks process and the exposure exercise of risk based on number and standard. In addition, it enlarges the study on the determinants of managing risks operations and especially makes contribution to the functions of governing risks analysis. The current study has some limitations:

First, this study is linked to the cultural features of managing risk operations which have effects on the observations of the plaintiffs. While the present research is conducted in Pakistani banking system. Every country has its own culture and features, which make its own managing risks functions. In the coming times, this topic can be extended to other countries.

Secondly, this research thesis has limited times for completion, so the sample cannot be increased because the top manager is taken as a sample who is not available every time. As a result of low period of data gathering, data were only gathered from only capital of Pakistan Islamabad. So, in upcoming times data could be gathered from various cities.

Thirdly, this research is not capable to induce all over the world due to changes in monitoring amendments, guidelines and exercise in other states. Therefore, it is restricted to the managing risks operations of banks working in Pakistan.

In addition, this study focuses on the presence of managing risks features and not the concentration of the exposure of the same. It does not show the fundamental linkage among the theme and sub theme under study. It is still valuable as techniques to increase the results of the conventional study model, for instance survey study.

Future Direction

Future study could be conducted in more detail of each kind of risks for well and comprehensive awareness of managing risk operations, for instance; to identify risk, estimating risks, monitoring risks, reducing and reporting the risks. While the present research is done on the managing risks operations of banks operating in Pakistan. Such types of study can be conducted in other various states separately by the same study design. It is hoped that various nations will have different outcomes owing to the cultural and rules and regulations distinctions. In addition, group study could also be carried out by using proposed managing risk operations model in various countries. It will be also interesting to conduct comparative and contrasting study of managing risks operations of various countries. As the managing risk operations are always recurring problem after international monetary catastrophe 2009. Therefore, it is required to conduct comprehensive research study regularly as the fluctuations are occurring regarding regulatory requirement and changes of sharia rules in the Islamic banking system. In addition, future study can also be

conducted on other monetary industry like insurance and private companies.

References

- Abedifar, P., Molyneux, P., & Tarazi, A. (2013). Risk in Islamic banking. Review of finance, 17(6), 2035-2096.
- Abu Hussain, H., & Al-Ajmi, J. (2012). Risk management practices of conventional and Islamic banks in Bahrain. *The Journal of Risk Finance*, 13(3), 215-239.
- Akhter, T., Abdul Halim, Z., Mehzabin, S., Shahriar, A., & Azad, M. A. K. (2023). Do national culture and economic freedom affect bank risk-taking behavior? Evidence from GCC countries. International Journal of Islamic and Middle Eastern Finance and Management.
- Al-Khadash, H. A., & Feridun, M. (2006). Impact of strategic initiatives in management accounting on corporate financial performance.
- Al-Tamimi, H. A. H. (2002). Risk management practices: an empirical analysis of the UAE commercial banks. *Finance India*, 16(3), 1045.
- Alazzabi, W. Y. E., Mustafa, H., & Karage, A. I. (2023). Risk management, top management support, internal audit activities and fraud mitigation. *Journal of Financial Crime*, 30(2), 569-582.
- Ali, M., Khattak, M. A., & Alam, N. (2023). Credit risk in dual banking systems: does competition matter? Empirical evidence. International Journal of Emerging Markets, 18(4), 822-844.
- Ali, W., Ibrahim Alasan, I., Hussain Khan, M., Ali, S., Cheah, J.-H., & Ramayah, T. (2022). Competitive strategies-performance nexus and the mediating role of enterprise risk management practices: a multi-group analysis for fully fledged Islamic banks and conventional banks with Islamic window in Pakistan. International Journal of Islamic and Middle Eastern Finance and Management, 15(1), 125-145.
- Alisherovich, T. S., & Ugli, N. B. B. (2023). Internal Control in Banks. EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY, 3(3), 34-39.
- Allyn, E., Crompton, L., Dickemann, M., Khan, B., Mujtaba, H., Naqvi, N., . . . Homosexualities, I. (1997). Stephen O. Murray Will Roscoe.
- Alsamhi, M. H., Al-Ofairi, F. A., Álahdal, W. M., & Farhan, N. H. (2023). The impact of financial risk on economic value added: a comparative analysis of Islamic and commercial banks of Yemen. *International Journal of Business Excellence*, 29(2), 266-287.
- Alshater, M. M., Khan, A., Hassan, M. K., & Paltrinieri, A. (2023). Islamic Banking: Past, Present and Future. Journal of College of Sharia & Islamic Studies, 41(1).
- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of marketing*, 54(1), 42-58.
- Anvarovich, N. E. (2022). Improving the Risk Management System in a Commercial Bank as a Condition for Minimizing Credit Risks. EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY, 2(2), 43-45.
- Ariff, M., & Rosly, S. A. (2011). Islamic banking in Malaysia: Unchartered waters. *Asian Economic Policy Review*, 6(2), 301-319.
- Arora, D., & Agarwal, R. (2009). Banking risk management in India and RBI supervision. Available at SSRN 1446264.
- Arunkumar, R., & Kotreshwar, G. (2006). Risk Management in commercial banks (A case study of public and private sector banks). Paper presented at the Indian Institute of Capital Markets 9th Capital Markets Conference Paper.

- Ashraf, M. S., Yazid, A. S., & Remli, N. B. (2021). Impact of Financial Risk Management Practices on Islamic Banks Performance in Pakistan. *Research Journal of Finance and Accounting*, 12(14), 12-22.
- Asif, M. (2022). Integration of Information Technology in Financial Services and its Adoption by the Financial Sector in Pakistan. *Inverge Journal of Social Sciences*, 1(2), 23-35.
- Asrori, Mukhibad, H., & Nurkhin, A. (2023). Economic consequence of social and environmental concern in Islamic bank–Do COVID-19 pandemic matter? *Cogent Business & Management*, 10(2), 2225818.
- Azadarmaki, A., Asl, T. J., Bagheri, S. N. S., & Mousavi, F. S. Islamic Economics: A Survey of the Literature.
- Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking & finance*, 37(2), 433-447.
- Belkhaoui, S. (2023). Banking system and economic growth linkages in MENA region: Complementarity and substitutability between Islamic and conventional banking. *Journal of Islamic Accounting and Business Research*, 14(2), 267-288.
- Bhatt, T. K., Ahmed, N., Iqbal, M. B., & Ullah, M. (2023). Examining the determinants of credit risk management and their relationship with the performance of commercial banks in Nepal. *Journal of risk and financial management*, 16(4), 235.
- Bhattacharya, A., & Chattopadhyay, P. K. (2009). Biogeography-based optimization for different economic load dispatch problems. *IEEE transactions on power systems*, 25(2), 1064-1077.
- Bryman, A., & Burgess, B. (2002). Analyzing qualitative data: Routledge.
- Carey, A. (2001). Effective risk management in financial institutions: the Turnbull approach. *Balance sheet*, 9(3), 24-27.
- CHAPELLE, D. A. (2023). Operational risk management. The Risk Management Handbook: A Practical Guide to Managing the Multiple Dimensions of Risk, 56.
- Choudhry, M. (2022). The principles of banking: John Wiley & Sons.
- Cornwell, N., Bilson, C., Gepp, A., Stern, S., & Vanstone, B. J. (2023). The role of data analytics within operational risk management: A systematic review from the financial services and energy sectors. *Journal of the Operational Research Society*, 74(1), 374-402.
- Cumming, C., & Hirtle, B. (2001). The challenges of risk management in diversified financial companies. *Economic policy review*, 7(1).
- De Vaus, D. (2002). Analyzing social science data: 50 key problems in data analysis: sage.
- Ding, B. Y., & Wei, F. (2023). Overlapping membership between risk management committee and audit committee and bank risk-taking: Evidence from China. *International Review of Financial Analysis*, 86, 102501.
- Drzik, J., Nakada, P., & Schuermann, T. (1998). Risk, Capital, and Value Measurement in Financial Institutions. The Journal of Lending & Risk Management, 23-27.
- Fatemi, A., & Fooladi, I. (2006). Credit risk management: a survey of practices. *Managerial finance*, *32*(3), 227-233.
- Fishell, V., Aberle, E., Judge, M., & Perry, T. (1985). Palatability and muscle properties of beef as influenced by preslaughter growth rate. *Journal of Animal Science*, 61(1), 151-157.
- Haddad, A. (2023). Does the country's religion affect the financial performance of conventional and Islamic banks? Comparative study in the international framework. *Journal of Islamic Marketing*, 14(2), 410-434.
- Hair, J. F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool.

Brazilian Journal of Marketing, 13(2).

- Hassan, A. (2009). Risk management practices of Islamic banks of Brunei Darussalam. *The Journal of Risk Finance*, 10(1), 23-37.
- Hassan, M. K., İslam, M. T., Ahmed, Z., & Sarker, J. I. (2023). Islamic banking in Bangladesh: a literature review and future research agenda. *International Journal of Islamic and Middle Eastern Finance and Management*.
- Hassan, Y., & Naser, K. (2013). Determinants of audit fees: Evidence from an emerging economy.
- Iqbal, Z., & Mirakhor, A. (2011). An introduction to Islamic finance: Theory and practice (Vol. 687): John Wiley & Sons.
- Jameel, M. A., & Siddiqui, D. A. (2023). The Effect of Credit, and Liquidity risk, Along with Capital Adequacy and Audit Quality on bank's financial stability: A comparative study between Islamic and Conventional banks of Pakistan. *Along with Capital Adequacy and Audit Quality on bank's financial stability: A comparative study between Islamic and Conventional banks of Pakistan.(April 28, 2023).*
- Kabir, M. N., Worthington, A., & Gupta, R. (2015). Comparative credit risk in Islamic and conventional bank. *Pacific-Basin Finance Journal*, 34, 327-353.
- Kayani, U. N. (2023). Islamic Finance an alternative mode for short term financing–working capital management. International Journal of Islamic and Middle Eastern Finance and Management, 16(2), 310-322.
- Khalid, S., & Amjad, S. (2012). Risk management practices in Islamic banks of Pakistan. *The Journal of Risk Finance*, 13(2), 148-159.
- Khambata, D., & Bagdi, R. R. (2003). Off-balance-sheet credit risk of the top 20 Japanese banks. Journal of International Banking Regulations, 5, 57-71.
- Khurshid, S., Nazar, S., Ajmal, M. M., & Danish, Z. (2022). PROPOSING AND TESTING A MODEL OF CORPORATE GOVERNANCE AND BANKS PERFORMANCE; A COMPARATIVE STUDY BETWEEN THE CONVENTIONAL AND ISLAMIC BANKS. PalArch's Journal of Archaeology of Egypt/Egyptology, 19(3), 1093-1109.
- Kibria, A., & Siddiqui, M. B. (2022). An analysis of the Pakistani banking industry's performance in relation to Islamic and conventional banking. *International Research Journal of Management and Social Sciences*, 3(3), 31-39.
- Lassoued, M. (2018). Comparative study on credit risk in Islamic banking institutions: The case of Malaysia. *The Quarterly Review of Economics and Finance*, 70, 267-278.
- Mahdi, I. B. S., & Abbes, M. B. (2018). Relationship between capital, risk and liquidity: a comparative study between Islamic and conventional banks in MENA region. *Research in International Business and Finance*, 45, 588-596.
- Mahmood, N. S., & Ahmed, E. M. (2023). Mediating effect of risk management practices in Iraqi private banks financial performance. *Journal of Financial Services Marketing*, 28(2), 358-377.
- Mairafi, S. L., Hassan, S., & Mohamed-Arshad, S. B. (2022). Comparative Analysis on Liquidity and Risk-Taking Behaviour between Islamic and Conventional Banks in MENA Region. Journal of Islamic Economic and Business Research, 2(2), 172-188.
- Maroof, L., Basit, A., & Khan, K. N. (2022). Responsiveness of Banks' Stability Towards Peak and Trough Phases of Business Cycle: A Comparative Analysis of Islamic Banks and Conventional Banks. *COMSATS Journal of Islamic Finance (CJIF)*, 7(2).
- Masduqie, M. H. A., Hardiyanti, I. S., & Panjaitan, A. S. (2023). Manajemen Risiko Asuransi Syariah: Dasar Hukum, Tahapan Dan Urgensinya. Yurisprudentia: Jurnal Hukum Ekonomi, 9(1), 22-38.

- Masood, O., Bellalah, M., Mansour, W., & Teulon, F. (2010). Non-performing loans and credit managers' role: a comparative approach from Pakistan and Turkey. *International journal of business*, 15(3), 347.
- Meyer, C., & Davis, S. (2000). Blur: The speed of change in the connected economy. *Work Study*, 49(4).
- Miller, D. (2011). Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship theory and practice*, 35(5), 873-894.
- Nahar, S., & Azim, M. I. (2023). Executives' perceptions of risk management disclosures and its determinants: a developing country perspective. *Journal of Accounting in Emerging Economies*, 13(1), 1-21.
- Nazir, S., Tayyab, A., Sajid, A., ur Rashid, H., & Javed, I. (2012). How online shopping is affecting consumers buying behavior in Pakistan? *International Journal of Computer Science Issues (IJCSI)*, 9(3), 486.

Neuman, S. B., & Dickinson, D. K. (2003). Handbook of early literacy research.

- Nguyen, Q. K. (2022). The impact of risk governance structure on bank risk management effectiveness: Evidence from ASEAN countries. *Heliyon*, 8(10).
- Niinimäki, J.-P. (2004). The effects of competition on banks' risk taking. *Journal of Economics*, 81(3), 199-222.
- Nunnally, J. C. (1978). An overview of psychological measurement. *Clinical diagnosis of mental disorders: A handbook*, 97-146.
- Rahman, R. A., Alsmady, A., Ibrahim, Z., & Muhammad, A. D. (2014). Risk management practices in Islamic banking institutions: A comparative study between Malaysia and Jordan. *Journal of Applied Business Research (JABR)*, 30(5), 1295-1304.
- Rehman, A. A., Benamraoui, A., & Dad, A. M. (2018). A comparative study of Islamic and conventional banks' risk management practices: empirical evidence from Pakistan. *Journal of Banking Regulation*, 19, 222-235.
- Ryan, G. W., & Bernard, H. R. (2000). Techniques to identify themes in qualitative data.
- Sajid, R., Ayub, H., Malik, B. F., & Ellahi, A. (2023). The Role of Fintech on Bank Risk-Taking: Mediating Role of Bank's Operating Efficiency. *Human Behavior and Emerging Technologies*, 2023.
- Saunders, N. L., & Summers, M. J. (2011). Longitudinal deficits to attention, executive, and working memory in subtypes of mild cognitive impairment. *Neuropsychology*, 25(2), 237.
- Scheuren, F. (2004). What is a Survey?, American Statistical Association. *Alexandria*. V A. USA.
- Shafiq, A., & Nasr, M. (2010). Risk management practices followed by the commercial banks in Pakistan. International Review of Business Research Papers, 6(2), 308-325.
- Shafique, O., Hussain, N., & Taimoor Hassan, M. (2013). Differences in the risk management practices of Islamic versus conventional financial institutions in Pakistan: An empirical study. *The Journal of Risk Finance*, 14(2), 179-196.
- Tafri, F. H., Rahman, R. A., & Omar, N. (2011). Empirical evidence on the risk management tools practised in Islamic and conventional banks. *Qualitative Research in Financial Markets*, 3(2), 86-104.
- Tsang, N. K., Lee, L. Y., Wong, A., & Chong, R. (2012). THEMEQUAL—Adapting the SERVQUAL scale to theme park services: A case of Hong Kong Disneyland. *Journal of Travel & Tourism Marketing*, 29(5), 416-429.
- Tufano, P. (1996). Who manages risk? An empirical examination of risk management

practices in the gold mining industry. *the Journal of Finance*, 51(4), 1097-1137.

- Wetmore, J. L. (2004). Panel Data, liquidity risk, and increasing Loans-to-Core Deposits ratio of large commercial bank holding companies [1992-2000]. *American Business Review*, 22(2), 99.
- Wiek, A., Talwar, S., O'Shea, M., & Robinson, J. (2014). Toward a methodological scheme for capturing societal effects of participatory sustainability research. *Research Evaluation*, 23(2), 117-132.