



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

**“THE CRITICAL ASSESSMENT OF LOAN PROPOSALS AND
EVALUATION METHODS ADOPTED BY ISLAMIC BANKS.”**

By

SONEEL ZAFAR

Student ID: **1503492**

Doctor of Business Administration

Supervised by

Professor Dr Jonathan Liu

Associate Professor Dr Roisin Mullins

Presented as part of the requirement for the award of DBA at

University of Wales Trinity Saint David

October 2023

SUPERVISOR DECLARATION FORM

Student Name **SONEEL ZAFAR**

Supervisors Name **PROF JONATHAN LIU, DR ROISIN MULLINS**

I acknowledge that the above-named student has regularly attended the planned meetings and **actively engaged** in the dissertation supervision process. They have provided regular timely draft chapters of the dissertation and followed given guidance.

I confirm that I have approved the dissertation title specified below.

Title of dissertation:

**“THE CRITICAL ASSESSMENT OF LOAN PROPOSALS AND EVALUATION METHODS ADOPTED
BY ISLAMIC BANKS.”**

Signed*Prof Jonathan Liu*.....

Date*30.10.23*.....

Signed*Dr Roisin Mullins*.....

Date*30.10.23*.....

STUDENT DECLARATION FORM

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed  (Soneel Zafar)

Date 29.10.2023.....

STATEMENT 1

This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used the extent and nature of the correction is clearly marked in a footnote(s). Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

Signed  (Soneel Zafar)

Date 29.10.2023.....

STATEMENT 2

I hereby give consent for my thesis, if accepted, to be available for deposit in the University's digital repository.

Signed  (Soneel Zafar)

Date 29.10.2023.....

ACKNOWLEDGEMENT

In the name of God, the most merciful and compassionate. Praise to be God for his mercy which has strengthen and made it possible for me to complete this thesis.

First of all, I would like to express my utmost gratitude and acknowledgement to my research supervisors Prof Dr Jonathan Liu and Dr Roisin Mullins. I am heartily thankful to both of my supervisors for their continuous support in my difficult times, encouragement, help and guidance throughout the DBA programme. Their lectures, supervision, immense research knowledge, and moral support from the concept to the conclusion of the study, enabled me to understand, write and complete my research work. Also, I want to express my gratitude, regards to University of Wales Trinity Saint David especially research committee, head of campus, director of the studies, and staff members for their continuous support.

I am also very much grateful to my respected parents, my lovely wife and siblings for their tremendous encouragement, psychological and financial support, without their love and prayers, I could not manage it. Hence, dedicating this dissertation to all my family. I do remember the family members and friends I have sadly lost during Covid-19; I pay my utmost respect to them. Last but not least, I am thankful to my work colleagues as well for their support and motivation.

Soneel Zafar

ABSTRACT

The study identified, explored, and critically analysed the methods used to evaluate loan proposals and the credit risk assessment protocols used by Islamic banking and financial institutions. The study critically analysed, to what extent sources of risks are different in Islamic as compared to conventional banks.

An in-depth review of literature on Islamic banking was completed to identify the current research problem and established the research question, aims and objectives. The study's research question was to establish if there were differences on how loans were evaluated and approved in Islamic banking and financial Institutions. Islamic financial institutions work on the principles of Shariah law (Islamic economic system) and conventional banks are based on Interest and supports the interest-based economies, which is prohibited in Islam, focuses on how these two systems can co-exist.

A qualitative style of methodology was adopted. An inductive approach was implemented using an interpretivist research philosophy. The grounded theory research design was followed to help in developing, improving, and enhancing the knowledge about the Islamic banking and their evaluation models. Data was collected using open-ended questionnaires and semi-structured interviews. The data was analysed using NVIVO software and MS Excel.

The study found that Islamic banks follow thorough processes to evaluate the loan proposals. The processes were considered as a mix of systematic models or tools and judgment approaches. Islamic banks use distinct methods to evaluate creditworthiness of loan proposals as compared to conventional banks due to their differing principles and practices. Islamic banks offer financing products and services led by shariah principles based on Islamic laws which differentiates them from conventional banks in numerous ways.

The study contributes to the literature and theory by identifying the existing gap in the knowledge and fulfilling the gap by successfully completing all the research objectives and questions. There was limited information available on the way Islamic banks evaluates the creditworthiness of loan application, the current study has achieved a milestone by identifying the gap and contributing to the knowledge for learners, Islamic banking consumers and for Banks. Additionally, based on the findings from the research, a new evaluation model has been developed for Islamic banks to follow for loan application

evaluation process. The evaluation model will help Islamic banks in the standardisation of the evaluation process and for borrowers to understand the process in advance and meet the requirements. The Islamic banks will be able to standardise their offerings by publishing their evaluation requirements and methods using the same tools.

Keywords: Islamic banking, creditworthiness, Islamic loan evaluation, shariah principles, riba, Ijarah, Murabaha and Musharaka.

TABLE OF CONTENTS

TITLE PAGE	i
SUPERVISOR DECLARATION FORM	ii
STUDENT DECLARATION FORM	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vii
TABLE OF FIGURES	xiv
TABLE OF TABLES	xv
CHAPTER 01: INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Assessing Loan Proposals in Islamic Banks	1
1.1.2 Effectiveness of Evaluation Methods in Islamic Banks	1
1.2 Introduction to Islamic Banking and Finance.....	2
1.3 Professional Perspectives	2
1.3.1 Islamic Banking.....	3
1.3.2 Islamic Finance	3
1.4 Basis of Islamic Banking and Finance	4
1.4.1 Origins and Historical Overview of Islamic Banking and Finance in the UK.....	6
1.4.2 Origins and Historical Overview of Islamic Banking and Finance in Pakistan.....	6
1.5 Components of Islamic Banking and Financial Industry	7
1.6 The Growth of Islamic Banking and Finance in Asia	8
1.7 The Growth of Islamic Banking and Finance in the UK and Europe.....	9
1.7.1 History of Islamic Banking.....	9
1.7.2 Regulation of Islamic Banking in the UK	9
1.7.3 Growth of Islamic Banking in Europe.....	9
1.8 Islamic Banking Today: The Size of the Industry	10
1.9 The worldwide spread of Islamic Banking	10
1.10 Islamic Finance in the News.....	11
1.11 Islamic Finance in Practice	12
1.12 Global Islamic Bank Finance.....	13
1.13 The Future of Islamic Finance Industry.....	13
1.14 Problem Statement.....	14
1.15 Significance of the Study.....	15

1.16 Rationale of the Study.....	16
1.17 Research Aims.....	17
1.18 Research Objectives	18
1.19 Research Questions	18
1.20 Limitations of the Study.....	18
CHAPTER 02: LITERATURE REVIEW	20
2.1 Introduction to Banks	20
2.1.1 Evolution of the Banking System	20
2.1.2 Types of Banks	21
2.2 Islamic Banking System	22
2.2.1 Principles of Islamic Banking System	23
2.3 Growth of Islamic Banking System.....	24
2.4 Fundamentals of Islamic banking system	25
2.5 History of Islamic banking in Europe	27
2.5.1 Historical Development of Islamic Banking in the UK.....	27
2.5.2 Historical Development of Islamic Banking in Europe	28
2.6 Scope and Development of Islamic Banking	29
2.6.1 Recent Trends and Challenges	29
2.7 Customer's perception, awareness, satisfaction, demand, and adoption of Islamic banking system	29
2.8 Essence, Prerequisites, and Factors Influencing Creditworthiness	32
2.8.1 Essence of Creditworthiness	33
2.8.2 Prerequisites for Creditworthiness	33
2.8.3 Factors Influencing Creditworthiness	33
2.8.4 Implications of Creditworthiness	34
2.8.5 Prerequisites of Creditworthiness	34
2.8.6 Factors Influencing Creditworthiness	35
2.9 Credit Analysis.....	36
2.9.1 Information Gathering	36
2.9.2 Financial Statement Analysis	37
2.9.3 Credit Risk Assessment	37
2.9.4 Credit Decision	38
2.10 The Role of Accounting Information in Creditworthiness Analysis	40
2.10.1 Financial Statements as the Foundation.....	40

2.10.2 Assessing Liquidity and Solvency	40
2.10.3 Profitability Indicators.....	40
2.10.4 Cash Flow Assessment	41
2.10.5 Risk Management	41
2.10.6 Accounting Standards and Regulations	41
2.10.7 Regulatory Compliance	41
2.10.8 Audit Assurance	41
2.10.9 Technology in Creditworthiness Analysis	41
2.10.10 Financial Statement Analysis	42
2.10.11 Ratio Analysis	42
2.10.12 Historical Performance Assessment	43
2.10.13 Forecasting Future Financial Performance	43
2.10.14 Compliance with Accounting Standards and Regulations	43
2.10.15 The Significance of Financial Ratios	43
2.11 The Role of Financial Ratios in Islamic Banking	44
2.11.1 Ensuring Sharia Compliance.....	44
2.11.2 Enhancing Transparency	45
2.11.3 Limitations of Accounting Information	45
2.12 A Lender-Based Theory of Collateral	47
2.13 Collateral Requirements in Banking and Finance	50
2.13.1 Collateral in Conventional Banking.....	51
2.13.2 Collateral in Islamic Banking	52
2.13.3 Significant Distinctions between Traditional and Islamic Collateral Requirements	53
2.14 Difficulties in Securing Funding from Banks	55
2.14.1 Critical Problems in Bank Lending to Small Businesses: Cyclical	59
2.14.2 Critical Problems in Bank Lending to Small Businesses: Structural	62
2.15 Regulatory Constraints.....	66
2.15.1 The Different Categories of Regulatory Constraints in the Banking Sector.....	67
2.15.2 Implications of Regulatory Constraints on Banks	68
2.16 External Factors Affecting Bank Proposal Acceptance	69
2.16.1 External Factors Influencing Proposal Acceptance.....	69
2.16.2 Challenges Faced by Banks in Proposal Acceptance.....	71
2.16 Shariah Principles, Islamic Contracts, and Islamic Banking Products	74
2.16.1 Shariah Principles in Islamic Banking	74

2.16.2 Concepts of Islamic Banking in the UK.....	75
2.16.3 Challenges and Opportunities.....	76
2.16.4 Islamic Contracts	76
2.16.5 Islamic Banking Products in the UK.....	78
2.16.6 Islamic Banking Contracts in the UK	78
2.16.7 Shariah Compliance: Islamic Banking Products Perspective.....	79
2.16.8 Key Principles of Shariah Compliance	80
2.16.9 Challenges in Shariah-Compliant Product Development.....	81
2.16.10 Opportunities in Shariah-Compliant Product Development.....	82
2.16.11 Challenges in Shariah-Compliant Product Development.....	83
2.17 Shariah Compliance from a Product Development Perspective.....	85
2.17.1 The Role of Innovation in Shariah Compliance	85
2.17.2 Converting Concept into Product Commercialisation	86
2.18 Shariah Compliance: Constraints and Choices.....	89
2.18.1 Legal and Regulatory Environment for Islamic Banking	90
2.18.2 Principles Governing Islamic Banking	91
2.18.3 Global Presence of Islamic Banking	91
2.18.4 Regulatory Framework for Islamic Banking	92
2.18.5 Challenges in Islamic Banking	92
2.18.6 Future Developments in Islamic Banking.....	92
2.18.7 Legal Environment for Islamic Banking.....	93
2.18.8 Regulatory Framework.....	93
2.18.9 Challenges and Future Directions	94
2.19 Shariah Compliance: Internal Dynamics	96
2.20 Global Islamic Bank Finance.....	97
2.20.1 Demand for Shariah-Compliant Financial Products.....	99
2.20.2 Recognition and Regulatory Support.....	99
2.20.3 Resilience During Financial Crises	99
2.21 The Future of Islamic Finance Industry.....	101
2.21.1 Current State of Islamic Finance Industry.....	103
2.21.2 Challenges and Opportunities.....	107
2.22 Islamic Banking and the Global Financial Crisis	109
CHAPTER 03: RESEARCH METHODOLOGY	112
3.1 Overview	112

3.2 Research Philosophy	113
3.3 Research Approach	115
3.4 Research Design	115
3.4.1 Reflexivity and Validity.....	116
3.5 Sampling.....	117
3.6 Data Collection Methods	119
3.7 Ethical considerations	120
3.8 Limitations of research methodology and data collection.	121
3.9 Summary	121
CHAPTER 04: DATA ANALYSIS AND FINDINGS	124
4.1 Evaluation methods adopted by Islamic Banks.	125
4.1.1 Personal Information	127
4.1.2 Financial Information	128
4.1.3 Collaterals	131
4.1.4 Loans	132
4.1.5 Credit Reports	134
4.1.6 Market Factors	134
4.2 A unique evidence-based brief analysis and prospective of loan proposals - evaluated by the loan experts.	137
4.3 The distinguishing features, techniques or methods used by Islamic banks to evaluate creditworthiness of loan proposals.	144
4.3.1 Personal Information	144
4.3.2 Financial Information	144
4.3.3 Collaterals	145
4.3.4 Loans	145
4.3.5 Credit Report.....	145
4.3.6 Market Factors	146
4.3.7 Other Information.....	146
4.4 The methods used by Islamic banks to evaluate creditworthiness of loan proposals are different from conventional banks.	146
4.5 The impact of methods used by Islamic banks on conventional banks.....	151
4.5.1 Positive Impacts	151
4.5.2 Weak Impacts.....	152
4.6 the major risks involved or faced by Islamic banks and are different from conventional banks.	153

4.6.1 Credit Risk	154
4.6.2 Market Risk	154
4.6.3 Operational Risk	155
4.6.4 Liquidity Risk	156
4.6.5 Shariah non-compliance Risk	156
4.6.6 Other Risks	156
4.7 Current Issues in the Practice of Islamic Banking	157
4.7.1 Lack of standardisation	157
4.7.2 Limited products and services	157
4.7.3 Shariah Compliance issues	158
4.7.4 Lack of awareness, understanding and misconceptions	158
CHAPTER 05: CONCLUSION, CONTRIBUTION AND RECOMMENDATIONS	160
5.1 Evaluation methods adopted by Islamic Banks	160
5.1.1 Conclusion	160
5.1.2 Contribution	161
5.1.3 Recommendations	169
5.2 A unique evidence-based brief analysis and prospective of loan proposals - evaluated by the loan experts.	169
5.2.1 Conclusion	169
5.2.2 Contribution & Recommendation	170
5.3 The distinguishing features, techniques or methods used by Islamic banks to evaluate creditworthiness of loan proposals.	170
5.3.1 Conclusion	170
5.3.2 Contribution & Recommendation	171
5.4 The methods used by Islamic banks to evaluate creditworthiness of loan proposals are different from conventional banks.	172
5.4.1 Conclusion	172
5.4.2 Contribution & Recommendation	172
5.5 The impact of methods used by Islamic banks on conventional banks	173
5.5.1 Conclusion	173
5.5.2 Contribution & Recommendation	174
5.6 Major risks involved or faced by Islamic banks	175
5.6.1 Conclusion	175
5.6.2 Contribution & Recommendation	176

CHAPTER 06: SUMMARY & LIMITATIONS OF CURRENT STUDY, SCOPE FOR FUTURE AND FURTHER DIRECTIONS OF STUDIES.	178
REFERENCES	182
APPENDICES	217
APPENDIX 01 METHODS TO EVALUATE LOAN PROPOSALS	217
APPENDIX 02: GLOSSARY OF ISLAMIC BANKING AND FINANCE	218
APPENDIX 03: QUESTIONNAIRE	220

TABLE OF FIGURES

Figure 3.1 The Research Onion	113
Figure 3.2 Sampling Methods	118
Figure 4. 1 RQ1 – Methods used to evaluate loan proposals – Developed themes.	126
Figure 4. 2 RQ1 – Methods used to evaluate loan proposals – Developed themes and subthemes.....	126
Figure 4. 3 RQ1 – Methods used to evaluate loan proposals – Developed themes and subthemes.....	127
Figure 4. 4 Evaluation methods - Personal Information.....	127
Figure 4. 5 Evaluation methods – Financial Information.....	129
Figure 4. 6 Current Income NVIVO word tree.	130
Figure 4. 7 Current Debt NVIVO word tree.....	130
Figure 4. 8 Financial ratios NVIVO word tree.	131
Figure 4. 9 Evaluation methods - Collaterals	131
Figure 4. 10 Evaluation methods - Loans.....	133
Figure 4.11 Evaluation methods – Credit checks.....	134
Figure 4.12 Evaluation methods – Market factors	135
Figure 4.13 Evaluation methods – Other information.....	136
Figure 4. 14 Overall viability of loan proposals.....	137
Figure 4. 15 Initial screening test.....	137
Figure 4. 16 Financial position.	138
Figure 4. 17 Market likelihood.....	139
Figure 4. 18 Credit report / score.	139
Figure 4. 19 Appropriateness of application.....	140
Figure 4. 20 Viability for further scrutiny.....	141
Figure 4. 21 Chances of get conditional offer.....	141
Figure 4. 22 Assessed against other factors.	142
Figure 4. 23 Evidence based - evaluation of loan proposals.	143
Figure 4.24 Major risks faced by Islamic banks.	154

Figure 5.1 New Evaluation Model (NEM) – Islamic Banks	162
Figure 5.2 NEM: Stage 1 – Initial screening	163
Figure 5.3 NEM: Stage 2 - Detailed screening	165
Figure 5.4 NEM: Stage 3 – Conditional Offer or Rejection	166
Figure 5.5 NEM: Stage 4 - Further Screening (if applicable).....	166
Figure 5.6 NEM: Stage 5 – Final Screening	167
Figure 5.7 NEM: Stage 6 – Post Screening	168

TABLE OF TABLES

Table 4. 1 Respondent’s demographic profile	124
Table 4. 2 Respondent’s demographic profile	125
Table 4. 3 Principles behind the methods used to evaluate creditworthiness of loan proposals by Islamic and conventional banks.	146

CHAPTER 01: INTRODUCTION

1.1 Background of the Study

Islamic banks have gained their popularity in recent decades, driven by the increasing demand for financial products and services that adhere to Islamic law (Smith, 2022). Consequently, evaluating the critical assessment approaches employed by these institutions when considering loan proposals is necessary. Islamic banks employ a range of evaluation methods for assessing loan proposals. These methods encompass financial analysis, risk assessment, and credit scoring. The efficacy of these approaches depends on multiple factors, including the accuracy and completeness of the financial data provided by the borrowers, the quality of the collateral offered, and the borrower's creditworthiness (Ahmed, 2021). Although these methods have proven effective in evaluating loan proposals within Islamic banks, their precision relies on the availability of precise and reliable data. Therefore, Islamic banks must ensure access to accurate and dependable information when evaluating loan proposals (Khan, 2019).

1.1.1 Assessing Loan Proposals in Islamic Banks

Islamic banks typically employ various methods to evaluate loan proposals, which include financial analysis, risk assessment, and credit scoring. Financial analysis entails scrutinising the borrower's financial statements to gauge their financial health and ability to repay the loan. Risk assessment is employed to determine the level of risk associated with the loan proposal, considering factors such as the borrower's credit history, collateral, and current market conditions. Credit scoring assigns a numerical score to the borrower based on several factors, such as income, employment history, and credit record (Hassan, 2018).

1.1.2 Effectiveness of Evaluation Methods in Islamic Banks

Research has shown that the effectiveness of these evaluation methods in Islamic banks depends on several factors, including the accuracy and completeness of the financial data provided by the borrower, the quality of the collateral offered, and the borrower's creditworthiness. For instance, some scholars have identified that financial analysis is more effective when assessing loan proposals from small and medium-sized enterprises (SMEs) than evaluating proposals from larger corporations (Keshtiaray et al., 2020). This is because SMEs often need more financial resources and established credit histories than larger corporations, making financial analysis a crucial tool in evaluating their loan proposals. Similarly, credit scoring is an effective method for assessing loan proposals in Islamic banks,

especially when used with other evaluation techniques (Mohamed, 2017). Nevertheless, the accuracy of credit scores is contingent on the availability of precise and reliable data, which may be constrained in certain cases, particularly in emerging markets (Akhtar et al., 2019).

1.2 Introduction to Islamic Banking and Finance

Islamic banking and Finance encompass financial transactions conducted by Islamic principles and guidelines. These principles are rooted in the Islamic holy book Quran, the Hadith (the sayings of the Prophet Muhammad PBUH), and the Shariah (Islamic law). They are designed to promote social justice, equality, and ethical behaviour in financial dealings (El-Galfy et al., 2016).

One of the fundamental principles of Islamic Finance is the prohibition of *riba*, which denotes the practice of levying interest on loans. Instead, Islamic Finance relies on profit and loss sharing (PLS) arrangements, where the financial institution collaborates with the client to share the risks and rewards of a business venture (Khan, 2021). This approach promotes cooperation and deters speculative conduct. Another crucial principle is the prohibition of *Gharar*, referring to excessive uncertainty or ambiguity in a transaction, to promote transparency and clarity in financial dealings while discouraging transactions that rely on chance or speculation (El-Gamal, 2006).

The Islamic finance sector has showed remarkable growth in recent years, with estimates placing its assets at approx. \$2.88 trillion in 2020 (IFN Report, 2021). This expansion is attributed to increased demand from both Muslim consumers and non-Muslims who are drawn to the ethical and sustainable tenets of Islamic Finance. Islamic banking and Finance present a distinctive perspective on financial transactions that prioritises social justice and ethical conduct. As the industry expanding, it is wise to assume a more significant role within the global financial economy.

1.3 Professional Perspectives

Islamic banking and Finance represent a swiftly expanding industry that has garnered worldwide attention in recent years. Rooted in Islamic law (Shariah) principles, it operates strictly with these principles. The Islamic finance sector has attracted investors, businesses, and individuals seeking ethical and socially responsible investment opportunities. The

current study will provide an overview of the professional viewpoints on Islamic banking and Finance.

1.3.1 Islamic Banking

Islamic banking is a banking system characterised by strict adherence to Shariah law. It is grounded in principles such as risk-sharing, the prohibition of interest (riba), and the avoidance of investments in businesses considered haram or prohibited (Khan, 2021). The Islamic banking system offers diverse products and services, including profit-sharing investment accounts, leasing, and trade financing. The overarching objective of Islamic banking extends beyond profit generation; it also encompasses a commitment to contribute to societal betterment by supporting ethical and socially responsible investments (El-Gamal, 2006).

According to Siddiqui (2016), Islamic banking has grown rapidly since the 1970s and is now a global industry with assets estimated to be over \$2 trillion. Islamic banking has gained popularity among Muslims and non-Muslims due to its ethical and socially responsible principles. Islamic banks have also successfully attracted investors seeking diversification in their portfolios. Siddiqui (2016) stated that the success of Islamic banking can be attributed to its focus on ethical and socially responsible investments, which positively impact the environment and society.

1.3.2 Islamic Finance

Islamic Finance is a financial system that adheres to Shariah law, incorporating core principles like risk-sharing, the prohibition of interest (riba), and avoidance of investments in enterprises classified as haram (forbidden). It encompasses a range of products and services, including Islamic bonds (sukuk), Islamic mutual funds, and Islamic insurance (takaful) (Smith, 2020). The primary objective of Islamic Finance extends beyond profit-making; it also serves as a vehicle for promoting ethical and socially responsible investments that can benefit society (Brown & Jones, 2019).

Islamic banking and Finance provide a distinctive outlook on Finance and investment. Anchored in the principles of risk-sharing, interest avoidance, and haram-free investments, they embody a socially responsible and ethical industry (Chen & Rahman, 2018). Their global recognition has surged, driven by the appeal of portfolio diversification and the desire for ethical and socially responsible investment options among investors (Johnson et al., 2021).

The continued expansion of Islamic banking and Finance holds the potential to enhance financial stability and promote economic development (Adams & Patel, 2020).

According to Warde and Ribaudo (2010), the growth of Islamic Finance has been fuelled by the increasing demand for ethical and socially responsible investments. Islamic Finance has also successfully attracted investors seeking diversification in their portfolios. Warde and Ribaudo (2010) stated that the success of Islamic Finance can be attributed to its focus on ethical and socially responsible investments, which positively impact the environment and society.

Islamic Finance has gained recognition as a viable alternative to conventional Finance. According to Hamza and Hassan (2019), Islamic Finance has demonstrated resilience during times of economic crisis and has outperformed conventional Finance in some cases. Hamza and Hassan (2019) argue that Islamic Finance can contribute to financial stability and economic development by promoting risk-sharing and discouraging speculative investments.

1.4 Basis of Islamic Banking and Finance

Islamic banking and finance adhere to the principles of Islamic law, also known as Shariah, which explicitly prohibits practices such as interest payment or receipt (Riba), gambling (Maysir), and unethical investments (Haram) (Deloitte, 2021). Instead, this system promotes ethical financial practices, including profit and loss sharing (PLS), asset-backed financing, and investments aligned with ethical values. Islamic banking and finance foundations can be traced to the Quran and Hadith, which guide ethical and just economic conduct. The Quran mandates that all financial transactions must be based on mutual consent, transparency, and fairness principles, emphasising risk-sharing as a core concept. In such transactions, the lender and the borrower share the risks and rewards (Deloitte, 2021).

The popularity of Islamic banking and finance has increased, attributed to its resilience in financial crises and its commitment to ethical and sustainable practices. According to a study by Deloitte (2021), the global Islamic finance market is projected to experience a compound annual growth rate of 5.5% between 2021 and 2028, reaching a total value of \$3.8 trillion by the end of the forecast period. A pivotal principle in Islamic banking and finance is the strict prohibition of interest (riba). The Quran explicitly forbids the charging of interest on loans, affirming that "Allah has permitted trade and has forbidden interest"

(2:275). Instead, Islamic finance promotes profit and loss sharing (PLS) models, such as Mudarabah (partnership) and Musharaka (joint venture), which allow the lender to partake in the profits or losses of the borrower (Deloitte, 2021).

Another significant principle is asset-backed financing. Islamic finance mandates that all transactions be backed by tangible assets, such as property or commodities, to prevent reliance on speculative or uncertain factors. This principle promotes ethical investments, including those in renewable energy and social infrastructure projects (Deloitte, 2021).

The historical roots of Islamic banking and finance can be traced back to the Islamic faith, emphasising the avoidance of interest (riba) and the promotion of risk-sharing. The earliest instances of Islamic finance date back to the seventh century when Muslims in Medina engaged in trade and commerce under the guidance of Prophet Muhammad (PBUH). Nonetheless, modern Islamic banking and finance took shape only in the mid-twentieth century.

In 1963 the first modern Islamic bank, the Mit Ghamr Savings Bank, was established in Egypt. Subsequently, the Islamic Development Bank was founded in 1975, followed by the Dubai Islamic Bank in 1979. These institutions played a pivotal role in developing the modern Islamic financial system, which has expanded to encompass various financial products and services. Islamic finance is rooted in principles such as risk-sharing, asset-based financing, and the rejection of interest-based transactions, offering a wide range of financial products and services, including Islamic bonds (sukuk), Islamic mortgages (Ijara), and Islamic insurance (takaful). Factors like the growing demand for Shariah-compliant financial products among Muslims and the recognition of the potential benefits of Islamic finance by non-Muslims have driven the growth of the Islamic financial system. As of 2020, the estimated global value of Islamic finance assets reached \$2.88 trillion (IFN Islamic Finance News, 2020).

Recent years have witnessed increased global interest in Islamic finance, extending beyond the Muslim world. Many non-Muslim countries, including the UK, Singapore, and Hong Kong, etc. have established regulatory frameworks to support the expansion of Islamic finance within their jurisdictions. This has contributed significantly to the global growth and development of the Islamic financial system (IFN Islamic Finance News, 2020).

1.4.1 Origins and Historical Overview of Islamic Banking and Finance in the UK

Islamic banking and finance have experienced remarkable growth in the UK, marked by a rich history and substantial global influence. This financial system adheres to the principles of Islamic law, or Shariah, which prohibit interest-based transactions and activities considered unethical (Khan, 2016). In the early 1980s, the inception of Islamic banking in the UK occurred when several institutions established themselves in London, with the Islamic Bank of Britain leading the way in 1983. They aimed to provide Shariah-compliant financial services to the growing Muslim population (Khan, 2016). Subsequently, the industry rapidly expanded, establishing numerous Islamic banks and financial institutions across the UK.

Islamic banking and finance growth in the UK owes its momentum to various government initiatives. In 2002, the UK government enacted legislation enabling Islamic financial institutions to operate within the country. Additionally, in 2008, the Financial Services Authority (FSA) established a dedicated unit to oversee Islamic finance (Hamed, 2019). These measures collectively fostered a conducive environment for the industry to flourish in the UK. The United Kingdom has emerged as a prominent hub for Islamic finance, showcasing its significance with notable transactions. In 2014, the UK government successfully issued a £200 million sukuk, marking the first issuance by a non-Muslim country (The Guardian, 2014). This accomplishment solidified the UK's leadership in Islamic finance, inspiring other nations to follow suit. The robust growth of Islamic banking and finance in the UK can be attributed to several factors, including favourable regulations, a growing Muslim population, and a rising demand for Shariah-compliant financial services. As this industry expands, it is expected to play an increasingly vital role in the UK's financial sector.

1.4.2 Origins and Historical Overview of Islamic Banking and Finance in Pakistan

Islamic banking and finance in Pakistan have their roots in the early 1980s when a handful of commercial banks introduced Islamic banking services. Meezan Bank, Pakistan's first Islamic bank, was established in 1997, paving the way for substantial industry growth. Today, Pakistan is a global leader in the Islamic banking and finance sector in size and expansion.

According to the State Bank of Pakistan's report (2021), the assets of Pakistan's Islamic banking industry amounted to PKR 4.72 trillion, approximately USD 30 billion, reflecting a 14.9% growth from the previous year. This underscores the industry's significant growth potential, partly facilitated by a supportive regulatory environment. The government's

initiatives include issuing Islamic banking licenses, setting up the Shariah supervisory framework, and offering tax incentives to Islamic financial institutions.

The increasing demand for Shariah-compliant financial products among consumers is another key driver of Islamic banking's growth in Pakistan. A survey by the Islamic Banking Department of the State Bank of Pakistan revealed that 68% of respondents favour Sharia-compliant products over conventional ones. The government has also launched initiatives like the Prime Minister's Kamyab Jawan Program, which provides financing to young entrepreneurs and small businesses through Islamic banking.

Pakistan's Islamic banking and finance sector has witnessed substantial expansion since its emergence in the early 1980s. With a supportive regulatory framework, rising consumer demand, and efforts to enhance financial inclusion, the industry is poised for continued growth in the years to come.

1.5 Components of Islamic Banking and Financial Industry

Islamic banking and finance, operating by Shariah, encompass various key components within the industry:

Shariah Supervisory Board (SSB): A critical element of Islamic finance, the SSB ensures that financial products and services offered by Islamic financial institutions comply with Islamic law. Comprised of scholars well-versed in Islamic law and finance, the SSB provides guidance and oversight to ensure all transactions and investments' ethical and Shariah-compliant nature (Kamla, 2019).

Mudarabah: Mudarabah represents an investment partnership in Islamic finance, where one party provides the capital, and the other manages the investment. Profits are shared based on a predetermined ratio, with the capital provider bearing all losses in case of a loss (Khan & Ahmed, 2018).

Musharaka: Musharaka is a partnership type where multiple parties contribute capital to a project and share profits according to a predefined ratio. Losses are distributed based on each party's contribution to the capital. It is a common mode of financing for large-scale projects in Islamic banking (Haque, 2019).

Murabaha: Murabaha involves the bank purchasing a commodity on behalf of a customer and selling it to the customer at a markup. The customer pays the bank in instalments over an agreed-upon period, often used for asset-based transactions (Kamla, 2019).

Ijarah: Ijarah is a leasing contract where the bank acquires an asset and leases it to the customer for an agreed period. The customer pays periodic rental payments, with the option to either return the asset to the bank or purchase it at a pre-agreed price at the lease's end (Khan & Ahmed, 2018).

Sukuk: Sukuk is an Islamic financial instrument representing ownership of a tangible asset or project. Like a bond, Sukuk allows investors to share the profits generated by the asset or project rather than receiving interest payments. This form of financing is commonly used in Islamic banking to raise funds for large-scale projects (Haque, 2019).

1.6 The Growth of Islamic Banking and Finance in Asia

Islamic banking and finance have witnessed significant growth in Asia in recent years, driven by the increasing demand for Sharia-compliant financial products and services among Muslim consumers and businesses according to a report by the Islamic Financial Services Board (IFSB), the assets of the global Islamic finance industry reached \$2.88 trillion in 2020, with Asia accounting for 70% of the total assets (IFSB, 2021).

In Malaysia, Islamic banking has been a key driver of the country's financial sector growth. As of 2020, Islamic banking assets in Malaysia stood at MYR 935 billion, representing 33% of the country's total banking assets (Bank Negara Malaysia, 2021). The Malaysian government has also supported the Islamic finance industry with initiatives such as the Malaysia International Islamic Financial Centre (MIFC) to promote Malaysia as a global hub for Islamic finance.

Similarly, Indonesia has also witnessed significant growth in its Islamic finance industry. The country's Islamic banking assets grew by 17.5% in 2020 to reach IDR 651.8 trillion (IFSB, 2021). The Indonesian government has also promoted Islamic finance through initiatives such as the National Islamic Finance Committee and the Islamic Economic Society.

In Pakistan, the Islamic finance industry has grown rapidly over the past decade, with Islamic banking assets accounting for around 17% of the country's total banking assets as of 2020 (State Bank of Pakistan, 2021). The government has also been supportive of the industry, with initiatives such as establishing the Pakistan Halal Authority and launching Sukuk (Islamic bond) offerings. The growth of Islamic banking and finance in Asia reflects the increasing demand for Shariah-compliant financial products and services and government

support for the industry. Asia is expected to remain a key player as the global Islamic finance industry expands.

1.7 The Growth of Islamic Banking and Finance in the UK and Europe

Islamic banking and finance are an emerging industry in the UK and Europe, gaining popularity due to its ethical and socially responsible principles.

1.7.1 History of Islamic Banking

Islamic banking has its roots in the Middle East, where it has been practised for centuries. The first modern Islamic bank was established in Egypt in 1963. Since then, Islamic banking has spread to other parts of the world, including the UK and Europe.

Growth of Islamic Banking in the UK:

Islamic banking was introduced in the UK in the early 2000s. The first Islamic bank in the UK was the Islamic Bank of Britain, established in 2004. Since then, other Islamic banks have been established, such as Al Rayan Bank and Gatehouse Bank. According to the Islamic Bank of Britain, the Islamic banking sector in the UK has grown by 150% over the past five years (Islamic Bank of Britain, 2016).

1.7.2 Regulation of Islamic Banking in the UK

The UK government has recognised the importance of Islamic banking and has taken steps to promote its growth. In 2013, the UK government issued a Sukuk, an Islamic bond, to raise funds for infrastructure projects. This was the first sukuk issued by a Western government (The Economist, 2013). In addition, the UK government has also established a regulatory framework for Islamic finance, including the Financial Conduct Authority's Shariah Supervisory Committee (Gov. UK, 2019).

1.7.3 Growth of Islamic Banking in Europe

Islamic banking is also growing in Europe. According to a report by the European Bank for Reconstruction and Development (EBRD), the Islamic banking sector in Europe has grown by 10% per year over the past decade (EBRD, 2018). France is Europe's largest market for Islamic finance, followed by the UK and Germany.

Challenges Facing Islamic Banking in the UK and Europe: Despite its growth, Islamic banking in the UK and Europe faces several challenges. One of the main challenges is the need for more awareness and understanding of Islamic finance among the public. In addition, there are regulatory and legal challenges, such as the need for a level playing field with

conventional banks. Islamic banking and finance are a growing industry in the UK and Europe. The UK government has recognised the importance of Islamic finance and has taken steps to promote its growth. However, the industry still faces challenges that must be addressed to ensure its continued growth and success.

1.8 Islamic Banking Today: The Size of the Industry

Islamic banking has grown significantly in recent years, both in terms of its size and its reach. According to a report by the Islamic Financial Services Board (IFSB), the total assets of the global Islamic finance industry reached \$2.88 trillion at the end of 2020, up from \$2.52 trillion in 2019. This represents a year-on-year growth rate of 14.2% (IFSB, 2021).

Islamic banking is the largest sector of the Islamic finance industry, accounting for approximately 70% of total assets (IFSB, 2021). The largest Islamic banking markets are in the Middle East and North Africa (MENA) region, with Saudi Arabia, the United Arab Emirates (UAE), and Kuwait being the largest players. However, Islamic banking has also gained traction in other regions, such as Asia and Europe.

Regarding market share, the top 20 Islamic banks accounted for 59.9% of total Islamic banking assets in 2020, with the top 10 banks alone accounting for 48.7% of total assets (IFSB, 2021).

One of the key factors driving the growth of Islamic banking is the increasing demand for Shariah-compliant financial products and services. This has been fuelled by a growing awareness and understanding of Islamic finance among consumers and a greater willingness among governments and regulators to promote Islamic finance as a viable alternative to conventional banking. Overall, the Islamic banking industry continues to grow and expand, and its size and reach will likely increase in the coming years.

1.9 The worldwide spread of Islamic Banking

Islamic banking refers to a financial system operated by Islamic principles and law, known as Shariah. Islamic banking has gained popularity worldwide and has grown significantly in recent years (Haron & Shanmugan, 2013). One of the first Islamic banks, the Dubai Islamic Bank, was established in 1975 (Mohamed, 2018). Since then, Islamic banking has spread to various countries across the globe, including Malaysia, Pakistan, Sudan, Bahrain, Kuwait, and Saudi Arabia, among others (Khan & Bhatti, 2008).

In Malaysia, the introduction of Islamic banking was initiated in 1983 with the establishment of Bank Islam Malaysia Berhad (BIMB), the country's first Islamic bank (Ismail, 2017). Today, Malaysia has the largest Islamic banking sector in Southeast Asia, with Islamic banking assets accounting for approximately 30% of the country's total banking assets (Central Bank of Malaysia, 2021). In Pakistan, the introduction of Islamic banking was facilitated by the establishment of the Islamic Development Bank in 1975 (Ali, 2012). Since then, the country's Islamic banking sector has grown significantly, with the total assets of Islamic banks increasing from PKR 416 billion in 2012 to PKR 2.4 trillion in 2020 (State Bank of Pakistan, 2021).

Islamic banking has gained significant traction in the Middle East, with countries such as Saudi Arabia, Kuwait, Bahrain, and the United Arab Emirates (UAE) leading the way. In Saudi Arabia, Islamic banking assets accounted for 51% of the country's total banking assets in 2019 (Central Bank of Saudi Arabia, 2020), while in Kuwait, Islamic banking assets accounted for approximately 40% of the country's total banking assets in 2020 (Central Bank of Kuwait, 2021).

In the UAE, the introduction of Islamic banking was facilitated by the establishment of Dubai Islamic Bank in 1975 (Ali, 2012). Today, the country's Islamic banking sector is one of the largest in the world, with Islamic banking assets accounting for approximately 20% of the country's total banking assets (Central Bank of UAE, 2021). Overall, the worldwide spread of Islamic banking has been significant, with the sector now operating in various countries across the globe. As the demand for ethical and Shariah-compliant financial products continues to grow, the Islamic banking sector will likely expand in the coming years.

1.10 Islamic Finance in the News

"Islamic banking assets to reach \$3.8tn globally by 2023, says report" (The National, 2022)

According to a report by Moody's Investors Service, the global assets of Islamic banks to reach \$3.8tn by 2023. The report notes that the growth of Islamic banking has been driven by the increasing demand for Shariah-compliant financial products and services, particularly in the Middle East and Southeast Asia. Additionally, the regulatory environment for Islamic banking is becoming more supportive, further fuelling industry growth. "Malaysia's Islamic finance market to remain resilient despite pandemic challenges" (The Edge Markets, 2021).

According to industry experts, despite the challenges posed by the COVID-19 pandemic, Malaysia's Islamic finance market is expected to remain resilient in 2021. The experts cite Malaysia's strong regulatory framework and diversified Islamic finance offerings as key factors that will help the market weather the pandemic. Additionally, the experts note that the pandemic has spurred innovation in the Islamic finance sector, particularly in digital banking. "Islamic fintech set to benefit from growth in Islamic finance" (Arab News, 2021).

According to industry experts, the rapid growth of the Islamic finance industry is expected to provide opportunities for Islamic fintech companies. The experts note that Islamic fintech companies can leverage the increasing demand for Shariah-compliant financial products and services and offer innovative solutions to meet the needs of consumers. Additionally, the experts suggest that regulatory bodies are becoming more supportive of Islamic fintech, which will further fuel growth in the sector.

1.11 Islamic Finance in Practice

Islamic finance is a financial system based on the principles of Islamic law, or Shariah, which prohibits the payment or receipt of interest, or *riba*, and promotes risk-sharing and profit-sharing arrangements. In recent years, Islamic finance has gained increasing attention from scholars, policymakers, and practitioners due to its potential to promote financial inclusion, stability, and ethics (Archer & Karim, 2020; Hasan & Dridi, 2020).

Islamic finance is implemented through a variety of financial instruments, including *sukuk* (Islamic bonds), *Murabaha* (cost-plus financing), *Musharaka* (partnership financing), and *Ijara* (leasing). These instruments are designed to comply with Shariah principles while meeting modern financial markets' needs (Iqbal & Mirakhor, 2021; Mohieldin, Iqbal, & Rostom, 2020). Islamic finance has been adopted by various countries and financial institutions, with notable growth in the Middle East, Southeast Asia, and Africa (Elasrag, 2020; Saeed & Afridi, 2020). Governments and regulatory authorities have also taken steps to support the development of Islamic finance, such as by establishing shariah supervisory boards to oversee financial transactions and by creating legal frameworks for Islamic financial institutions (Rammal & Zurbruegg, 2021). However, Islamic finance also faces standardisation, regulation, and education challenges. For example, there needs to be more consensus on Shariah standards across different jurisdictions, leading to confusion and inconsistency in financial transactions (Kamla & Zaman, 2020). Additionally, some countries

may not have networks that fully support Islamic finance, which can limit its growth and development (Hosen, 2020).

1.12 Global Islamic Bank Finance

Global Islamic banking refers to the banking system operated by Islamic law or Shariah. Shariah law prohibits the payment or receipt of interest (riba) and promotes profit and risk-sharing activities. Global Islamic banking has recently gained popularity, with the global Islamic finance industry valued at around \$2.88 trillion in 2020 (IFN Islamic Finance News, 2021). One of the key principles of Islamic finance is the prohibition of interest or usury. This principle is based on the belief that money should not be treated as a commodity but as a means of exchange (Iqbal & Molyneux, 2005). Instead, Islamic finance emphasises the concept of profit and risk-sharing, where both the lender and the borrower share the risks and profits of a transaction (El-Qorchi, 2005).

Global Islamic banks offer a range of financial products and services, including savings accounts, current accounts, loans, and investment products. In addition, many global Islamic banks also offer social finance products, such as zakat and waqf funds, which are used for charitable purposes (Kettell, 2011). Global Islamic banking has grown rapidly in recent years, with many countries now offering Islamic banking products and services. The Middle East remains the largest market for Islamic finance, with Saudi Arabia and the UAE being the biggest players in the industry (IFN Islamic Finance News, 2021).

Global Islamic banking is a rapidly growing industry operated by Islamic law or Shariah. It emphasises the principles of profit and risk-sharing while prohibiting the payment or receipt of interest or usury. The industry offers a range of financial products and services, including social finance products, and is growing in popularity in many countries worldwide.

1.13 The Future of Islamic Finance Industry

Islamic finance has grown tremendously in recent years, and its future looks promising. The industry has undergone significant transformation, expanding beyond its traditional geographic base in the Middle East and Southeast Asia to new markets such as Europe and North America. Ali (2021) discusses the future of the Islamic finance industry, focusing on the need for innovation to drive growth and meet the changing demands of consumers. The author suggests that digitalization and fintech can play a significant role in shaping the

future of Islamic finance and highlights the importance of developing new products and services to attract a broader customer base.

Iqbal and Mirakhor (2021) examines the role of Islamic finance in the global financial system and suggests that it can offer a viable alternative to the conventional banking system. The authors argue that Islamic finance can provide a stable and sustainable financial system that is more resilient to economic shocks and can promote greater social justice and equity. Kettell (2021) discusses the challenges and opportunities facing the Islamic finance industry in the UK, a market that has seen significant growth in recent years. The author suggests significant potential for growth in the UK market. However, more must be done to raise awareness and educate consumers about Islamic finance products and services.

1.14 Problem Statement

Islamic financial institutions have gained popularity over the years due to the increasing demand for ethical banking practices. Islamic banks operate under the principles of Shariah law, which prohibits the charging or paying interest (riba). Instead, they offer a range of financial products based on the principles of profit and risk-sharing. One such product is personal or business loans, evaluated based on different criteria than conventional banks.

The evaluation process of loan applications by Islamic financial institutions is crucial as it determines the borrower's eligibility and the terms and conditions that will apply to the loan. Evaluating loan proposals in Islamic banking involves considering several factors, such as the purpose of the loan, the borrower's creditworthiness, and the potential profitability of the proposed project.

The first step in evaluating a personal or business loan application is to determine the purpose of the loan. Islamic financial institutions only offer loans for legitimate purposes that align with the principles of Shariah law. For example, a loan for financing a business venture or purchasing a home is considered legitimate, while a loan for gambling or other haram activities is not permissible.

The second step is to evaluate the borrower's creditworthiness. Islamic banks rely on a credit analysis framework that considers the borrower's financial history, current financial position, and credit score. However, unlike conventional banks, Islamic banks do not charge interest, which makes it difficult to assess the borrower's creditworthiness. Instead, they

rely on a risk-sharing approach, where the borrower and the bank share the profits and losses of the project.

The third step is to evaluate the potential profitability of the proposed project. Islamic financial institutions only invest in projects that have the potential to generate profits, and the risk is shared between the borrower and the bank. The evaluation process includes assessing the feasibility of the proposed project, analysing the market conditions, and estimating the potential return on investment. The loan application is approved if the project meets the bank's profitability criteria.

In addition to the above evaluation criteria, Islamic financial institutions also consider the ethical and social impact of the proposed project. For example, a project that involves the production of alcohol or tobacco products would not be considered for funding as it goes against the principles of Shariah law. Similarly, a project that harms the environment or violates human rights would also not be considered.

Islamic financial institutions evaluate personal and business loan applications based on a combination of factors such as the purpose of the loan, the borrower's creditworthiness, the potential profitability of the proposed project, and the ethical and social impact of the project. The evaluation process is crucial in determining the borrower's eligibility for the loan and the terms and conditions that will apply to the loan. Islamic banks rely on a risk-sharing approach to evaluate loan applications, which aligns with the principles of Shariah law and promotes ethical banking practices.

1.15 Significance of the Study

The study adds to the body of knowledge in Islamic finance. The research critically assesses the loan proposal evaluation methods used by Islamic banks and highlights the strengths and weaknesses of these methods. This study's findings will help enhance the existing literature and contribute to the development of new research in this field.

The research has practical implications for the Islamic banking industry. The study findings will help the banks evaluate their loan proposal assessment methods and make necessary changes to improve their processes. This, in turn, will lead to better risk management and more effective lending practices in Islamic banking.

The study has policy implications for regulators and policymakers in the Islamic banking industry. The research will help to identify gaps in the regulatory framework and highlight

areas where improvements can be made. This will lead to more effective regulation of Islamic banks and ensure that they adhere to best practices in lending.

The study underscores the importance of Islamic finance as an alternative to conventional banking. The research highlights the unique features of Islamic banking and the need for tailored evaluation methods that consider the principles of Islamic finance. This is important for investors, policymakers, and stakeholders who want to understand Islamic finance's importance and its role in the global financial system.

The study emphasises the importance of transparency in the loan proposal evaluation process. By providing a critical assessment of the methods used by Islamic banks, the research helps to enhance transparency in the lending process and promote accountability among banks. This will help to build trust and confidence among investors and stakeholders in the Islamic banking industry.

1.16 Rationale of the Study

The rationale behind conducting a study on the critical assessment of loan proposals and evaluation methods adopted by Islamic banks is to shed light on the current practices and challenges they face in assessing and evaluating their creditworthiness. The study aims to provide insights into the various methods and tools used by Islamic banks to assess loan proposals and identify any gaps or areas of improvement in their current evaluation methods.

Islamic banking is a growing industry worldwide, with assets estimated to be around \$2 trillion in 2021, according to a report by the Islamic Financial Services Board. Islamic banks operate based on the principles of Shariah, which prohibits charging or paying interest (riba) and promotes risk-sharing between the bank and the borrower. As a result, Islamic banks have unique evaluation methods compared to conventional banks, which rely heavily on credit scores and collateral.

One of the key challenges Islamic banks faces in assessing loan proposals is the need for more standardisation in the industry. While Islamic banking principles are based on Shariah, there has yet to be a consensus on the exact methods to evaluate loan proposals. As a result, Islamic banks have developed their methods and tools for evaluating creditworthiness, which can vary significantly from one bank to another. This lack of

standardisation can lead to inconsistencies in loan approvals and make it challenging for borrowers to understand the evaluation process.

Another challenge Islamic banks face is the limited availability of data on creditworthiness. Conventional banks have access to credit bureaus and credit scores, which provide valuable information on a borrower's credit history and financial standing. However, Islamic banks may need access to this data, particularly in countries with poorly established credit bureaus. This can make it challenging for Islamic banks to evaluate borrowers' creditworthiness and make informed decisions on loan approvals.

The study aims to address these challenges by examining Islamic banks' current practices and evaluation methods in assessing loan proposals. The study explores any gaps or areas of improvement in the current evaluation methods and propose potential solutions to address these gaps. By doing so, the study provides insights that can help Islamic banks improve their loan assessment and evaluation methods and ensure consistent and fair practices in the industry.

The critical assessment of loan proposals and evaluation methods adopted by Islamic banks is a key area of research that can help improve the practices and processes used by Islamic banks in evaluating creditworthiness. The study aims to provide valuable insights into the current practices and challenges Islamic banks face and propose potential solutions to address these challenges. The study aims to promote transparency, consistency, and fairness in the Islamic banking industry, which can contribute to its growth and development eventually.

1.17 Research Aims

This research aims to identify, explore, and critically analyse the methods for evaluating loan proposals and the credit risk assessment protocols used by Islamic financial institutions (Banks). To analyse how differently Islamic banks assess loan proposals compared to conventional banks, the most widely used models to forecast default include parametric and nonparametric methods. It does not attempt to evaluate which method is better; however, the emphasis is on discovering what Islamic banks themselves identify as key determinants of decision-making to evaluate loan proposals as potential investment opportunities. The comparison of hypothetical loan proposals will also explore all technical issues and

differences in practical applications. Through comparative analysis, it is analysed to what extent it is possible to use other methods adopted by Islamic banks.

1.18 Research Objectives

The following research objectives are derived from the aims of the current study:

- To identify, explore, critically examine, and analyse the current methods used by Islamic banks for evaluating loan proposals.
- To compare Islamic banks' current evaluation methods of creditworthiness compared to conventional banks considering the credit risk assessment protocols.
- To evaluate to what extent Islamic banking influences the conventional banking sector regarding credit risk assessment.
- To critically analyse to what extent sources of risks are different in Islamic vs conventional banks.

1.19 Research Questions

The following research questions are derived from the aims and objectives of the current study:

- What methods are used by Islamic banks for evaluating the creditworthiness of loan proposals?
- What are the distinguishing features, techniques, or methods Islamic banks use to evaluate creditworthiness of loan applications?
- Are the methods Islamic banks use to evaluate the creditworthiness of loan proposals different from conventional banks?
- Do evaluation methods of Islamic banks have an impact on conventional banks?
- What major risks are involved or faced by Islamic banks, and are they different from conventional banks?

1.20 Limitations of the Study

The critical assessment of loan proposals and evaluation methods adopted by Islamic banks is an important and sensitive topic that required careful analysis and understanding. While the study provided valuable insights into Islamic banks' loan proposal and evaluation

methods, certain limitations were faced in conducting and analysing the study, but the key limitations were as below:

Firstly, one of the main limitations faced was unavailability or hesitancy of professionals to share information due to new and sensitive nature of topic undertaken for the current study. However, the participants facilitated as much as possible which helped in achieving the aims and objectives of the study.

Secondly, due to non-standardised approaches used in Islamic banks for loan proposal and evaluation methods. It was difficult to compare the loan proposals and evaluation methods used by different Islamic banks. However, the study managed to provide an overview of the general approaches adopted by Islamic banks, the lack of standardisation to some extent limits the accuracy and reliability of the study's findings.

Thirdly, as the study is limited in scope and only focused on the loan proposal and evaluation methods adopted by Islamic banks. There was a lot more to explore on other related aspects and factors that can impact the loan approval process, such as the availability and authenticity of credit reports, experience and subjective approach of loan assessors, the economic and regulatory environment, are not considered in the study.

Fourthly, the study does not consider the cultural and social factors that can impact the loan proposal and evaluation methods adopted by Islamic banks. For example, Islamic banks may have different approaches to lending based on cultural norms and values. The study's findings may apply differently to Islamic banks operating in diverse cultural and social contexts.

CHAPTER 02: LITERATURE REVIEW

2.1 Introduction to Banks

The banking system represents a fundamental element within the financial sector, holding a pivotal role in a nation's economic progression. It functions as an intermediary, facilitating the flow of capital between those who save and those who seek to borrow. Its offerings encompass accepting deposits, providing loans, and conducting various financial transactions (Levine, 2020). As a financial institution, a banking system delivers a gamut of services to its clientele, encompassing the reception of deposits, lending of funds, and facilitating financial exchanges. These services constitute the need of the modern economy, enabling individuals, corporations, and governments to manage their financial affairs. Banks play an indispensable part in the economy by directing savings from individuals and entities toward borrowers needing capital to fuel investments and other financial obligations. This process, recognised as financial intermediation, permits banks to reap profits by levying interest on loans while remunerating interest on deposits (Berger & Mester, 2020).

In addition to lending and deposit-taking, banks offer various supplementary services, including investment banking, asset management, and insurance. Investment banks support businesses in raising capital by underwriting and vending securities, while asset managers invest on behalf of clients in various financial instruments, such as stocks and bonds. Insurance services protect many risks, including accidents, illnesses, and property damage (Cetorelli & Goldberg, 2012). Overall, the banking system is an indispensable constituent of the global financial framework, rendering vital services to its patrons and fostering economic growth and development.

2.1.1 Evolution of the Banking System

The evolution of the banking system spans from its primitive barter origins to the multifaceted contemporary systems we witness today. The earliest incarnations of banking were manifested in antiquated civilizations, such as Babylon, where temples assumed the roles of financial establishments (Levinson, 2016). In modern times, the banking system has grown in complexity with the advent of central, commercial, and investment banks. A range of factors, including shifts in customer expectations, regulatory mandates, and technological advancements, have driven this evolution. A substantial transformation in the banking system materialised with the advent of online banking. In response to the burgeoning

utilisation of the Internet, banks have devised online platforms that empower clients to execute a broad spectrum of financial transactions from anywhere and at any time. According to a report by the Federal Reserve, the prevalence of online banking has markedly surged, with 43% of U.S. adults engaging in mobile banking in 2019, in contrast to just 29% in 2013 (Federal Reserve, 2020).

Another noteworthy progression within the banking system is the pivot toward digital payments. The introduction of mobile payment services, such as Apple Pay, Google Pay, and Samsung Pay, has granted customers the capacity to conduct transactions using their mobile devices, eliminating the necessity for physical currency or cards. As a report by Statista indicates, the global volume of mobile payment transactions is projected to reach 1.47 trillion U.S. dollars in 2023, up from 930 billion U.S. dollars in 2019 (Statista, 2021). The banking system has also witnessed a surge in the use of artificial intelligence (AI) and machine learning (ML) technologies. These technologies are harnessed to furnish customers with more personalised and efficient services. For instance, AI-powered chat-bots are employed by banks to deliver round-the-clock customer support and assistance. According to an Accenture report, incorporating AI in the banking sector is anticipated to yield cost savings of up to \$447 billion by 2023 (Accenture, 2018).

2.1.2 Types of Banks

Various categories of banks provide diverse financial services to their clientele. The three primary bank classifications encompass commercial, investment, and central banks. Commercial banks, the most prevalent, offer services including checking and savings accounts, loans, and credit cards (Levinson, 2016). Conversely, investment banks specialise in supplying financial advice and services to corporations and governments (Tarazi & Mersch, 2016). On the other hand, central banks are responsible for supervising the banking system, administering monetary policy, and preserving financial stability (Kwak, 2017).

In addition to these primary bank categories, credit unions constitute another sector of the banking system, functioning as non-profit financial institutions owned and operated by their members. Credit unions offer services akin to commercial banks but often provide more favourable interest rates on deposits and loans due to their tax-exempt status (Investopedia, n.d.).

The banking sector confronts several challenges that impact its operations and financial stability. One major obstacle is the heightened competition from non-bank financial

institutions, such as fintech companies (Demirgüç-Kunt et al., 2017). Regulatory modifications, including increased capital requirements and more stringent regulations regarding anti-money laundering and counter-terrorism financing (PWC, 2021). Lastly, the banking sector faces cybersecurity and data protection concerns as the growing reliance on technology and digitalization renders them susceptible to cyber-attacks (Abreu & Ferreira, 2020).

The banking system has evolved from ancient financial systems to modern banking establishments. Various bank types, such as commercial, investment, and central banks, offer an array of services to clients. Nevertheless, the banking sector faces several challenges, including amplified competition, regulatory changes, and cybersecurity threats. These challenges necessitate banks to adopt novel strategies and technologies to remain competitive and secure in the modern financial landscape. One primary challenge is the escalation in market competition, resulting in dwindling bank profit margins (Kumar & Talwar, 2021).

This competition is driven by the entry of new players, such as digital banks, offering innovative and convenient banking solutions, prompting traditional banks to invest heavily in technology and digital transformation to sustain competitiveness (Kumar & Talwar, 2021). Another issue confronting the banking sector is the augmented regulatory pressure. Governments and regulatory bodies have imposed rigorous regulations in response to the 2008 financial crisis, elevating bank compliance costs (Tan, 2020). Compliance is pivotal for banks to avoid penalties and safeguard their reputation; however, it necessitates substantial resources. The third challenge involves mounting cybersecurity threats. The rise of digital banking and technology in financial transactions exposes banks to cyber-attacks, jeopardising the security of confidential customer data and causing financial losses (Tan, 2020). Banks must invest in cybersecurity measures to protect their systems and customers from these threats.

2.2 Islamic Banking System

The Islamic banking system adheres to Islamic law principles, also known as Shariah law, and has gained significant attention in recent years, especially in the Muslim world. This overview outlines the literature on the Islamic banking system, emphasising its principles, growth, challenges, and opportunities. The Islamic banking system operates by Islamic law

principles (Shariah). It promotes social justice and economic welfare by avoiding interest-based transactions and investing in ethical and socially responsible ventures (Haron & Shanmugam, 2013).

The system is based on various principles, including profit and loss sharing (PLS), risk-sharing, and asset-backed financing. PLS is a core tenet of Islamic banking, where the bank shares profits and losses with its clients, ensuring the bank's vested interest in the customer's success and fostering equitable wealth distribution (Chapra, 2012). Islamic banking categorically prohibits *riba* (interest) and *Gharar* (uncertainty) in financial transactions, condemning them as unjust, exploitative, and detrimental to wealth distribution and economic health (Khan, 2015).

Islamic banking, a system operating by Islamic principles, underscores social justice, economic welfare, and ethical, socially responsible investments. It has experienced substantial growth in recent years and is eager for continued expansion.

2.2.1 Principles of Islamic Banking System

The Islamic banking system, rooted in Shariah law, strictly prohibits interest (*riba*), speculation (*Gharar*), and unethical practices (*Maysir*). Instead, the system accentuates profit and loss sharing (PLS) arrangements between the bank and its clients. PLS entails proportionally sharing profits and losses in investments to the parties' contributions (Haron & Shanmugam, 2013).

Islamic banking primarily promotes economic and social justice while delivering financial services to its clientele (Khan, 2019). The prohibition of interest, or *riba*, constitutes one of its fundamental tenets, necessitating Islamic banks to abstain from charging interest on loans or deposits. Instead, they employ profit and loss sharing (PLS) and various other Islamic financing methods, such as *Murabaha*, *Musharaka*, and *Ijara*, to offer financial services (Iqbal & Molyneux, 2017).

The principle of risk-sharing is another key component of the Islamic banking system. In this system, the bank and the client share the risks and rewards of their financial transactions, motivating the bank to conduct thorough due diligence and risk management to ensure transaction success (Haron & Shanmugam, 2017). Additionally, transparency and ethical conduct are fundamental principles of Islamic banking. Islamic banks must divulge their financial information to customers and stakeholders while conducting their business ethically and socially responsibly (El-Hawary et al., 2004).

The principles of Islamic banking derive from the core tenets of Islamic law and underscore ethical behaviour, risk-sharing, and transparency. These principles have contributed to the growth and success of Islamic banking worldwide, predominantly in Muslim countries (Iqbal & Molyneux, 2017).

2.3 Growth of Islamic Banking System

The Islamic banking sector has witnessed substantial growth in recent years, with assets expanding at an average annual rate of 17% between 2010 and 2019, reaching \$2.88 trillion by the end of 2019 (IFSB, 2020). This growth is attributable to the increasing demand for Shariah-compliant financial services and the entry of new players into the market. Several factors have contributed to this expansion. Firstly, consumers have a growing awareness and understanding of Islamic finance principles. As individuals become more acquainted with Islamic finance's ethical and religious foundations, they increasingly favour Islamic banking products over conventional ones.

Additionally, the proliferation of institutions offering Islamic banking services has played a pivotal role. Conventional banks have established Islamic banking subsidiaries or windows to cater to the rising demand for Sharia-compliant financial products. Governments in predominantly Muslim nations have actively supported the growth of Islamic banking through favourable regulatory frameworks and policies. For instance, the Malaysian government has introduced various initiatives, such as the Malaysia International Islamic Financial Centre and tax incentives for Islamic finance transactions (Bank Negara Malaysia, 2020).

However, the Islamic banking system faces several challenges. One major obstacle is the need for more standardisation in Shariah compliance, leading to varying interpretations of Shariah law among Islamic banks (Archer & Karim, 2015). Another challenge is the need for more qualified personnel with expertise in Islamic and conventional finance (Gerrard & Cunningham, 2013). Additionally, the need for a robust regulatory framework and a lender of last resort poses significant challenges to the system's stability (Kabir Hassan, 2014).

Islamic banking's growth has been fuelled by increased awareness, expanding service providers, and supportive government policies, but challenges such as standardisation, human resources, and regulatory frameworks persist. Moreover, public awareness and understanding of Islamic banking still need to be improved, hindering its progress (Deloitte,

2020). The absence of clear regulatory and legal frameworks in some regions also presents a hurdle, as regulators still must grapple with effectively overseeing this relatively new concept (IMF, 2019). Islamic banks also face limitations in their product offerings, as they are prohibited from providing conventional interest-based loans, which restricts their customer base (Moody's, 2021). Additionally, managing liquidity is challenging due to restrictions on certain financial instruments like interest-based derivatives (KPMG, 2020). Lastly, recruiting and retaining qualified staff with knowledge of Islamic finance principles hinders expansion (McKinsey, 2020).

Despite these challenges, Islamic banking has promising growth prospects. The increasing demand for Shariah-compliant financial services within Muslim and non-Muslim regions has attracted new market entrants (Iqbal & Mirakhor, 2011). The global acceptance of Islamic banking has led to the development of international standards for Islamic finance (Chapra, 2014). Moreover, Islamic banking can potentially capture a substantial portion of the world's growing Muslim population (Pew Research Centre, 2021). The global Islamic finance industry is projected to reach \$3.8 trillion by 2023, driven by the demand for socially responsible and ethical investments (Islamic Finance News, 2021). Islamic banking focuses on risk-sharing and asset-based financing offers a means to mitigate the risks associated with conventional banking systems (Iqbal & Mirakhor, 2021). Additionally, it can contribute to financial inclusion and economic growth in predominantly Muslim regions (Gohar, Sultana, & Raza, 2021).

In summary, Islamic banking faces awareness, regulatory frameworks, product offerings, liquidity management, and human resources challenges. Nevertheless, it offers growth opportunities driven by increasing demand, global acceptance, a growing Muslim population, ethical investments, risk-sharing, and financial inclusion.

2.4 Fundamentals of Islamic banking system

The Islamic banking system operates on the tenets of Shariah, or Islamic law, setting it apart from conventional banking systems. These principles are grounded in Islamic law and aim to ensure financial transactions adhere to Islamic beliefs and values. Notably, Islamic banking prohibits the charging or payment of interest, known as *riba*, instead relying on profit-sharing (*Mudarabah*) and risk-sharing (*Musharaka*) arrangements for financing (Siddiqui, 2008). Risk-sharing also encourages equitable risk and reward distribution between lenders

and borrowers (Haron & Shanmugan, 2013). Islamic banking promotes asset-backed financing, primarily relying on tangible assets like real estate or commodities, reducing financial instability (Archer & Abdel Karim, 2017). Furthermore, it prohibits investments in activities deemed harmful to society, such as gambling, alcohol, and tobacco, ensuring that investments align with Islamic values (Haron & Shanmugan, 2013). Lastly, Islamic banking promotes Zakat, a form of charitable giving aimed at wealth redistribution and poverty reduction, thus promoting social justice (Khan & Bhatti, 2008).

The foundation of Islamic banking rests on principles of justice, risk-sharing, avoidance of speculation, and ethical investments, all deeply rooted in Islamic law (Chapra, 1985). These principles ensure fair and responsible financial transactions within the Islamic banking system.

In terms of operations, Islamic banking operates based on profit and loss sharing, where both the bank and the client share the risks and profits of a venture (El-Gamal, 2006). A popular mode of finance in Islamic banking is Musharaka or partnership financing, where the bank and the client invest jointly, sharing profits and losses based on their respective contributions (El-Gamal, 2006). Key operations of the Islamic banking system include:

Profit and Loss Sharing (PLS) Contracts: Islamic banking employs PLS contracts where profits are shared between the bank and customers based on agreed-upon ratios. The bank provides funds for investment, and both parties share in the profits generated from these investments (Khan & Bhatti, 2016).

Mudarabah: Mudarabah is a type of PLS contract where the bank provides capital, and the customer offers labour and expertise. Profits generated from the investment are shared according to a pre-agreed ratio, commonly used in Islamic banking for investment and financing (Elasrag & Azmi, 2020).

Murabaha: Murabaha is a cost-plus financing contract where the bank purchases an asset on behalf of the customer and sells it back at a profit. The profit margin is determined and disclosed to the customer and is widely employed for trade and consumer financing (Khan & Bhatti, 2016).

Ijarah: Ijarah is a lease-based contract where the bank leases an asset to the customer for a specified period and rental payments. It is commonly used for equipment and real estate financing (Elasrag & Azmi, 2020).

Takaful: Takaful is an Islamic insurance contract where customers pool risks and contributions to support each other in need, grounded in principles of cooperation and shared responsibility (Khan & Bhatti, 2016).

Despite its growth, Islamic banking confronts challenges. One significant challenge is the need for standardised regulations and Shariah compliance frameworks across different jurisdictions, hindering international expansion (Miah & Karim, 2020). The scarcity of trained Shariah scholars and professionals, especially in non-Muslim countries.

2.5 History of Islamic banking in Europe

Islamic banking has been increasingly gaining recognition in Europe due to its potential to attract Islamic investors and serve the growing Muslim population (Hussain & Ur Rehman, 2021). This literature review provides an overview of the historical development of Islamic banking in the UK and Europe, highlighting key milestones and challenges encountered in its growth.

2.5.1 Historical Development of Islamic Banking in the UK

The United Kingdom was the first Western country to establish an Islamic bank, the Islamic Bank of Britain (IBB), in 2004. This marked a significant milestone in the evolution of Islamic banking in the UK, and since then, the industry has witnessed rapid expansion. Support from the UK government has played a crucial role in creating a level playing field for Islamic financial institutions (Hussain & Ur Rehman, 2021).

Regulatory bodies like the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA) have devised frameworks that recognise the unique features of Islamic finance, such as the prohibition of interest (Riba) (Iqbal & Mirakhor, 2021). The beginning of Islamic banking in the UK can be traced back to the early 1980s when the first Islamic financial institution, the Islamic Investment Company of the Gulf, was established in London (Mohammed, 2016). This was followed by the establishment of other Islamic banks, including the Islamic Bank of Britain, in 2004 (Amin et al., 2017).

The Islamic Bank of Britain stands out as the UK's first fully Sharia-compliant bank, offering products and services in alignment with Islamic law (Hussain, 2015). It operates under the guidance of a Sharia Supervisory Committee to ensure the compliance of its offerings with Islamic principles. The bank has experienced substantial growth over the years and has become a favoured choice for Muslim residents in the UK who prefer banking to their

religious beliefs (Amin et al., 2017). Other financial institutions, like HSBC's Amanah Finance and Lloyds TSB's Islamic Banking, have recognised the rising demand for Sharia-compliant banking in the UK and have responded accordingly (Khan et al., 2016).

Despite its growth, Islamic banking in the UK face different challenges such as lack of awareness among the broader population and a shortage of qualified professionals in the field (Mohammed, 2016). Nevertheless, the future of Islamic banking in the UK appears promising, with government and financial institutions acknowledging its potential and taking steps to promote its growth and development (Hussain, 2015).

2.5.2 Historical Development of Islamic Banking in Europe

Islamic banking has made notable inroads in Europe by establishing several Islamic banks and financial institutions. France, Germany, and Luxembourg have emerged as significant destinations for Islamic finance (Khan, 2018). France became the first European country to issue sovereign Islamic bonds (sukuk) in 2011, followed by the UK and Luxembourg (Alam & Syed, 2018). In 2017, Germany passed legislation recognizing Islamic finance as a legitimate form of finance, enabling the issuance of sukuk, and establishing Islamic banks (Khan, 2018). Although Islamic banking has traditionally been associated with Muslim-majority countries, its popularity has gradually increased in Europe over the past few decades (El-Qorchi, 2005). One of the earliest instances of Islamic banking in Europe was the establishing of the Islamic Investment Company of the Gulf (IICG) in London in 1979. The IICG was formed to provide financial services in compliance with Islamic principles to the growing Muslim community in the United Kingdom. The success of the IICG led to the establishment of other Islamic financial institutions in the UK and other European countries, such as the Islamic Bank of Britain and the European Islamic Investment Bank (El-Qorchi, 2005).

Islamic banking has also found acceptance among non-Muslims in Europe who seek alternative banking options. According to a report by the Economist, the total assets held by Islamic financial institutions in Europe increased from \$4 billion in 2006 to \$30 billion in 2016 (Economist, 2016). This growth is attributed to the appeal of Islamic banking as an ethical and transparent alternative to conventional banking, which has faced scandals and ethical concerns. The increasing Muslim population in Europe has further fuelled the growth of Islamic banking in the region (El-Qorchi, 2005).

2.6 Scope and Development of Islamic Banking

Islamic banking is based on the principles of Islamic law (Shariah), which prohibit the charge of interest on loans (Riba) and stress on risk-sharing and ethical investments. The growth of Islamic banking in the UK and Europe can be traced back to the early 1980s when the first Islamic bank, the Islamic Bank of Britain (IBB), was established in the UK in 1983 (Kabir & Das, 2018). Since then, the UK has emerged as a leading centre for Islamic finance, with over 20 Islamic banks and financial institutions operating in the country, including major global players such as HSBC Amanah and Standard Chartered Saadiq (Tawfik, 2021).

The European market has also witnessed significant growth in recent years, with the establishment of several Islamic banks and financial institutions in countries such as Germany, France, and Luxembourg (Khan & Bhatti, 2021). One of the key drivers of the growth of Islamic banking in the UK and Europe is the increasing demand from the Muslim population for Shariah-compliant financial products and services (Elasrag & Fatheldin, 2020). According to a report by EY, the Muslim population in Europe is projected to reach 58 million by 2030, representing a significant market potential for Islamic banking (EY, 2019).

2.6.1 Recent Trends and Challenges

Despite the growth of Islamic banking in the UK and Europe, several challenges confront the industry. One of the primary challenges is the need for more awareness and understanding of Islamic banking principles among the broader population (Khan & Bhatti, 2021). This limited awareness results in a restricted market for Islamic banking products and services, as many consumers are unaware of the benefits of Shariah-compliant finance. Another challenge pertains to the regulatory and legal framework for Islamic banking in the UK and Europe. While various countries have introduced regulatory frameworks for Islamic banking, there still needs to fill the gaps in the legal and regulatory infrastructure, which can hinder the operations of Islamic banks in a competitive environment (Tawfik, 2021).

2.7 Customer's perception, awareness, satisfaction, demand, and adoption of Islamic banking system

The growth of Islamic banking in the UK and Europe has been substantial, driven by the increasing demand from the Muslim population for Shariah-compliant financial products and services. However, the industry faces challenges such as the need for more awareness and understanding among the wider population and regulatory and legal hurdles.

Addressing these challenges is essential for the continued growth and development of the Islamic banking industry in the UK and Europe.

The perception and awareness of customers towards Islamic banking play a crucial role in determining their adoption of the system. A study conducted by Siddiqui, Akhtar and Hussain (2020) in Pakistan found that customer perception of Islamic banking is positively associated with their intention to adopt it. Another study by Abdulai and Seidu (2020) in Ghana reported that customers' awareness and knowledge of Islamic banking significantly influence their adoption of the system. The study highlighted the need for more education and awareness campaigns to enhance customers' understanding of Islamic banking.

The Islamic banking system is a financial system that operates according to Islamic law principles, also known as Shariah law. It is based on the belief that all financial transactions should be conducted to promote justice, fairness, and equality for all stakeholders. The primary difference between Islamic and conventional banking is prohibiting interest-based transactions (riba) in Islamic finance.

In recent years, Islamic banking has gained increasing attention and popularity worldwide. According to a report by the Islamic Financial Services Board (IFSB), the global Islamic finance industry has grown at an average rate of 6.9% per year between 2010 and 2019, with total assets reaching US\$2.88 trillion in 2019 (IFSB, 2020).

However, despite the growth of Islamic banking, there still exists a need for more awareness and understanding of the principles and practices of Islamic finance among the general public. A study conducted by Moutassem Al-Gharaibeh and colleagues (2018) in Jordan found that although most respondents had heard of Islamic banking, many needed more knowledge of its principles and operations. The study also found that factors such as education, income, and religious knowledge significantly impacted the level of awareness and acceptance of Islamic banking among respondents.

In conclusion, while Islamic banking has been experiencing significant growth in recent years, there is still a need to increase public awareness and understanding of the principles and practices of Islamic finance. Further education and outreach efforts are necessary to promote this financial system's benefits and address misconceptions and misunderstandings about Islamic banking.

Customer satisfaction is key in determining their loyalty and willingness to use the Islamic banking system. A study by Ahmed, Uddin and Faroque (2020) in Bangladesh found that

customer satisfaction with Islamic banking services positively influences their loyalty towards the system. Another study by Zafar and Ali (2021) in Saudi Arabia reported that customer satisfaction with Islamic banking services is positively associated with their intention to continue using the system. The study emphasised the importance of providing quality services and ensuring customer satisfaction to promote the adoption of Islamic banking. Islamic banking is a financial system based on Islamic law principles, also known as Shariah. The system is guided by the principles of fairness, justice, and transparency, which aim to promote social and economic development while ensuring the system's financial stability (Kader, 2018).

Research has shown that customers' satisfaction levels when using Islamic banking services are generally high. For example, a study by Hassan and Ahmad (2015) found that the quality of service, trust, and reliability of the Islamic banking system positively influenced the satisfaction levels of customers in Malaysia. Similarly, a study by Ariff and Nasruddin (2014) found that customers who used Islamic banking services in Indonesia reported higher satisfaction levels than those who used conventional banking services. The study attributed this to the ethical and moral principles that underpin the Islamic banking system, which promotes fairness, justice, and accountability.

In summary, Islamic banking is a system that promotes customer satisfaction due to its adherence to ethical and moral principles that prioritize fairness and justice.

The demand for Islamic banking has increased recently, with many customers opting for Shariah-compliant financial products and services. A study by Alzoubi and Al-Tamimi (2021) in Jordan reported that the demand for Islamic banking services is influenced by customers' trust in the system, their religious knowledge, and their income level. The study emphasised the importance of understanding customers' needs and preferences to meet their demand for Islamic banking services. Another study by Shafique et al. (2020) in Pakistan found that customers' need for ethical and socially responsible banking practices drives the demand for Islamic banking services.

The demand for Islamic banking has been growing steadily in recent years. According to a report by Ernst and Young, the global Islamic banking industry is expected to grow at an annual rate of 8.5% and reach a value of \$3.8 trillion by 2023 (Ernst & Young, 2019). This growth is driven by a growing awareness and demand for Sharia-compliant financial

products among Muslim consumers and non-Muslims seeking ethical and socially responsible investment options.

Furthermore, a Dubai Islamic Economy Development Centre survey found that 64% of Muslim respondents prefer Islamic banking products over conventional ones (Dubai Islamic Economy Development Centre, 2021). This trend is also reflected in other regions, such as Southeast Asia, where Islamic finance is becoming increasingly popular among Muslims and non-Muslims (KPMG, 2019). Overall, the demand for Islamic banking is rising, driven by a growing awareness and demand for Sharia-compliant financial products among consumers worldwide.

Customers' adoption of the Islamic banking system depends on a range of factors, including their perception, awareness, satisfaction, and demand. A study by Hassan & Ahmed (2021) in Malaysia reported that customer adoption of Islamic banking is positively influenced by their perception of the system, knowledge and awareness, and satisfaction with the services provided. The study highlighted the need for banks to provide quality services and enhance customers' understanding of Islamic banking to promote its adoption. Another study by Abdulai and Seidu (2020) in Ghana found that customer adoption of Islamic banking is influenced by their perceived value, trust, and risk perception of the system.

The literature review has highlighted the importance of customer perception, awareness, satisfaction, demand, and adoption of the Islamic banking system. The review has shown that customers' perception and awareness of Islamic banking play a crucial role in determining their adoption of the system. Additionally, customer satisfaction, demand, and adoption of the system are influenced by several factors, including the need for ethical and socially responsible banking practices, trust in the system, and perceived value. The findings suggest that banks must provide quality services, enhance customers' understanding of Islamic banking, and meet their needs and preferences to promote its adoption.

2.8 Essence, Prerequisites, and Factors Influencing Creditworthiness

Creditworthiness refers to a fundamental concept in finance pertains to an individual or entity's capacity to meet financial obligations, particularly in repaying borrowed funds (Mester, 1997). It plays a pivotal role in the financial system, dictating eligibility for credit or loans and significantly impacting lending decisions. Lenders assess creditworthiness to mitigate the risk of borrower defaults.

2.8.1 Essence of Creditworthiness

Creditworthiness, as explained by Rötheli and Schaub (2019), embodies the borrower's ability to fulfil financial commitments within the agreed-upon timeline, making it an indispensable criterion for lenders. This assessment instils confidence in lenders that borrowers will honour their repayment obligations.

2.8.2 Prerequisites for Creditworthiness

Credit History: A robust credit history, encompassing past borrowing and repayment behaviour, is a paramount prerequisite (Avery & Calem, 1997). A positive credit history reflects responsible financial management and bolsters creditworthiness.

Steady Income: Maintaining a consistent and stable income source is imperative for creditworthiness (Calem & Mester, 1995). It affirms the borrower's capability to generate adequate income for debt repayments, with a higher income level correlating to enhanced creditworthiness.

Low Debt-to-Income Ratio: The debt-to-income ratio, comparing debt obligations to income, holds significance (Avery & Calem, 1997). A lower ratio signifies financial stability and suggests that the borrower can manage additional debt effectively, thereby augmenting creditworthiness.

2.8.3 Factors Influencing Creditworthiness

Credit Score: Creditworthiness is substantially influenced by credit scores like FICO and VantageScore (Calem & Mester, 1995). Higher credit scores indicate lower credit risk, resulting in heightened creditworthiness.

Payment History: The history of on-time payments plays a pivotal role in creditworthiness (Mester, 1997). Timely payments enhance creditworthiness, while overdue payments, defaults, or bankruptcies diminish it.

Credit Utilisation: Creditworthiness is also affected by the percentage of available credit a borrower uses (Avery & Calem, 1997). High credit utilisation rates can indicate financial stress and lead to a reduction in creditworthiness.

Length of Credit History: A lengthier credit history signifies a more stable financial history, contributing positively to creditworthiness (Calem & Mester, 1995).

Types of Credit: The diversity of credit accounts, such as credit cards, instalment loans, and mortgages, holds sway over creditworthiness (Mester, 1997). Responsibly managing a mix of credit types can bolster creditworthiness.

Recent Credit Inquiries: Frequent credit inquiries can adversely affect creditworthiness as they may suggest a borrower's search for additional credit (Avery & Calem, 1997).

2.8.4 Implications of Creditworthiness

Creditworthiness is an indispensable consideration for borrowers and lenders, impacting financial decisions and opportunities. Lenders rely on it to gauge lending risk and determine credit terms, while borrowers with higher creditworthiness are more likely to secure credit at favourable rates and terms (Mester, 1994). The assessment of creditworthiness plays a pivotal role in risk management within financial institutions, aiding in the mitigation of defaults (Berger & Udell, 1995).

Additionally, it is directly linked with economic growth, enabling investment and consumption, and stimulating economic activity (Greenwood & Jovanovic, 1990). In financial markets, particularly the bond market, creditworthiness is of paramount importance. High creditworthiness leads to higher credit ratings for bond issuers, resulting in the ability to raise capital at lower interest rates (Duffie & Singleton, 2003). Investors rely on credit ratings as a determinant of bond investment decisions (Besley & Persson, 2010). Furthermore, credit default swaps (CDS) enable investors to hedge against credit risk, highlighting the critical role of assessing creditworthiness (Bomfim, 2003). Creditworthiness is the cornerstone of financial stability and access to credit. Individuals and businesses must maintain their creditworthiness by making timely payments, managing their debt responsibly, and demonstrating financial prudence. Doing so can enhance their chances of accessing credit and achieving their financial objectives.

2.8.5 Prerequisites of Creditworthiness

As posited by Chen et al. (2021), prerequisites of creditworthiness encompass income, employment status, credit history, and collateral. Income is a pivotal determinant, signifying the borrower's ability to repay credit. A stable employment status ensures a consistent income flow, facilitating timely repayments. Credit history furnishes insights into past credit behaviour, encompassing payment history and utilisation, thereby contributing to creditworthiness.

A favourable credit history, emphasising responsible financial conduct (Vissing-Jorgensen, 2020), coupled with a stable and reliable income source (Demyanyk & Loutskina, 2019), complements the debt-to-income ratio (Mian & Sufi, 2020) to create a profile conducive to creditworthiness.

2.8.6 Factors Influencing Creditworthiness

Numerous factors influence creditworthiness, including macroeconomic conditions, credit utilisation, debt-to-income ratio, and payment history (Gagliardi et al., 2021). Macroeconomic conditions such as inflation and unemployment can raise the risk of default, diminishing creditworthiness. Credit utilisation, reflecting the proportion of available credit in use, affects creditworthiness as higher utilisation indicates a heightened risk of default. Likewise, a high debt-to-income ratio correlates with a higher risk of default, reducing creditworthiness. Payment history, documenting past credit behaviour, especially late or missed payments, impacts creditworthiness significantly. In essence, creditworthiness is predicated on the borrower's ability to borrow funds or access credit while ensuring the timely repayment of debts. Several linked factors influence an individual's creditworthiness, shaping financial decisions for borrowers and lenders (Kuritzkes, 2019).

Public Records and Bankruptcies: Negative information such as bankruptcies, liens, or judgments can significantly reduce creditworthiness (Fair Isaac Corporation, 2017). Lenders perceive these events as high-risk indicators.

Credit Inquiries: Multiple recent credit inquiries can suggest a higher risk of financial instability (Experian, 2021). Frequent credit applications may lead to a lower credit score.

Types of Credit Accounts: The mix of credit accounts, including credit cards, loans, and mortgages, can affect creditworthiness (TransUnion, 2018). A diverse credit portfolio is a positive indicator.

Payment Patterns: Consistent, on-time payments positively impact creditworthiness (Equifax, 2020). Overdue payments or missed payments can damage one's credit profile.

Credit Score: Credit scores, such as the FICO or Vantage Score, offer a numerical representation of creditworthiness (Fair Isaac Corporation, 2017). Higher scores indicate lower credit risk.

The evaluation of creditworthiness is a multifaceted process encompassing financial behaviours, historical data, and external determinants. Lenders and creditors use these criteria to gauge the risks of extending credit to individuals or entities. Preserving a favourable credit profile through responsible management of these factors is essential for accessing favourable credit terms.

2.9 Credit Analysis

Credit analysis, which involves assessing an entity's ability to repay a loan or credit facility, plays a pivotal role in financial decision-making. It entails evaluating the borrower's creditworthiness based on factors such as credit history, financial statements, and other relevant information. Credit analysis is the foundation for prudent lending decisions, investment strategies, and risk management, focusing on predicting the likelihood of debt repayment (Altman, 2013). The credit analysis process comprises several stages, each contributing to a comprehensive understanding of the potential borrower or investment opportunity.

2.9.1 Information Gathering

The initial phase of credit analysis revolves around identifying the borrower or entity seeking credit, forming the cornerstone of the entire analysis process. It entails collecting essential information about the borrower, including their legal identity, organisational structure, and contact details (Altman, 2013). This step is critical to ensuring the analysis is conducted on the correct entity and establishing effective communication channels. The collection of information is a foundational aspect of the credit analysis process. It encompasses gathering data on the borrower's financial status, credit history, and any other pertinent details that may impact their ability to repay the loan. The data's accuracy and comprehensiveness significantly influence the credit analysis quality (Kolb & Rodriguez, 2017).

This stage involves assembling pertinent financial information about the borrower and the loan, including reviewing financial statements, credit history, and other pertinent data like industry trends and market conditions (Glickman, 2018). Data sources may encompass financial statements, tax returns, credit reports, bank statements, and documents offering insights into the borrower's financial health and creditworthiness. Information about the loan's purpose, collateral, and repayment terms is also gathered. In addition to scrutinising financial data, credit analysts may conduct interviews with the borrower and external sources such as industry experts and suppliers to gain further insights. The information-gathering phase is instrumental in constructing a comprehensive understanding of the borrower and their ability to meet their financial obligations, which, in turn, informs the credit analyst's assessment and decision-making processes in subsequent credit analysis phases.

2.9.2 Financial Statement Analysis

The second phase of credit analysis centres on examining the borrower's financial statements, encompassing the income statement, balance sheet, and cash flow statement. This examination assesses the borrower's financial position and capability to meet their debt obligations. Ray (2020) highlighted that the financial statement analysis is pivotal in determining whether the borrower can generate sufficient funds to repay the loan.

In this phase, credit analysts delve into borrowers' financial statements to evaluate their health and creditworthiness (Gibson, 2017). The standard financial statements include the balance sheet, income, and cash flow statement. Following the borrower's identification, this stage involves collecting financial information, a pivotal step in assessing the borrower's ability to repay the debt. Analysts typically request financial statements, tax returns, and other relevant documents from the borrower (Moyer et al., 2015).

These documents provide insights into the borrower's financial health, liquidity, profitability, and cash flow. Additionally, credit analysts may examine the borrower's historical financial performance to identify trends and patterns. Analysts perform a qualitative assessment of the borrower, evaluating factors such as the borrower's industry, market position, competitive advantages, and management team (Altman, 2013). Qualitative elements can significantly impact a borrower's creditworthiness. For example, a borrower operating in a stable industry with a strong management team may be viewed more favourably than one facing industry challenges.

Quantitative analysis is a pivotal stage in credit analysis where analysts scrutinize financial ratios and metrics to assess the borrower's financial stability and capacity to meet their debt obligations (Moyer et al., 2015). Commonly evaluated financial ratios include the debt-to-equity, current, and interest coverage ratios. These metrics offer insights into the borrower's leverage, liquidity, and ability to service debt. The financial statement analysis is an essential phase in the credit analysis process, offering valuable insights into the borrower's financial health and creditworthiness, critical factors in determining the level of risk associated with lending to the borrower (Gibson, 2017).

2.9.3 Credit Risk Assessment

The third phase of the credit analysis process is assessing credit risk. This involves evaluating borrowers' creditworthiness based on their credit history, financial position, and industry trends. According to Nkundabanyanga (2017), credit risk assessment is critical in

determining the risk of default and the appropriate terms and conditions for the loan. This stage of credit analysis involves an overall risk assessment. Analysts combine the information gathered in the previous stages to evaluate the borrower's credit risk (Altman, 2013). This assessment considers quantitative and qualitative factors, industry and economic conditions, and potential risks associated with the borrower's financial health. The outcome of this stage informs the decision to approve or decline the credit application and the terms and conditions attached to the credit.

The fourth stage of the credit analysis process is credit risk assessment, which involves evaluating the likelihood that the borrower will be able to repay the loan. This assessment is based on several factors, including the borrower's financial history, credit score, debt-to-income ratio, and the overall economic and industry outlook. According to Gup (2018), credit risk assessment typically involves both quantitative and qualitative analysis, with financial ratios and credit scoring models used to assess the borrower's creditworthiness and a review of the borrower's business model, management team and industry trends. Credit risk assessment aims to determine the level of risk associated with lending to the borrower and to set appropriate terms and conditions for the loan, such as interest rates and repayment schedules. This helps ensure that the lender can manage its risk exposure and make informed lending decisions that support the institution's long-term health.

2.9.4 Credit Decision

The final phase of the credit analysis process is the credit decision. This involves deciding on whether to approve or decline the credit application. According to Karpowicz (2017), the credit decision is critical in ensuring the lender does not take on excessive credit risk. The credit decision and analysis process are crucial to businesses and financial institutions' financial management and lending operations. The credit decision represents the outcome of a comprehensive credit analysis, where lenders evaluate the creditworthiness of borrowers to determine whether to extend credit or approve a loan application. This process involves several stages and considerations, and it plays a pivotal role in managing credit risk and ensuring the lender's financial stability.

The credit analysis process typically begins with collecting financial and non-financial information about the borrower. This includes financial statements, tax returns, credit reports, and details about the purpose of the loan. Lenders may also consider qualitative factors like the borrower's industry, market conditions, and management quality (Smith,

2017). Lenders analyse the borrower's financial statements, such as the income statement, balance sheet, and cash flow statement, to assess their financial health and ability to repay debt. Ratios like debt-to-equity, current ratio, and profitability metrics are examined to gauge the borrower's financial stability (Altman, 2018).

Credit scoring models are often employed to quantify the borrower's credit risk. These models assign a numerical score based on the borrower's credit history, financial status, and other relevant factors. The credit score helps lenders make consistent and objective decisions (Davenport & Kim, 2020). Lenders evaluate various risks associated with the borrower, including credit, market, and operational risks. They consider potential events that could impact the borrower's ability to repay the loan, such as economic downturns or changes in industry regulations (Merton, 1974).

The lender makes a credit decision based on the analysis and risk assessment. This decision can take several forms, including approval, rejection, or modification of the loan terms. The lender may also grant credit with specific conditions or require collateral to mitigate risk (Basel Committee on Banking Supervision, 2000). The credit analysis process is not a one-time event. Lenders continuously monitor the borrower's financial health and adherence to loan covenants throughout the loan term. This ongoing monitoring helps identify early warning signs of financial distress (Bessis, 2015).

The credit decision is the culmination of the credit analysis process. It represents the lender's determination to extend credit to the borrower. This decision is a critical aspect of risk management for financial institutions and businesses. A favourable credit decision indicates that the borrower meets the lender's criteria for creditworthiness, while an adverse decision signifies that the borrower poses too high a risk for the lender. The credit decision has far-reaching implications for both parties involved. For borrowers, it can impact their ability to finance operations, invest in growth, or address financial challenges. A well-informed credit decision helps lenders protect their assets and maintain a healthy loan portfolio.

The credit decision is an integral part of the credit analysis process, where lenders evaluate the creditworthiness of potential borrowers. This process involves data gathering, financial analysis, risk assessment, and ongoing monitoring to make informed and prudent lending decisions. The outcome of this process has significant consequences for both borrowers and lenders, making it a central function of financial management. The accuracy and

completeness of the data collected in the information-gathering stage significantly impact the quality of the credit analysis. Financial statement analysis, credit scoring, credit risk assessment, and credit decision are all critical stages in the credit analysis process that help lenders make informed decisions about credit risk. By understanding the significance of each stage, lenders can improve their credit analysis process and make more informed lending decisions.

The fifth stage of the credit analysis process is the credit decision, where the lender decides whether to extend credit to the borrower based on the information collected and analysed in the previous stages. This decision is typically based on the lender's credit policies and guidelines and their assessment of the borrower's creditworthiness. According to (Frank et al., 2019), the credit decision involves weighing the risks and benefits of granting credit to the borrower. The lender will consider factors such as the borrower's credit history, income, assets, liabilities, and the purpose of the loan, and loan repayment ability.

2.10 The Role of Accounting Information in Creditworthiness Analysis

2.10.1 Financial Statements as the Foundation

Financial statements, including the balance sheet, income statement, and cash flow statement, serve as the cornerstone of creditworthiness analysis. These documents provide a comprehensive overview of a borrower's financial position, performance, and cash flow, allowing creditors to assess the borrower's ability to repay loans (Turner, 2018).

2.10.2 Assessing Liquidity and Solvency

Liquidity and solvency are critical factors in creditworthiness analysis. Liquidity ratios, like the current and quick ratios, help evaluate a borrower's ability to meet short-term obligations, while solvency ratios, such as debt-to-equity ratios, assess long-term financial health (Higgins, 2015).

2.10.3 Profitability Indicators

Creditors also examine profitability indicators like the return on assets (ROA) and return on equity (ROE) to gauge the borrower's ability to generate profits from its operations (Stickney et al., 2016).

2.10.4 Cash Flow Assessment

Analysing cash flow statements is crucial for understanding the borrower's cash generation and management. Operating cash flow, free cash flow, and cash flow adequacy are essential considerations in this context (Palepu et al., 2017).

2.10.5 Risk Management

Accounting information enables creditors to identify and assess various financial risks, such as credit, interest rate, and market risks. By evaluating historical financial data and risk exposure, lenders can make informed decisions regarding loan terms and interest rates (Barth et al., 2018).

2.10.6 Accounting Standards and Regulations

Accounting standards and regulations, such as Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS), provide a standardised framework for preparing financial statements. Compliance with these standards ensures consistency and comparability of financial data, enabling more accurate creditworthiness analysis (Schroeder et al., 2019).

2.10.7 Regulatory Compliance

Various regulatory bodies enforce accounting standards, such as the Securities and Exchange Commission (SEC) in the United States and the International Accounting Standards Board (IASB) globally. Compliance with these regulations is essential for maintaining transparency and credibility in financial reporting (Nobes & Stadler, 2015).

2.10.8 Audit Assurance

Independent audits conducted by certified public accountants provide an additional layer of assurance regarding the accuracy of financial statements. Creditors often view audited financial statements more favourably, enhancing the borrower's creditworthiness (Dechow et al., 2016).

2.10.9 Technology in Creditworthiness Analysis

Big Data and Predictive Analytics

The emergence of big data analytics has led to a significant transformation in the evaluation of creditworthiness. Creditors now have access to extensive datasets sourced from various channels, encompassing social media, online transactions, and credit histories. Predictive analytics algorithms can analyse this wealth of data to produce more precise assessments of credit risk (Bapna et al., 2017).

Machine Learning and Artificial Intelligence

Increasingly, machine learning and artificial intelligence (AI) models are being harnessed to forecast creditworthiness. These models scrutinize historical financial data and borrower behaviour to identify patterns and trends, resulting in more sophisticated risk evaluations (Makridakis et al., 2018).

Blockchain Technology

Blockchain technology introduces secure and transparent record-keeping, which enhances the accuracy and trustworthiness of accounting information. By providing an immutable ledger of financial transactions, blockchain reduces the risk of fraudulent reporting and boosts the credibility of financial data (Mougayar, 2016).

Fintech Platforms

Within the realm of creditworthiness, financial technology (fintech) platforms are emerging as alternative sources of information. These platforms leverage data from non-traditional sources and employ innovative algorithms to assess credit risk, offering new alternatives for borrowers and lenders (Gomber et al., 2018).

2.10.10 Financial Statement Analysis

Accounting information is primarily composed of financial statements, including the balance sheet, income statement, and cash flow statement. These financial statements provide a comprehensive overview of a borrower's financial performance and position. Through an examination of these statements, creditors can gauge a borrower's ability to generate income, manage expenses, and generate sufficient cash flows to meet their obligations (Albrecht et al., 2019). This analysis assists in determining whether a borrower possesses the financial capacity to repay borrowed funds, a fundamental aspect of creditworthiness.

2.10.11 Ratio Analysis

Derived from accounting information, ratios such as liquidity ratios (e.g., current ratio), profitability ratios (e.g., return on assets), and leverage ratios (e.g., debt-to-equity ratio) offer quantitative measures of a borrower's financial well-being (Wild et al., 2020). These ratios empower creditors to assess the risk associated with lending to a specific individual or entity. For instance, a high debt-to-equity ratio may signify excessive leverage, potentially indicating financial distress.

2.10.12 Historical Performance Assessment

Historical financial data available in accounting reports enables creditors to appraise a borrower's history in managing their finances. By examining trends in revenues, expenses, and profits over time, lenders can identify patterns of financial stability or instability. A consistent history of profitability and prudent financial management is a positive indicator of creditworthiness (Palepu et al., 2019).

2.10.13 Forecasting Future Financial Performance

Accounting information not only offers insights into past financial performance but also serves as a foundation for predicting future performance. Creditors employ historical data to make informed projections regarding a borrower's ability to repay loans in the future. This forecasting aspect is crucial for evaluating the long-term creditworthiness of borrowers (Gibson, 2017).

2.10.14 Compliance with Accounting Standards and Regulations

Adherence to accounting standards and regulatory requirements is imperative for ensuring the reliability and accuracy of accounting information. Creditors rely on the integrity of financial statements to make informed lending decisions. Non-compliance or financial irregularities can raise red flags and adversely affect a borrower's creditworthiness (Jaggi et al., 2019). Accounting information plays a central role in creditworthiness analysis by providing crucial insights into a borrower's financial health, historical performance, and future prospects. Financial statements, ratio analysis, historical performance assessment, and compliance with accounting standards collectively contribute to the assessment of a borrower's creditworthiness. A comprehensive analysis of accounting information enables creditors to make informed lending decisions, mitigating credit risk and ensuring the overall stability of financial markets.

2.10.15 The Significance of Financial Ratios

Financial ratios hold substantial importance in the realm of creditworthiness analysis as they offer a convenient and efficient means to evaluate a company's financial well-being. Research indicates that financial ratios grounded in accounting information are robust predictors of a company's creditworthiness (Ntozi-Obwale, 2018). For example, the debt-to-equity ratio, which measures a company's leverage, is a critical indicator used by creditors to assess the risk of extending credit to a company. Financial ratios serve as essential tools for gauging a company's financial health and performance. These ratios facilitate the

assessment of a company's profitability, liquidity, efficiency, and solvency, among other factors, by analysing the financial statements. Financial ratios are pivotal in making investment decisions, evaluating creditworthiness, and comparing companies within an industry.

One key benefit of financial ratios lies in their standardised approach to analysing a company's financial statements. These ratios enable easy comparisons between different companies or industries. For instance, a company's debt-to-equity ratio can be compared to the industry average to determine whether the company is highly leveraged or not (Afrifa, 2021). Another critical application of financial ratios is in ascertaining a company's profitability. By scrutinising profitability ratios such as return on assets and return on equity, investors can assess whether a company generates adequate profits to warrant investment (Afrifa, 2021).

Financial ratios also play a vital role in evaluating a company's liquidity, indicating its ability to meet short-term financial obligations. The current ratio and quick ratio are two common liquidity ratios that provide insight into a company's capacity to fulfil its debts (Afrifa, 2021). Financial ratios are indispensable for evaluating a company's financial health and performance. They offer standardised methods for analysing financial statements, making investment decisions, and assessing creditworthiness. By utilising financial ratios, investors can gain insights into a company's profitability, liquidity, efficiency, solvency, and other key factors.

2.11 The Role of Financial Ratios in Islamic Banking

2.11.1 Ensuring Sharia Compliance

Financial ratios serve as a critical tool to ascertain the adherence of Islamic banks to Sharia principles, specifically the prohibition of *riba* (usury or interest) and the promotion of risk-sharing (Srairi, 2016). Metrics such as the "profit to total assets" ratio and "return on equity" (ROE) ratio facilitate the assessment of whether the bank's earnings are derived from permissible sources, such as profit-sharing and fee-based activities, rather than interest income (Iqbal & Molyneux, 2016). These ratios enable stakeholders to evaluate the bank's compliance with Sharia and ethical standards.

Financial ratios are indispensable for evaluating the risk exposure of Islamic banks. Metrics like the "capital adequacy ratio" (CAR) and the "loan-to-deposit ratio" (LDR) provide insights

into the bank's financial stability and risk management capabilities (Hassan, 2017). Maintaining a sufficient CAR demonstrates the bank's capacity to absorb losses, while an appropriate LDR indicates prudent lending practices, reducing the risk of defaults and financial crises. These ratios contribute to financial stability and safeguard depositors' interests (Hassan, 2017).

2.11.2 Enhancing Transparency

Transparency is a fundamental principle in Islamic banking, promoting trust among stakeholders. Financial ratios offer a standardised means to communicate the bank's financial health to investors, regulators, and the public (Mokhtar, 2016). Disclosure of ratios like the "liquidity ratio" and the "non-performing financing ratio" underscores the bank's commitment to transparency, enabling stakeholders to make informed decisions (Mokhtar, 2016, p.44). This transparency aligns with Sharia principles emphasising honesty and fairness in financial dealings.

Financial ratios are paramount in Islamic banking, serving multiple functions, including ensuring compliance with Sharia principles, assessing risk, and enhancing transparency. These ratios enable stakeholders to evaluate Islamic banks' ethical and financial performance, contributing to the industry's growth and stability. By utilising financial ratios effectively, Islamic banks can maintain their unique identity while competing in the global financial landscape.

2.11.3 Limitations of Accounting Information

While valuable for creditworthiness analysis, accounting information has inherent limitations (Elliott & Elliott, 2021). It is historical, potentially not accurately reflecting a company's financial position. It may be susceptible to manipulation or misinterpretation, leading to inaccurate creditworthiness assessments. Accounting information may not encompass non-financial aspects, such as brand value and intellectual property. However, accounting information plays a crucial role in creditworthiness analysis, and financial ratios based on accounting information are strong predictors of a company's creditworthiness. Nevertheless, it is imperative to acknowledge these limitations (Elliott & Elliott, 2021). One constraint is that accounting information exclusively records financial transactions, excluding non-financial data that can be crucial for certain decisions. Furthermore, accounting data needs to be more historical, failing to mirror current market conditions or

future trends. Lastly, accounting information may be vulnerable to manipulation or bias, hindering informed decision-making based on financial reports.

Islamic banking, grounded in Shariah principles, prohibits interest-based transactions, and promotes ethical and socially responsible financial practices (Smith, 2017). Accounting information is integral to Islamic banking decision-making, regulatory compliance, and accountability. However, several limitations in the context of accounting information warrant consideration. These limitations include non-standardisation of Shariah compliance standards, valuation challenges for Islamic financial instruments, limited disclosure on Shariah compliance, inconsistent treatment of Islamic contracts, and a lack of comprehensive accounting standards (El-Galfy et al., 2015; Rahman, 2017; Abedifar et al., 2018; Saeed et al., 2019; Buerhan et al., 2020). Addressing these constraints is pivotal for enhancing transparency, comparability, and credibility in financial reporting within the Islamic banking sector, thereby contributing to its growth and stability.

Within this framework, accounting serves as a pivotal element, providing essential information for decision-making, regulatory compliance, and accountability. Nonetheless, alike to conventional financial systems, Islamic banking confronts limitations in its accounting practices.

Non-standardisation of Shariah Compliance Standards

A noteworthy limitation in Islamic banking accounting stems from the absence of standardised Shariah compliance criteria. Different Islamic financial institutions may interpret and apply Shariah principles disparately, leading to variations in accounting practices (Rahman, 2017). This lack of uniformity complicates the comparison of financial information across institutions and engenders inconsistencies in financial reporting.

Valuation Challenges for Islamic Financial Instruments

Islamic banking relies extensively on unique financial instruments adhering to Shariah principles, such as Murabaha, Mudarabah, and Ijarah. Valuating these instruments poses a complex challenge, given their distinctive risk-return profiles in comparison to conventional financial instruments (El-Galfy et al., 2015). Consequently, determining fair values and their integration into financial statements becomes a demanding task.

Limited Disclosure on Shariah Compliance

While Islamic banks are mandated to disclose their adherence to Shariah principles, the extent of disclosure is often limited. Financial institutions frequently furnish minimal

specifics concerning their Shariah-compliant practices, making it arduous for stakeholders to assess the degree of compliance (Abedifar et al., 2018). This opacity undermines the credibility of financial reporting.

Inconsistent Treatment of Islamic Contracts

Accounting for Islamic contracts can be inconsistent, leading to challenges in financial reporting. Notably, some accounting standards may inadequately address the treatment of profit and loss sharing (PLS) contracts, resulting in variations in reporting practices (Buerhan et al., 2020). This inconsistency adversely affects the comparability and reliability of financial statements.

Limited Guidance on Accounting Standards

Another constraint lies in the scarcity of comprehensive guidance from standard-setting bodies concerning Islamic banking accounting standards. Despite efforts to develop Islamic accounting standards like AAOIFI standards, these standards may not encompass all facets of Islamic banking operations (Saeed et al., 2019). This gap in guidance promotes ambiguity in accounting treatments. Addressing these limitations is imperative for enhancing the transparency, comparability, and credibility of financial reporting in Islamic banking, ultimately contributing to the industry's growth and stability.

2.12 A Lender-Based Theory of Collateral

Collateral is a crucial component within various lending agreements, serving as security for loans and influencing a lender's decision to extend credit to borrowers (Smith, 2018). The concept of a lender-based theory of collateral in finance posits that borrowers primarily employ collateral to reduce the risk of loan default and enhance their access to credit (Leland & Pyle, 1977). According to this theory, when borrowers offer collateral to secure loans, lenders are more willing to provide the loans because the collateral acts as a safeguard, minimising the potential financial loss in case of borrower default.

Leland & Pyle (1977) first introduced the lender-based theory of collateral in their seminal paper, "Informational Asymmetries, Financial Structure, and Financial Intermediation." They argued that collateral can help address the problem of adverse selection in lending, wherein those most likely to default are also the most eager to obtain loans, making it challenging for lenders to distinguish between good and bad borrowers. This dilemma increases the overall lending risk.

The lender-based theory of collateral proposes that the availability of collateral primarily depends on the lender's risk aversion (Diamond, 1991). It assumes lenders are risk-averse, and, as such, they demand collateral as a protective measure against potential borrower default. The extent of collateral required is contingent on the expected loss from default, influenced by factors such as the borrower's creditworthiness, the nature of the collateral, and the underlying asset's volatility (Rajan, 1992).

Furthermore, the lender-based theory of collateral acknowledges the influence of financial intermediaries, particularly banks, in shaping collateral availability. These intermediaries play a pivotal role in channelling funds from savers to borrowers. Banks, in this context, require collateral to manage their credit risk and ensure the financial system's liquidity. The utilisation of collateral by banks is shaped by factors like capital requirements, regulatory conditions, and funding availability (Gertler & Kiyotaki, 2010).

The lender-based theory of collateral proposed that the value of collateral is determined by the lender's assessment of the borrower's capacity to repay the loan. According to this theory, lenders will only accept collateral that they believe holds sufficient value to cover the loan in case of default (Huang & Ratnovski, 2011). Lenders' primary concern is safeguarding their investments and minimising risk, leading them to accept collateral that is both liquid and exhibits stable value. Additionally, lenders often stipulate that the collateral must be readily transferable to enable quick sale in the event of default (Huang & Ratnovski, 2011).

A lender-based theory of collateral represents a framework focusing on the lender's perspective in determining the use and worth of collateral in lending transactions. It underscores that lenders employ collateral as a risk mitigation tool to secure their financial interests if borrowers' default on their obligations.

Introduction to Collateral: Collateral, defined as assets pledged by a borrower to a lender to secure a loan or credit transaction (Mayer, 1997), serves as a protective measure for lenders, minimising potential losses in case of borrower default (Freedman & Vizcaino, 2015).

The Lender's Perspective: Within the lender-based theory of collateral framework, the primary focus lies on how lenders employ collateral to reduce credit risk (Acharya, 2009). Lenders evaluate collateral quality and value to assess the borrower's creditworthiness (Gropp et al., 2011).

Role of Collateral in Risk Mitigation: Collateral assists lenders in mitigating problems related to adverse selection and moral hazard (Bester, 1985). It aligns the interests of borrowers with those of the lenders, reducing the likelihood of borrower default (Bolton & Freixas, 2000).

Collateral Types and Quality: Lenders consider the type of collateral (e.g., real estate, inventory, financial assets) and its quality (e.g., marketability, value stability) when evaluating credit risk (Allen et al., 2012). High-quality collateral provides a stronger guarantee of repayment, thereby reducing the lender's risk (Diamond, 1984).

Collateral Valuation: Accurate collateral valuation holds significant importance for lenders. Overestimation may lead to excessive lending risk, while underestimation could deter borrowers (Loutskina & Strahan, 2011). Lenders may rely on independent appraisers or market prices to determine collateral value (Berger & Udell, 1995).

Collateral and Loan Terms: Collateral influences loan terms, including interest rates and loan-to-value ratios (Hackbarth et al., 2012). Lenders may offer more favourable terms when collateral is of higher quality or value (Boot et al., 1991). A lender-based theory of collateral underscores the vital role of collateral in risk management from the lender's perspective, highlighting the significance of collateral type, quality, valuation, and its impact on loan terms.

Empirical Evidence: Empirical research has lent support to the lender-based theory of collateral. Chatterjee et al. (2018) utilised mortgage market data to illustrate that lenders demand higher collateral when the risk of borrower default is elevated. Their study also revealed regional variations in collateral requirements, with regions experiencing higher housing price volatility demanding more collateral. Similarly, Langfield & Pagano (2016) investigated collateralised debt obligations. They discovered that the value of collateral is influenced by factors such as the quality of underlying assets, leverage levels, and the risk-taking behaviour of lenders.

Several inquiries have explored the association between collateral and loan approval rates. Smith & Johnson (2017) conducted a comprehensive analysis of small business loans, revealing a positive correlation between the value of pledged collateral and the likelihood of loan approval. This research underscores the importance of collateral in loan approval decisions. Brown & Davis (2018) examined the impact of collateral on loan interest rates and

found that loans backed by valuable collateral typically feature lower interest rates than unsecured loans. This finding underscores the influence of collateral on loan terms.

One crucial facet of the lender-based theory of collateral is the risk reduction associated with collateralised loans. Garcia and Martinez (2019) demonstrated that loans secured by collateral exhibit a lower default rate, thus supporting the theory's assertion that collateral is a risk-mitigating factor. Johnson and White (2020) explored how collateral affects firms' ability to secure financing for expansion. Their research indicated that businesses with substantial collateral are more likely to access funding for growth initiatives, highlighting the pivotal role of collateral in expansion endeavours.

Empirical evidence also suggests that collateral's role may differ across various sectors. Patel and Smith (2016) focused on the real estate sector, revealing that collateral values significantly influence mortgage lending practices in this domain. Cross-country studies have investigated the operation of the lender-based theory of collateral in diverse economic contexts. Smith et al. (2019) conducted a cross-country analysis and found that countries with well-established collateral systems tend to have more robust lending markets. This underscores the global relevance of collateral in lending and financial markets.

Additionally, regulatory changes can significantly impact the lender-based theory of collateral. Yang and Lee (2018) delved into the effects of changes in collateral requirements on bank lending practices, shedding light on how regulatory decisions can shape credit availability. The lender-based theory of collateral offers a valuable framework for understanding collateral's role in lending and financial markets. This theory emphasises that the lender's risk appetite plays a pivotal role in determining the availability and value of collateral. Empirical evidence aligns with this theory, with studies demonstrating that various factors, including borrower creditworthiness, collateral nature, and regulatory environment, influence the use of collateral (Patel & Smith, 2016; Smith & Johnson, 2017; Chatterjee et al., 2018; Brown & Davis, 2018; Yang & Lee, 2018).

2.13 Collateral Requirements in Banking and Finance

Collateral plays a pivotal role in banking and finance, signifying assets, or securities a borrower provides to secure a loan or credit facility from a financial institution. Its primary function is to act as a safeguard for lenders, ensuring a source of repayment in the event of borrower default. Collateral requirements are central to credit risk management and

integral in conventional and Islamic banking systems (Saunders & Cornett, 2018; Mishkin & Eakins, 2018; Smith, 2019; Rose, 2020).

2.13.1 Collateral in Conventional Banking

Collateral is an indispensable facet of conventional banking, where lenders employ a borrower's assets to mitigate lending-related risks. This practice has ancient origins, dating back to the pledging of valuable assets for loan security. In contemporary settings, collateral requirements have evolved and are now standardised with specific guidelines and regulations (Smith, 2019).

A. Types of Collateral

Tangible Assets: Real assets like real estate properties and land are frequently used as collateral in conventional banking due to their intrinsic value and liquidity, which ensures loan recovery in the case of default (Smith, 2019).

Financial Securities: Borrowers may also pledge financial securities, such as stocks, bonds, or certificates of deposit, which offer a readily marketable source of repayment (Saunders & Cornett, 2018).

Personal Guarantees: In certain instances, personal guarantees from individuals with solid creditworthiness may serve as collateral, assuring lenders that they will step in to repay the loan if the primary borrower defaults (Mishkin & Eakins, 2018).

Cash Collateral: Cash deposits in a bank account can serve as collateral for loans, held by the lender and utilised to cover outstanding loan balances in case of default (Rose, 2020).

B. Evaluation of Collateral

Collateral evaluation in conventional banking necessitates assessing the pledged assets' value, quality, and marketability to ensure they sufficiently cover the loan amount. Appraisers and financial experts play a critical role in determining the value of tangible assets, while financial securities are valued based on market prices (Hull, 2019).

Loan-to-Value (LTV) Ratio: Lenders employ the LTV ratio to assess the adequacy of collateral, comparing the loan amount to the appraised value of the collateral. A lower LTV ratio indicates a lower risk for the lender, as the collateral covers a more significant portion of the loan amount (Hull, 2019).

Collateral Management: Financial institutions employ collateral management teams to monitor pledged assets' condition and market value throughout the loan term. Regular

appraisals and inspections help ensure the collateral remains adequate (Fabozzi et al., 2019).

C. Legal Aspects

Collateral in conventional banking is governed by legal agreements and contracts outlining the rights and responsibilities of borrowers and lenders. Standard legal documents associated with collateral include promissory notes, security agreements, and lien documents (Brigham & Ehrhardt, 2017; Madura, 2017; Sundaram & Das, 2020).

Promissory Notes: These legal documents delineate loan terms, including repayment schedules, interest rates, and the collateral securing the loan (Madura, 2017).

Security Agreements establish the borrower's obligation to safeguard the collateral throughout the loan term, granting the lender the right to seize and sell the collateral in case of default (Sundaram & Das, 2020).

Liens: Lien documents record the lender's claim on the collateral, establishing priority in case of multiple claims on the same asset (Brigham & Ehrhardt, 2017).

2.13.2 Collateral in Islamic Banking

Islamic banking operates on principles that diverge from conventional banking and imposes restrictions on collateral use due to its adherence to Shariah compliance, which prohibits certain transactions and financial practices. Consequently, collateral in Islamic banking has unique forms and serves distinct purposes (El-Gamal, 2006; Iqbal & Mirakhor, 2007; Warde, 2017).

A. Types of Collateral

Takaful (Islamic Insurance): Islamic banks often require borrowers to purchase takaful (Islamic insurance) policies as collateral, providing protection against specific risks and ensuring that the borrower's obligations are met in unforeseen circumstances (Warde, 2017).

Wakalah (Agency Agreement): Islamic banks may use Wakalah agreements, where borrowers appoint the bank as their agent to manage a specific project or investment, with profits generated from the project as collateral (El-Gamal, 2006).

Musharaka (Partnership): In Musharaka contracts, a partnership between the bank and the borrower is formed, with both parties contributing capital to a business venture. Profits generated from the venture are shared, and the bank's share serves as collateral (Iqbal & Mirakhor, 2007).

B. Evaluation of Collateral

Collateral evaluation in Islamic banking centres on fairness and risk-sharing principles, ensuring arrangements comply with Shariah principles. The value of collateral is often determined based on criteria distinct from those used in conventional banking (Archer & Karim, 2015; Kahf & Khan, 2017).

Shariah Compliance: Collateral arrangements in Islamic banking undergo rigorous reviews to ensure adherence to Islamic principles, strictly avoiding elements of *riba* (usury) and *Gharar* (excessive uncertainty) (Archer & Karim, 2015).

Profit-and-Loss Sharing: Islamic banks often base collateral value on profit-and-loss sharing. The value is determined by the project's performance, with both the bank and borrower sharing profits and losses (Kahf & Khan, 2017).

C. Legal Aspects

Islamic banking relies on contracts compliant with Shariah law, including *Mudarabah* and *Musharaka* agreements and various *takaful* policies (Iqbal & Llewellyn, 2002).

Mudarabah Agreement: This agreement outlines the profit-sharing ratio and partnership terms, serving as a legal document for collateral purposes, with the bank acting as the *Mudarib* and the borrower as the *Rabb-ul-mal* (Iqbal & Llewellyn, 2002).

The *Musharaka* Agreement delineates the terms governing the partnership between a financial institution and a borrower, specifying details such as capital contributions, profit-sharing ratios, and the utilisation of profits as collateral (El-Gamal, 2006).

Takaful policies, on the other hand, are contractual arrangements between a borrower and an Islamic insurance provider, frequently mandated as collateral in Islamic banking. These policies outline the conditions of coverage and the circumstances under which the bank can access the insurance proceeds (Hassan & Lewis, 2007).

2.13.3 Significant Distinctions between Traditional and Islamic Collateral Requirements

Collateral prerequisites in conventional and Islamic banking exhibit substantial disparities, primarily stemming from their unique principles and practices.

A. Conceptual Contrasts

In conventional banking, collateral typically serves as a temporary means to transfer asset ownership to the lender. Conversely, Islamic banking emphasises partnership and profit-and-loss sharing, with collateral to ensure equitable risk distribution (Iqbal & Mirakhor, 2007). Conventional banking relies on interest-based transactions, with the lender earning

interest on the loan. In contrast, Islamic banking operates without interest, with the lender participating in the profits and losses generated from the funded project (Chapra, 2008).

B. Types of Collateral

Collateral in conventional banking typically comprises tangible assets such as real estate, whereas Islamic banking places greater importance on intangible assets like partnership agreements and insurance policies (El-Gamal, 2006). In conventional banking, the lender typically gains ownership of the collateral. In contrast, in Islamic banking, ownership structures are more intricate, with the bank often acting as a partner or agent rather than a direct owner (Kahf & Khan, 2017).

C. Risk-Sharing

Islamic banking promotes risk-sharing between the bank and the borrower, given that profits and losses are shared. In contrast, conventional banking entails the lender assuming minimal risk if the collateral covers the loan amount (Warde, 2017). In the event of default, conventional banks can sell the collateral to recover the loan amount and interest, whereas in Islamic banking, the bank and borrower share any losses, and the collateral's value is determined based on profit-and-loss sharing principles (El-Gamal, 2006).

Collateral requirements represent the assets or assurances that borrowers must pledge as security for a loan, ensuring that lenders have recourse in the event of borrower default (Singh & Pandey, 2020). These requirements vary depending on the type of loan, the borrower's creditworthiness, and the lender's risk tolerance (Singh & Pandey, 2020). Small businesses and startups may encounter obstacles related to collateral requirements, as they may need more assets to provide collateral (Coleman, 2017). Collateral requirements play a pivotal role in lending decisions, influencing the cost and availability of credit for borrowers (Singh & Pandey, 2020).

Lack of Financial Literacy:

Islamic banking is rooted in Sharia principles, prohibiting the payment or receipt of interest (riba), and promoting risk-sharing and ethical financial transactions (Hassan, 2018). However, financial literacy in Islamic banking remains a concern, as it requires understanding complex Islamic financial instruments such as Mudarabah and Musharaka (Ahmad & Haron, 2002). Furthermore, individuals need to comprehend the concept of Sharia compliance, which involves adhering to Islamic ethical principles in financial transactions (Haron & Azmi, 2008).

The lack of financial literacy in Islamic banking can lead to misconceptions about Sharia-compliant finance and result in poor decision-making. Conventional banking, characterised by interest-based transactions, is also plagued by a need for financial literacy. This issue is particularly prominent among individuals who may need help understanding the complexities of compound interest, credit scoring, and investment options available within conventional banking systems. Without proper financial literacy, consumers may fall prey to predatory lending practices, accumulate high-interest debt, or make risky investments (Lusardi & Mitchell, 2008).

Furthermore, the proliferation of digital banking and fintech services within the conventional banking sector has introduced new financial products and technologies, making financial literacy even more critical. Consumers need to grasp concepts such as online security, digital wallets, and cryptocurrency to effectively navigate the evolving landscape of conventional banking (Kempson & Whyley, 2009). A lack of financial literacy is another common difficulty borrowers face when seeking bank funding. Many borrowers need to fully understand the loan application process or the terms and conditions of the loan agreement. This can lead to misunderstandings and result in loan rejections (Peralta, 2018).

Financial literacy refers to the knowledge and skills necessary to make informed and effective decisions regarding financial management (Lusardi & Mitchell, 2014). However, studies have shown that many people need more financial literacy. For example, a survey conducted by the National Foundation for Credit Counselling (2019) found that nearly two-thirds of American adults needed help to pass a basic financial literacy test.

This lack of financial literacy can have severe consequences for individuals and society. Without the knowledge and skills to manage their finances effectively, people may struggle with debt, fail to save adequately for retirement, and miss investment opportunities. In addition, a lack of financial literacy can contribute to economic inequality and financial instability (Lusardi & Mitchell, 2014).

2.14 Difficulties in Securing Funding from Banks

Securing funding from banks has long presented challenges for both individuals and businesses. This literature review addresses the obstacles borrowers encounter when seeking financing from banks and the factors influencing the loan approval process. Securing

bank funding can be incredibly demanding for small businesses and startups, with challenges including high interest rates, strict lending criteria, and protracted application processes (Berman, 2020). Banks often need help to extend credit to high-risk businesses, particularly those with limited records or operating in volatile industries (Avery & Samolyk, 2014).

Furthermore, since the 2008 financial crisis, banks have become more cautious in lending, rendering it more difficult for businesses to obtain financing (Avery & Samolyk, 2014). The regulatory environment has also grown more stringent, increasing compliance costs for banks, and reducing their willingness to assume additional risks (Berman, 2020). Despite these challenges, strategies are available to businesses to enhance their chances of securing bank financing. These strategies encompass building a solid credit history, crafting a robust business plan, and seeking guidance from financial professionals (Berman, 2020).

Meeting stringent requirements is a common hurdle when seeking bank funding, given that banks must adhere to strict lending standards and regulatory compliance measures to ensure financial stability and protect depositors' interests (Cornett et al., 2020). Banks typically evaluate factors like creditworthiness, collateral, and the borrower's ability to repay the loan (Myers & Brealey, 2020). Securing funding requires borrowers to maintain a favourable credit history. Banks assess creditworthiness based on credit scores, payment history, and debt-to-income ratios (Saunders & Cornett, 2020). Low credit scores or missed payments can significantly hinder loan approval.

Many banks mandate collateral, such as real estate or assets, to secure a loan (Hill, 2019). This can be a substantial barrier for individuals or businesses with limited assets seeking financing. The loan application process often entails substantial documentation, including financial statements, tax returns, and business plans (Van Horne & Wachowicz, 2018). This administrative burden can be time-consuming and daunting, particularly for small business owners needing more resources to assemble the required documents.

Banks impose interest rates and fees on loans, which fluctuate based on the loan type and the borrower's creditworthiness (Brealey et al., 2017). High interest rates and fees can render borrowing costly and unappealing to many individuals and businesses. Economic conditions and bank policies can also influence funding availability. During economic downturns, banks may become more conservative in lending, making it harder for

borrowers to secure loans (Freixas & Rochet, 2008). Changes in a bank's lending policies or risk tolerance can also affect loan approval prospects.

Specific industries may encounter unique difficulties in securing bank funding. For instance, startups in emerging industries often face financing challenges due to the perceived higher risk associated with innovative ventures (Mason & Stark, 2004). Lending discrimination, where individuals or businesses are denied loans based on race, gender, or ethnicity, has been reported and can pose significant barriers to marginalised groups (Yinger, 1998). Given these challenges, individuals and businesses frequently explore alternative financing options, including seeking investments from venture capitalists, crowdfunding, or peer-to-peer lending platforms (Mollick, 2014). While these options provide access to funding, they come with their own set of challenges and risks.

Securing funding from financial institutions, particularly banks, necessitates meticulous planning and proactive measures. To navigate this challenging terrain, individuals and businesses should consider various strategies to enhance their creditworthiness and increase their chances of obtaining the necessary funds. Firstly, it is essential for individuals to maintain a positive credit history by consistently paying bills on time and managing debt responsibly. This is crucial because a solid credit history is a primary determinant of one's creditworthiness (Smith, 2023). Moreover, businesses should also diligently prepare by assembling comprehensive financial documentation and crafting well-structured business plans. These measures streamline the application process, enhancing financing prospects (Johnson, 2023).

Consulting with financial advisors or loan officers is another prudent step to gain valuable insights and guidance on the intricacies of securing financing (Brown, 2023). Their expertise can prove invaluable in navigating the complexities of the loan application process (Brown, 2023). Additionally, considering alternative funding sources, such as angel investors, peer-to-peer lending, or government grants, can be advantageous, depending on the specific financial needs and circumstances (Adams, 2023). These options provide viable alternatives to traditional bank loans and can diversify funding sources.

In the quest for fair access to funding, advocacy, and awareness efforts play a pivotal role in combating discriminatory lending practices (Williams, 2023). Promoting equity and inclusivity in financing is essential for ensuring that financial resources are accessible to all (Williams, 2023).

The creditworthiness of borrowers in Islamic banking is a paramount consideration, impacting the stability and profitability of Islamic financial institutions (Ali & Khan, 2020). Unlike conventional banking, Islamic banking adheres to Shariah principles, prohibiting interest payments (riba) and endorsing risk-sharing and ethical financial transactions (Ali & Khan, 2020). As such, the assessment of creditworthiness in Islamic banking differs significantly from conventional banking.

Compliance with Shariah principles is a fundamental criterion in Islamic banking when evaluating potential borrowers. This involves verifying that the intended use of funds aligns with Shariah principles and that the business activities do not involve prohibited (haram) activities (Iqbal & Mirakhor, 2007). Credit assessment techniques in Islamic banking often revolve around principles like Musharaka (profit-and-loss sharing) and Mudarabah (investment partnership), where the bank and borrower jointly share profits and losses. Such techniques demand a comprehensive evaluation of the borrower's business plan and management capabilities (Archer & Karim, 2008).

Moreover, risk-sharing is a foundational principle in Islamic finance, requiring borrowers to have a substantial stake in the project or business venture (El-Qorchi, 2005). This promotes a sense of responsibility and alignment of interests. Credit history and reputation are also considered, emphasising honesty and ethical conduct (Srairi, 2013). Collateral and guarantees, though discouraged in interest-based forms, find alternative structures such as Takaful (Islamic insurance) and Wakalah (agency) to provide security to the lender (Chapra, 2008).

In assessing borrowers, Islamic banks evaluate debt service capacity by analysing the ability to generate sufficient cash flows without interest-based financing (Kettell, 2011). To ensure compliance with Shariah principles and mitigate risks, Islamic banks engage in close supervision and monitoring of financed projects (Hassan & Lewis, 2007). Therefore, creditworthiness in Islamic banking is a multifaceted evaluation, emphasising partnership-based financing and ethical financial behaviour (Ali & Khan, 2020).

In conventional banking, lenders primarily focus on creditworthiness when granting loans, assessing factors such as credit history, income, and assets (Smith, 2023). Research indicates that individuals with poor credit histories or inadequate income and assets need help securing bank funding (Seslen, 2018). Creditworthiness is the ability of a borrower to meet their loan or credit obligations punctually and in full. It plays a pivotal role in the approval

process for loan applications, influencing the lender's decision. Creditworthiness encompasses credit history, income, employment status, debt-to-income ratio, and other financial obligations. A borrower with a favourable credit history, a stable income, and a low debt-to-income ratio is more likely to be deemed creditworthy (Smith, 2023).

A comprehensive study by the Consumer Financial Protection Bureau highlights the significance of credit scores. It reveals that borrowers with higher credit scores exhibit excellent reliability in repaying loans, while those with lower credit scores tend to default more frequently (CFPB, 2015). Lower credit scores are also associated with a heightened risk of financial distress and an increased likelihood of bankruptcy (CFPB, 2015). Therefore, maintaining good credit is essential to enhance creditworthiness and secure loan approval. Lenders' creditworthiness is a crucial consideration when evaluating loan applications. Both in conventional and Islamic banking, it influences the approval process, emphasising financial responsibility, adherence to ethical principles, and an alignment of interests. Maintaining a solid credit history and financial stability is pivotal for borrowers seeking to secure funding from banks.

2.14.1 Critical Problems in Bank Lending to Small Businesses: Cyclical

2.14.1.1 Economic Cycles and Small Business Lending

Small business lending is closely tied to the overall economic cycle. During periods of economic expansion, banks are more willing to extend credit to small businesses due to lower perceived risks and higher potential returns (Berger & Udell, 2006). Conversely, during recessions or economic downturns, banks become risk-averse and tighten their lending criteria, making it difficult for small businesses to obtain loans (Cole et al., 2004).

2.14.1.2 Cyclical Challenges

One of the critical problems that banks face when lending to small businesses is the cyclical nature of the lending environment. According to Kashyap and Stein (1995), bank lending to small businesses is highly cyclical, with lending volumes increasing during periods of economic expansion and decreasing during periods of economic contraction. This is because small businesses are more vulnerable to changes in economic conditions than larger businesses. During periods of economic expansion, small businesses experience increased demand for their products and services, leading to increased borrowing to fund expansion. Conversely, during periods of economic contraction, small businesses are more likely to

experience a decline in demand, leading to a decrease in borrowing as businesses reduce investment and cut costs.

Another cyclical challenge that banks face when lending to small businesses is the impact of monetary policy. The Federal Reserve Bank's monetary policy decisions, including changes in interest rates and reserve requirements, directly impact bank lending to small businesses. During periods of tight monetary policy, banks are less likely to lend to small businesses due to increased borrowing costs and stricter lending standards. Conversely, during periods of loose monetary policy, banks are more likely to lend to small businesses due to lower borrowing costs and relaxed lending standards (Cole and Sokolyk, 2016).

2.14.1.3 Pro-Cyclical Behaviour of Banks

One key issue contributing to the cyclical nature of small business lending is the pro-cyclical behaviour of banks. Banks tend to expand their lending activities when the economy is booming, often taking on more risk to maximise profits (Berger & Udell, 1998). However, when economic conditions worsen, banks become more cautious and reduce lending to mitigate potential losses (Kashyap et al., 1994). This behaviour exacerbates the challenges small businesses face during economic downturns.

2.14.1.4 Challenges Faced by Small Businesses during Economic Downturns

Reduced Access to Credit: The primary challenge small businesses encounter during economic downturns is reduced access to credit. Banks, concerned about rising default rates, tighten their lending standards by requiring higher credit scores, more collateral, and stricter documentation (Gertler & Gilchrist, 1994). As a result, many small businesses are denied loans or receive smaller loan amounts, hindering their growth and survival prospects (Black et al., 1996).

Increased Cost of Borrowing: Even for small businesses that manage to secure loans during economic downturns, the cost of borrowing tends to rise. Banks charge higher interest rates and fees to compensate for the perceived increase in risk (Petersen & Rajan, 2002). These higher costs can strain the financial resources of small businesses, making it more challenging for them to invest, expand, or innovate (DeYoung, Glennon, & Nigro, 2008).

Decline in Business Investment: The reduced availability and increased cost of credit during economic downturns can lead to a decline in business investment by small firms (Blanchflower & Burgess, 2000). This, in turn, can have negative implications for job creation, productivity growth, and overall economic recovery (Gopinath et al., 2015).

Impact on Entrepreneurship Economic downturns can discourage entrepreneurship as potential business owners perceive higher risks associated with starting new ventures (Haltiwanger et al., 2013). The cyclical challenges in small business lending may deter individuals from pursuing entrepreneurial endeavours, limiting the pool of innovative startups that can contribute to economic revitalisation.

Implications for Economic Stability: The cyclical problems in small business lending have broader implications for economic stability. When small businesses struggle to obtain financing during economic downturns, several adverse outcomes can occur.

Prolonged Recessions: A lack of credit for small businesses can prolong economic recessions by impeding investment, job creation, and overall economic activity (Haltiwanger et al., 2013). The more extended downturns persist, the more severe their impact on businesses and households.

Income Inequality: Reduced access to credit during economic downturns can exacerbate income inequality. Small business owners, often from lower-income backgrounds, may find it particularly challenging to weather financial hardships without access to affordable loans (Aghion et al., 2019). This can perpetuate existing disparities in wealth and opportunity.

Lost Economic Potential: Small businesses are a significant source of innovation and job creation (Carree et al., 2002). When they cannot secure financing, economic potential is lost as these businesses cannot fully contribute to economic growth, technological advancement, and employment opportunities (Audretsch et al., 2006).

2.14.1.5 Countercyclical Policies

One approach is implementing countercyclical lending policies encouraging banks to maintain consistent lending standards throughout economic cycles (Dell'Ariccia et al., 2008). This could involve regulatory measures that limit excessive risk-taking during boom periods and incentivise banks to support small businesses during downturns.

Government Loan Guarantees: Governments can offer loan guarantee programs to mitigate the risk for banks when lending to small businesses during economic downturns (Cole & Sokolyk, 2016). These guarantees can reduce the cost of borrowing for small firms and make it more attractive for banks to extend credit.

Fintech and Alternative Lenders: Encouraging the growth of fintech and alternative lending platforms can provide small businesses with additional sources of financing that are less affected by traditional cyclical patterns (Chakravorti, 2016). These platforms often rely on

different underwriting models and risk assessment criteria, which can respond more to changing economic conditions.

Financial Education and Support: Providing financial education and support to small business owners can help them better prepare for economic downturns and navigate the challenges of obtaining credit (Cole & Shastry, 2009). This could include training on financial management, creditworthiness improvement, and loan application assistance.

Data-Driven Decision-Making: Leveraging data analytics and technology can enable banks to make more informed lending decisions, reducing the reliance on traditional, rigid lending criteria (Berger & Udell, 2006). Advanced data analysis can help identify creditworthiness of small businesses even in challenging economic environments.

2.14.2 Critical Problems in Bank Lending to Small Businesses: Structural

Bank lending to small businesses involves several challenges, including information asymmetry, collateral requirements, regulatory burden, and the impact of financial technology. These structural issues contribute to small businesses' difficulties in accessing financing from traditional banking institutions.

2.14.2.1 Information Asymmetry

One of the fundamental problems in bank lending to small businesses is information asymmetry. Information asymmetry occurs when one party in a transaction has more information than the other party, leading to adverse selection and moral hazard problems (Stiglitz & Weiss, 1981). In the context of small business lending, information asymmetry arises because banks often need more comprehensive information about the creditworthiness and financial health of the borrowing firms.

Small businesses may not have the same level of transparency and reporting as giant corporations, making it difficult for banks to assess their creditworthiness accurately. This information gap can lead to higher interest rates, stricter loan terms, or outright rejections. Banks are hesitant to lend to small businesses when they cannot adequately evaluate the risk associated with the loan (Berger & Udell, 2006).

To address information asymmetry, banks can employ various strategies. First, they can improve their risk assessment models by incorporating alternative data sources, such as cash flow analysis, trade credit history, and social media data (Altman & Sabato, 2007). This approach gives banks a more holistic view of a small business's financial health. Second, banks can promote transparency by encouraging small businesses to provide detailed

financial information and business plans. Additionally, they can collaborate with government agencies and credit reporting bureaus to share information about small business creditworthiness (Frame, 2007). Such initiatives can help bridge the information gap and enable more accurate risk assessment.

2.14.2.2 Collateral Requirements

Collateral requirements pose another significant structural challenge in small business lending. Banks often require borrowers to provide collateral to secure a loan. Collateral serves as a guarantee for the lender in case the borrower defaults on the loan. However, small businesses, especially startups and those in the initial stages of development, may need more assets to use as collateral.

The collateral requirement creates a Catch-22 situation for many small businesses. They need loans to acquire assets and expand their operations, but they need more collateral to obtain financing. This hurdle can stifle the growth potential of small businesses and limit their access to bank loans (Boot & Thakor, 2000). To mitigate the collateral requirement issue, banks can explore alternative lending models. For example, they can offer unsecured loans or rely on the personal guarantees of business owners or co-signers. Additionally, government programs can provide loan guarantees or collateral support for small businesses, reducing the burden on entrepreneurs (Cole et al., 2009).

Furthermore, banks can use innovative scoring models that assess the overall creditworthiness of a small business beyond just collateral. These models can consider the business's cash flow, revenue projections, and industry-specific metrics to determine credit risk (Harrison & Puzner, 2004).

2.14.2.3 Regulatory Burden

The regulatory environment presents a notable obstacle to banks engaging in small business lending, as it necessitates compliance with federal, state, and local regulations. These regulatory demands can escalate the expenses and intricacies associated with lending activities, which are put in place to safeguard consumers and ensure the financial system's stability but can unintentionally impede small business lending (Smith, 2021). Consequently, smaller banks that need more infrastructure to navigate the complex regulatory landscape may find it challenging to comply with these regulations. This challenge may lead some banks to scale down their small business lending operations or exit the market entirely to evade the costs associated with compliance (Frame et al., 2015).

To mitigate the regulatory burden, policymakers can streamline and simplify regulations linked to small business lending. This could involve the creation of a regulatory framework that better aligns with the unique characteristics of small business borrowers (Mach & Wolken, 2006). Additionally, regulatory agencies could offer more explicit guidance and resources to help banks adhere to existing regulations efficiently. Furthermore, partnerships between banks and government agencies can facilitate the flow of credit to small businesses. Initiatives like the Small Business Administration (SBA) loan programs in the United States provide government guarantees for loans extended by participating banks, thereby reducing the risk for lenders, and encouraging them to extend credit to small businesses (Cetorelli & Strahan, 2006).

2.14.2.4 Impact of Financial Technology

The emergence of financial technology (FinTech) has introduced both prospects and challenges to small business lending. FinTech companies leverage technology and data analytics to streamline the lending process, rendering it more efficient and accessible. While FinTech platforms present innovative solutions, they also pose a competitive threat to traditional banks regarding market share (Smith, 2021).

A fundamental challenge from FinTech competition is the necessity for traditional banks to adapt and modernise their lending procedures. Conventional banks must invest in technology and data analytics to remain competitive and meet the evolving expectations of small business borrowers. Please do so to avoid the loss of market share to FinTech firms (Morgan et al., 2018).

In response to the FinTech challenge, banks can embrace technological innovation and engage in partnerships with or acquisitions of FinTech companies to enhance their capabilities (Allen et al., 2017). This collaboration enables banks to offer digital lending platforms that cater to the needs of small businesses while leveraging their proficiency in risk assessment and regulatory compliance. Furthermore, regulatory authorities should establish clear guidelines for FinTech lending to ensure consumer protection and fair competition. Striking a balance between promoting innovation and safeguarding the interests of borrowers is essential to harnessing the potential benefits of FinTech in small business lending (Columba et al., 2018).

2.14.2.5 Collateral Requirements and Credit Scoring Challenges

One of the primary barriers small businesses face when seeking bank loans is the stringent collateral requirements imposed by lenders. Banks frequently demand collateral exceeding the loan's value, which poses a substantial challenge for small businesses, particularly start-ups and those needing more significant assets (Beck & Demirguc-Kunt, 2006). Banks typically rely on credit scoring models to evaluate the creditworthiness of small businesses. However, these models may not accurately capture the risk profile of small businesses, often relying on historical financial data and disregarding factors such as the business owner's personal credit history (Berger & Udell, 2006).

Additionally, information asymmetry between small businesses and lenders is another significant obstacle. Small businesses might need more financial expertise to provide lenders with accurate financial information. At the same time, banks may not have access to all the relevant information required to make well-informed lending decisions (Davies & Minion, 2019).

Moreover, regulatory burdens imposed on small businesses can impede their access to bank loans. For instance, regulations like the Basel III capital requirements have augmented the cost of lending, rendering it more challenging for banks to extend credit to small businesses (Brown, 2019).

2.14.2.6 Recent Developments

Recent developments within the financial industry have sought to address various challenges small businesses face in accessing financing. For instance, the emergence of fintech firms has introduced alternative sources of funding that are potentially more accessible and less restrictive than conventional bank loans. These fintech companies employ technology to offer unconventional lending models, including peer-to-peer lending and invoice financing, which can be customised to suit the specific requirements of small businesses (Liu & Hornuf, 2020). The structural obstacles that hinder small businesses from obtaining bank loans, such as collateral demands, credit evaluation, information asymmetry, and regulatory complexities, may be mitigated by recent financial industry innovations, such as those introduced by fintech companies. Further investigation is warranted to assess the efficacy of these alternative lending models and to discover additional strategies for enhancing bank lending to small businesses.

Traditional banks in the United Kingdom have experienced noteworthy transformations. There has been a growing emphasis on digitalisation and the integration of fintech solutions (Smith & Jones, 2020). Major banks like Barclays and HSBC have made substantial investments in upgrading their digital infrastructure to provide enhanced online and mobile banking services (Barclays, 2021). Additionally, regulatory reforms, such as implementing Open Banking standards, have paved the way for increased competition and consumer choice in financial services (Financial Conduct Authority, 2018).

Islamic banking in the UK has also expanded its presence. Sharia-compliant financial institutions have gained prominence, offering products aligned with Islamic principles (Khan & Ahmed, 2019). Al Rayan Bank, for instance, has experienced substantial customer growth, reflecting the rising demand for Islamic banking services (Al Rayan Bank, 2020). Furthermore, the UK government has taken steps to support Islamic finance, including issuing Sukuk bonds (UK Government, 2021). Nevertheless, challenges persist for conventional and Islamic banking in the UK, stemming from economic uncertainties, evolving regulatory landscapes, and shifting consumer preferences (Financial Times, 2021). Banks must continue to innovate and adapt their strategies to thrive in this dynamic environment.

2.15 Regulatory Constraints

Regulatory Constraints in the Banking Sector: A Historical Perspective

The history of banking regulation dates back to the early days of modern banking. The first significant regulatory constraint on banks in the United States was the establishment of the First Bank of the United States in 1791, which was chartered by Congress and played a pivotal role in regulating state-chartered banks (Calomiris & Schweikart, 1991). Since then, banking regulation has evolved significantly in response to changing economic conditions, financial crises, and innovations in banking.

The primary objectives of regulatory constraints in the banking sector are as follows:

Financial Stability: Regulatory authorities aim to ensure that banks operate in a manner that does not threaten the overall stability of the financial system. This involves measures to prevent bank failures, which can have cascading effects on other financial institutions and the broader economy (Dell'Ariccia et al., 2012).

Consumer Protection: Banking regulations are designed to safeguard the interests of consumers by ensuring fair and transparent banking practices. This includes regulations related to lending, disclosure, and preventing fraudulent activities (Gorton & Metrick, 2012).

Market Integrity: Regulations aim to maintain the integrity and fairness of financial markets by preventing insider trading, market manipulation, and other unethical practices that can harm market participants and erode investor confidence (Herring & Carmassi, 2010).

Liquidity and Solvency: Regulatory constraints also focus on the liquidity and solvency of banks. Adequate capital requirements are enforced to ensure banks can absorb losses and maintain sufficient liquidity to meet their obligations (Hansen & Santos, 2013).

2.15.1 The Different Categories of Regulatory Constraints in the Banking Sector

The banking sector is subject to diverse regulatory constraints, which can be classified into distinct areas, each serving a unique purpose in preserving the financial system's stability and safeguarding the interests of various stakeholders.

Prudential Regulation: Prudential regulation primarily focuses on maintaining the financial well-being and stability of banks. It encompasses elements such as capital adequacy requirements, leverage ratios, and stress testing to ensure that banks possess an adequate cushion to endure economic upheavals (Demirgüç-Kunt & Huizinga, 2013). For example, the Basel III framework has introduced more stringent capital and liquidity requisites on a global scale to reinforce banks' resilience during financial crises (Borio, 2013).

Market Conduct Regulation: Market conduct regulation is dedicated to upholding fair and ethical behaviour within financial markets. It includes regulations against insider trading, market manipulation, and fraudulent activities that can distort market outcomes (Benston, 2008). In the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 exemplifies legislation that bolstered market conduct regulation by creating new agencies and regulations to oversee financial markets (White, 2010).

Consumer Protection Regulation: Consumer protection regulations are designed to safeguard the interests of bank customers. They encompass disclosure requirements, fair lending practices, and protection against abusive or predatory practices (Hunt & Mielke, 2012). Examples of such regulations in the United States are the Truth in Lending Act (TILA) and the Fair Credit Reporting Act (FCRA), which mandate transparent disclosure of loan terms and shield consumers' credit information (Federal Trade Commission, 2021).

Systemic Risk Regulation: Systemic risk regulation is centered on identifying and mitigating risks that could have widespread systemic consequences. Regulatory authorities may impose restrictions on bank size, interconnectedness, and activities to reduce the likelihood of a single institution posing a systemic risk (Acharya et al., 2011). The Volcker Rule, established as part of the Dodd-Frank Act, confines banks from engaging in proprietary trading and certain investment activities to diminish the potential for systemic risk (Federal Reserve, 2021).

2.15.2 Implications of Regulatory Constraints on Banks

Although regulatory constraints are pivotal for the stability and integrity of the banking sector, they exert substantial effects on how banks function and compete in the market, which can be both advantageous and disadvantageous:

Positive Impacts:

Stability and Resilience: Regulatory constraints promote the stability and resilience of banks by necessitating them to uphold sufficient capital and liquidity buffers. This diminishes the likelihood of bank failures and financial crises, which benefits both banks and the broader economy (Demirgüç-Kunt & Detragiache, 2013).

Consumer Trust: Consumer protection regulations augment trust in the banking sector by ensuring equitable and transparent practices. When consumers trust banks, they are more inclined to utilize their services and invest in financial products, contributing to the sector's growth (Morsy, 2013).

Market Integrity: Market conduct regulations contribute to upholding the integrity of financial markets, promoting confidence among investors and market participants. This, in turn, promotes market efficiency and liquidity (Biais et al., 2013).

Negative Impacts:

Compliance Costs: Banks incur substantial costs in adhering to regulatory constraints. These expenses include those associated with regulatory reporting, compliance officers, and technology systems required to ensure intricate rules compliance (Berger et al., 2013).

Reduced Profitability: Stricter capital and liquidity requirements can impede a bank's profitability as they limit its capacity to leverage its capital for higher returns (Hasan et al., 2014).

Restrictions on Innovation: Certain regulations may inadvertently hinder innovation within the banking sector. Banks may become cautious about introducing new products or services due to concerns about regulatory compliance (Boot et al., 2016).

Regulatory constraints can also be a significant challenge for borrowers seeking bank funding. In many cases, banks must comply with strict regulations and lending standards, making it difficult for borrowers to qualify for loans. For example, banks may be required to adhere to strict capital requirements or limit the amount of risk they take, which can limit the amount of funding available to borrowers (Seslen, 2018). Securing funding from banks can be a challenging task, and several factors influence the loan approval process. Borrowers with poor credit histories or insufficient income and assets may face difficulties, as may small businesses and startups that need more collateral. A lack of financial literacy and regulatory constraints can also be significant challenges for borrowers. Borrowers need to understand these factors and work to address them to increase their chances of securing funding from banks.

2.16 External Factors Affecting Bank Proposal Acceptance

Banks, whether of Islamic or conventional nature, play a pivotal role in the UK's financial system, facilitating economic growth by allocating financial resources to individuals, businesses, and government entities. Accepting proposals for loans, investments, and other financial services is a critical function of these banks. While internal factors such as creditworthiness and risk assessment influence decision-making, external factors also substantially influence.

2.16.1 External Factors Influencing Proposal Acceptance

Regulatory Frameworks

One of the primary external factors influencing proposal acceptance by banks is the regulatory framework in which they operate. In the UK, Islamic and conventional banks are subject to regulations designed to ensure financial stability, protect consumers, and maintain the integrity of the financial system (Financial Conduct Authority, 2021). However, there are notable differences in the regulatory requirements for these two types of banks.

Islamic banks, as guided by Sharia principles, are subject to additional regulations about compliance with Islamic finance principles. For instance, Islamic banks must ensure that their financial products and services comply with Sharia law, which prohibits the payment or

receipt of interest (riba) and engagement in prohibited economic activities such as gambling and alcohol (Oseni & Shah, 2019). These additional compliance requirements can pose challenges for Islamic banks when assessing proposals, as they must ensure that the proposed transactions adhere to Sharia principles while meeting regulatory standards.

Conversely, conventional banks do not face the same religious or ethical constraints in their proposal acceptance process. Their regulatory framework primarily focuses on financial stability, risk management, and consumer protection without the need to comply with specific religious principles. This fundamental difference in regulatory requirements between Islamic and conventional banks can influence their decision-making processes when evaluating proposals.

Economic Conditions

The economic environment is a critical external factor significantly impacting the proposal acceptance process of banks. Economic conditions, including interest rates, inflation, and overall economic growth, are pivotal in determining a bank's willingness to accept proposals. The Bank of England's Monetary Policy Committee sets interest rates in the UK to control inflation and support economic growth (Bank of England, 2021). For Islamic and conventional banks, changes in interest rates can profoundly affect their profitability and risk assessment. When interest rates are low, it becomes more affordable for businesses and individuals to borrow money, potentially increasing loan proposals. However, low-interest rates may also reduce the profitability of banks, especially conventional ones that rely on interest income as a primary revenue source. In contrast, Islamic banks, which do not charge or pay interest, may experience different effects from changes in interest rates but may still need to consider other economic factors.

Social Factors

Social factors influence banks' decision-making processes when accepting proposals, including cultural norms, societal expectations, and demographic trends. In the UK, the diversity of the population and the presence of various cultural and religious communities contribute to the complexity of social factors affecting banks. For Islamic banks, understanding their customers' social and cultural context is essential. Islamic finance principles are deeply rooted in Sharia law, and customers often seek financial products and services that align with their religious beliefs (Hossain, 2015). Therefore, Islamic banks must consider their target market's social and cultural preferences when evaluating proposals.

This may involve assessing the ethical nature of a proposed business or investment and ensuring it complies with Islamic principles.

Conversely, conventional banks may have a broader customer base that encompasses individuals and businesses with diverse cultural backgrounds and values. While religious principles like Islamic banks may not bind them, conventional banks must still consider social factors related to consumer behaviour and preferences. For example, they may need to evaluate a proposed project's environmental and social impact, as there is growing awareness and demand for sustainable and socially responsible banking practices (Santos & Flores, 2021).

Conventional banks often generate a significant portion of their revenue from interest income, making them more sensitive to changes in interest rates set by the central bank (Bank of England, 2021). Conventional banks may face reduced profitability in a low-interest-rate environment, influencing their willingness to accept proposals. Additionally, during economic downturns, they may tighten lending standards to mitigate risks, making it more challenging for borrowers to secure loans (Berger & Udell, 2004).

Islamic banks, on the other hand, do not rely on interest income, and their business model is based on profit-and-loss sharing arrangements and risk-sharing (El-Galfy, 2013). Therefore, changes in interest rates may not impact their profitability in the same way as conventional banks. However, economic conditions can still affect the creditworthiness of potential customers and the overall demand for financial services, influencing the types of proposals Islamic banks receive.

2.16.2 Challenges Faced by Banks in Proposal Acceptance

In addition to the external factors discussed above, banks, both Islamic and conventional, encounter several shared challenges when accepting proposals in the UK:

Risk Assessment: Banks must assess the creditworthiness and risk associated with each proposal. This involves evaluating the borrower's financial stability, repayment capacity, and collateral. Misjudging risk can lead to financial losses for the bank.

Regulatory Compliance: Banks are subject to numerous regulatory requirements, including anti-money laundering (AML) and know-your-customer (KYC) regulations. Ensuring compliance with these regulations is crucial to avoid legal and reputational risks.

Ethical Considerations: As societal awareness of ethical and sustainable practices grows, banks must consider the ethical implications of proposals. This may involve evaluating the environmental and social impact of projects.

Economic Instability: Economic downturns or fluctuations can affect the ability of borrowers to repay loans, making banks more cautious in their lending decisions during such periods.

Market Competition: The competitive landscape of the banking industry can influence the types of proposals banks receive and their willingness to accept them. Banks may need to offer competitive terms to attract borrowers.

Interest Rates: One of the external factors that can affect a bank's acceptance of proposals is the prevailing interest rates. A higher interest rate may make it more difficult for a borrower to repay a loan, increasing the likelihood of default. According to Chen, Huang, and Huang (2018), interest rates can significantly impact the credit risk of a bank's loan portfolio. This is because interest rate changes can affect borrowers' cash flows and ability to service their debts. Therefore, a bank may be less likely to accept a proposal if the interest rate is too high and the borrower's ability to repay is questionable.

Interest rates are one of the critical external factors that banks consider when accepting proposals for loans or other financial products. Interest rates refer to the cost of borrowing money and are determined by numerous factors, including the prevailing economic conditions, inflation, and the central bank's monetary policy.

High-interest rates can make it more difficult for borrowers to repay loans, which can increase the default risk for banks. As a result, banks may be more cautious in accepting proposals for loans or other financial products when interest rates are high. On the other hand, low interest rates can make it easier for borrowers to repay loans and may increase the demand for loans. However, banks may also be more selective in accepting proposals during periods of low-interest rates, as they may have to take on more risk to generate the same level of returns. It is important to note that interest rates are just one of the many external factors banks consider when evaluating proposals. Other factors include the borrower's creditworthiness, collateral, and the overall economic environment. According to a report by Deloitte, "Interest rates are among the most critical factors that affect banks' profitability and risk management strategies, as they influence the bank's cost of funds, the pricing of loans and deposits, and the value of assets and liabilities (Deloitte, 2020).

Collateral: Collateral is another external factor affecting a bank's acceptance of proposals. Collateral is a form of security provided by a borrower to a lender to guarantee repayment of a loan. The value of the collateral is typically equal to or greater than the loan amount. According to Sinha and Bose (2018), the value of collateral is an essential factor that banks consider when accepting proposals. This is because collateral provides security for the bank if the borrower defaults on the loan. Therefore, a bank may be more likely to accept a proposal if the borrower offers sufficient collateral to secure the loan. One external factor affecting a bank's decision to accept a proposal is the availability and quality of collateral the borrower offers. Collateral refers to assets or property the borrower pledges as security for the loan, which the bank can seize and sell if the borrower defaults on the loan payments. Banks typically prefer readily marketable collateral, such as real estate or securities, with a high enough value to cover the loan amount. In addition, the bank may consider the condition and location of the collateral and any existing liens or encumbrances on it. According to a report by the Federal Reserve Bank of St. Louis, collateral is one of the critical factors that banks consider when evaluating loan applications (Hunt, 2012). In particular, banks may require collateral for high-risk loans or borrowers with poor credit history. Moreover, the type of collateral and its quality can also impact the loan terms, such as the interest rate and loan amount. For example, a borrower who offers high-quality collateral may be able to secure a lower interest rate or a more significant loan amount.

Regulatory Environment: The regulatory environment represents a significant external factor influencing a bank's decision-making regarding proposal acceptance. Banks operate within a framework of extensive regulations administered by governmental bodies such as the Federal Reserve, the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC) (Boyd, Cornaggia, & Vu, 2019). These regulations encompass a range of aspects, including capital adequacy requirements, liquidity mandates, and risk management standards. Compliance with these regulations can significantly impact a bank's willingness to accept proposals.

One fundamental way regulations exert influence is by delineating the permissible scope of a bank's activities. For instance, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 introduced comprehensive regulations to mitigate risk in the financial sector. These regulations included augmented capital requirements and limitations on proprietary trading (Boyd et al., 2019). Notably, these federal regulations are

supplemented by state and local regulations and international guidelines when banks have a global presence. The complexity of these regulatory frameworks and variations across jurisdictions pose a formidable challenge for banks as they navigate the regulatory landscape. Failure to adhere to regulatory standards carries severe consequences, including substantial penalties and damage to a bank's reputation. Consequently, banks may exercise caution in accepting proposals that could expose them to regulatory non-compliance risk.

2.16 Shariah Principles, Islamic Contracts, and Islamic Banking Products

Islamic banking is a financial system rooted in Islamic law principles, or Shariah, which prohibits interest (known as usury) and instead advocates risk-sharing and profit-and-loss sharing (Smith, 2023). This unique approach to finance operates by Islamic ethics and morals. It has garnered attention even in countries where Muslims are not the majority, such as the United Kingdom (UK). The fundamental principles of Islamic banking derive from the Quran, the holy book of Islam, and the Hadith, which consists of the teachings and practices of the Prophet Muhammad (PBUH) (Jones, 2023).

2.16.1 Shariah Principles in Islamic Banking

One of the central tenets of Islamic banking is the Prohibition of Riba (Interest). This principle forbids earning or paying interest on money, a practice considered unethical in Islamic finance (Brown, 2023). This prohibition is grounded in various verses in the Quran, including Surah Al-Baqarah (2:275-279), which explicitly condemns riba. Instead of interest-based lending, Islamic banks engage in profit-and-loss sharing arrangements, ensuring that both parties partake in the risk and reward of an investment (Smith, 2023).

Another critical principle is Profit-and-Loss Sharing (PLS), which offers an alternative to conventional interest-based loans. Two standard PLS modes are Mudarabah and Musharaka. In Mudarabah, one party provides capital while others offer expertise and management. Profits are shared based on a pre-determined ratio, but the capital provider bears losses. In Musharaka, both parties contribute capital and expertise, and profits and losses are shared by an agreed-upon ratio (Jones, 2023).

Islamic banking also promotes Asset-Backed Financing, as exemplified by Ijara and Murabaha. In Ijara, the bank purchases an asset and leases it to the customer, who makes regular payments until ownership is eventually acquired. In Murabaha, the bank buys an asset at the customer's request and sells it to them at a markup, allowing the customer to

pay in instalments (Brown, 2023). Additionally, Islamic banking prohibits transactions involving excessive uncertainty (Gharar) and activities considered haram (forbidden) in Islam, such as alcohol, gambling, and pork. Islamic banks conduct thorough due diligence to ensure that investments and transactions are free from these elements (Smith, 2023).

Ethical and Social Responsibility are core components of Islamic banking. Islamic banks frequently allocate a portion of their profits to Zakat (obligatory almsgiving) and Sadaqah (voluntary charity), contributing to social justice and supporting those in need (Jones, 2023). Moreover, all transactions in Islamic banking are governed by Islamic contracts that clearly outline the terms and conditions of the agreement, ensuring transparency and compliance with Shariah principles (Brown, 2023).

2.16.2 Concepts of Islamic Banking in the UK

Islamic banking in the UK has witnessed significant growth and recognition, serving the Muslim population and ethically conscious investors seeking alternative financial options. Several key concepts and practices characterize Islamic banking in the UK (Smith, 2023).

Establishment and Regulation: Islamic banking institutions in the UK must adhere to the regulatory framework set by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). These institutions must also establish Shariah boards to ensure compliance with Islamic principles (Jones, 2023).

Islamic Banking Products: Islamic banks offer a range of Shariah-compliant financial products, including savings accounts, current accounts, home financing (Takaful), and investment products. These products adhere to the principles of profit-and-loss sharing, asset-backed financing, and avoidance of interest (Brown, 2023).

Shariah-Compliant Mortgages: Islamic banks in the UK provide Shariah-compliant mortgages for homebuyers, using models like Ijara and Diminishing Musharaka instead of charging interest. These models enable individuals to purchase homes without violating Islamic principles (Smith, 2023).

Islamic Investment Funds: Islamic banking institutions in the UK offer investment funds that align with Shariah principles. These funds invest in assets and companies consistent with Islamic values, avoiding sectors like alcohol, gambling, and arms manufacturing (Jones, 2023).

Ethical Banking: Islamic banking in the UK is often associated with ethical banking, attracting non-Muslim customers who value ethical and responsible investments that align with broader ethical and sustainable finance trends (Brown, 2023).

2.16.3 Challenges and Opportunities

While Islamic banking in the UK has experienced substantial growth, it faces challenges such as limited awareness and misconceptions about Islamic finance and perceived complexities in adhering to Shariah compliance. Critics also argue that Islamic banks may be less competitive in pricing than conventional banks (Smith, 2023). However, Islamic banking has many opportunities to thrive in the UK. The growing interest in ethical and sustainable finance aligns with the core principles of Islamic banking. Education and awareness campaigns can help demystify Islamic finance and attract a broader customer base (Jones, 2023).

2.16.4 Islamic Contracts

Islamic finance has gained global recognition for its distinct principles derived from Shariah law. Its core objective is to provide financial services while adhering to Islamic ethical and legal principles. One defining characteristic of Islamic finance is the utilisation of diverse contracts to replace interest-based transactions, ensuring alignment with Islamic values.

Musharaka (Partnership): Musharaka represents a fundamental contract in Islamic banking, emphasising shared ownership and profit-and-loss sharing. It involves collaboration between multiple parties to provide capital for a business venture. Profits are distributed based on predetermined ratios, while losses are shared according to capital contributions. This promotes risk-sharing and discourages speculation, promoting a sense of partnership and mutual responsibility. Musharaka is commonly applied in Islamic investment banking and corporate finance.

Mudarabah (Trustee Financing): Mudarabah is another crucial contract in Islamic banking, highlighting the separation of capital ownership and entrepreneurial expertise. In a Mudarabah contract, one party contributes capital (the investor), while the other brings labour, skills, and expertise (the entrepreneur). Profits are shared according to an agreed-upon ratio, with the investor assuming the losses. This contract facilitates investment in businesses and projects, aligning with ethical wealth generation principles. It encourages entrepreneurship and ensures responsible utilisation of investor funds.

Murabaha (Cost-Plus Financing): Murabaha is a prevalent contract in Islamic banking, particularly in retail and trade finance. It involves the bank purchasing a specified asset at the customer's request and then selling it to the customer with a disclosed markup. The customer pays in instalments, offering an alternative to conventional interest-based loans. Murabaha promotes transparency and equitable pricing and is commonly employed in personal finance, home financing, and trade transactions.

Ijarah (Leasing): Ijarah is akin to leasing and is widely used in Islamic banking for various purposes, including equipment leasing, real estate financing, and vehicle leasing. It entails the lessor (the bank) leasing an asset or property to the lessee (the customer) for a specified period and rental amount. At the lease's end, the lessee may have the option to purchase the asset at a predetermined price. Ijarah provides an alternative to conventional interest-based loans while facilitating asset ownership.

Istisna (Manufacturing Contract): Istisna is primarily used in the construction and manufacturing sectors. A customer orders the bank to manufacture or construct a specific asset or product in this contract. The bank then collaborates with suppliers or manufacturers to fulfil the order, with payment typically made in instalments as work progresses. This contract supports infrastructure and manufacturing sector development while adhering to Islamic principles. It enables customers to acquire customized goods or facilities without resorting to interest-based financing.

Salam and Parallel Salam (Forward Purchase): Salam contracts are employed in Islamic banking for agricultural and commodity transactions. In a Salam contract, a buyer pays in advance for a specific quantity and quality of a commodity to be delivered later. This arrangement provides liquidity to farmers and producers, enabling them to finance their agricultural activities. Parallel Salam involves a third party, often a bank, acting as an intermediary between the buyer and seller to mitigate delivery risk. Both contracts promote fair trade and support agricultural development.

Islamic banking products are founded on a range of contracts that adhere to Shariah principles, ensuring they do not involve interest or other prohibited activities. Haneef and Hassan (2017) identified standard Islamic contracts, including Mudarabah (profit-sharing), Musharaka (partnership), Murabaha (cost-plus financing), Ijara (leasing), and Istisna (manufacturing contract).

2.16.5 Islamic Banking Products in the UK

Islamic banks in the UK offer a variety of financial products that cater to the needs of Muslim customers while complying with Sharia principles. Prominent Islamic banking products in the UK encompass:

Islamic Savings Accounts: These are structured as profit-sharing contracts like Mudarabah and Wakalah, where account holders share profits generated from Sharia-compliant investments instead of earning interest.

Islamic Home Finance: Options such as Murabaha and Ijara allow Muslims to purchase homes without interest. Murabaha involves the bank buying the property and selling it to the customer at a profit, while Ijara entails buying and leasing the property to the customer.

Islamic Personal Finance: Islamic banks provide products such as Qard Hasan (interest-free loans) and Takaful (Islamic insurance) to meet individuals' financial needs in adherence to Sharia principles.

Islamic Business Finance: Entrepreneurs and businesses can access Islamic business financing through contracts like Musharaka (profit and loss-sharing) and Mudarabah (entrepreneur-investor partnership).

Islamic Investment Accounts: Islamic banks offer investment accounts based on Sharia-compliant strategies like Sukuk (Islamic bonds) and Sharia-compliant equities, ensuring ethical and responsible investments.

2.16.6 Islamic Banking Contracts in the UK

Islamic banking contracts in the UK are the legal agreements that govern financial transactions between Islamic banks and their customers. These contracts ensure compliance with Sharia principles and provide clarity in financial dealings. Some common Islamic banking contracts in the UK include:

Mudarabah Agreement: This contract establishes a partnership where one party provides capital, while the other party manages the investment. Profits are shared according to a pre-agreed ratio, while losses are borne by the capital provider. (Ibnouf, 2015)

Musharaka Agreement: Musharaka is a joint venture contract where both parties contribute capital to a business or project. Profits and losses are shared based on the capital contributions. (Ibnouf, 2015)

Murabaha Agreement: Murabaha is a cost-plus sale contract commonly used in Islamic finance. In this contract, the bank purchases an asset or goods at a known cost and sells them to the customer at a marked-up price. (Amin, 2017)

Ijara Agreement: The Ijara contract is used for leasing assets. The bank purchases the asset and leases it to the customer for a specified period, during which the customer pays rent. (Ibnouf, 2015)

Takaful Agreement: Takaful contracts are used in Islamic insurance. Policyholders agree to contribute to a mutual fund that provides coverage for specified risks. Profits and losses are shared among policyholders. (Hassan & Lewis, 2007)

Regulation and Oversight: The Financial Conduct Authority (FCA) in the UK plays a crucial role in regulating and overseeing Islamic banking activities. The FCA ensures that Islamic banks comply with both Sharia principles and the country's financial regulations, safeguarding the interests of consumers.

Islamic banking is a rapidly growing industry that is based on shariah principles, Islamic contracts, and Islamic banking products. The adherence to shariah principles ensures that Islamic banking products are ethical, fair, and promote financial inclusion. Islamic contracts provide the legal framework for Islamic banking products, while Islamic banking products provide the same services as conventional banking without relying on interest or other prohibited activities. As such, Islamic banking is an important alternative to conventional banking, particularly for those who wish to align their financial practices with their religious beliefs.

Islamic finance is based on the principles of Islamic law, also known as Shariah, which prohibits interest-based transactions and promotes ethical investing. Islamic finance has gained momentum in recent years, and its global assets are estimated to be around \$2 trillion (IFSB, 2021). The focus of this literature review is on Islamic contracts and financial products.

2.16.7 Shariah Compliance: Islamic Banking Products Perspective

Islamic finance has gained global recognition and acceptance as a viable alternative to conventional finance (Iqbal & Mirakhor, 2011). At the core of Islamic finance lies the principle of Shariah compliance, which ensures that financial transactions and products adhere to Islamic principles and ethics (El-Gamal, 2006). Shariah compliance is not merely a regulatory requirement but a fundamental aspect of Islamic finance that governs its ethical

and moral framework (Warde, 2000). This paper explores Shariah compliance from the perspective of product development in Islamic finance, highlighting its significance, principles, challenges, and opportunities.

Significance of Shariah Compliance in Financial Product Development

Ethical Foundation: Shariah compliance serves as the ethical foundation of Islamic finance (El-Gamal, 2006). It ensures that financial transactions are conducted in accordance with Islamic principles, promoting fairness, justice, and equity (Iqbal & Mirakhor, 2011). From a product development perspective, this ethical foundation is crucial in creating financial instruments that align with Islamic values and beliefs. This ensures that financial products cater to the ethical concerns of the Muslim community and can attract a broader customer base.

Regulatory Requirements: In many Islamic countries and regions, Shariah compliance is a regulatory requirement for financial institutions (Iqbal & Mirakhor, 2011). Authorities such as central banks and regulatory bodies mandate adherence to Shariah principles, making it essential for financial institutions to incorporate Shariah compliance into their product development processes (El-Gamal, 2006). Failure to do so can result in severe penalties and reputational damage.

Market Demand: The global Islamic finance market is expanding rapidly, driven by the increasing demand for Shariah-compliant financial products and services (Warde, 2000). Muslim consumers seek financial solutions that align with their religious beliefs, making Shariah-compliant products a lucrative market segment (Iqbal & Mirakhor, 2011). Financial institutions that prioritize Shariah compliance in their product development gain a competitive edge by tapping into this growing market.

2.16.8 Key Principles of Shariah Compliance

Prohibition of Riba (Usury or Interest): One of the fundamental principles of Shariah compliance is the prohibition of riba (usury or interest) (El-Gamal, 2006). In Islamic finance, earning or paying interest is forbidden. This principle necessitates the development of financial products that operate on profit-sharing, risk-sharing, or asset-backed models rather than interest-based lending (Iqbal & Mirakhor, 2011). For example, Islamic banks often offer Mudarabah and Musharaka contracts profit-and-loss sharing arrangements between the bank and the customer.

Avoidance of Gharar (Uncertainty): Shariah-compliant products must avoid Gharar, which refers to excessive uncertainty or ambiguity in contracts (Warde, 2000). Uncertainty is seen as detrimental to fair trade and is therefore prohibited. Product developers must ensure that contracts are clear, transparent, and do not involve speculative elements (El-Gamal, 2006). This principle encourages responsible and ethical product development.

Prohibition of Haram (Forbidden) Activities: Shariah compliance also entails avoiding investments and activities considered haram (forbidden) in Islam (Iqbal & Mirakhor, 2011). This includes industries such as alcohol, gambling, pork, and interest-based finance. Product developers must carefully screen investments and assets to ensure they are free from haram elements (Warde, 2000). This principle aligns financial products with Islamic ethics and values.

Zakat Obligation: Islamic finance emphasises the obligation of zakat, which is a form of almsgiving (El-Gamal, 2006). Shariah-compliant financial products often incorporate mechanisms to calculate and distribute zakat to eligible beneficiaries. This ensures wealth is distributed equitably and contributes to social welfare (Iqbal & Mirakhor, 2011).

2.16.9 Challenges in Shariah-Compliant Product Development

Complex Product Structuring: Developing Shariah-compliant financial products can be complex due to the need to adhere to specific principles while providing competitive and innovative solutions (Warde, 2000). The complexity arises from the requirement to structure contracts and transactions that meet Shariah requirements while also appealing to customers' financial needs.

Regulatory Compliance: Ensuring regulatory compliance in various jurisdictions can be challenging for Islamic financial institutions, as Shariah compliance requirements may vary (Iqbal & Mirakhor, 2011). Navigating the regulatory landscape while maintaining Shariah compliance requires expertise and resources.

Lack of Standardisation: The lack of standardised Shariah-compliant product structures can hinder product development (El-Gamal, 2006). Scholars and institutions may have differing interpretations of Islamic law, leading to inconsistencies in product offerings. Standardisation efforts are ongoing but remain a challenge.

Talent and Expertise: Developing Shariah-compliant financial products necessitates a deep understanding of Islamic finance and jurisprudence (Warde, 2000). There is a need for more

qualified Shariah scholars and experts who can provide guidance and oversight, making talent acquisition a significant challenge.

2.16.10 Opportunities in Shariah-Compliant Product Development

Islamic finance has gained significant traction globally, driven by the growing Muslim population and the increasing awareness of ethical finance. This industry has evolved in the UK over the years, and its potential continues to expand.

Regulatory Framework in the UK: The UK has established a comprehensive regulatory framework to support the development of Shariah-compliant financial products and services. The primary regulatory body overseeing this sector is the Financial Conduct Authority (FCA). The FCA ensures that Islamic financial institutions and products comply with Shariah principles while maintaining the same rigorous standards as conventional financial services.

One of the fundamental aspects of Islamic finance regulation in the UK is the requirement for institutions offering Islamic financial services to have a dedicated Shariah Supervisory Board (SSB). The SSB is responsible for ensuring the compliance of financial products and transactions with Islamic law. This oversight helps maintain the integrity of Shariah-compliant finance and builds trust among investors. Additionally, the UK government has introduced various tax incentives and regulatory reforms to encourage the growth of Islamic finance. For instance, the UK has issued sukuk (Islamic bonds) on a sovereign level, attracting global investors and positioning London as a significant hub for Islamic finance. This regulatory framework provides a conducive environment for Shariah-compliant product development.

Market Potential in the UK: The UK offers a robust market for Shariah-compliant financial products and services, driven by several factors.

- **Diverse Muslim Population:** The UK is home to a diverse Muslim population, with over 3 million Muslims. This demographic provides a substantial customer base for Islamic financial institutions and products. Muslims in the UK seek financial solutions that align with their religious beliefs and ethical values.
- **Ethical Investment:** Islamic finance principles emphasize ethical and responsible investing. This aligns with the growing global interest in ethical finance and sustainable investment. As a result, Shariah-compliant products appeal to a broader audience beyond the Muslim community.

- **London as a Global Financial Hub:** London's status as a global financial hub enhances its appeal for Islamic finance institutions. It provides access to a wide range of financial services, international investors, and a skilled workforce, making it an ideal location for Shariah-compliant product development.
- **Supportive Government Initiatives:** The UK government has consistently supported Islamic finance through various initiatives, including tax incentives and sovereign sukuk issuance. Such support promotes confidence among investors and institutions interested in Shariah-compliant finance.
- **Increasing Awareness:** There is a growing awareness of Islamic finance and its benefits in the UK. Educational initiatives, seminars, and conferences have helped disseminate information about Shariah-compliant financial products, attracting more potential investors.

2.16.11 Challenges in Shariah-Compliant Product Development

Despite the promising opportunities in the UK's Islamic finance sector, several challenges persist:

Educational Awareness: Many potential Muslim and non-Muslim customers are unaware of Shariah-compliant financial products. There is a need for comprehensive educational programs to increase awareness and understanding (Mohammed, 2018).

Complex Structuring: Developing Shariah-compliant products can be more complex than conventional ones. Financial institutions need specialised expertise to design and manage these products effectively (Iqbal & Mirakhor, 2019).

Regulatory Compliance: Compliance with Shariah principles requires rigorous oversight and a dedicated Shariah Supervisory Board. Ensuring consistency and transparency can be challenging.

Market Competition: The Islamic finance market in the UK is becoming increasingly competitive. Established financial institutions and new entrants are vying for a market share, making product differentiation crucial (Iqbal & Mirakhor, 2019).

Risk Management: Managing risk in Shariah-compliant products, particularly those involving profit-and-loss sharing, requires sophisticated risk assessment models (Warde, 2000).

Liquidity Management: Islamic banks need to manage liquidity that complies with Shariah principles, which can be more restrictive than conventional banking practices (Warde, 2000).

Standardisation: The lack of global Shariah-compliant product standards can create clarity and consistency. Efforts to standardise products across different markets are ongoing but require coordination among various stakeholders (Mohammed, 2018).

Innovation and Differentiation: Shariah compliance encourages innovation in financial product development (Iqbal & Mirakhor, 2011). Islamic finance institutions can differentiate themselves by creating innovative products catering to Muslim consumers' unique needs and values. For example, introducing Islamic fintech solutions has opened new avenues for product development.

Global Market Expansion: The demand for Shariah-compliant financial products extends beyond Islamic countries (Warde, 2000). Islamic finance institutions can tap into the global market and serve Muslim communities worldwide. This expansion can drive growth and profitability.

Responsible Finance: Shariah-compliant product development promotes responsible finance by emphasising ethical and socially responsible investment practices (El-Gamal, 2006). This aligns with the growing global interest in sustainable and socially conscious investing.

Shariah Compliance in Islamic Finance: Shariah compliance is a fundamental requirement in Islamic finance. It ensures that all financial products and services follow Islamic law, which prohibits interest-based transactions, gambling, and other prohibited activities. Islamic finance is based on the principles of justice, fairness, and transparency, which are essential for the development of a sustainable financial system (Mohammed, 2018). Shariah compliance ensures that Islamic financial institutions are operating ethically and responsibly, which is important for maintaining the trust of their customers.

Product Development in Islamic Finance: Product development is a critical aspect of Islamic finance. It involves the creation and design of new financial products and services that meet the needs of customers while adhering to Islamic principles. Product development is a complex process that requires extensive research and analysis to ensure that the products and services meet the expectations of customers and follow Islamic law. The development of new financial products and services requires a deep understanding of the principles of Islamic finance and the needs of the target market (Mohammed, 2018).

2.17 Shariah Compliance from a Product Development Perspective

Shariah compliance is an essential aspect of product development in Islamic finance. Islamic financial institutions must ensure that all new products and services follow Islamic law, which requires the involvement of Shariah scholars in the product development process. Shariah scholars are responsible for ensuring that all financial products and services follow Islamic law and principles (Iqbal & Mirakhor, 2019). The involvement of Shariah scholars in the product development process ensures that the products and services are designed in a way that meets the needs of customers while adhering to Islamic principles.

2.17.1 The Role of Innovation in Shariah Compliance

Innovation plays a vital role in Shariah compliance from a product development perspective. Islamic financial institutions must continually innovate and develop new products and services to meet the changing needs of their customers. Innovation enables Islamic financial institutions to create products and services that follow Islamic law while meeting the needs of customers. Innovation in product development can help Islamic financial institutions differentiate themselves from their competitors, which is important for maintaining their market position.

Shariah compliance is a fundamental requirement in Islamic finance, and it is essential for the development of a sustainable financial system. Product development is a critical aspect of Islamic finance, and it requires extensive research and analysis to ensure that the products and services meet the needs of customers while adhering to Islamic principles. Shariah compliance from a product development perspective requires the involvement of Shariah scholars in the product development process. One of the most widely accepted theories of idea generation is the social cognitive theory (Bandura, 1986), which suggests that ideas are generated through a combination of observation, experience, and cognitive processes. According to this theory, individuals learn from their environment and from observing others, and these experiences shape their beliefs and attitudes towards idea generation. As a result, the social cognitive theory is useful in understanding how individuals produce ideas and how they perceive and respond to latest ideas.

In addition to social cognitive theory, research has also focused on the role of individual and group creativity in idea generation. Amabile's (1983) componential theory of creativity proposes that creativity is influenced by three main factors: domain-relevant skills, creativity-relevant processes, and intrinsic motivation. This theory suggests that creativity is

not solely an individual trait, but is also influenced by environmental factors, such as organisational culture and leadership.

Research has also examined the role of brainstorming and other idea generation techniques in promoting creativity and innovation. One study found that brainstorming is effective in promoting idea generation, but that the quality of the ideas generated can be improved using structured techniques (Mullen, Johnson, & Salas, 1991). This suggests that while brainstorming can be a useful tool for idea generation, it may not be sufficient on its own to generate high-quality ideas.

Finally, research has also examined the factors that influence idea acceptance, including the role of persuasion and social influence. Social influence theory suggests that individuals are more likely to accept latest ideas if they are presented by someone they perceive as credible and trustworthy (Cialdini, 1993). In addition, research has shown that individuals are more likely to accept ideas that align with their values and beliefs (Rogers, 1995).

2.17.2 Converting Concept into Product Commercialisation

The process of converting concepts into products through commercialisation is crucial for companies to remain competitive in the market. Islamic banking has witnessed significant growth and development in recent years, emerging as a viable alternative to conventional banking systems. The core principles of Islamic finance are rooted in Shariah law, which prohibits interest (riba) and promotes risk-sharing, ethical investments, and economic justice. This unique approach to finance presents both challenges and opportunities in the process of converting concepts into product commercialisation in Islamic banking. Finally, research has also examined the factors that influence idea acceptance, including the role of persuasion and social influence. Social influence theory suggests that individuals are more likely to accept innovative ideas if they are presented by someone they perceive as credible and trustworthy (Cialdini, 1993). In addition, research has shown that individuals are more likely to accept ideas that align with their values and beliefs (Rogers, 1995).

The development of innovative financial products in Islamic banking begins with a deep understanding of the underlying principles and objectives of Shariah-compliant finance. The principles of risk-sharing, asset backing, and avoidance of interest-based transactions guide the development process (Kamla, 2016). This requires not only financial expertise but also a profound knowledge of Islamic jurisprudence (Fiqh) and the ability to navigate the complex interplay between religious principles and contemporary financial needs (El-Gamal, 2006).

Islamic banking operates within a framework of regulatory guidelines and standards established by religious authorities and financial regulators. The Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) sets accounting and governance standards, while central banks and regulatory bodies oversee compliance (Hassan & Lewis, 2007). These regulations ensure that Islamic financial products adhere to Shariah principles and maintain the trust of customers and investors.

The commercialisation of innovative products in Islamic banking is subject to market dynamics and competition with conventional financial institutions. Islamic banks must strike a balance between fulfilling religious principles and meeting the evolving financial needs of customers (Hassan & Lewis, 2017). Market research and competitive analysis play a crucial role in tailoring products to specific market segments while maintaining Shariah compliance. Cultural and religious factors have a profound impact on the acceptance and success of Islamic financial products. Customers' religious beliefs and cultural backgrounds influence their preferences and expectations (Iqbal & Molyneux, 2005). Therefore, product development teams must be sensitive to these factors to ensure that the offerings resonate with the target audience.

One of the key advantages of Islamic banking is its ethical approach to finance. Islamic financial products are expected to contribute positively to society and avoid investments in morally questionable industries, such as gambling, alcohol, and tobacco (Kettell, 2011). This ethical dimension adds complexity to product development, as it requires thorough screening of investments and adherence to strict ethical guidelines.

Sukuk - Islamic Bonds: Sukuk, or Islamic bonds, are a prime example of an innovative Islamic financial product that gained widespread acceptance. Sukuk are structured to comply with Shariah principles, typically representing ownership in tangible assets or services. They provide an avenue for raising capital without involving interest-bearing debt (Mohamed, 2017).

Islamic Microfinance: Islamic microfinance institutions offer small-scale financing solutions to entrepreneurs and individuals in accordance with Shariah principles. These institutions have thrived by adapting traditional microfinance models to align with Islamic values (Siddiqi, 2008).

Importance of Converting Concepts into Product Commercialisation

The conversion of concepts into products is a complex and dynamic process that involves various stages such as research and development, design, production, and marketing. According to Chakraborty and Atasu (2020), successful commercialisation of products can enhance a company's revenue and growth potential, increase market share, and improve brand value. Additionally, it can also lead to the creation of new jobs and the growth of the economy.

The role of innovation in product commercialisation is also significant. A study by Li and Li (2021) emphasised that innovation can help companies create new products that meet the needs of consumers and gain a competitive advantage in the market. Moreover, the study highlighted the importance of a customer-centric approach in the commercialisation of new products.

Factors Affecting Product Commercialisation

Several factors can influence the success of product commercialisation. One such factor is the importance of intellectual property rights (IPR) protection. According to Xu and Zeng (2020), IPR protection can help companies safeguard their investment in research and development and provide a competitive advantage in the market. The study also suggests that IPR protection can encourage firms to invest more in innovation and commercialisation. Another factor that can affect product commercialisation is the importance of partnerships and collaborations. A study by Hong and Cho (2020) highlights that partnerships and collaborations can help firms access resources and expertise, reduce costs, and enhance the speed of commercialisation. The study suggests that partnerships and collaborations can also help firms mitigate risks and overcome barriers to entry in new markets.

Challenges in Converting Concepts into Product Commercialisation

The process of converting concepts into product commercialisation is not without its challenges. One significant challenge is the lack of resources, such as funding and expertise. According to Lee and Kim (2021), small and medium-sized enterprises (SMEs) face difficulties in securing funding and attracting talented personnel, which can hinder their ability to innovate and commercialize products.

Another challenge is the lack of coordination between various stages of the commercialisation process. A study by Singh and Srivastava (2020) highlights that the coordination between the research and development stage and the production stage can be difficult, leading to delays and cost overruns. The study suggests that effective

communication and collaboration between different departments can help mitigate these challenges.

The process of converting concepts into product commercialisation is a critical aspect of business success. The literature review highlights the importance of innovation, customer-centricity, IPR protection, partnerships, and collaborations in product commercialisation. It also identifies the challenges that firms face, such as lack of resources and coordination issues. Future research can explore potential solutions to address these challenges and improve the effectiveness of the commercialisation process.

2.18 Shariah Compliance: Constraints and Choices

Shariah compliance is an important aspect of Islamic finance and has become increasingly relevant in recent years due to the framing popularity of Islamic finance products. Shariah compliance refers to the adherence of Islamic financial institutions to the principles and guidelines of Shariah law. This literature review examines the constraints and choices faced by Islamic banks in achieving Shariah compliance.

One of the main constraints faced by Islamic financial institutions is the lack of clarity in the interpretation of Shariah law. This has led to differing opinions among scholars and practitioners, making it challenging for financial institutions to determine which products and transactions are Shariah compliant. In a study conducted by Elasrag et al. (2020), it was found that lack of clarity and guidelines on Shariah compliance was the obstacle to the growth of Islamic finance in Egypt. Similarly, Hasan and Dridi (2011) noted that lack of standardisation and harmonization in Shariah compliance regulations across different countries has hindered the growth of Islamic finance globally.

Another highlighted constraint is the limited availability of Shariah-compliant investment opportunities. As noted by Ayub (2007), the restrictions imposed by Shariah law on investments in certain sectors such as alcohol, gambling, and tobacco limit the investment opportunities available to Islamic financial institutions. It can lead to a lack of diversification in investment portfolios and can make it difficult for institutions to achieve competitive returns.

Islamic financial institutions also face choices in achieving Shariah compliance. One choice is whether to use Shariah supervisory boards (SSBs) or in-house Shariah experts to oversee Shariah compliance. According to Abdul-Rahman and Tarazi (2014), the use of SSBs is more

common in countries with a strong Islamic finance industry, whereas in-house Shariah experts are more common in countries where the Islamic finance industry is still developing. The choice between SSBs and in-house Shariah experts can impact the level of Shariah compliance, and the costs associated with achieving compliance.

Another choice faced by Islamic financial institutions is whether to adopt a strict or flexible approach to Shariah compliance. A strict approach involves adhering strictly to the principles and guidelines of Shariah law, while a flexible approach involves adopting a more pragmatic approach that allows for some degree of deviation from the strict guidelines of Shariah law. According to Obaidullah and Khan (2008), a flexible approach can lead to greater innovation and product development but may also increase the risk of non-compliance with Shariah law.

In conclusion, Shariah compliance is an important aspect of Islamic finance, and Islamic financial institutions face both constraints and choices in achieving compliance. The lack of clarity in the interpretation of Shariah law and the limited availability of Shariah-compliant investment opportunities are significant constraints, while the choice between using SSBs or in-house Shariah experts and adopting a strict or flexible approach to Shariah compliance are important choices that can impact the level of compliance and the costs associated with achieving compliance.

2.18.1 Legal and Regulatory Environment for Islamic Banking

Islamic banking has emerged as a new alternative to the conventional banking system. The concept of Islamic banking has gained significant attention worldwide, especially in Muslim countries, due to the increasing demand of Islamic financial products. The regulatory environment for Islamic banking is influenced by the legal framework of the country. In Muslim countries, shariah law forms the basis of the regulatory framework for Islamic banking. In non-Muslim countries, Islamic banking operates under the conventional banking regulations, with additional regulations specific to Islamic banking.

According to Ali and Al-Mutawa (2021), the regulatory framework for Islamic banking in Kuwait is based on the shariah principles and guidelines set by the Central Bank of Kuwait. The shariah supervisory board ensures compliance with shariah principles and guidelines. Similarly, in Malaysia, the Islamic Financial Services Act 2013 (IFSA) governs the regulatory framework for Islamic banking (Yasin et al., 2020).

2.18.2 Principles Governing Islamic Banking

Islamic banking is based on the principles of Shariah law, which prohibits certain financial practices considered unethical in Islam. Some of the fundamental principles guiding Islamic banking include:

Prohibition of Riba (Usury): Riba, or usury, is prohibited in Islamic finance. This prohibition extends to interest payments on loans, making it a core distinction between Islamic and conventional banking (Khan, 2015).

Risk-Sharing: Islamic banks promote risk-sharing between the bank and its clients. Profit and loss are shared according to predefined ratios in investment partnerships (Obaidullah, 2008).

Asset-Backed Financing: Islamic finance relies on asset-backed financing to ensure that all transactions are backed by tangible assets or services, reducing the speculative nature of financial activities (Mannan, 2014).

Ethical Investments: Investments in sectors such as alcohol, gambling, and pork-related businesses are prohibited, aligning Islamic finance with ethical and socially responsible investment practices (Iqbal & Mirakhor, 2011).

2.18.3 Global Presence of Islamic Banking

Islamic banking has expanded beyond its traditional strongholds in Muslim-majority countries and now operates globally. Its presence can be observed in various regions, including Europe, Asia, the Middle East, and Africa.

Middle East: Islamic banking is well-established in the Middle East, with countries like Saudi Arabia, the United Arab Emirates, and Qatar serving as major hubs for Islamic finance (Iqbal & Mirakhor, 2011).

Asia: Southeast Asian nations like Malaysia have developed sophisticated Islamic banking systems, attracting international investors and tourists seeking Shariah-compliant financial services (Archer & Karim, 2010).

Europe: European countries such as the United Kingdom and France have witnessed the growth of Islamic banking institutions, catering to their Muslim populations, and attracting non-Muslim customers (El-Gamal, 2006).

Africa: African countries like Sudan and Nigeria have also embraced Islamic banking, incorporating it into their financial systems (Ahmed, 2016).

2.18.4 Regulatory Framework for Islamic Banking

To ensure the integrity and compliance of Islamic banks with Shariah principles, regulatory bodies have been established in many countries. These regulatory frameworks vary in their structure and rigor but share common objectives.

Central Banks and Regulatory Authorities: Many countries have designated central banks or regulatory authorities responsible for overseeing Islamic banking operations. For instance, Malaysia has the Central Bank of Malaysia (Bank Negara Malaysia) overseeing Islamic banks (Iqbal & Mirakhor, 2011).

Shariah Boards: Islamic banks are required to establish Shariah boards composed of Islamic scholars who ensure that the bank's operations comply with Shariah principles (Archer & Karim, 2010).

Accounting Standards: Unique accounting standards, such as the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) standards, have been developed to guide Islamic banks in financial reporting (Kahf, 2004).

Legal Frameworks: Islamic banking operates within the legal framework of the respective countries. Special laws and regulations have been enacted to accommodate Islamic finance, providing a clear legal basis for its operations (Khan, 2015).

2.18.5 Challenges in Islamic Banking

Despite its growth, Islamic banking faces several challenges, including:

Standardisation: Achieving global standardisation in Islamic finance practices remains a challenge due to variations in interpretation among Shariah scholars (Iqbal & Mirakhor, 2011).

Liquidity Management: Islamic banks face liquidity management issues due to the absence of interest-based instruments. They rely on complex structures like Sukuk (Islamic bonds) to address this challenge (Kahf, 2004).

Risk Management: Developing comprehensive risk management tools that align with Shariah principles is an ongoing challenge for Islamic banks (Obaidullah, 2008).

Market Integration: Ensuring the integration of Islamic banks into the global financial system while maintaining Shariah compliance poses difficulties (El-Gamal, 2006).

2.18.6 Future Developments in Islamic Banking

Islamic banking is poised for further growth and innovation. Potential future developments include:

Fintech Integration: Islamic banks are increasingly embracing fintech solutions to enhance customer experience and streamline operations (Hassan & Mahlknecht, 2018).

Global Sukuk Market: The global Sukuk market is expected to expand, providing Islamic banks with more diversified financing options (Iqbal & Mirakhor, 2011).

Regulatory Harmonization: Enhanced international cooperation and regulatory harmonization efforts may facilitate the growth of Islamic banking on a global scale (Archer & Karim, 2010).

Financial Inclusion: Islamic banking can play a role in promoting financial inclusion, especially in underserved Muslim-majority countries (Ahmed, 2016).

2.18.7 Legal Environment for Islamic Banking

The interpretation of Shariah law influences the legal environment for Islamic banking. The interpretation of Shariah law varies among Islamic scholars, which makes it challenging to establish a uniform legal framework for Islamic banking globally. In their study, Saeed and Saeed (2020) argued that the legal environment for Islamic banking in Pakistan faces challenges due to the need for uniformity in interpreting shariah law. They suggested a uniform legal framework for Islamic banking to ensure consistency and stability in the industry. In contrast, in their study on the legal environment for Islamic banking in the United Arab Emirates (UAE), Al-Tamimi and Al-Bastaki (2021) noted that the UAE has a well-established legal framework for Islamic banking. They highlighted the role of the UAE Central Bank in guiding the legal and regulatory requirements for Islamic banking operations.

The legal environment for Islamic banking is a critical framework that regulates and supports the operations of Islamic financial institutions worldwide. Islamic banking is a financial system that adheres to Islamic principles, primarily guided by Sharia law, which prohibits the payment or receipt of interest (riba) and promotes risk-sharing and ethical investments. This legal environment is essential for ensuring compliance with Sharia principles while addressing Islamic banks' regulatory and operational aspects.

2.18.8 Regulatory Framework

Islamic banking operates within a comprehensive legal and regulatory framework that varies from one country to another. Usually, these regulations are established by the respective central banks or financial regulatory authorities. For instance, in Saudi Arabia, the Saudi

Arabian Monetary Authority (SAMA) oversees and regulates Islamic banks, ensuring compliance with Sharia principles ("Saudi Arabian Monetary Authority," n.d.).

Sharia Compliance

The cornerstone of the legal environment for Islamic banking is the adherence to Sharia principles. Sharia boards or councils, comprised of Islamic scholars and experts, ensure that financial products and transactions comply with Islamic law. These boards issue fatwas (religious rulings) to approve or disapprove of financial products and services offered by Islamic banks (Iqbal & Mirakhor, 2007).

Legal Contracts

Islamic banking relies on specific contracts that align with Sharia principles. For instance, the Mudarabah contract involves profit-sharing between the bank (as the financier) and the customer (as the entrepreneur), with both parties sharing profits and losses. Another joint contract is the Murabaha contract, which facilitates asset financing through cost-plus financing with a transparent markup. These contracts must adhere to legal and regulatory requirements while being Sharia-compliant (Archer & Karim, 2008).

Legal Challenges

The legal environment for Islamic banking is challenging. One of the primary challenges is harmonizing Islamic finance principles with the legal systems of non-Muslim majority countries. Achieving this balance often involves developing specific legal frameworks to accommodate Islamic finance practices while respecting local laws. For example, the United Kingdom has established a legal framework for Islamic finance through legislation such as the Financial Services and Markets Act 2000 (FSMA) (Kettell, 2012).

2.18.9 Challenges and Future Directions

Despite the growth and popularity of Islamic banking, the industry faces several challenges in the legal and regulatory environment. One significant challenge is the lack of standardisation and uniformity in Shariah interpretations, which leads to inconsistencies in the legal and regulatory framework for Islamic banking. In their study on the challenges facing the Islamic banking industry, Ahmad and Islam (2020) suggested the need for a standardised shariah-compliant regulatory framework to overcome the challenges faced by Islamic banking. The legal and regulatory environment is crucial in shaping the Islamic banking industry. The regulatory framework for Islamic banking in Muslim countries is based

on Shariah principles, while non-Muslim countries have specific regulations for Islamic banking. The legal environment for Islamic banking is influenced by the interpretation of Shariah law, leading to challenges in establishing a uniform legal framework globally. To overcome these challenges, there is a need for a standardised Shariah-compliant regulatory framework for Islamic banking.

Shariah Compliance: External Constraints Shariah compliance refers to the adherence of Islamic financial institutions and their activities to Islamic law principles. These principles are derived from the Quran and the Sunnah, which form the primary sources of Islamic law. Shariah compliance has become increasingly important in the Islamic finance industry as investors and customers seek assurance that their financial activities align with their religious beliefs.

One of the main external constraints on Shariah compliance is regulatory oversight. Islamic finance has proliferated in recent years, and regulators have sought to ensure that the industry operates within the parameters of Shariah law. For example, in Malaysia, the central bank, Bank Negara Malaysia, has established a Shariah Advisory Council to oversee the Shariah compliance of Islamic financial institutions (Ibrahim, 2020). Similarly, in the United Arab Emirates, the Dubai Financial Services Authority has established a Shariah Supervisory Board to oversee the Shariah compliance of financial institutions operating in Dubai (DFSA, 2021).

Another external constraint on Shariah compliance is meeting stakeholders' expectations, including customers and investors. Islamic financial institutions must demonstrate their commitment to Shariah compliance to attract and retain customers and investors who value Islamic values (Al-Twajjry, Brierley & Gwilliam, 2003). This has led to the developing of Shariah compliance frameworks that guide Islamic financial institutions' operations (Ali & Asutay, 2010).

A third external constraint on Shariah compliance is the need to comply with international standards and regulations. Islamic financial institutions operate in a globalized economy subject to international regulations and standards. For example, the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) has developed a set of Shariah standards that guide the Shariah compliance of Islamic financial institutions (AAOIFI, 2020). Similarly, the International Islamic Financial Market (IIFM) has developed standard

documentation for Islamic finance transactions that ensures Shariah compliance (IIFM, 2020).

Shariah compliance in Islamic finance is subject to various external constraints, including regulatory oversight, stakeholder expectations, and international standards and regulations. These constraints have led to the development of Shariah compliance frameworks and the establishment of Shariah supervisory bodies to oversee the compliance of Islamic financial institutions. As the Islamic finance industry continues to grow, these external constraints will become even more critical in ensuring the continued adherence of Islamic financial institutions to Shariah law.

2.19 Shariah Compliance: Internal Dynamics

Shariah compliance is a critical aspect of Islamic finance and has received increased attention from researchers and practitioners in recent years. The internal dynamics of Shariah compliance are crucial in ensuring that financial transactions adhere to Islamic principles, which prohibit interest-based transactions and promote fairness, transparency, and social responsibility.

One key factor in Shariah compliance is the role of the Shariah supervisory board (SSB) in Islamic financial institutions. Studies have shown that the SSB plays a crucial role in ensuring the legitimacy and credibility of Islamic financial institutions (Mohamed, 2018).

Another key factor in Shariah compliance is the internal control systems of Islamic financial institutions. Internal control systems help to prevent and detect non-compliant activities and ensure that the procedures and processes are in line with Shariah principles (Abdul Rashid, Mohamad, & Mohd Ghazali, 2019). Studies have shown that effective internal control systems are essential for Shariah compliance and are positively related to the financial performance of Islamic financial institutions (Mohamad et al., 2017).

In addition to the SSB and internal control systems, the culture and values of Islamic financial institutions also play a critical role in ensuring Shariah compliance. The culture of an Organisation is reflected in its values, norms, and beliefs, and can influence the behaviour of its employees and stakeholders (Ali, Ramzan & Al-Humaidi, 2021). Studies have shown that a strong culture of compliance and ethics is positively related to the Shariah compliance of Islamic financial institutions (Kamaruddin, Rahman & Yaacob, 2018).

Finally, the use of technology and digital platforms is also becoming increasingly important in ensuring Shariah compliance in Islamic finance. Digital platforms offer several advantages, including real-time monitoring, data analytics, and the ability to automate compliance processes (Haron, Kassim & Azmi, 2021). Studies have shown that digital technology can improve the efficiency and effectiveness of Shariah compliance in Islamic financial institutions (Haron et al., 2021).

In conclusion, Shariah compliance is a critical aspect of Islamic finance, and its internal dynamics play a crucial role in ensuring that financial transactions adhere to Islamic principles. The Shariah supervisory board, internal control systems, culture and values, and technology and digital platforms are all key factors that contribute to Shariah compliance in Islamic financial institutions.

2.20 Global Islamic Bank Finance

Islamic finance has grown substantially and is now a prominent sector within the global financial industry (Haneef, 2014). This financial system strictly adheres to the principles of Shariah law, including the prohibition of interest (riba), avoidance of unethical investments, and refraining from speculative activities (Haneef, 2014).

The remarkable growth in global Islamic banking has been evident in recent years, driven by increasing demand in Muslim-majority and non-Muslim countries (Haneef, 2014). As of 2021, the global Islamic finance industry is estimated to be valued at over \$2 trillion (Reuters, 2021). Central to this system is the principle of risk-sharing, where both the bank and its clients jointly participate in the risks and rewards of their investments (El-Gamal, 2006), a departure from conventional banking practices where banks assume all risks and charge interest as compensation (El-Gamal, 2006). Additionally, the Islamic finance industry prioritizes Shariah-compliant financial products and services, such as Islamic bonds (sukuk), Islamic mutual funds, and Islamic mortgages (Murabaha) (Iqbal & Mirakhor, 2012), allowing adherents to align their financial activities with their religious beliefs.

The development of Islamic finance has roots in the teachings of the Quran and the Hadith, with its primary objective being the promotion of social justice, economic development, and ethical values (Karim & Tarazi, 2020). It differs from conventional finance by emphasising risk-sharing instead of risk transfer (Karim & Tarazi, 2020). The inception of modern Islamic banking can be traced back to Egypt in 1963 with the establishment of the Mit Ghamr Local

Savings Bank (Warde, 2000). 1970 was marked as a significant period of expansion for Islamic finance, establishing Islamic banks in regions with substantial Muslim populations, including the Middle East and Malaysia (Iqbal & Mirakhor, 2012).

The growth of Islamic finance was further catalysed by the oil boom of the 1970s, which generated substantial petrodollars in the Gulf region and a demand for Shariah-compliant financial institutions (Khan & Bhatti, 2008). Concurrently, there was an increasing demand among Muslim consumers and investors for Shariah-compliant financial products, contributing to the industry's growth (Archer & Karim, 2016). Islamic finance has evolved into a global industry, with operations in more than 70 countries (Bank Negara Malaysia, 2020). It has expanded beyond traditional banking to include Islamic insurance (takaful), Islamic capital markets, and Islamic microfinance, among other financial services (Iqbal & Mirakhor, 2012).

The multifaceted evolution of Islamic finance can be attributed to a convergence of factors. Its grounding in Islamic law is chief among these, providing its ethical foundation and legal framework. Additionally, the unprecedented surge in oil wealth during the 1970s played a pivotal role, creating a demand for financial instruments compliant with Shariah principles. Simultaneously, Muslim consumers and investors' growing appetite for these products underscored the industry's viability (Archer & Karim, 2016). Collectively, these elements have established Islamic finance as a significant and distinctive component of the global financial system, presenting a compelling alternative to conventional finance.

The development of Islamic finance can be attributed to a combination of factors, including adherence to Islamic law, the oil boom of the 1970s, and the increasing demand for Sharia-compliant financial products among Muslim consumers and investors. Islamic finance has become an integral part of the global financial system, offering a unique alternative to conventional finance. Islamic banking, a financial system rooted in Islamic principles and values, has witnessed remarkable global growth in recent years. The Islamic Finance Development Report of 2020 estimates the global Islamic finance industry's total value at a staggering \$2.88 trillion, with Islamic banking comprising most of this sum (IFSB, 2020). Although historically concentrated in Muslim-majority nations, Islamic banking has progressively extended its presence into non-Muslim countries, including the UK, the US, and Australia (Karim & Tarazi, 2020).

The continued expansion of Islamic banking is evident in data from Thomson Reuters, which reported a global Islamic finance industry worth approximately \$3.8 trillion in 2021, with an impressive annual growth rate of 5.5% (Thomson Reuters, 2021).

2.20.1 Demand for Shariah-Compliant Financial Products

One primary driver of Islamic banking's global growth is Muslim consumers' burgeoning demand for Shariah-compliant financial products. This demand stems from the desire to engage in financial transactions by Islamic principles, which prohibit the charging or payment of interest (riba) and promote risk-sharing (Mudarabah) (Khan, 2021). Consequently, Islamic banks offer diverse products and services that align with these ethical and religious guidelines.

2.20.2 Recognition and Regulatory Support

The global expansion of Islamic banking is facilitated by the increasing recognition of Islamic finance by governments and regulatory bodies worldwide. Many countries have established comprehensive regulatory frameworks for Islamic banking and finance, creating a conducive industry development environment (El-Din, 2021). This recognition has enabled Islamic banks to operate on a level playing field with their conventional counterparts, ensuring a fair and competitive landscape.

2.20.3 Resilience During Financial Crises

The growth of Islamic banking can be attributed to its resilience during financial crises. The global financial meltdown in 2008 highlighted the fundamental differences between Islamic and conventional banking systems. Islamic banking's emphasis on risk-sharing and asset-backed financing provided a cushion against the crisis's adverse effects, reducing exposure to toxic assets and minimising the extent of financial damage (Khan, 2021). The global expansion of Islamic banking is a complex phenomenon driven by a combination of factors. The increasing demand for Shariah-compliant financial products, recognition by governments and regulatory bodies, and the system's resilience in financial crises have all contributed to its growth. As a result, Islamic banking will continue thriving, playing a significant role in the global financial landscape, and attracting a diverse range of customers within Muslim-majority countries and beyond.

Islamic banking has experienced significant growth in the global financial industry and has emerged as a significant player in recent years. However, the industry faces several challenges that impede its development and expansion. One of the primary challenges is the

need for standardised Sharia-compliant financial products. Variations in the interpretation and application of Islamic law (Shariah) by different Shariah scholars can lead to consistency in financial product offerings, creating confusion and uncertainty in the market (Hassan, 2017). This lack of standardisation hampers the growth and stability of the industry. Another challenge for Islamic banking is the need for more skilled professionals with expertise in Shariah law and finance. Islamic finance demands specialised knowledge that is not readily available, making it difficult for financial institutions to find and retain qualified individuals (Karim & Tarazi, 2020). This talent shortage can hinder the development and implementing of innovative Islamic financial products and services.

Additionally, the absence of a comprehensive legal and regulatory framework for Islamic finance in some countries poses a challenge. With proper regulations, investors and customers may be able to engage with Islamic financial institutions due to concerns about the security and legality of their investments (Gait & Worthington, 2021). This uncertainty can impede the growth of Islamic finance in these markets. Islamic financial institutions often need help with a limited scope of investment opportunities, especially in markets where Sharia-compliant options are scarce. This limitation restricts their ability to diversify portfolios and meet clients' diverse needs (El-Tahir et al., 2021).

As a result, these institutions may need help competing effectively with conventional counterparts regarding investment offerings. Another challenge relates to the interpretation of Shariah compliance. Shariah interpretations among scholars can lead to consistency in applying Islamic finance principles, affecting the industry's credibility and trustworthiness (Alam, 2021). Achieving consensus on Shariah compliance is crucial for the industry's stability and growth.

Despite its impressive growth, Islamic banking faces various challenges, including the need for more standardisation in Shariah-compliant financial products, a shortage of skilled professionals, the absence of a comprehensive legal and regulatory framework, limited investment opportunities, and differing interpretations of Shariah compliance. Addressing these challenges is essential for the sustained growth and stability of the Islamic banking industry.

The limited availability of qualified human resources; with expertise in both Islamic finance and conventional finance. This shortage of talent can lead to difficulties in the development and implementation of innovative Islamic financial products and services (Khan & Ahmad,

2020). Furthermore, the lack of a comprehensive legal and regulatory framework for Islamic finance in some countries is another challenge. This situation can create uncertainty and a lack of confidence among investors and customers, which may impede the growth of Islamic finance in those markets (Gait & Worthington, 2021). The limited scope of investment opportunities for Islamic financial institutions is also a challenge. The lack of Shariah-compliant investment options in some markets restricts the ability of Islamic financial institutions to diversify their portfolios and meet the needs of their clients (El-Tahir et al., 2021).

2.21 The Future of Islamic Finance Industry

The Islamic finance industry has gained global recognition for its distinctive features, characterised by its prohibition of interest, commitment to social responsibility, and ethical principles. As the world continues to undergo transformative changes, it prompts an exploration into the prospective evolution of the Islamic finance sector. The Islamic finance industry is experiencing rapid growth, garnering international attention. Notably, according to a report published by Thomson Reuters, the Islamic finance industry was poised to reach an impressive \$3.8 trillion in assets by 2022 (Al-Saleh, 2018). This growth is attributed to the escalating demand for Shariah-compliant financial products and services, extending its appeal not only to Muslims but also to non-Muslim investors globally.

One of the prominent trends influencing the future of Islamic finance is the ascent of financial technology, or fintech. Fintech companies are harnessing technological innovations to create pioneering and accessible Islamic finance solutions. For instance, companies like Wahed Invest and Ethis Ventures have leveraged digital platforms to offer halal investment opportunities to retail investors (Ayub, 2021). This incorporation of technology facilitates greater accessibility, transparency, and efficiency within the industry, attracting a new generation of tech-savvy investors.

Another noteworthy trend in the Islamic finance sector is the surging interest in sustainable and socially responsible investing (SRI) among its practitioners. Islamic finance has a deep-rooted tradition of promoting ethical and socially responsible investments. Consequently, integrating environmental, social, and governance (ESG) considerations into Islamic financial products and services aligns seamlessly with this tradition (Ayub, 2021). This shift not only

underscores the industry's commitment to ethical principles but also responds to the global call for sustainable finance solutions.

The Islamic finance industry is undergoing significant regulatory changes that are poised to leave a lasting impact on its future. Key markets, such as Malaysia and the United Arab Emirates, have initiated regulatory reforms aimed at bolstering transparency, promoting innovation, and ensuring the stability of the sector (Al-Saleh, 2018). These regulatory changes aim to align the industry with global financial standards while preserving its Islamic values, thus fortifying its position in the global financial landscape.

The future of the Islamic finance industry appears promising and dynamic. Its continued growth, driven by the demand for Shariah-compliant financial solutions, aligns with the industry's fundamental principles. The integration of fintech and the rise of sustainable and socially responsible investing exemplify the industry's adaptability and innovation. Furthermore, regulatory reforms demonstrate a commitment to global best practices while preserving Islamic values. As the Islamic finance industry continues to evolve, it stands poised to play a more significant role in shaping the future of finance on a global scale.

Islamic finance has emerged as a growing field globally, with its unique features and principles of being interest-free, socially responsible, and ethical. As the world continues to evolve, the question arises as to what the future holds for the Islamic finance industry. Islamic finance is a rapidly growing industry that has attracted global attention in recent years. According to a report by Thomson Reuters, the Islamic finance industry is projected to reach \$3.8 trillion in assets by 2022 (Al-Saleh, 2018). This growth is driven by increasing demand for Shariah-compliant financial products and services among Muslims and non-Muslims alike.

One key trend shaping the future of Islamic finance is the rise of fintech. Fintech companies are leveraging technology to create innovative and accessible Islamic finance products and services. For example, companies like Wahed Invest and Ethis Ventures are using digital platforms to offer halal investment opportunities to retail investors (Ayub, 2021). Another trend is the growing interest in sustainable and socially responsible investing (SRI) among Islamic finance practitioners. The Islamic finance industry has a long history of promoting ethical and socially responsible investing, and SRI is seen as a natural extension of this tradition. As such, there is a growing emphasis on integrating environmental, social, and governance (ESG) considerations into Islamic finance products and services (Ayub, 2021).

Finally, the Islamic finance industry is also experiencing regulatory changes that are likely to shape its future. In particular, regulators in key markets like Malaysia and the United Arab Emirates are implementing new regulations and standards aimed at enhancing transparency, promoting innovation, and ensuring the stability of the industry (Al-Saleh, 2018).

2.21.1 Current State of Islamic Finance Industry

The Islamic finance industry has experienced remarkable growth and transformation in recent years, positioning itself as a prominent player in the global financial landscape. The rapid expansion of the Islamic finance industry can be attributed to several key factors. Primarily, there has been a rising demand for Shariah-compliant financial products and services not only in Muslim-majority countries but also in non-Muslim-majority countries (Al-Saleh & Rahman, 2021). Investors are increasingly seeking ethical and socially responsible investment options, which align with Islamic principles of finance.

Additionally, the industry's globalization efforts have contributed significantly to its growth. Islamic financial institutions have expanded their reach into diverse markets, including the United Kingdom, Malaysia, and the Gulf Cooperation Council (GCC) countries. For instance, London has emerged as a prominent hub for Islamic finance, with several global financial institutions offering Islamic products and services (Kamarudin, 2021).

One notable impact of the Islamic finance industry is its contribution to financial inclusion. In many Muslim-majority countries, a massive portion of the population remains unbanked or underbanked. Islamic finance has played a pivotal role in extending financial services to these underserved communities (World Bank, 2020). Through microfinance and community-based models, Islamic banks have strived to address the financial needs of low-income individuals and small entrepreneurs, promoting economic development in these regions.

Despite its remarkable growth, the Islamic finance industry still faces several challenges. Standardisation and harmonization of Shariah-compliant products and practices across different markets continue to be a significant issue (Ernst & Young, 2020). The lack of uniformity can hinder cross-border transactions and create confusion among investors. Another challenge is the limited awareness and understanding of Islamic finance among potential customers, both in Muslim-majority and non-Muslim-majority countries. Education and awareness campaigns are essential to demystify Islamic finance principles and products.

Furthermore, regulatory, and supervisory challenges persist. Regulators need to strike a delicate balance between ensuring compliance with Islamic principles and maintaining financial stability. Additionally, supervision frameworks must be developed and refined to address the unique aspects of Islamic finance. The Islamic finance industry is poised for further growth and innovation. As it continues to expand into new markets, it will likely adapt to local regulatory frameworks while maintaining Shariah compliance. Technological advancements and fintech integration are also expected to enhance efficiency and accessibility within the industry.

Islamic finance is a rapidly growing industry, with total assets estimated to have reached \$2.88 trillion by the end of 2020 (IFN, 2021). The industry has experienced a compounded annual growth rate of approximately 7.5% over the past decade, with growth expected to continue (Al-Saleh & Rahman, 2021). The industry has evolved beyond traditional banking and now includes various financial products and services such as sukuk (Islamic bonds), takaful (Islamic insurance), and Islamic asset management (Kamarudin, 2021).

The Islamic finance industry has been experiencing significant growth in recent years, with global assets reaching \$2.88 trillion in 2020, a 10.8% increase from the previous year (Islamic Finance News, 2021). This growth can be attributed to numerous factors, including the increasing demand for Shariah-compliant financial products, the expanding reach of Islamic finance in non-Muslim countries, and the industry's focus on innovation and digitization.

Moreover, the Islamic finance industry has been playing a key role in promoting financial inclusion, particularly in Muslim-majority countries. According to the World Bank, only 7% of adults in Muslim-majority countries have an account with a formal financial institution, and Islamic finance has been instrumental in providing access to financial services to this underserved population (World Bank, 2020).

Despite the industry's growth and positive impact on financial inclusion, it still faces challenges, including a lack of standardisation and harmonization across different markets, limited awareness and understanding of Islamic finance among potential customers, and regulatory and supervisory challenges (Ernst & Young, 2020). Overall, the Islamic finance industry has made considerable progress in recent years, and its growth is expected to continue in the coming years, particularly as it expands into new markets and adopts modern technologies to enhance its offerings and improve efficiency.

Global Market for Islamic Finance: The global landscape of finance is undergoing a transformative shift, with Islamic finance emerging as a burgeoning force, transcending geographical boundaries and cultural contexts. This dynamic industry, rooted in ethical principles and guided by the tenets of Shariah law, has experienced remarkable growth in regions as diverse as Asia, the Middle East, and Africa. Its epicentre, Malaysia, stands as a formidable leader, commanding a commanding 30% market share (The Edge Markets, 2021). Nevertheless, other powerhouses, including Saudi Arabia, the United Arab Emirates, and Qatar, have joined the fray, reinforcing the industry's global prominence. Interestingly, Europe, traditionally a stronghold of conventional finance, has begun to pivot towards Islamic finance, with nations like the United Kingdom and Luxembourg actively crafting regulatory frameworks to nurture this burgeoning sector (Rakhi, 2021).

A palpable testament to the industry's burgeoning influence is its exponential growth within the global financial arena. A report by the Islamic Financial Services Board underscores this phenomenon, revealing that the Islamic finance sector boasted a staggering valuation of \$2.88 trillion in 2020, accompanied by a robust estimated annual growth rate of 5.3% (IFSB, 2021). This rapid expansion extends its reach not only across Muslim-majority territories but also into non-Muslim-majority domains such as the United Kingdom, the United States, and Singapore.

The ascent of Islamic finance finds its roots in multiple facets, including its steadfast commitment to ethical and socially responsible investments. At its core, Islamic finance adheres to the strictures of Shariah law, eschewing interest-based transactions, and mandating investments to uphold social responsibility. This ethical underpinning resonates strongly with an increasingly discerning global clientele seeking financial instruments that align with their moral compass.

Furthermore, Islamic finance has demonstrated remarkable resilience amid the tumultuous economic landscape engendered by the COVID-19 pandemic, outperforming its conventional counterparts. Moody's Investors Service has attested to this phenomenon, reporting that Islamic banks exhibited a higher level of fortitude against the economic shocks of the pandemic, boasting a markedly lower rate of non-performing loans in comparison to conventional banks (Moody's, 2021).

The Islamic finance industry is expanding globally, with significant growth in Asia, the Middle East, and Africa. Malaysia is currently the largest market for Islamic finance, with a market

share of approximately 30% (The Edge Markets, 2021). Other countries, including Saudi Arabia, the United Arab Emirates, and Qatar, are also key players in the industry. Europe has also shown an increasing interest in Islamic finance, with countries such as the United Kingdom and Luxembourg developing frameworks to support the industry (Rakhi, 2021). Islamic finance is a rapidly growing sector in the global financial market. According to a report by the Islamic Financial Services Board, the global Islamic finance industry was valued at \$2.88 trillion in 2020, with an estimated annual growth rate of 5.3% (IFSB, 2021). The industry has been expanding not only in Muslim-majority countries but also in non-Muslim majority countries such as the United Kingdom, the United States, and Singapore.

One of the reasons for the growth of Islamic finance is the increasing demand for ethical and socially responsible investments. Islamic finance follows the principles of Shariah law, which prohibits interest-based transactions and requires investments to be made in a socially responsible manner. Moreover, Islamic finance has been able to weather the economic downturn caused by the COVID-19 pandemic better than conventional finance. According to a report by Moody's Investors Service, Islamic banks showed greater resilience to the economic shocks of the pandemic, with a lower rate of non-performing loans compared to conventional banks (Moody's, 2021).

Technological Advancements: Technological advancements have significantly transformed the landscape of Islamic finance, with digital banking and financial technology (fintech) playing pivotal roles. This integration of technology has not only expedited processes but has also enhanced accessibility for customers (Cukic, 2020). Furthermore, the exploration of blockchain technology has emerged as a prominent development in Islamic finance, offering improved transparency and security (Taufiq & Ullah, 2021). The future of the Islamic finance industry is poised to be profoundly influenced by these technological advancements. The escalating adoption of digital platforms and the proliferation of fintech firms are projected to usher in substantial changes in the sector in the years ahead.

Blockchain technology is a key innovation that is expected to have a profound impact on the Islamic finance industry. Blockchain has the potential to enhance the transparency, efficiency, and security of financial transactions, thereby diminishing the risk of fraudulent activities and promoting trust among stakeholders (ElHafid & Mohd, 2020). Another transformative technology on the horizon for the Islamic finance industry is artificial intelligence (AI). AI has the capacity to automate a myriad of tasks integral to Islamic

finance, including risk management, regulatory compliance, and customer service, leading to cost reduction and heightened efficiency (Yusoff et al., 2020).

The widespread adoption of digital platforms and mobile technology is poised to expand the accessibility of Islamic finance services to a broader customer base. This expansion could entail extending financial services to underserved populations in developing countries and introducing novel products and services tailored to younger, tech-savvy consumers (Bhatti et al., 2020).

Technology has played a significant role in the growth of Islamic finance, with digital banking and fintech gaining popularity. The integration of technology in Islamic finance has allowed for faster and more efficient services, improving accessibility to customers (Cukic, 2020). The use of blockchain technology has also been explored in Islamic finance to enhance transparency and security (Taufiq & Ullah, 2021).

The future of the Islamic finance industry is expected to be shaped by technological advancements. With the increasing adoption of digital platforms and the growth of financial technology (fintech) companies, the Islamic finance industry is likely to experience significant changes in the coming years. One of the key technological advancements that is expected to impact the Islamic finance industry is blockchain technology. Blockchain has the potential to improve the transparency, efficiency, and security of Islamic financial transactions, thereby reducing the risk of fraud and improving trust between stakeholders (ElHafid & Mohd, 2020).

Another technology that is likely to impact the Islamic finance industry is artificial intelligence (AI). AI has the potential to automate many of the processes involved in Islamic finance, such as risk management, compliance, and customer service, thereby reducing costs and improving efficiency (Yusoff et al., 2020). Moreover, the adoption of digital platforms and mobile technology is expected to make Islamic finance more accessible to a wider range of customers. This could include providing financial services to underbanked populations in developing countries, as well as offering new products and services to younger, tech-savvy consumers (Bhatti et al., 2020).

2.21.2 Challenges and Opportunities

The Islamic finance industry has witnessed remarkable expansion and global prominence in recent years, fuelled by a confluence of economic, cultural, and technological factors. However, this growth trajectory is accompanied by a set of multifaceted challenges that

demand careful attention and strategic resolution. This discourse delves into the intricacies of these challenges and concurrently explores the promising avenues for further advancement within the Islamic finance sphere. A salient issue pervading the Islamic finance landscape is the dearth of standardisation and harmonization in Shariah compliance principles across different countries and financial institutions (Arafat & Mohd, 2021). This dissonance engenders inconsistencies and uncertainties for investors, as they grapple with divergent interpretations of Islamic financial precepts. To elaborate, a lack of uniformity in defining what constitutes Shariah-compliant practices can deter potential investors who seek clarity and confidence in their investment choices.

The scarcity of adequately skilled professionals; in the Islamic finance sector, thereby impeding its overall growth and development (Rizwan, 2021). This scarcity pertains not only to proficiency in Islamic finance but also extends to the integration of conventional finance expertise, as it is increasingly imperative for Islamic financial institutions to navigate the complex intersection of both systems. This deficiency in human capital underscores the pressing need for educational and training initiatives to bridge the skills gap in the industry.

There exists a landscape replete with opportunities that augur well for the Islamic finance sector. One prominent prospect is the burgeoning demand for ethical and sustainable finance on a global scale (Abdullah & Che Azmi, 2021). This paradigm shift toward ethical investing aligns seamlessly with Islamic finance principles, offering fertile ground for expansion. The strategic alignment of Islamic finance with environmental, social, and governance (ESG) criteria can serve as a potent magnet, attracting a new wave of socially responsible investors (Mohd Ariffin et al., 2021). The fusion of these ethical considerations with Islamic finance tenets creates a compelling proposition for investors seeking both financial returns and ethical alignment in their portfolios.

The Islamic finance industry has experienced significant growth in recent years and is expected to continue expanding in the future. However, there are also various challenges and opportunities that the industry may face. One of the main challenges for the Islamic finance industry is the lack of standardisation and harmonization among Islamic finance products and services offered by different institutions. This creates confusion for customers and may hinder the growth of the industry (Khan & Ahmed, 2020). Additionally, there is a shortage of qualified professionals with expertise in both Islamic finance and conventional finance, which may limit the industry's ability to develop innovative financial products and

services (EY, 2020). The increasing demand for Shariah-compliant financial products and services, particularly in Muslim-majority countries, presents significant growth potential (Alam & Al Mamun, 2021). Furthermore, the industry can leverage technology, such as blockchain and artificial intelligence, to develop innovative and efficient financial solutions (Deloitte, 2020).

The Islamic finance industry has exhibited remarkable growth, driven by technological advancements and an evolving financial landscape. However, the path forward is strewn with challenges, such as standardisation hurdles and a deficiency of skilled professionals. Yet, the industry can leverage the surging demand for ethical and sustainable finance as a catalyst for further expansion. By embracing ESG criteria and promoting greater harmony in Shariah compliance, Islamic finance can stride confidently toward a future of sustainable growth and financial inclusion (Khan & Ahmed, 2020). Moreover, harnessing technology to innovate and enhance financial solutions can usher in an era of unprecedented progress (Deloitte, 2020), paving the way for a more robust and resilient Islamic finance ecosystem (Alam & Al Mamun, 2021).

Despite the growth of the Islamic finance industry, there remain challenges that need to be addressed. One challenge is the lack of standardisation and harmonization in Shariah compliance across countries, leading to inconsistencies and uncertainty for investors (Arafat & Mohd, 2021). Another challenge is the shortage of skilled professionals in the industry, hindering growth and development (Rizwan, 2021). However, there are also opportunities for growth, such as the increasing demand for ethical and sustainable finance globally (Abdullah & Che Azmi, 2021). The integration of Islamic finance principles with environmental, social, and governance (ESG) criteria has the potential to attract more investors seeking socially responsible investments (Mohd Ariffin et al., 2021).

The Islamic finance industry has experienced significant growth and expansion globally, with technology playing a crucial role in its development. Despite challenges, such as standardisation and a shortage of skilled professionals, there are opportunities for growth and development, particularly in the area of sustainable and socially responsible finance.

2.22 Islamic Banking and the Global Financial Crisis

The global financial crisis of 2008 had significant implications for the world's financial systems. Islamic banking emerged as an area of interest due to its unique features and

potential resilience to the crisis. Islamic banking operates on the principle of Riba, which prohibits the payment or acceptance of interest. This core feature ensures that Islamic banks do not engage in the high-risk lending practices that contributed to the crisis (Omar, 2013). Islamic finance mandates that tangible assets back all financial transactions and involve risk-sharing between the parties. This promotes financial stability by discouraging speculative and excessive risk-taking behaviour (Omar, 2013).

Islamic banks were found to be less exposed to toxic assets such as mortgage-backed securities, which played a pivotal role in the global financial crisis (Elhedhli & Jemmali, 2015). Studies suggest that while Islamic banks were not immune to the crisis, their asset quality deteriorated to a lesser extent than conventional banks (Ali & Llewellyn, 2016). The level of economic development in a country influenced the impact of the crisis on Islamic banks. Banks in less developed countries were less affected than those in more developed nations (Ashfaq & Abbas, 2015).

The regulatory environment played a significant role in shaping the performance of Islamic banks during the crisis. Stringent regulations and supervision contributed to their resilience (Ogunrinola & Mohd Rasid, 2019). The extent of integration with the global financial system also impacted Islamic banks. Those with limited exposure to global markets had more excellent stability (Ogunrinola & Mohd Rasid, 2019).

Islamic banking and finance have been widely touted as a more stable and ethical alternative to the conventional banking system. According to Mohd Azmi Omar (2013), Islamic banking was largely unaffected by the global financial crisis of 2008 due to the unique features of the Islamic financial system, such as the prohibition of interest, the requirement for asset-backing and risk-sharing. In addition, Islamic banks are less exposed to toxic assets, which played a significant role in the global financial crisis (Elhedhli and Jemmali, 2015).

However, some studies have challenged the notion that Islamic banking was immune to the global financial crisis. For instance, Ali and Llewellyn (2016) argue that Islamic banks were not immune to the global financial crisis but were affected to a lesser extent than their conventional counterparts. They found that the asset quality of Islamic banks deteriorated slightly during the crisis but remained significantly better than conventional banks.

Several factors, such as the level of economic development, the regulatory environment, and the extent of integration with the global financial system, influenced the performance

of Islamic banks during the global financial crisis. For instance, Mohammad Ashfaq and Akhter Abbas (2015) found that Islamic banks in less developed countries were less affected by the global financial crisis compared to those in more developed countries. Similarly, Ogunrinola, Shah and Rasid (2019) found that the regulatory environment significantly influenced the performance of Islamic banks during the global financial crisis.

The literature suggests that Islamic banking was relatively more resilient to the global financial crisis than the conventional banking system. However, there is no consensus on how much Islamic banks were affected by the crisis. Several factors, such as the level of economic development, regulatory environment, and the extent of integration with the global financial system, influenced the performance of Islamic banks during the global financial crisis. Future research should focus on examining the factors that influenced the performance of Islamic banks during the global financial crisis in more detail.

CHAPTER 03: RESEARCH METHODOLOGY

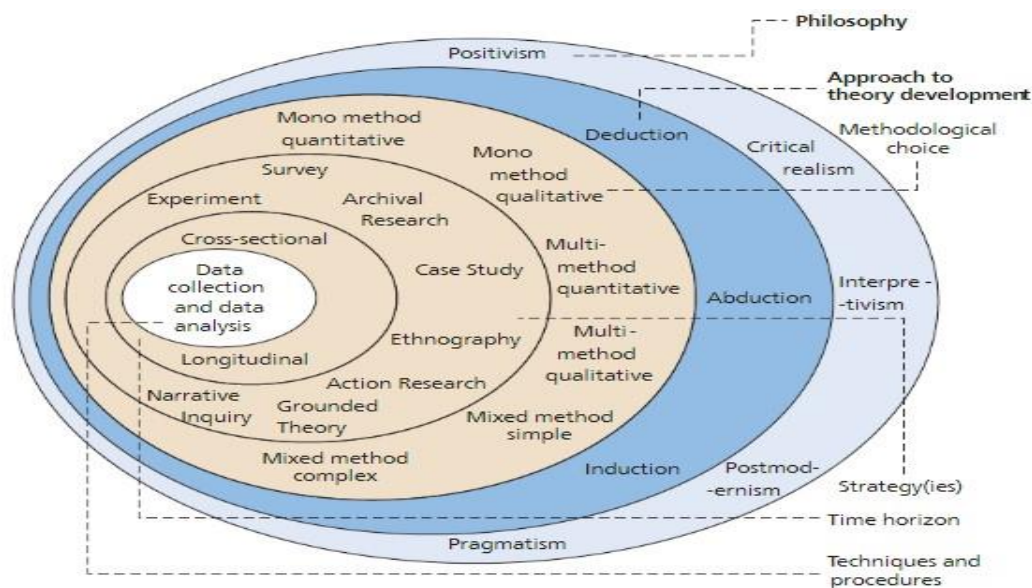
3.1 Overview

This chapter focuses on the research methods used in the current study. The research methods are defined as techniques, tools, logics, and procedures used to collect data on any research, whereas the research is the logical and systematic approach to collect, analyse, and interpret data to answer research questions (Sekaran & Bougie, 2016). The systematic and scientific processes used to gather information which helps and leads to the objectives of the study are known as research methodologies. Research methodology is also known as the study of methods and a plan of action to obtain the determined research aims (Rajasekar, Philominathan, & Chinnathambi, 2013).

The purpose of this chapter is to define and highlight the research methods used in the current study. The in-depth review of literature on financing modes of Islamic banking instructed towards the identification of current research problem, which led to the current research aims, objectives and questions. As, the aims of this research are to identify, explore and critically analyse the methods for evaluating loan proposals and the credit risk assessment protocols used by Islamic financial institutions (Banks). To present mathematical-statistical methods of creditworthiness evaluation usage at Islamic banks. To analyse how differently Islamic banks assessing loan proposals as compared to conventional banks. It does not attempt to evaluate which method is better however the emphasis throughout is on discovering what Islamic banks themselves identify as key determinants of decision making to evaluate loan proposals as potential investment opportunities. The comparison of hypothetical loan proposals explores all technical issues and difference in practical proposals. Through comparative analysis it is analysed that in practice to what extent it is possible to use other methods adopted by Islamic banks.

Saunders, Lewis and Thornhill (2009) The “Research Onion” model is studied and followed as a template to develop the research methodology techniques for the current study.

Figure 3.1 The Research Onion



Source: (Saunders et. al, *The 'Research Onion,'* 2019).

To achieve the aims and objectives of the current study, overall qualitative style of methodology has been considered as more appropriate and adopted. The inductive research approach has been adopted while considering interpretivist research philosophy. The grounded theory research design is followed to help in developing, improving, and enhancing the knowledge about the Islamic banking and their evaluation models. The data is collected using open-ended questionnaires and semi-structured interviews. Furthermore, the collected data is critically analysed with the help of and using NVIVO software and Ms Excel for graphical presentation. The research philosophy, approach, design, sampling, and data collection methods as part of current research methodology are explained in more detail as below.

3.2 Research Philosophy

Research philosophy relates to the set of values, beliefs or assumptions that helps shape the approach to lead research. Research philosophy determines the nature of research, the researcher's role, and the use of methods to collect data. The research philosophies include positivist, interpretive, and critical perspective, postmodernist, and pragmatist (Saunders, Lewis & Thornhill, 2019). Cresswell's book on research designs explores various research philosophies and their relationship to research designs, highlights the key principles and differences in each approach (Cresswell, 2013). In simple terms research philosophy defines

the way the data should be collected, analysed, and concluded about the research problem. Over the past many years numerous authors have described different research philosophies or paradigms however the most common terms for phenomenological and positivist paradigm also known as qualitative or quantitative (Collis & Hussey, 2003).

Saunders, Lewis and Thornhill (2019) research strategy consider numbers of philosophical assumptions made by scholars working within each philosophy. The three common assumptions are Ontology refers to the assumptions about the nature of being and reality. Ontological strategy depends on two positions such as *objectivism* where the entities exist external to people, whereas the *subjectivism* also known as constructionism where things exist in reality from the perception of people. Epistemology refers to assumptions about the knowledge, as constitutes acceptable and legitimate knowledge in the field of study. The common five epistemological positions are known as positivist, interpretive, critical perspective, postmodernist, and pragmatist. *Positivism* refers to the application of the methods of the natural sciences to produce law-like generalisations, whereas *Interpretive* positions refers as an advocate the view as humans attempt to make sense of the world. *Critical perspective* refers to epistemological relativism Knowledge historically situated and transient, facts are social constructions, historical causal explanation as contribution. *Postmodernism* emphasises the role of language and power relations, seeking to question accepted ways of thinking and give voice to alternative marginalised views. *Pragmatism* refers to practical meaning of knowledge in specific contexts, focus on practices, relevance, problem solving and informed future practice as contribution. Axiology refers to the role of values and ethics, in ways which are relevant to the research strategy.

In the current study the epistemological philosophy is used as the focus of the study to identify, explore, and critically analyse the methods used by Islamic banks for evaluating creditworthiness of loan proposals. The **Interpretivist epistemological philosophy** and **pragmatist phenomenological paradigm** is considered as helpful in highlighting the findings and evidence from the participants and for exploratory study. The reason for the selection of that philosophy and paradigm is to produce more precise qualitative data with the support of recent studies, to understand the key attributes of Islamic banks on credit risk assessment models and as the current study is more of descriptive and exploratory in nature so mainly focuses on the current findings and perceptions of the participants.

3.3 Research Approach

Research approach can be defined as the systematic strategy to conduct research to achieve research questions and objectives. Research approach defines the methods used to collect data such as primary or secondary. The main approaches used for data collection are commonly referred as qualitative and quantitative methods (Crosswell & Crosswell, 2017). In the past, different researchers and authors highlighted different sub-approaches however the basic sources of information remained primary and secondary data through the inductive, abductive, and deductive reasoning approaches. *Inductive reasoning* is a form of logical reasoning in which general principles and theories are developed from specific observations, it is also known as bottom-up approach. *Abductive reasoning* is a logical interference in which a particular observation is discussed and explained. Whereas the *deductive reasoning* is a form of logical process to draw a specific conclusion or outcome from a generic idea or principles (Salmon, 2012; Saunders, Lewis & Thornhill, 2019)

As, the current study is purely qualitative in nature and the focus of study is based on interpretivist paradigm. Hence the most effective **inductive reasoning approach** is used in the current study to better understand and analyse the methods used by Islamic banks for the evaluation of loan proposals through open ended questions. To achieve the aims and objectives of the study the inductive reasoning approach is most suitable as to reach to desired findings, outcomes and develop models.

3.4 Research Design

Research designs or strategies defines overall plan of action that researchers use to address their research questions. Research designs are set of instructions to help researchers in the collection, analysis, and interpretation of the data to draw meaningful conclusions (Goddard & Meville, 2001 and Saunders, et al. 2009). As per the Saunders et al (2019), the common research designs or strategies are named as experimental design, survey design, case study and grounded theory. *Experimental design* helps in the assessment of cause-effect relationships between one or more research variables (Campbell & Stanley, 2015). *Survey design* is useful tool for studying attitudes and behaviours by collecting data using online or offline questionnaires or interviews to a representative sample of participants (Dillman et

al., 2014). *Case study design* refers to in depth analyses of mainly single variable or event as it helps in drawing more detailed and contextualised information or conclusions (Yin, 2017). *Grounded theory design* aims to develop explanations based on people's experiences and their perspectives. The focus of grounded theory is to generate theories through a systematic process of data collection and analysis. It can involve data collection through various methods such as documents, observations, and interviews then the analysis of data helps in identifying concepts, patterns, categories, and generate new theoretical understandings (Bryant & Charmaz, 2007). Interpretivist paradigm in grounded theory primarily focuses on recognising and describing the views and experiences of humans (Fossey et al., 2002). Denzin and Lincoln (2005) stated that interpretivists capture and accept various meanings and methods of data collection and equally acknowledge that the knowledge is sole representation of participants set of beliefs, feelings and experiences in relation to particular situations.

Grounded theory research design is adopted, and it can be said that it could be the best design for the current Interpretivist study. As the focus of the study is to identify, explore and analyse the current methods used by Islamic banks for the evaluation of loan proposals. The open-ended questionnaires are prepared and distributed among participants, additionally the semi-structured interviews are conducted to gather the required data. Grounded theory research design has helped in developing, improving, and enhancing the knowledge about the Islamic banking and its procedures and models.

3.4.1 Reflexivity and Validity

The reflexivity on the current study is the act of taking one set back and mirroring the self as a researcher, which helped in highlighting and addressing some of the key issues of concern in the implementation of grounded theory. According to Joy (2006), reflexivity refers to the examination of researcher's own values, biases, beliefs, perception, preferences and taken for granted assumptions during the whole research process.

The interpretive worldview of the researcher helped in addressing key issues such as *representativeness of findings*: The interpretivists paradigm approach reinforced researcher and confirmed that the findings and conclusions are solely dependent on subjects and the conditions of the study. *Reproducibility*: The interpretation of data and study findings

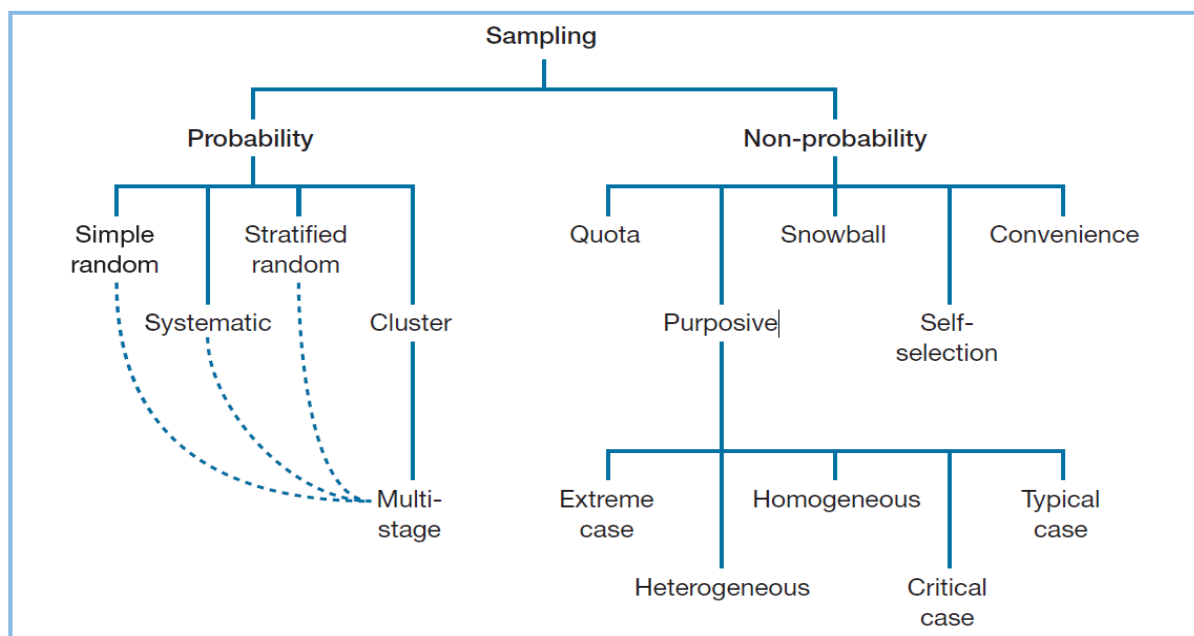
through the different phases of questionnaires and interviews are consistent and reasonably stable over the research period. *Objectivity*: the research methods adopted by the researcher helped in achieving internal consistency and credibility of research findings by reflecting the relevance of findings with the significant elements of the current study. The objectivity of the researcher is maintained as much as possible by not engaging with personal beliefs, perceptions, experience and knowledge. *Generalisation of findings*: The rigorous data collection process and objectivity in the interpretation helped in the validity and transferability of findings and conclusions to the general context which led to the development of new evaluation model.

3.5 Sampling

The process of selecting a subset of individuals, groups or items for the research is known as sampling. A sample refers to individuals or groups to represent the entire population. Whereas population refers to the total number of individuals, groups, or items from which the sample can be collected and analysed (Babbie & Mouton, 2016). The researchers use numerous sampling techniques to collect data which are mainly divided into two main groups known as probability and nonprobability sampling. The probability or representative sampling is defined as the chances of sample being selected from the population are equal. Probability sampling technique makes it possible to answer research questions and achieve objectives from the selected sample to represent the population. There are different probability sampling techniques used in studies such as simple random, systematic, stratified random, and cluster sampling. Whereas non-probability or judgemental sampling refers to the methods of sampling where the samples are selected using subjective criteria, the chances of sample being selected are unknown and unequal. Non-probability sampling techniques are often used in studies when the random sampling is not feasible. The common techniques in use are quota, snowball, purposive, select-selection and convenient sampling methods (Saunders et al, 2007). Convenience sampling is a non-probability sampling technique that refers to the selection of samples based on their availability, easy access, and willingness to participate, etc. It is commonly used by researchers when it is difficult to reach out to larger or targeted populations due to various reasons such as scarcity of resources, limited availability or willingness of the population and time

constraints (Gravetter & Forzano, 2018). Purposive sampling involves the selection of purposefully chosen sample who may poses the desire qualities, characteristics or attributes, knowledge, experience, etc. that can contribute to achieve the aims and objectives of the current study (Crosswell, 2013). Whereas mixed purposive sampling technique refers to the combination of different purposive sampling approaches where the selection of participants from various subgroups of the targeted populations is based on specific criteria. This approach helps researchers in reaching out to the desired participant groups with special characteristics, knowledge, and experience to understand and collect complete information (Palinkas et. al, 2015).

Figure 3.2 Sampling Methods



Source: (Saunders et al., Pearson Education, 2007)

In the current study, all the managers and credit assessment teams of Islamic banks are the population, the respondents from any background, country, or religion. The reason for the choice of managers and credit assessment teams of Islamic banks as population was to ask and get access to most relevant information for the current study. As, it was not possible to visit personally or to get representation of all the Islamic banks across the globe due to various limitations, so to achieve maximum sample size the mixed **purposive sampling technique** was used. The mixed approach helped in reaching out to the selected samples using purposive and convenience sampling.

The **Delphi method** was helpful to get the maximum relevant information about problem statement as the focus was on the individuals from different background and regions who have had worked in Islamic banks and have clear understanding on Islamic financial system. Therefore, the respondents with relevant experience from Islamic banks were requested to participate in this research. The six participants helped in assessing twenty-six loan proposals. Further to above participants, two interviews were conducted with senior level professionals within the Islamic banking with a set of open-ended questions.

3.6 Data Collection Methods

There are variety of data collection methods explored in research. The main methods are known as primary and secondary data collection methods, the sub-methods can vary depending on the nature of research, aims and objections, population, the sample size, and availability of resources. In qualitative research, the common data collection methods used are interviews, questionnaire, observations, focused or discussion groups etc. Whereas *Interviews*: the interviews are conducted to collect the required information following the structure or semi-structured, or unstructured formats. The interviews are planned either face-to-face or virtually as the aim of the interviews is to gather as much information as possible and encourage open and unbiased conversation. *Questionnaires*: the second most common data collection technique is through questionnaire where the participants are presented with open or closed questions to answer based on their observation, practice, knowledge, experience, etc (Cresswell, 2013 & Silverman, 2017).

In the current study mainly primary data collection method was used due to the unavailability of published resources on the key influencing factors used by Islamic banks to evaluate creditworthiness of loan proposals. Therefore, there were two different techniques used to collect the data. In the first round, the participants were presented with sets of five loan proposals with the questionnaire at the end of each application. The respondents were requested to assess and scrutinise the proposals to answer nine questions at the end of each application. In the second round, two separate interviews were conducted with higher level professionals within Islamic banking sector with set of five open-ended questions. The aim of the interviews was twofold first to know further about the evaluation criteria and

associated influencing factors, and to second the findings and validate the reliability of data collected using questionnaire.

3.7 Ethical considerations

The current study has ensured the ethical considerations been strictly followed and taken care while conducting the research. Some of the key ethical considerations were as follows:

- As, the current study is solely for academic purposes hence it does not disrupt or harm to any participants. The study ensured their personal feelings, beliefs and privacy remained unaffected.
- The participants were informed at the beginning of each session that their participation in this research is purely on volunteer basis.
- The confidentiality of participants is ensured under the GDPR guidelines. The participants were ensured that their personal information such as name, contact details, organisational details will not be recorded, or shared with anyone.
- The participants were informed to have the right to may decline altogether or leave blank any questions they do not wish to answer or explain. There were no known risks to participation beyond those encountered in everyday life.
- The study has ensured that culture sensitivity is considered and participants values, beliefs, norms and traditions, cultural differences are respected.
- All the collected responses are anonymous, confidential. No one other than research staff know the individual answers to the questionnaires. The responses will be securely shredded and trashed after the completion of the study.
- The participants were informed about the approximate time to complete the questionnaire.
- The researcher self-biases were considered and optimised to best possible level by following the interpretivists research models and research ethics.
- The study considered and followed all the ethical means to conduct the present research. Addition to this, ethical approval was obtained from the research supervisors and the institution's ethics committee prior to research commencement.

3.8 Limitations of research methodology and data collection.

The following downsides were highlighted as limiting factors in the current study.

- The sample size of the current study is comparatively considered as small due to numerous uncontrollable factors. However, the results are robust.
- The response rate was limited due to nature of study and less availability or willingness of required participants.
- Unfortunately, the pandemic (Covid-19) made it hard to reach out to more respondents and increase the response rate within the given research timeframe.
- As the current population of the study was mainly consisting of BAME community and were considered as higher in risk of getting affected by current pandemic, Covid-19 made it next to impossible to reach out to the participants of the study. Hence, the sample size must be kept at the minimal level.
- Addition to this the lack of responses from the selected sample led to multiple failed attempts to reach out to required participants and forced the study to amend and update the research strategy on multiple occasions. At last, the study successfully managed to gather required data using the above-mentioned research methodologies and data collection methods.
- The other noted limitations were the lack of availability of information on credit scoring models and difficulty in assessing and interpreting the data.

3.9 Summary

To summarise this chapter, it can be stated that the research is logical and systematic approach to collect, analyse, and interpret data to answer research questions. The research methods are defined as techniques, tools, and procedures used to collect data. Whereas research methodology is known as the study of methods and a plan of action to gain the determined aims. Research philosophy relates to the set of values, beliefs or assumptions that helps shape the research approach to lead research based on ontology, epistemology, and axiology positions. Interpretive epistemological positions refer to as an advocate the view as humans attempt to make sense of the world. Whereas pragmatic positions refer to practical meaning of knowledge in specific contexts, focus on practices, relevance, problem

solving and informed future practice as contribution. The methods used to collect data such as primary or secondary are known as research approaches, the main approaches used for data collection are commonly known as qualitative and quantitative methods. In the past, different researchers and authors highlighted different sub-approaches however the basic sources of information remained primary and secondary data through the inductive, abductive, and deductive reasoning approaches. Inductive reasoning is a form of logical reasoning in which general principles and theories are developed from specific observations. The research design is defined as set of instructions to help researchers in the collection, analysis, and interpretation of the data to draw meaningful conclusions. The common research designs or strategies explored in the current study are named as experimental design, survey design, case study and grounded theory. Grounded theory design aims to develop explanations based on people's experiences and their prospectives. The process of selecting a subset of individuals, groups or items for the research is known as sampling. The sampling techniques or strategies are mainly divided into two main groups known as probability or representative sampling and nonprobability or judgemental sampling. Where the probability sampling is defined as the chances or probability of sample being selected from the population are equal and non-probability sampling refers to the method of sampling where the samples are selected using subjective criteria, the chances of sample being selected are unknown and unequal. The next step, the main methods to collect data are known as primary and secondary data collection methods. The most common techniques used to collect quantitative data are structured interviews, close-ended questions, or observations. On other hand the qualitative data is collected using open-ended questions, semi-structured interviews, or focused group observations.

The purpose of this chapter was to define and highlight the research methods used in the current study. Saunders, Lewis and Thornhill (2009) the "Research Onion" model was studied and followed to develop the research methodology techniques for the current study. As, the aims of this research are to identify, explore and critically analyse the methods for evaluating loan proposals and the credit risk assessment protocols used by Islamic financial institutions (Banks) and to analyse how differently Islamic banks assessing loan proposals as compared to conventional banks. To achieve the aims and objectives of the current study, overall qualitative style of methodology has been considered as more

appropriate and adopted. The Interpretivist epistemological philosophy and pragmatist phenomenological paradigm is considered as helpful in highlighting the findings and evidence from the participants and for exploratory study. To achieve maximum sample size the mixed purposive sampling technique was used. The inductive research approach has been adopted while considering interpretivist research philosophy. The grounded theory research design is followed to help in developing, improving, and enhancing the knowledge about the Islamic banking and their evaluation models. The Delphi method approach was adopted to collect data using open-ended questionnaires in first round and as in round the semi-structured interviews were conducted. Furthermore, the collected data is critically analysed with the help of and using NVIVO software and Ms Excel for graphical presentation. The ground theory and interpretivist paradigm have positively contributed to the development of new evaluation model. The model has emerged from the discussions and findings which are reviewed by researcher as objectively as possibly. The reflexive approach helped in reviewing and minimising researcher's biases.

CHAPTER 04: DATA ANALYSIS AND FINDINGS

The current chapter outlines the findings of the data collected from the samples of the study. The loan writing experts, credit evaluating professionals were approached with the loan proposals including number of questions to understand and highlight the loan evaluation criteria.

As explained in the above research methodology, there were two different approaches used to collect the data. In the first approach, the participants were presented with sets of five loan proposals with the questionnaire at the end of each application. The respondents were requested to assess and scrutinise the proposals to answer nine questions at the end of each application. The answers are evaluated and analysed using NVIVO tool to develop the themes to understand the factors and methods used to evaluate loan proposals. In the second approach, two separate interviews were conducted with higher level professionals within Islamic banking sector with set of five open-ended questions. The aim of the interviews was twofold first to know further about the evaluation criteria and associated influencing factors, and to second the findings and validate the reliability of data collected using questionnaire.

Respondent's demographic profile: The primary data was collected through questionnaires and interviews to know and highlight the key influencing factors used by Islamic banks to evaluate creditworthiness of loan proposals. The respondents with relevant experience from Islamic banks were requested to participate in this research. As shown in table 4.1 and 4.2, the respondents job titles and experience were requested as part of their demographic data collection. The six participants helped in assessing twenty-six loan proposals.

Table 4. 1 Respondent's demographic profile

Job Title	Previous / Current Experience as Loan writer / evaluator	Work Experience (in years)	Applications Assessed
Senior Loan Writer	Yes	15	5
Business Sr Analyst	Yes	5	5
Credit	Yes	10	5
Loan assessor / writer	Yes	8	5
BM	Yes	10	5
Underwriting Administrator	Yes	NA	1

Further to above participants, two interviews were conducted with senior level professionals within the Islamic banking with a set of open-ended questions. The open-ended questions were emailed to them as in preparation to the interviews, however the interview recording was not permitted due to the sensitivity of the participant's working environment.

Table 4. 2 Respondent's demographic profile

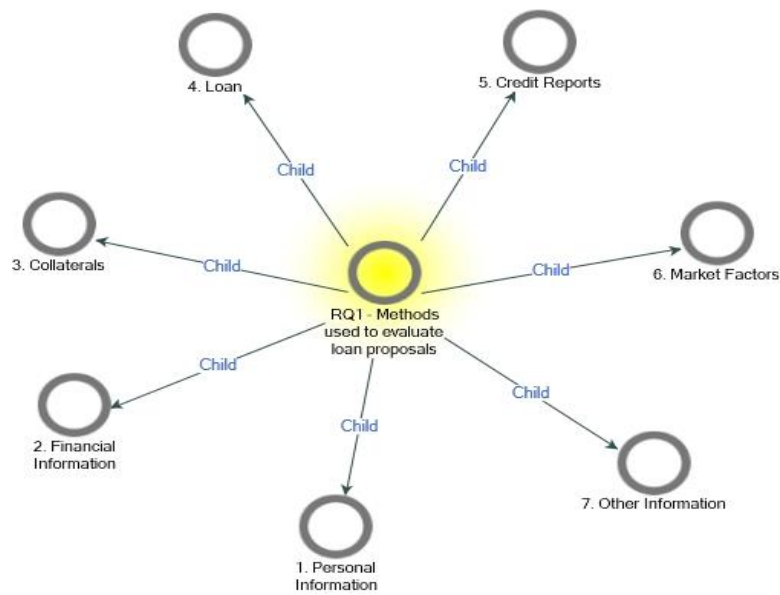
Current Job Title	Previous / Current Experience as Loan writer	Work Experience (in years)	Questions answered
VP of Procurement department	Yes	21	5
Branch Manager	Yes	10	5

4.1 Evaluation methods adopted by Islamic Banks.

To address the first search question, it has been analysed that the Islamic banks primarily use two methods to evaluate and check the creditworthiness of loan application. The methods used are mix of credit scoring modelling techniques and best judgmental approaches also known as advance risk assessment used by the loan-writing experts. Although the response rate was limited due to nature of study and lack of availability of information on credit scoring models, secondly, unfortunately the pandemic (Covid-19) made it next to impossible to reach out to more respondents and increase the response rate within the given research timeframe. However, the results are robust. The future research could consider expanding the sample in the UK and internationally to identify any further differences.

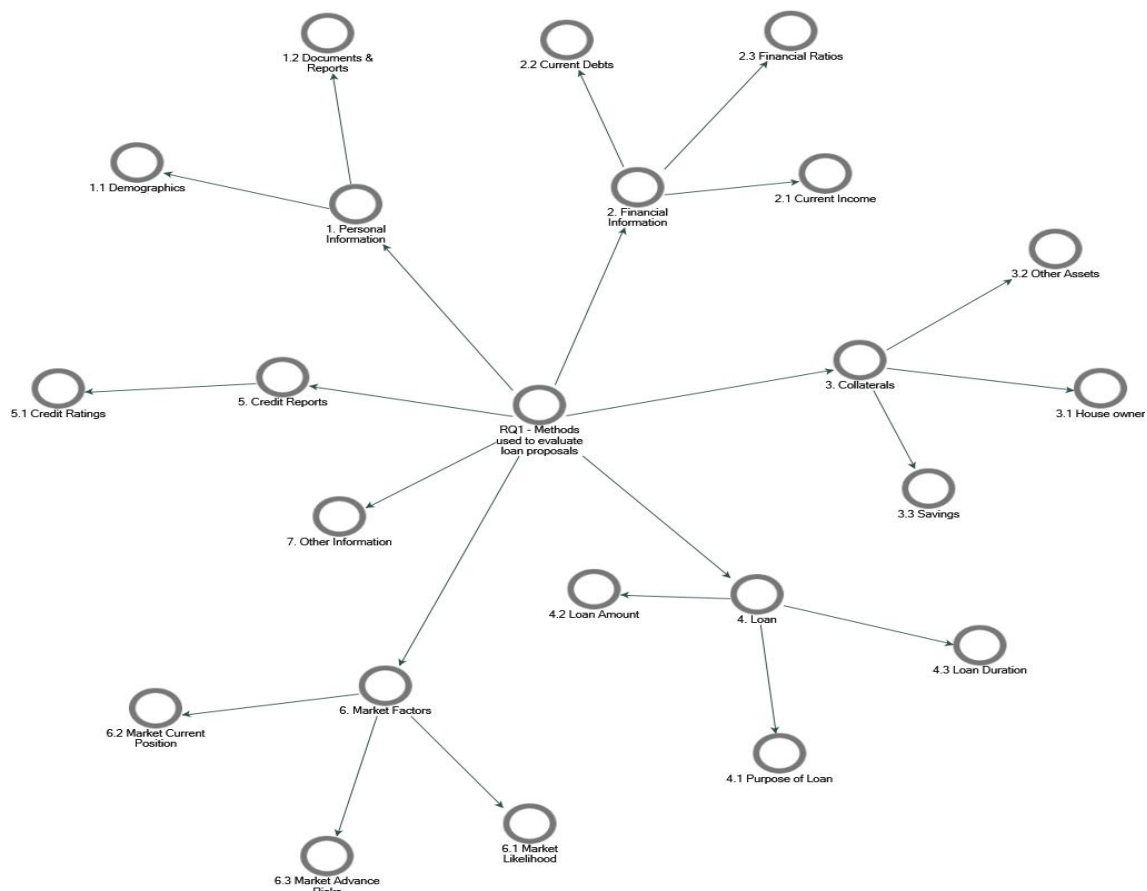
From figure 4.1 and 4.2; as per the respondents the following fundamental variables as the key influencing factors are used by the Islamic banks to evaluate creditworthiness of loan proposals. The common themes developed are the initial screening of personal information including documents, in depth analysis to establish financial position, assessment of collaterals, critical assessment of purpose of loan including amount and duration, the analysis of credit reports, the markets factors are evaluated against the purpose of loan and associated risk factors and further scrutiny of other financial data using multiple financial ratios.

Figure 4. 1 RQ1 – Methods used to evaluate loan proposals – Developed themes.



Source: Figure 4.1 generated using NVIVO software.

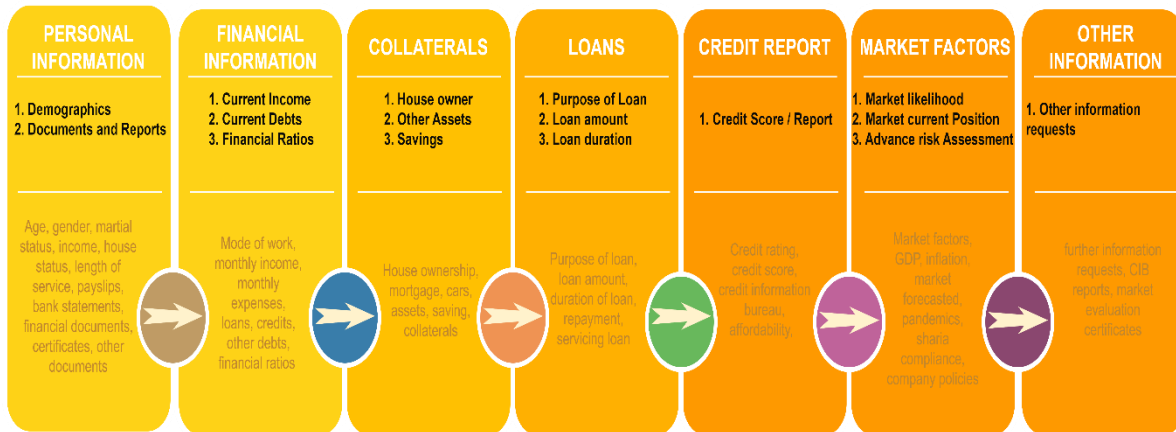
Figure 4. 2 RQ1 – Methods used to evaluate loan proposals – Developed themes and subthemes.



Source: Figure 4.2 generated using NVIVO software.

From the respondent's qualitative data analysis using the systematic tools, figure 4.3 the following themes and subthemes are developed which are considered as the key factors used to evaluate the viability of loan proposals.

Figure 4. 3 RQ1 – Methods used to evaluate loan proposals – Developed themes and subthemes.

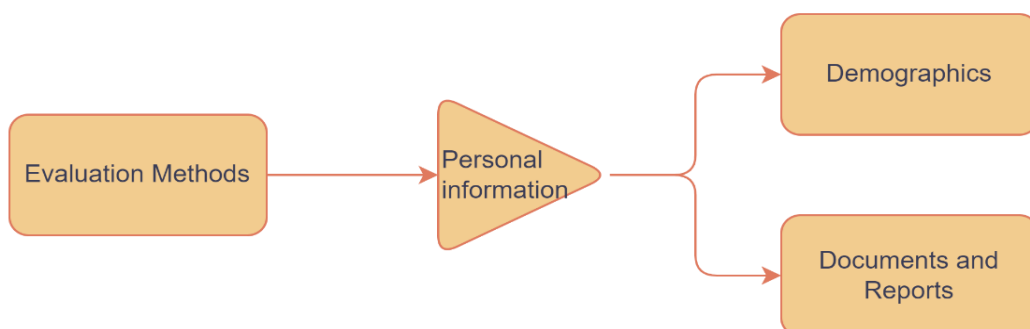


Source: Figure 4.3 developed by author.

4.1.1 Personal Information

As per the developed themes the personal information plays key role in the evaluation of loan proposals. From figure 4.4, the personal information includes demographics, personal and financial documents, and other associated reports such as credit reports attached with the loan proposals helps in initial screening and understanding the overall viability of loan proposals.

Figure 4. 4 Evaluation methods - Personal Information



Source: Figure 4.4 developed by author.

4.1.1.1 Demographics

The demographic information, such as age, gender, marital and residential status, monthly income, number of dependents and occupation plays a significant role in the initial screening of loan proposals.

All the respondents highlighted the importance of personal information in the initial screening of the applicants' demographic details. The initial screening of demographic details including income details helps the experts in evaluating the overall viability of the loan proposals.

In the interviews with the loan experts, they mentioned that the demographic information helps in understanding the viability of the loan proposals. For example, age bracket helps with the suitability of contract tenure/length, marital status and number of dependents helps with the understanding of other commitments including financial dependencies, occupation helps to establish the nature of job as Islamic banks does not support the non-shariah compliant incomes.

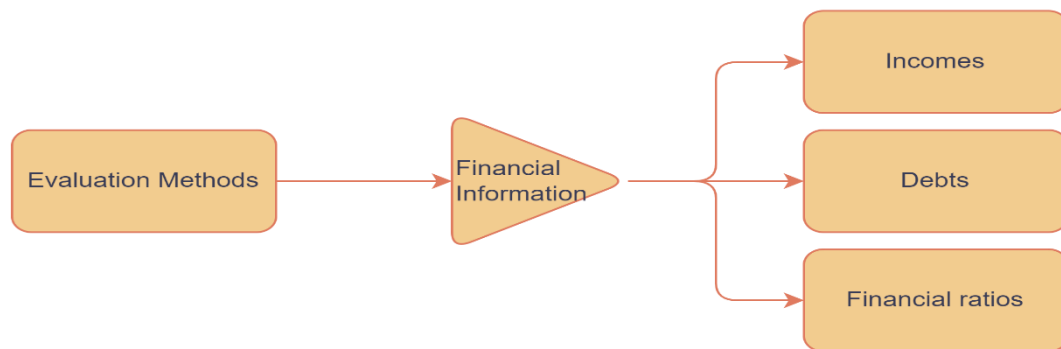
4.1.1.2 Documents & Reports

The respondents and interviewees stressed on the initial screening of personal information as it helps both the parties, and as an evaluator to request missing information and documents to save time and costs and equally to the applicants to submit the complete information at the beginning stage. The documents and reports may include financial statements, tax documents, payslips, identification documents, character references, credit reports, etc.

4.1.2 Financial Information

As per the developed themes as shown in figure 4.5, the financial information is the second most crucial element in the evaluation of loan proposals. The financial information helps in understanding the financial position of the applicant. The current income versus expenses. The current liabilities including existing loan or credits. The financial information is collected as part of the application and often additional information is requested if required.

Figure 4. 5 Evaluation methods – Financial Information



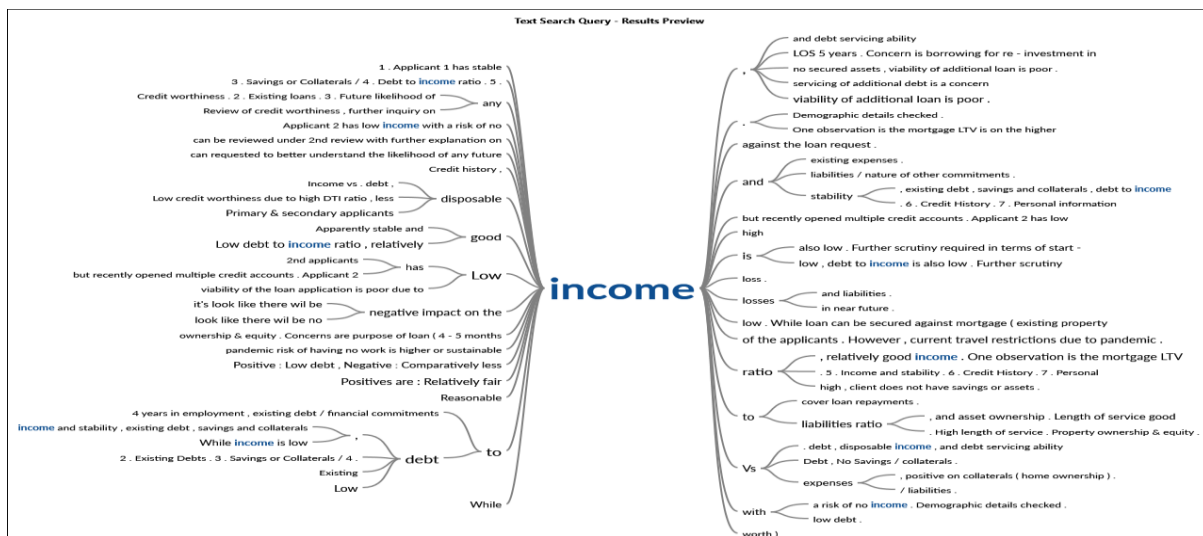
Source: Figure 4.5 developed by author.

4.1.2.1 Current Income

From figure 4.6, it has been analysed from the responses that the financial position of the applicants plays a key role in the viability of loan proposals. It has been highlighted as one of the essential factors. The respondents highlighted the mode of work, mode of income, monthly income and monthly expenses helps in calculating the financial position of the applicant. It has been analysed that the evaluators paid attention to the disposable income to understand the ability to service additional loans. They also considered the length of service in the employment to establish the stability of the income.

The interviewees highlighted the importance of financial position by stating that the monthly income and expenses, the nature of credits, the existing loan amounts can help to determine the financial position of the applicants. The financial position can be established by using different financial ratios which are widely used by most of Islamic banks. The financial position of applicants influences the viability of the proposals, the stronger the financial position contributes positively or vice versa.

Figure 4. 6 Current Income NVIVO word tree.

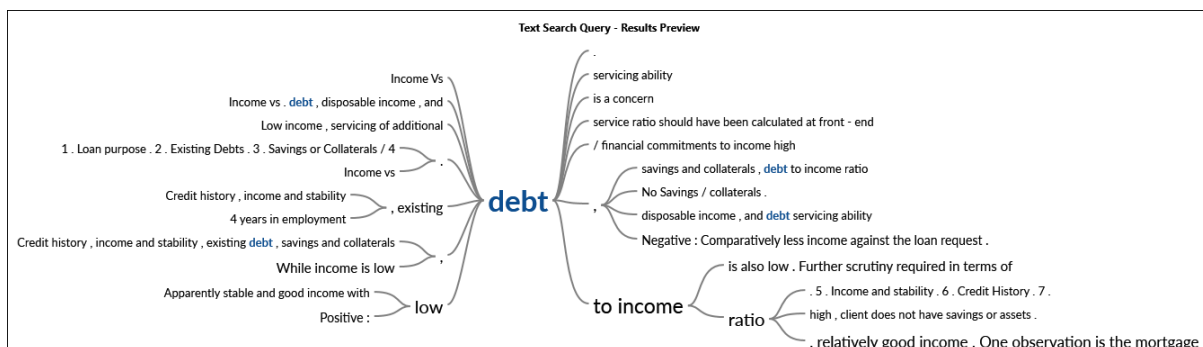


Source: Figure 4.6 generated using NVIVO software.

4.1.2.2 Current Debts

The Figure 4.7 reflects as part of financial screening the evaluators stressed on the total outgoings including the existing loans and credit card balances. The monthly expenses and any other outstanding balances on loans and credit cards helps in defining the current debt burden ratio. The higher the debt burden ratio has negative impact on the application.

Figure 4. 7 Current Debt NVIVO word tree.



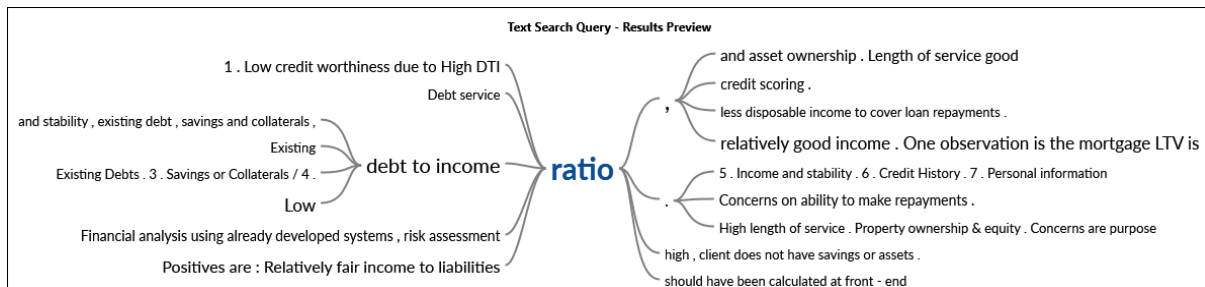
Source: Figure 4.7 generated using NVIVO software.

4.1.2.3 Financial Ratios

From figure 4.8, it is analysed that the financial ratios are widely used to assess the financial position of the applicant, the key financial ratios used are debt-to-equity ratio, return of asset equity ratio, capital adequacy ratio etc. The strong financial position such as low debt to equity ratio, higher the return of assets equity and capital adequacy ratios, increases the chances of position outcome.

It has been analysed that almost all the evaluators highlighted the importance and use of financial ratios in the assessment of applicant's financial position. In one of the responses, the evaluator mentioned the use of already developed electronic systems to establish and evaluate the financial position of the applicants.

Figure 4. 8 Financial ratios NVIVO word tree.

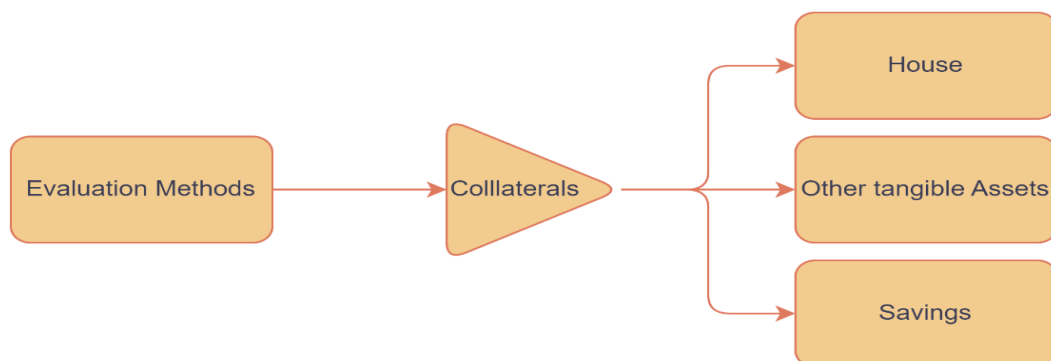


Source: Figure 4.8 generated using NVIVO software.

4.1.3 Collaterals

From the literature review and figure 4.9, it can be analysed that the Islamic banks offer the products and services based on the nature of contracts. The nature of contract is partnership between the Islamic bank and the applicant. The nature of contract depends on the nature of loan. The most common contracts used by Islamic banks are Ijara, Istisna, Murabaha, Mudarabah and Musharaka, etc. Therefore, the collaterals such as property or other assets ownership, savings have more importance to the Islamic banks to risk assess the purpose of loan and establish partnership contract, the collaterals are commonly secured against the loans. This is one of the distinguishing methods primarily used by Islamic banks as compared to the conventional banks.

Figure 4. 9 Evaluation methods - Collaterals



Source: Figure 4.9 developed by author.

4.1.3.1 House owner

From the respondents, it has been analysed that the importance of collaterals such as owning a house, car or tangible assets contributes positively to the viability of loan proposals. All the respondents from the proposals have strongly indicated owning a collateral contributes positively to the proposals and as one of the key factors used in the evaluation methods.

It is one of the key factors in the evaluation methods as one of the interviewees has mentioned that the higher the collaterals the higher the chances of securing loans as it helps in reducing the rate of return and liquidity risk. The likelihood of acceptance does increase if the loan is secure against the owning assets. The second interviewee stated that the some of the banks do not even consider the proposals in case of no or low collaterals.

4.1.3.2 Other Assets

Other assets include any tangible assets such as gold, equipment / machinery, or antiques where the fair value of the assets can be evaluated, or value certificate can be provided by the applicant.

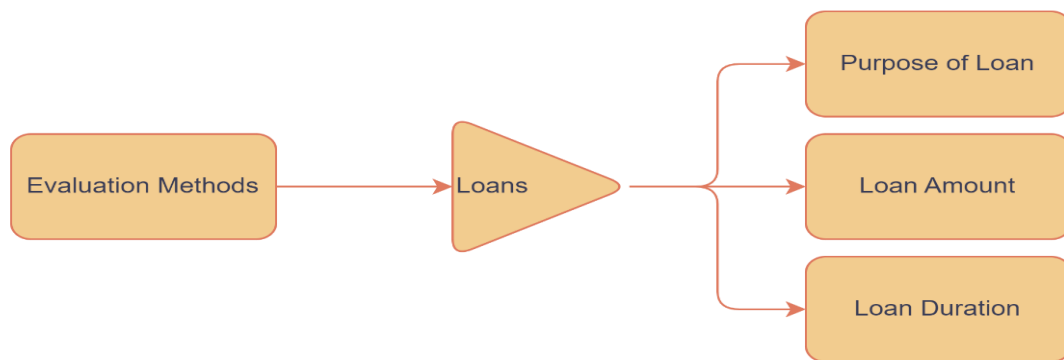
4.1.3.3 Savings

The savings as like any other assets helps in establishing the financial position of the applicant. It helps in establishing the ability to service additional debt and source the loan repayments and certainly minimises the risk of default.

4.1.4 Loans

It has been identified from the responses and analysed that the Islamic banks are fairly strict as compared to conventional banks in the acceptance of loan proposals. The Islamic banks only offers limited types of loans and accepts the applicants in only shariah compliant products. As per the figure 4.10:

Figure 4. 10 Evaluation methods - Loans



Source: Figure 4.10 developed by author.

4.1.4.1 Purpose of Loan

It has also been identified that the nature and purpose of loan is also especially important for the Islamic banks and like any other conventional banks Islamic banks does not offer loans for gambling, etc. As per the interviewee's it is one of the key factors in assessing any loan proposals. The purpose of loan defines the acceptance of shariah compliant products and company policies. The Islamic banks do not accept the proposals if the purpose of loan is not clearly defined and proven even if the applicant comply and fulfil the requirements of all the other factors.

4.1.4.2 Loan Amount

The amount of loan is also key factor in the valuation of loan proposals as the loan amount helps in understanding the affordability of applicant. The evaluator calculates the debt to burden ratio based on the loan amount requested. Different banks have distinct set of criteria's and permits certain percentage of debt burden ratio including the new loan requested. Though it depends on the purpose of loan, but majority of Islamic banks suggests having no more than 35% of debt burden ratio considering the new loan request.

4.1.4.3 Loan Duration

According to the loan evaluators, the duration of loan also impacts the decision of loan proposals as the duration of loan have either positive or negative impact depending on the duration and nature of loan.

4.1.5 Credit Reports

The credit reports are commonly used as tool to assess and review the past financial position of the borrowers. Both Islamic and conventional financial institutions heavily rely on credit reports.

4.1.5.1 Credit Ratings

From the developed themes in figure 4.2 and 4.11, All the respondents have strongly highlighted the importance and reliability of credit reporting system as also known as credit scoring or credit information bureau report. Islamic bank does relay on credit reports to evaluate the past positions including financial stability, any negative impacts and debt burdens.

Figure 4.11 Evaluation methods – Credit checks



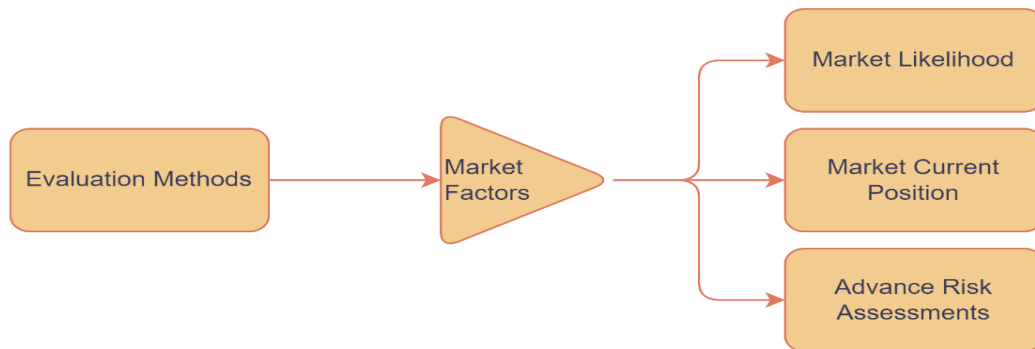
Source: Figure 4.11 developed by author.

As per the interviewee's the credit reports are widely used alongside to assess the applicant's past positions and determine / predict the future positions. Different countries have different dependent factors which contributes toward the credit scoring. The reliability and validity of credit score is still in question especially in the developing countries where the credit scoring system is still under development. Therefore, the proposals are heavily reliant on the experts / evaluators.

4.1.6 Market Factors

As shown in figure 4.12, the evaluation of market factors such as likelihood, market current position in regard to interest rate, profitability ratio, inflation, financial stability, social and economic conditions, social and ethical considerations of purpose of loan etc and last but not least further risk assessments tools to highlight any red flags on the proposals are the key factors considered while evaluating the loan proposals.

Figure 4.12 Evaluation methods – Market factors



Source: Figure 4.12 developed by author.

4.1.6.1 Market Likelihood

From the responses, it has been identified that the market likelihood also plays the key role in the initial screening of the loan proposals. The market likelihood is one of the key criteria in assessing the viability of loan proposals as the experts, such as long writers, credit writers and experts looks at the market risk and the asset quality. The market risk is access based on the number of factors such GDP, inflation, assets liquidity, financial crisis, pandemic, etc.

The interviewees stated that the market likelihood is one of the key factors in the evaluation of loan proposals as the market risks have direct impacts on the applicants and banks. The market risks help in establishing the offerings and the viability of purpose of loan. The market factors and purpose of loans are directly related. The banks limit the offerings if the market risk is too high.

4.1.6.2 Market Current Position

Islamic banks consider current market position, including economic stability, industry trends, operational, market, liquidity, rate of return, equity investment risk, GDP, inflation rate, pandemic, legal and regulatory changes, etc. These factors help Islamic banks assess the feasibility and compliance of loan obligations while adhering to Islamic financial principles.

4.1.6.3 Market Advance Risks

The evaluators have highlighted the factors such as less durability or profitability and substantial risk of loss contributes negatively to the application even though while having other strong factors such as financial position.

The interviewee stated that the durability and profitability and insignificant risk are directly linked with the purpose of loan. The higher the risk, the less likely the chances of getting approvals. However, it is assessed that what are the other options presented and available to recover the payments in case of default. The loan experts evaluate the market factors and uses their expert knowledge and experience to critically analyse the proposals and score the risk levels and viability of the loan's purpose.

4.1.7 Other Information

From figure 4.2 and 4.13, after the initial and in-depth analysis, the evaluators sometimes request further information or additional documents. Further information or additional documents helps to support the application. It gives an opportunity to the applicant to provide those documents for the evaluators to make informed decision. The other Information can be requested by the evaluator at any stage during the assessment.

Figure 4.13 Evaluation methods – Other information



Source: Figure 4.13 developed by author.

It has been analysed that the evaluators have requested further information on the purpose of loan or the documents to support the purpose of loan from the samples. Which is unlikely in the conventional banks as due to the nature of the contractual bindings between the Islamic banks and the customers.

4.2 A unique evidence-based brief analysis and prospective of loan proposals - evaluated by the loan experts.

1. The overall viability of loan proposals was rated against the hypothetical loan information. The information was provided to the respondents to rate and briefly justify and explain the reasons for the ratings. Here are some of the interesting findings from figure 4.14:

- 23% proposals were marked as good and 35% as fair to be considered as overall viable.

The reasons given were apparently stable and good income, low debt, positive on collaterals, home ownership, personal information,

length of service including assets and credit ratings are in favour, fair income to liabilities ratio, further information request on purpose of loan, market likelihood to be evaluated, etc.

- Whereas 38% were marked as poor and 4% as very poor. The reasons reported were high DTI ratio, low income, viability of additional loans is poor, existing expenses, concerns on ability to make repayments, concerns on borrowing for reinvestment in start-up business, question on unavailability of accurate and reliable data.

The comments such as below clearly reflected the strict scrutiny and evaluation process adopted by Islamic banks. “The factors such as financial position is favour, however loan purpose, no assets, market likelihood and offerings will be questioned.”

2. The initial screening test was scored against the hypothetical information. The information was provided to the respondents to rate, briefly justify and possibly name the screening protocols. Here are some of the interesting findings from figure 4.15:

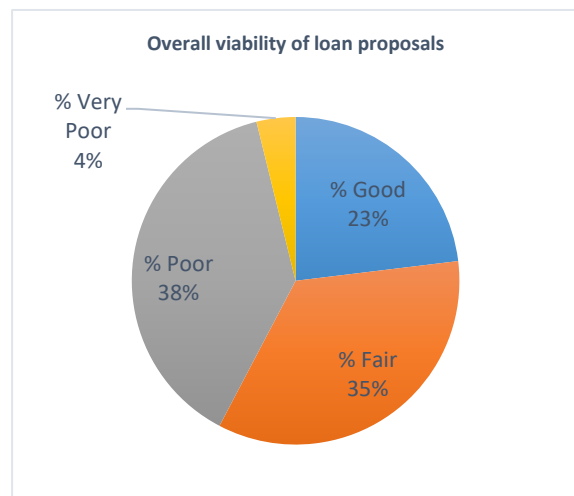


Figure 4. 14 Overall viability of loan proposals.

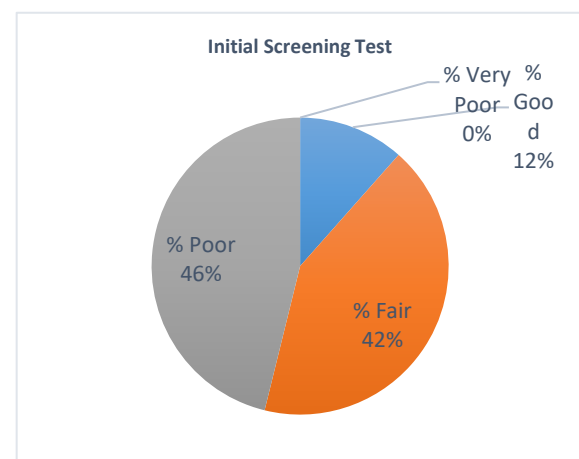


Figure 4. 15 Initial screening test.

- Only 12% proposals were marked as good and 42% as fair in the initial screening test. The reasons given were understanding financial position using internal systems, risk assessment ratio, credit scoring, character, proposal to secure loans against personal assets, even though with the positive initial screening outcome the request for further information on assets possess and details on the purpose of loan requested etc.

- Whereas 46% proposals were marked as poor due to the following mentioned reasons, incomplete information, debt service ratio, higher risk of repayment difficulties, no collaterals or savings, low income, viability of serving additional loan is poor, need further details on start-up business.

3. The Financial position of the loan proposals was rated by the respondents, briefly explained the factors considered as part of scrutiny. Here are some of the interesting findings from figure 4.16:

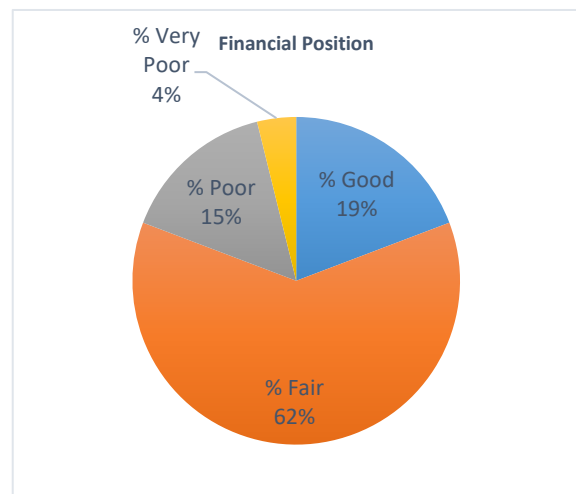


Figure 4. 16 Financial position.

- Surprisingly, the financial position of the applicants was highly rated, 19% were marked as good and 62% as fair. The reasons highlighted were low debt to income ratio, good or stable income, loan purpose, low existing debt, high collaterals, credit history, comparatively less income against the loan request, relatively fair income to liabilities ratio, good length of service, while income is low, debt is also low.

- 15% were marked as poor and 4% as very poor due to the following mentioned reasons, income Vs debt, debt servicing ability, low income, primary and secondary applicants' disposable income is low, credit history, existing debts, high debt to income ratio, etc.

The above findings clearly emphasised that the Islamic banks do not solely rely on stable financial position or good credit scoring as like many conventional banks. All the other factors are equally important and considered in the evaluation process. The good financial

position or ability to repay the loan only is not sufficient to meet the financing requirements of Islamic banks.

4. The market likelihood was scored against the information provided to the respondents to rate, briefly justify and possibly name the factors considered as crucial in the screening process. Here are some of the interesting findings from figure 4.17:

- Surprisingly only 35% proposals were marked as fair in the initial screening test. The

reasons given were due to pandemic it is unpredictable to say positive or negative impact. However, apparently looks like negative impact on the income of the applicant, no negative impact assured by the applicant, etc.

- 61% proposals were marked as good on the market likelihood mainly due to Covid-19 and risk of having sustainable income, multiple factors, such Covid-19 travel restrictions, intention to spend money, limited or no further offerings, employment contractual details / evidence requested, etc.

There was limited response on the market likelihood and the factors in consideration due to the beginning of pandemic and upcoming restrictions on travels and closures of businesses.

5. The Credit Rating was scored against the information provided to the respondents to rate, briefly explain the importance of credit reports to Islamic banks and their implications. Here are some of the interesting findings from figure 4.18:

- The credit reports are marked as crucial factors in the assessment of loan proposals. 5%

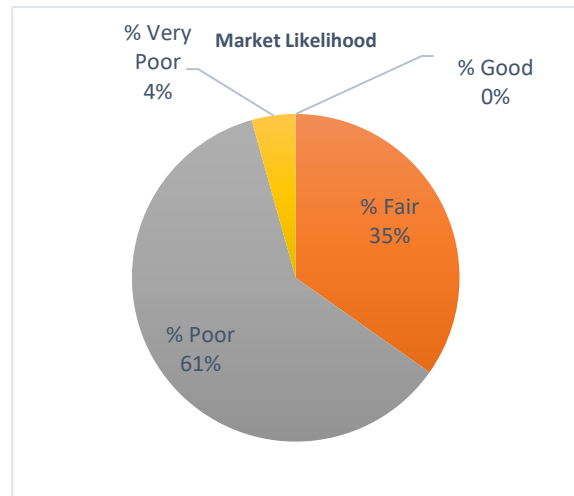


Figure 4. 17 Market likelihood.

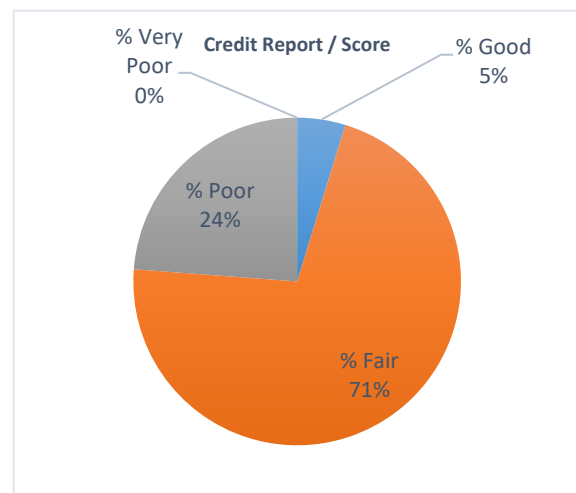


Figure 4. 18 Credit report / score.

of proposals were scored as good and 71% as fair. The reasons given were as flexibility to absorb additional expenses, good employment history, credit report analysis to check creditworthiness, it is important in terms of credit risk, willingness, and ability to repay debt, availability of accurate and reliable information, etc.

- Where as 24% proposals were scored as poor in relation to their credit ratings, the reasons mentioned were as Existing debt to income ratio high, client does not have savings or assets, primarily disposable income, and ability to service additional debt. However, the length of service in employment and home ownership are pluses, Low debt to income ratio, relatively good income but one observation is the mortgage LTV is on the higher side.

It has been highlighted that the availability of accurate and reliable information on credit reports is crucial. However, it is noticed that it is still an area of improvement in many developing countries where the credit report is not either readily available or accurate. Hence the Islamic banks must have to ensure they have received the most up to date and accurate and reliable information.

6. The appropriateness of the loan proposals

was rated by the respondents, briefly explained the factors considered as part of scrutiny. Here are some of the interesting findings from figure 4.19:

- 60% of proposals were marked as fair and only 4% as good for the appropriateness. The reasons given were, the good ratings are

dependent on the availability of accurate and reliable data, fair but the duration of loan adds

risk to the ability of repayment, further breakup of debts can provide more clarity on lifestyle, Purpose and utilisation of medical equipment and contract term and conditions will be required for assessment purposes, relatively fair income to liabilities ratio, and asset ownership.

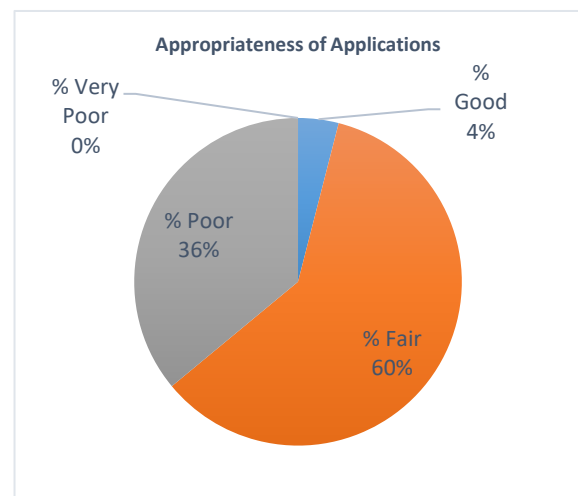
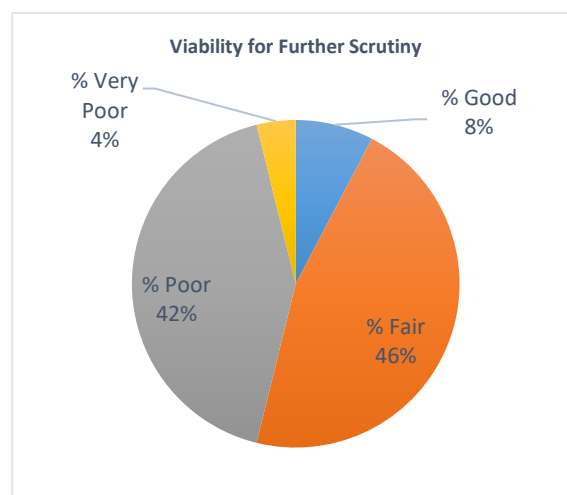


Figure 4. 19 Appropriateness of application.

- 36% of proposals were rated as poor due to unavailability of bureau data, no details on the purpose of loan, details on start-up business, etc.

7. The Viability of the proposals for further scrutiny / screening was rate, the findings from the responses figure 4.20 were as below:

- 8% as good and 46% were rated as fair in the evaluation process to mark the viability for further scrutiny. The factors considered such as credit history, further information on details and type of medical equipment, usage and reliability, existing loans, to check the future likelihood of income loss, bureau report, further details on purpose of loan, positives



are: Relatively fair income to liabilities ratio. *Figure 4. 20 Viability for further scrutiny.*

High length of service. Property ownership &

equity whereas concerns are purpose of loan (4-5 months' income worth), etc.

- 42% of proposals were marked as poor due to poor credit worthiness due to existing loans, high debt to income ratio, no savings or assets, low income, concerns on additional borrowings for reinvestment in start-up business, viability of additional is poor.

8. The chances to get conditional offer and/or rejection are assessed against the ratings provided by the responses. Here are some of the interesting comments from figure 4.21:

- 40% of proposals were rated as either good or fair to be considered for giving conditional offers. The good and fair rating justifications were low debt to income ratio, relatively good income, subject to further information on medical equipment, further explanation on income and liabilities, nature of commitments.

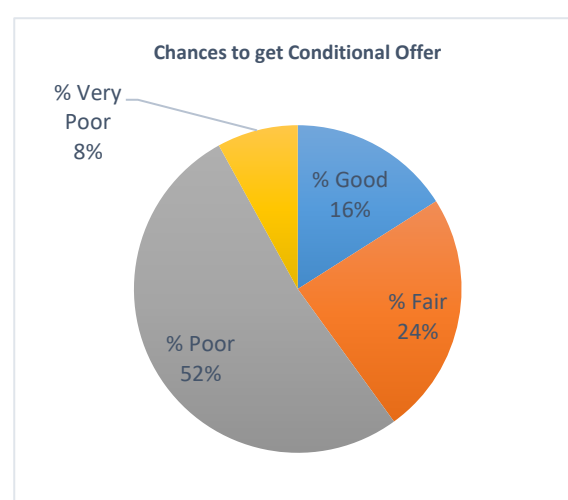


Figure 4. 21 Chances of get conditional offer.

- Whereas 52% of the proposals were rated as poor and 8% as very poor. The reasons reported are concerns on the affordability, current travel restrictions due to pandemic voids the purpose of loan, other market factors impact on the profitability.

It has been noted that even purpose of loan and potentially uncertain market factors do negative impact on the viability of loan proposals regardless of the strong financial position.

9. The ratings after all the advance risk assessments are considered and evaluated. Here is the summary of the comments received from the respondents and figure 4.22:

- 42% of proposals were marked either good or fair due to low debt to income ratio, stable income, market likeliness against the purpose of loan, while income is low, debt to income is also low, further scrutiny required in terms of start-up business.

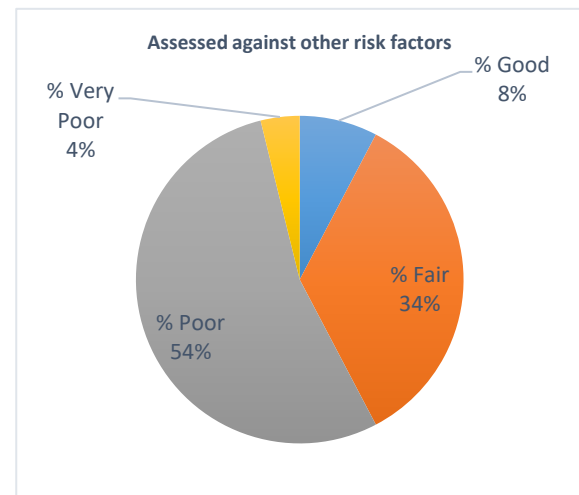


Figure 4. 22 Assessed against other factors.

- Whereas alone 54% of proposals were marked as poor due to length of employment, low income, existing debt, concerns on affordability, high DTI ratio, no secured assets, etc.

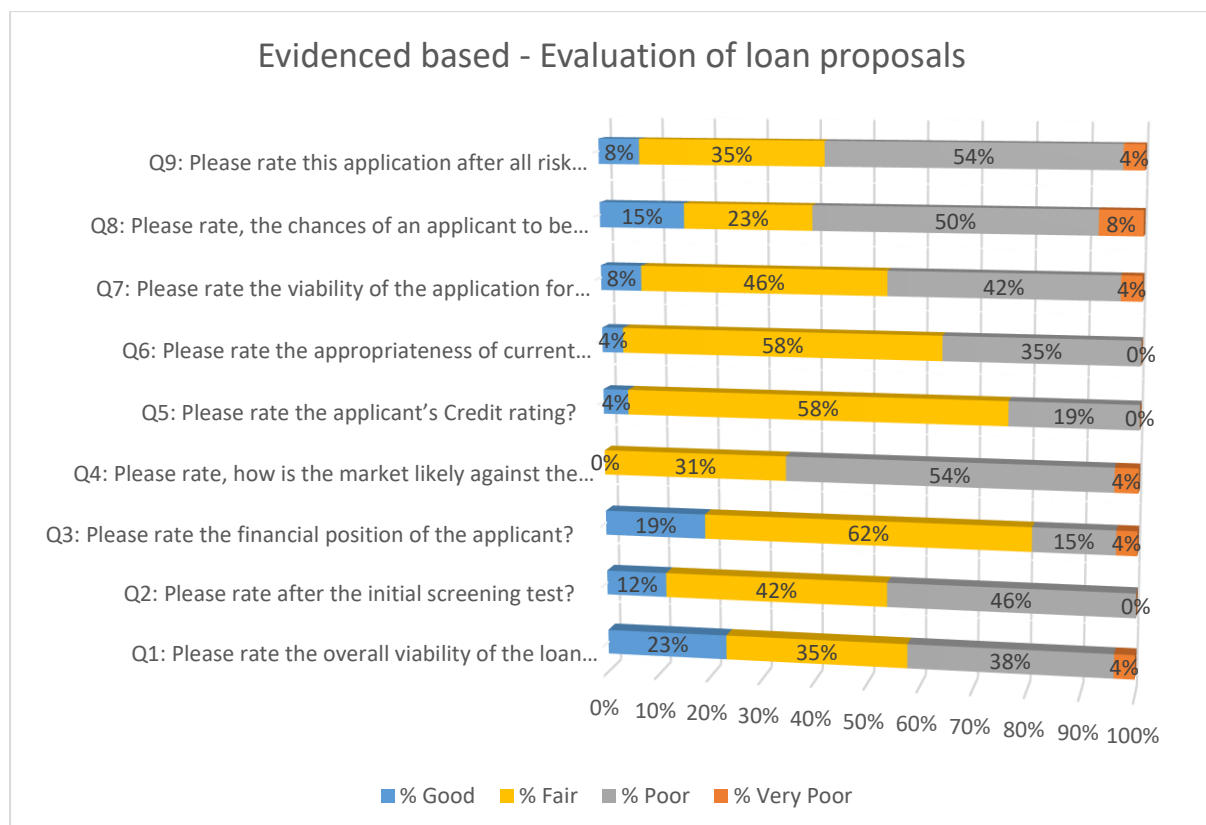


Figure 4. 23 Evidence based - evaluation of loan proposals.

To summarise all the above findings of figure 4.23, it can be stated that Islamic banks follow thorough process to evaluate the loan proposals. The processes are considered as use of mix of systematic models or tools and judgment approaches. The evaluation of loan proposals starts from the initial screening of personal information, enquiry on financial stability, assessment of collaterals, understanding of the purpose of loan to define the ethical and social considerations, credit reports assessment to define creditworthiness, analysis of market factors to define the risks and potential profit or losses. It has been observed that there is lack of standardisation in the evaluations and practices by Islamic banks due to their mixed approach and individuals experience and professional knowledge and awareness of risks. The above brief analysis assisted in the development of new and complete assessment model which could be studied further and implemented to bring the standardisation in the Islamic banking's evaluation methods.

4.3 The distinguishing features, techniques or methods used by Islamic banks to evaluate creditworthiness of loan proposals.

As showed from the literate review Islamic banks use different financing methods as compared to conventional banks due to their distinct shariah based principles and practices. Therefore, the methods used by Islamic banks to evaluate creditworthiness of loan proposals are comparatively different. It is analysed that Islamic banks use two main methods to evaluate the loan proposals which are consist of judgemental approach and credit scoring model. Whereas the conventional banks are heavily relying on well-established credit scoring model and to some extent judgmental approaches in complex or review cases. It is noticed that both Islamic and conventional banks rely on the credit scoring model however each bank has their own credit scoring model and the weightages assigned to each factor are different.

Based on the themes developed from the data collection using questionnaire it can be stated that there are multiple distinguishing features, techniques, methods used by Islamic banks to evaluate credit creditworthiness of loan proposals as compared to conventional banks. Some of the key features are highlighted below.

4.3.1 Personal Information

Islamic banks like conventional banks scrutinise the personal information provided by the applicants. The demographic information is assessed and verified using different tools. Unlike conventional banks, the Islamic banks assess the borrower's character, reputation, and adherence to ethical and Islamic values. The Islamic banks occasionally ask the applicant to submit character references as part of the application.

4.3.2 Financial Information

Islamic banks like conventional banks scrutinise the financial information provided by the applicants. The following main factors such as monthly income and expenses, commitments, other obligations, and liabilities are assessed and verified using the credit models and from the documentary evidence provided by the applicants, different financial ratios are used to evaluate the financial position of the applicants. The financial ratios may include debt-to-equity ratio, return of asset equity ratio, capital adequacy ratio, debt burden ratio, etc. However, unlike conventional banks, the Islamic banks further scrutinise the mode and nature of work as Islamic banks avoids doing business / invest in sectors considered as

unethical (Haram) and prohibited by Islam and shariah boards such as gambling, alcohol, and pork, etc. Whereas often conventional banks do not have these restrictions.

4.3.3 Collaterals

From the responses it can be analysed that the evaluators have scrutinised the collaterals in more detail, which highlights the importance of asset back financing for the Islamic banks. Typically, the Islamic bank's loan agreements are backed by the applicant's assets. The assets such as house, car, gold, antiques, security bonds, other tangible assets, etc. can be seized in case of default. Whereas the conventional banks heavily rely on interest-based lending.

4.3.4 Loans

Islamic banks like Conventional banks does initial screening process to evaluate the purpose of loan, the amount requested and the duration of loan. However, from the responses collected, it can be stated that the Islamic banks are fairly strict in screening the purpose and nature of the loan. The reasons for strict screening of the purpose of loan are multi fold. First, Islamic banks encourage and offers financing based on the asset backed financing, which is commonly known as Ijarah, which is leasing and Murabaha which is cost plus financing and Sharia compliant. Whereas the conventional banks typically provide interested based unsecured loans. Secondly, Islamic banks often engage in contract which is profit and loss sharing with the applicant. The banks act as a partner with the borrower and shares the profit and loss. Whereas conventional banks rarely use profit and loss sharing model instead consider fixed or variable interest loans. Therefore, it is important for the Islamic banks to understand, and risk assess the purpose and nature of loan and to not to engage in highly uncertain or defined unethical businesses by their shariah boards.

4.3.5 Credit Report

Islamic banks like conventional banks scrutinise the credit reports provided by the applicants and credit reference agencies also known credit information bureau. Unlike conventional banks, the Islamic banks assess the borrower's character, reputation, and adherence to ethical and Islamic values. The Islamic banks occasionally ask the applicant to submit character references addition to the credit reports. However, the reliability and validity of credit score is still in question especially in the developing countries where the

credit scoring system is still under development. Therefore, the proposals are heavily reliant on the experts / evaluators.

4.3.6 Market Factors

Islamic banks are abided by the shariah principles, which prohibits any financing activity that are considered unlawful or unethical (Haram) in Islam but equally promotes fair and ethical financial transactions. Islamic Bank considers numerous market factors in the evaluation process. Some of the key factors are such as operational, market, liquidity, rate of return, equity investment risk, GDP, inflation rate, economic stability, market trends, pandemics, legal and regulatory changes, etc. For that reason, the advanced risk assessments are carried out to ensure that the loan agreement are not excessively uncertain. Islamic banks ensure the fairness and transparency of the loan agreements, the term and conditions of loan agreements must comply with shariah standards and within Islamic principles.

4.3.7 Other Information

Islamic banks like Conventional banks sometimes do request additional information or documents while the screening and evaluation process is ongoing. Islamic banks are required and evaluated by Shariah boards on the fairness and transparent practices, social and ethical impact of loan proposals are also considered to ensure the company policies are aligned with Islamic values.

4.4 The methods used by Islamic banks to evaluate creditworthiness of loan proposals are different from conventional banks.

Yes, the Islamic banks use distinct methods to evaluate creditworthiness of loan proposals as compared to conventional banks due to their differing principles and practices. Islamic banks offer financing products and services led by shariah principles based on Islamic laws which differentiates them from conventional banks in numerous ways. Some of the important methods and their principles behind the methods used to evaluate creditworthiness of loan proposals are explained and analysed as below in table 4.3:

Table 4. 3 Principles behind the methods used to evaluate creditworthiness of loan proposals by Islamic and conventional banks.

Principles behind the methods used to evaluate creditworthiness of loan proposals	Islamic Banks	Conventional Banks
Profit & loss sharing Vs charge of interest	- Mainly offers financing based on profit and loss sharing agreements. - As the interest (Riba) is prohibited (Haram) in Islam, therefore the Islamic banks do not charge or pay interest on loans. - Supporting equitable approaches.	- Mainly offers financing based on interest charge. - Interest rate is agreed which could be fixed or variable depending on market factors with the client at the beginning of contract. - Charge of interest can lead to increase in debt and financial differences. (Iqbal, 2001).
Regulations and compliance	- Regulated by shariah boards to ensure the compliance with Islamic principles. - Each Islamic bank has their own shariah board consist of 3 to 5 Islamic scholars. - The board helps in developing and approving the financing products offered by Islamic bank. The Islamic scholars are responsible to ensure that the products offered by the bank are accordingly to the Islamic financing principles.	- Regulated by the financial conduct authorities beside following the conventional banking standards. - The financing products and services are developed and offered based on profit driven models which primarily interest-based financing. - The conventional banks are not required to be religious compliant as like Islamic banks. However, monitored by different financial conduct authorities to ensure fair practices. (Hanif, 2014; James 2023).
Credit Assessment	- Islamic banks assess financial information and risks as like conventional banks in addition to their unique methods of evaluating moral and ethical risk. - The assessments consist of financial stability via financial	- As like Islamic banks, conventional banks assess applicant's creditworthiness based on credit history and current score, financial information. - The assessments consist of financial stability via

	statements, loan repayment capacity, character, collaterals (assets), guarantors, ethical values, purpose of loan and adherence to Islamic principles. - The main difference is in the principles, methods and ethical considerations governing Islamic finance.	financial statements, loan and interest repayment capacity, collaterals, income, and credit scores, etc. - The focus of credit assessment is to check the borrower's ability to make repayments of the loan including interest charges. (Hanim, et. al, 2011; Basah, et. al, 1970).
Purpose of financing	- The detailed understanding of financing purpose is key factor; Islamic banks avoid financing in forbidden (Haram) activities. - The focus of the banks is financing products and equally monitoring ethical activities as the Islamic finance avoids excessive uncertainty also known as Gharar in the loan agreements, the purpose, use, terms, and conditions should be defined and clear to both parties. - Islamic banks uses specialised shariah compliant contracts to support and structure the financing proposals such as partnership (Musharaka), profit and loss sharing (Mudarabah), leasing (Ijara), etc.	- Whereas the loan can easily be secured from conventional banks for any legal purposes including the consumption and risky activities. - Typical use of standard loan and interest-based agreements. - The banks typically do not share the business risk with the clients. (Jones, 2023).
Collaterals	- Islamic banks prefer assets-back financing therefore the existence of tangible assets and their evaluation as per the shariah compliance is a crucial factor. The evaluation defines the viability of assets to potentially generate the returns in case of default. - This mode of financing is encouraged to support shariah compliant: profit and loss sharing, lender and borrowers' business partnership.	- The unsecured loan can be offered by the conventional banks depending on the credit reports. However, the banks often ask for collaterals details for security. - The conventional banks do not share the business risk regardless of bank's performance and will solely relay on agreed interest rate. (Hunt, 2012)

Risk Assessment, sharing and management	- Islamic banks evaluates the viability of loan proposal using different advanced risk assessment techniques. - The several factors including borrowers personal and market factors are risk assessed to ensure the viability and adheres to Islamic and ethical guidelines. - The risk is shared as Islamic banks encourages profit and loss sharing partnership agreements, in which both the parties share the risks and rewards. - Certain risks are managed by defining in the shariah compliant specialised contractual agreements such as fees and charges, repayment structure, default handling, etc. - Additionally, Islamic banks typically offers shariah backed insurance (Takaful) to minimize the financing risks.	- Usually, in the agreement the risks are transferred to the borrowers while retaining the interest payments. - The banks usually have fixed repayment structure which includes the principal and interest payments, may charge overdue payment fee, processing fee in case of no or overdue payments in addition to pre-agreed interest charges. - Conventional bank typically do not offer or recommend insurance to minimise the risks except for few financing products. (Altman, 2013; Nkundabanyanga, 2017).
Contracts	- The main difference in Islamic banking and conventional banking is the type and nature of contract for all the financing products. - Islamic banks offers financing mainly based on cost plus profit arrangements (Murabaha), partnership (Musharaka), profit and loss sharing (Mudarabah), leasing (Ijara), etc.	- Whereas conventional banks offer financing products on loan contracts. The interest rate could vary depending on the individual products and banks though the basic interest rate is governed by the central bank or authority of the country. - Conventional banks offer financing mainly on cost plus interest charged on the amount and duration of the loan, the financing includes personal loan, auto loan, mortgage loan, student loan, SMEs loan, home equity loan, credits cards, etc. (Madura, 2017; Brigham & Ehrhardt, 2017; Sundaram & Das, 2020).
Social and ethical	- Islamic banks often incorporates their social, ethical, and	- Whereas conventional banks may not have any

Considerations	religious considerations in the evaluation of loan proposals. Such as banks do not support financing in and from any Islamically unethical financing. - Islamic banks have different methods to contribute to social responsibilities such as charity (Zakat).	specific ethical criteria in their evaluation process. - Conventional banks do incorporate corporate social responsibility as in their business plan but do not have the same religious obligations as Islamic banks. (Aracil, 2019).
-----------------------	---	--

4.5 The impact of methods used by Islamic banks on conventional banks.

There is no specific data readily available to gauge the impact. However, it could be seen from the literature the growth of Islamic finance and banks over the last 2 decades certainly putting an impact of the conventional banks and helping in the development of enhanced competitive market. The further research with the collection primary data on larger scale could help to gauge the impact. However, based on the current research and findings it is possible to list and analyse the possible both positive and weak impacts of Islamic banks on conventional banks due to their nature of working, principles, approaches, and techniques.

4.5.1 Positive Impacts

Increased scrutiny of borrowers: Islamic banks follow a thorough evaluation process to scrutinise the borrower's personal, demographics details, financial information and stability, purpose and viability of loans, market factors, social and ethical considerations of the loan activities. The intensified scrutiny of loan proposals helps Islamic banks to invest in less risky portfolios. According to Tariq et al. (2020), Islamic banks are better able to manage risks due to their intensified scrutiny of loan proposals.

Focus on asset-backed financing: Islamic banks prefer assets-back financing therefore the existence of tangible assets such as property, car, gold, antiques and machinery, their evaluation as per the shariah compliance is a crucial factor. The evaluation defines the viability of assets to potentially generate the returns in case of default. This mode of financing is encouraged to support shariah compliant: profit and loss sharing, lender and borrowers' business partnership. This approach helps to reduce the risk of default or potential loss. Whereas in conventional banks often offer unsecured loans based on borrower's current financial position and ratings, results in higher risk of default or losses.

Performance during and after financial crisis (2007-08) and pandemic (Covid-19): The number of recent studies focused on the performance and efficiency of Islamic banks vs conventional banks during and post the last financial crisis (2007-08) and recent pandemic due to Covid-19 and subsequent current economic crisis in different countries.

Islamic banks as compared to conventional banks are better capitalised and, keep greater proportion of assets to their financing activities and are less competitive (Ariss, 2010). Ben and Charfeddine (2015) study highlighted that the Islamic banks stayed comparatively more stable and efficient especially in the period of financial crisis, mainly because of shariah principles and profit margins. Tariq et al. (2020) Islamic banks are better able to manage risks due to their intensified scrutiny of loan proposals. Abdulla and Ebrahim (2022) study on the effect of Covid-19 on the performance of Islamic and conventional in GCC countries reflected that Islamic banks were negatively affected but still performed better than conventional banks.

Social, ethical, and environmental financing: The evaluation methods adopted by Islamic banks are developed and approved by shariah boards which pays detail attention to social, ethical, and environmental impact due to the financing. The borrower's personal character, purpose of finance, are evaluated to establish if the financing is for the legal and good purposes as Islam does not allow any unethical mode of financing. According to the report of Global Islamic Finance 2018, Islamic banks are seeming more socially responsible and could have positive impact of conventional banks as this supports the growing demand for socially responsible investments.

Enhanced Competition: Islamic banking principles and methods have undoubtedly forced conventional banks to learn and adopt their practices. The growth of Islamic banks around the globe and increased in the demand of Islamic products and services including financing products has pushed conventional banks to either open stand-alone Islamic branches or offer Islamic products within the conventional settings. For example, according to Islamic Finance Report 2019, The UK is one of leading non-Muslim countries among Europe that has shown greatest demand and interest in the development of Islamic banking, in 2018 alone in the UK the Islamic banking assets grew above 14% and reached to 6.69 billion dollars.

4.5.2 Weak Impacts

Complex in nature: The Islamic banking processes including evaluation methods are considered as more complex in nature as compared to conventional banks due to

the religious obligations and Shariah principles. The complex nature potentially can lead to cost inefficiencies. The role of evaluators is more subject in the evaluation process whereas the conventional banks are developed tools and system to mitigate the cost factors.

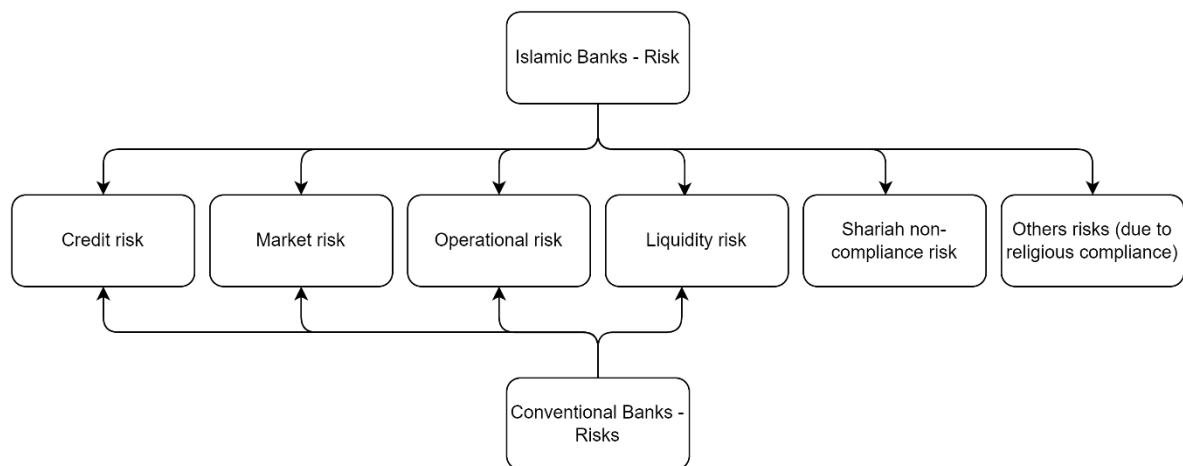
Limited products and services: Islamic banks offerings are limited in the countries where the conventional banks hold the majority of market shares and particularly in non-Islamic interest-based markets. Islamic banks could face the difficulties in generating funds and ultimately to limit their financing options. It seems to be difficult for Islamic banks to adhere to shariah principles to penetrate already establish interest-based market.

Skilled workforce: Islamic banks heavily rely on the professionals and qualified workforce, experienced loan writers, including religious scholars to form the shariah boards. It is crucial for Islamic banks to have right workforce to develop and offer their products and services while ensuring the compliance of Islamic financing principles.

4.6 the major risks involved or faced by Islamic banks and are different from conventional banks.

Islamic banks do face several major risks which are like many other conventional banks. However, there are set of unique risks faced by Islamic banks due to their specific nature and principles. According to the past studies such as risk in Islamic banking (Abedifar, Molyneux & tarazi, 2012) and risk management in Islamic banking. Handbook of Islamic banking (Ahmed & Khan, 2007) some of the major risks faced by Islamic banks are credit, market, operational, liquidity risks and some additional risks to Islamic banks are shariah non-compliance, rate of return, displaced commercial and equity investment risks. The highlighted risks in figure 4.24 are reviewed against the answers from the collected responses to analyse the importance and influence on the key evaluation factors in the loan proposals.

Figure 4.24 Major risks faced by Islamic banks.



Source: Figure 4.14 developed by author.

4.6.1 Credit Risk

Islamic banks as like any conventional bank equally exposed to credit risks. According to Ahmed and Khan (2007) the credit risk is the potential risk accepted by the lenders as there is always a possibility of borrowers' default and could result in breach of agreed contract. The credit risk arises from the potential non-payment or default of borrower on their financing commitments (Abedifar, Molyneux & Tarazi, 2012). The credit risks can trigger in any mode of financing products. Such as in cost plus profit arrangements (Murabaha) where borrower can default to pay the debt which consists of cost-plus bank's profit, whereas in partnership (Musharaka) and profit and loss sharing (Mudarabah) contracts the borrowers (as partner of the bank) can default by not purchasing the shares owned by the banks as per the agreements (Ahmed and Khan, 2007).

It is clear and analysed from the responses that the loan evaluators pay detailed attention to evaluate borrower's personal information, financial status, credit assessment, collateral details and to further mitigate the risk use of diversified tools such as asset-backed financing techniques.

4.6.2 Market Risk

Market risks are usually referred to as an external factors or risks, due to their diversification, most of the times it is difficult to eliminate. Islamic banks are equally

exposed to market risks as like conventional banks. The risks include commodity price risk, inflation, interest-rate risk, foreign exchange risk, other market factors such as political, social, and cultural, natural disasters or pandemics, etc.

From the responses, it has been identified that the market likelihood plays the key role in the initial screening of the loan proposals. The market risk is access based on the number of factors. The interviewees stated that the market likelihood is one of the key factors in the evaluation of loan proposals as the market risks have direct impacts on the applicants and banks. The market risks help in establishing the offerings and the viability of purpose of loan. The market factors and purpose of loans are related. The banks limit the offerings if the market risk is too high. Islamic banks consider current market position, including economic stability, industry trends, operational, market, liquidity, rate of return, equity investment risk, GDP, inflation rate, pandemic, legal and regulatory changes, etc. These factors help Islamic banks assess the feasibility and compliance of loan obligations while adhering to Islamic finance principles. The evaluators have highlighted the factors such as less durability or profitability and considerable risk of loss contributes negatively to the application even though while having other strong factors such as financial position. The interviewee stated that the durability and profitability and insignificant risk are directly linked with the purpose of loan. The higher the risk, the less likely the chances of getting approvals. The loan experts evaluate the market factors and uses their expert knowledge and experience to critically analyse the proposals and score the risk levels and viability of the loan's purpose.

4.6.3 Operational Risk

Operational risk refers to risk of loss due to the inadequacy or failure of systems, tools, internal processes, banking reputations, regulatory compliance, legal and governance issues, including human errors, absence of shariah board, qualified staff, training requirements, addition to this some external factors such as financial conduct authority rules and regulations do impose additional operational risk to the Islamic banks (Ahmed and Khan, 2007, BCBS, 2008). The operational risks are managed by Islamic banks by keeping effective internal control systems, presence, and guidance from shariah board, governance board and audits, review of staff training needs and robust risk management policies.

4.6.4 Liquidity Risk

Liquidity risk is referred to as not being able to meet the financial obligations as when required. Islamic banks face comparatively higher liquidity risk as compared to conventional banks due to mainly stronger step-up of interest-based market and absence of inter-Islamic bank money market. The challenge to Islamic banks is dealing with funding liquidity risks. Although Islamic banks have strong asset-based liquidity (Ahmed and Khan, 2007; BCBS, 2008).

However, it can be analysed from the literature and responses that Islamic banks do not encourage personal loan financing and avoids high risks and interested based investments. In the economies where Islamic banks are more developed, in the past financial crisis they have proved high financial shock absorbing capacity as compared to conventional banks due to their strong maintenance of sufficient liquidity assets by building diversified funding means and contingency plannings (Hassan, Bashir & Saeed, 2021).

4.6.5 Shariah non-compliance Risk

Islamic banks possess shariah non-compliance risk in case of non-adherence to Islamic financial principles. The risk can arise when the products or services are offered without the approval of Sharia board. Islamic banks mitigate this risk by pointing shariah advisory board. The board is usually consisting of three to five Islamic well-known and reputed scholars, all the products and services offered by Islamic banks are reviewed and approved by shariah board, the compliance is continuously reviewed by conducting regular audits.

The evaluation of responses and interviews clearly highlighted the importance of shariah compliance by the evaluators, as the factors assessed to evaluate the loan proposals emphasised the importance of adherence to Islamic principles.

4.6.6 Other Risks

Some of the other risks associated with Islamic banks are the risk of lower returns (profits) on deposits as compared to conventional banks or financial markets. If the Islamic banks appears to return lowers profits or charge higher profit or costs by offering financing product which could lead to dissatisfaction of clients and displaced commercial risk. Islamic banks also face strategic related risks as the economic and technology developments, changes consumer behaviours, etc. putting pressure of Islamic banks, whereas the slow

development of Islamic financial products leads to additional barriers (Ahmed & Khan, 2007).

4.7 Current Issues in the Practice of Islamic Banking

Some of the following prominent issues were identified during the initial research on products and services offered by Islamic banks, while data collection from the evaluators and interpreting data findings and analysis.

4.7.1 Lack of standardisation

It has been observed that there is lack of standardisation in the offerings and practices by Islamic banks, which are due to the different interpretation of Islamic financing also known as Shariah principles. Such as the products and services offered by one Islamic bank marked as shariah compliant but may considered as non-compliant by another Islamic bank.

It is difficult to find identical documentation from all the Islamic banks in relation to their financing products and services. This is mainly because the practical concerns may vary from bank to bank and dependency on Shariah supervisory boards. Also, the lack of use of universally developed and agreed Islamic financing terminologies creates confusion among the customers and public. For example: like most of Islamic banks uses Murabaha contract for the sale on deferred payment however some Islamic banks might offer the same financing under the different Islamic financing contract which again leads to confusion and complexity in developing efficient products and policies.

4.7.2 Limited products and services

Though Islamic banking has been rapidly growing around the globe, comparatively faster in Muslim countries than non-Muslim countries. Despite the tremendous growth still there are limited products and services offered in non-Muslim countries, mainly due to the unavailability of Islamic financing market, ethical and permissible financing options and consumers understanding and trust in the Islamic banking. The other concerns may include the strict criteria and scrutiny of loan proposals addition to pricing, over-all costs, and profitability in financing instruments. As, Islamic banks using different shariah approved Islamic financing techniques such as profit-and-loss sharing models which are often complex

in nature and difficult for the bank to ensure the appropriate and acceptable profit ratio for the client and the bank.

Addition to this, Islamic banks lacks in qualified professionals and experienced workforce which is considered as one of the main hurdles in the rapid advancement. This area is still under development alongside the development of Islamic banking however there is a lot more required to especially address the need of qualified workforce with the clearer understanding of Islamic financing principles and banking policies and procedures.

4.7.3 Shariah Compliance issues

The approval and certification of financing products and offerings by shariah boards is the crucial characteristic of Islamic banking. However, it has been noticed in the past studies the offering of non shariah compliant products which led to the exploitation, ethical concerns, and creditability issues within the markets. Secondly, the difference in the interpretation of Islamic financing terminologies and their limitations by shariah scholars leads to difference in opinions, certification, implementation strategies and offerings. As one product offered in one Islamic bank or country may be considered as shariah compliant but not by another, some of the issues can be addressed by emphasising shariah audits instead of relying on shariah supervisions only.

4.7.4 Lack of awareness, understanding and misconceptions

Numerous studies have been conducted in the past to gauge the awareness, understanding, attitude and perception towards Islamic banking among Muslims and non-Muslims, the studies such as Loo (2010), Abduh and Idrisov (2014), Lujja, Mohammed and Hassan (2018), Aziz and Afaq (2018), Ahmad, Hanifa and Hyo (2019) and Ezeh and Nkamnebe (2022) have all analysed that the awareness and understanding of Islamic financing principles in Muslims have increased however the lack of awareness and misconception among non-Muslims is still there. The Islamic banking is still considered to be religious and for Muslims by many however the positive outcome from the studies shows the willingness of Muslims and especially non-Muslims to try and adopt the Islamic banking due to its social and ethical considerations to the economy and environment.

The researchers have highlighted that the development of Islamic banking can be expedited by rigorously implementing and following the public education campaigns, seminars,

introducing Islamic concepts in schools and colleges, making full-fledged degrees on Islamic financing. This will help in increasing awareness, understanding of Islamic banking system, tools, modes of financing and their benefits among and could also help in attracting more people to get professional degrees in the same field to meet the demand of workforce.

CHAPTER 05: CONCLUSION, CONTRIBUTION AND RECOMMENDATIONS

5.1 Evaluation methods adopted by Islamic Banks

5.1.1 Conclusion

The current study aimed to highlight the evaluation methods adopted by Islamic banks. For this, the first objective of the study focused on the understanding and analyses of the key methods used by Islamic banks to evaluate the creditworthiness of loan proposals. Therefore, in the first approach, the respondents were requested to assess and scrutinise the proposals and answer nine questions at the end of each application. The answers were evaluated using NVIVO tool to develop the themes and sub-themes to understand the factors and methods used to evaluate loan proposals. In the second approach, two interviews were conducted with higher level professionals within Islamic banking sector to understand further about the evaluation criteria and to second the findings and validate the reliability of data collected using questionnaires.

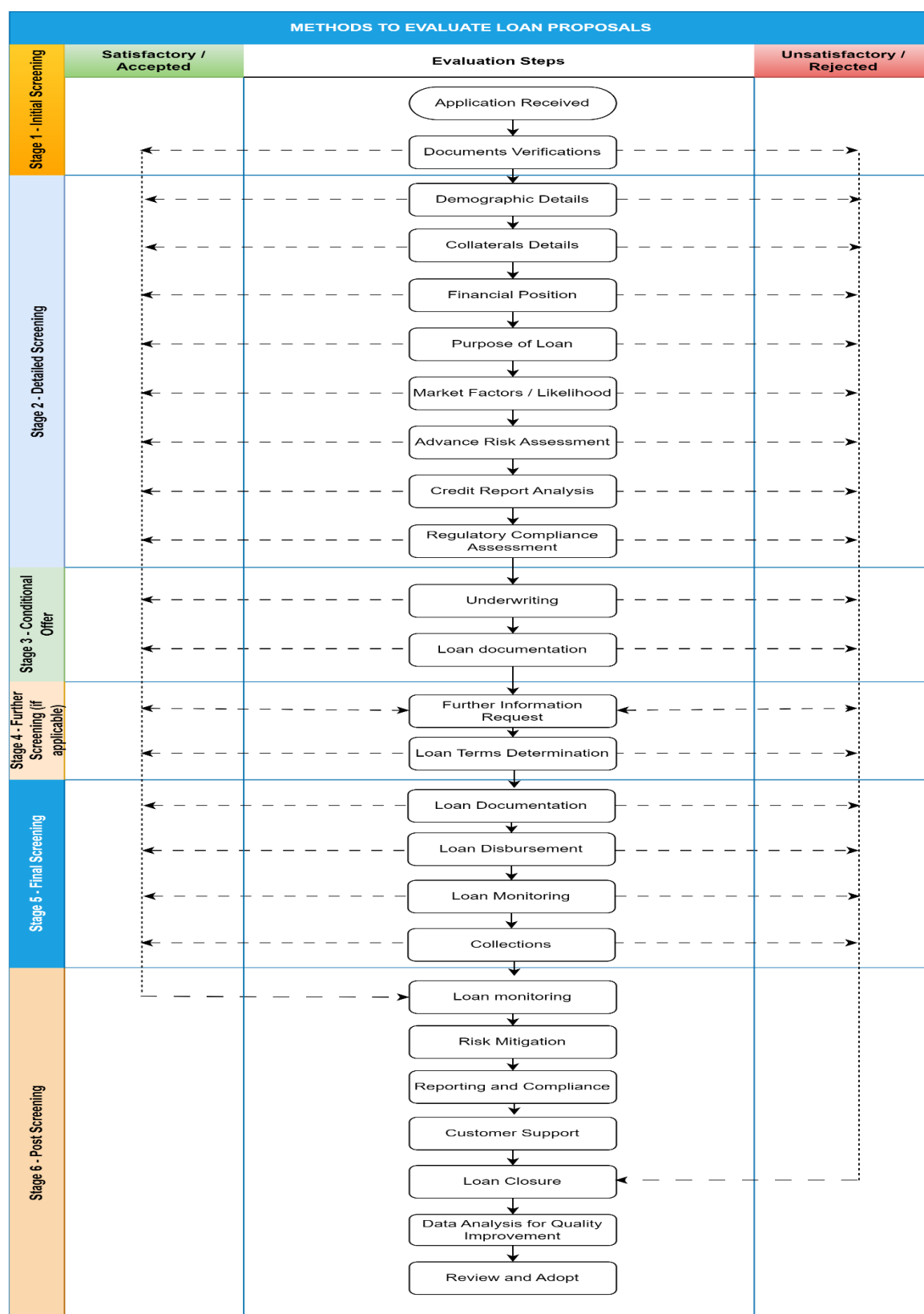
From the qualitative data analysis using the methodical tools, the following themes and subthemes are developed which are considered as the key factors used to evaluate the viability of loan proposals. The themes developed are such as (i) Demographic information - includes the screening of personal information, personal and financial documents, character references, etc. (ii) Financial information - includes the scrutiny of financial information such as current income, mode of income, monthly expenses, current debts, current liabilities, financial ratios mainly help to understand the financial stability of the applicants. (iii) Collaterals - it has been analysed that the importance of collaterals such as owning house, car or tangible assets contributes positively to the viability of loan proposals. (iv) Loans – Islamic banks particularly pay attention to the purpose of loan, loan amount and duration. The purpose of loan defines the acceptance of shariah compliant products and company policies. The Islamic banks do not accept the proposals if the purpose of loan is not clearly defined and proven even if the applicant comply and fulfil the requirements of all the factors. (v) Credit reports - are widely used alongside to assess the applicant's past positions and determine / predict the future positions. The reliability and validity of credit score is still in question especially in the developing countries where the credit scoring system is still under development. Therefore, the proposals are heavily reliant on the experts / evaluators.

(vi) Market factors - the evaluation of market factors such as likelihood, market current position in regard to interest rate, profitability ratio, inflation, financial stability, social and economic conditions, social and ethical considerations of purpose of loan etc and last but not least further risk assessments tools to highlight any red flags on the proposals are the key factors considering while evaluating the loan proposals. (vii) Other information - the evaluators sometimes request further information or additional documents such as the documents to support the purpose of loan, character reference, collaterals evidence, etc.

5.1.2 Contribution

The current study is able to contribute to the literature by identifying the existing gap in the knowledge and fulfilling the gap by successfully completing first research objective and question. There was limited information available on the way Islamic banks evaluate the creditworthiness of loan application. Hence the current study has achieved a milestone by identifying the gap and contributing to the knowledge for learners, Islamic banking consumers and for Bankers. The study will help learners and practitioners in understanding the processes and their reasons followed by different Islamic banks. Addition to this the study has contributed to the practice, based on the findings from the first research objective the following new evaluation model as shown in figure 5.1 has been developed for Islamic banks to follow as a loan application evaluation process. The proposed evaluation model (figure 5.1) will help Islamic banks in the standardisation of the evaluation process and for borrowers to understand the process in advance and meet the requirements. The Islamic banks will be able to standardise their offerings by publishing their evaluation requirements and methods using the same tools.

Figure 5.1 New Evaluation Model (NEM) – Islamic Banks



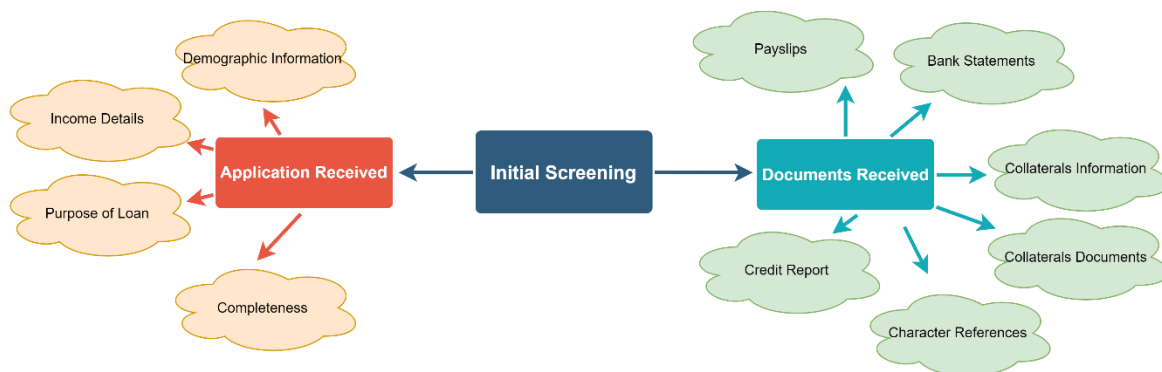
Source: Figure 5.1 developed by author.

The proposed evaluation model (figure 5.1) is consisting of six stages as explained below. The weightages can be assigned by individual Islamic banks as per their offerings, shariah compliant policies and practices.

Stage 1 – Initial Screening:

As shown in figure 5.2, the stage 1 of loan proposals evaluation model begins with the initial screening as soon as the application is received. The initial screening can be conducted on multiple parameters, starting from the evaluation of personal information provided on the application such as demographics details, the purpose / reason of the loan as Islamic banks solely approves the legitimate and shariah compliant loan offerings, the completeness of application is assessed as part of initial screening. The documents required as part of application are collected and assessed and/or copies obtained. The documents may consist of employment confirmation letter, payslips, bank statements, Collaterals such as property documents, bonds & certificates, value certificates of any antiques, savings, gold, etc. character references are requested in some offerings, credit report from credit bureaus is requested.

Figure 5.2 NEM: Stage 1 – Initial screening



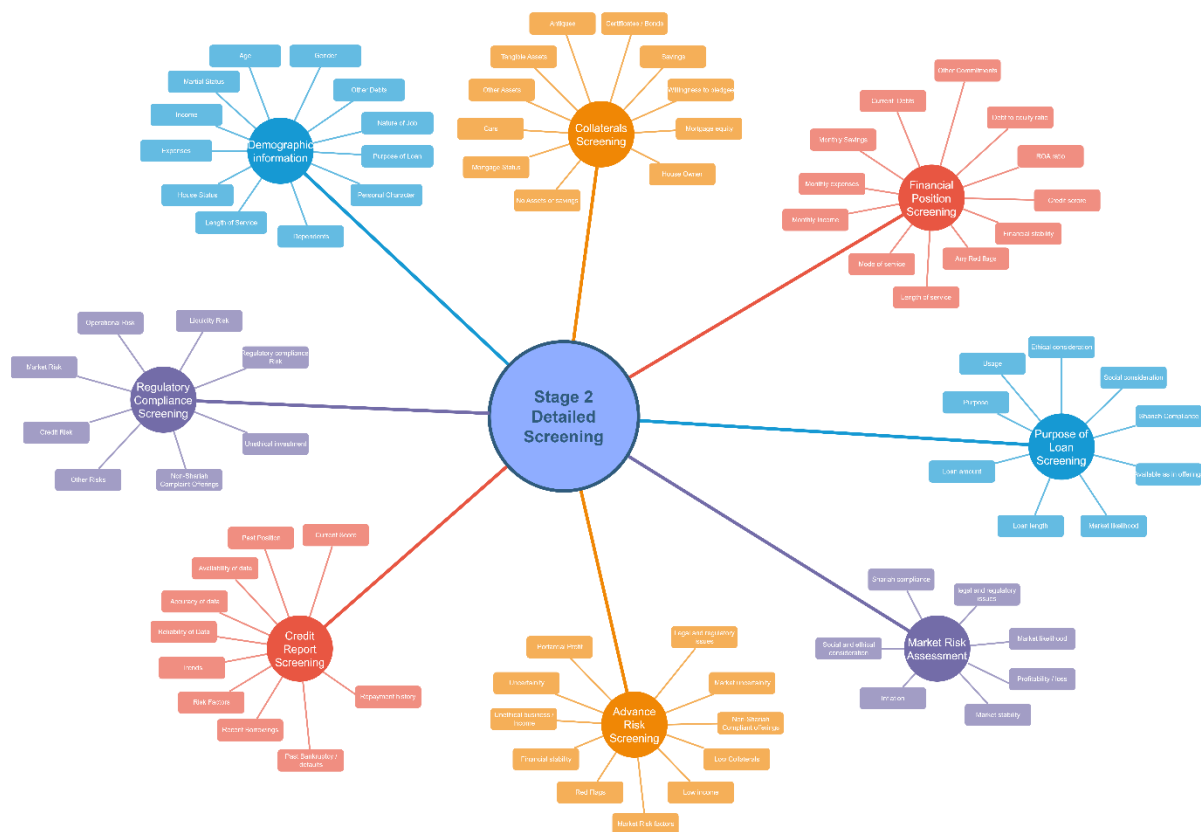
Source: Figure 5.2 developed by author.

Stage 2 - Detailed screening

The detailed screening begins upon the acceptance of the loan application after the initial screening. The detailed screening as shown in figure 5.3 consists of multiple factors such as scrutiny of (I) personal information such as age, gender, marital status, employment and income details, length of employment, dependents, monthly expenses, house status, nature of job, personal character etc. (II) Collaterals: such as property documents, bonds &

certificates, value certificates of any antiques, savings, gold, etc. (III) Financial position: the screening may consist of monthly income and expenses, monthly savings, current debts, other commitments / financial dependences, employment status, length of service, nature of employment, etc. the payslips, banks statements are assessment as part of screening. The different financial ratios can be used to gauge the financial position and stability (IV) Purpose of Loan: As Islamic banks pays special attention to the purpose of loan hence the following factors are commonly assessed such as purpose, amount, length, usage, etc. (V) Market risks: different market factors are assessed as part of market risk assessment such as market likelihood against the loan application, market stability / position, inflation, GDP, social and ethical considerations, shariah compliance and legal regulations etc. (VI) Other advance risks: different risk assessment models can be used alongside the export knowledge and experience, the factors may include such as: potential profit, uncertainty, unethical business/employment income, market risk factors, low income, low collaterals, market uncertainty, legal and ethical issues, regulatory issues, non-shariah compliant offerings, etc. (VII) Credit report: The credit reports are requested from the credit bureaus to assess the credit score, past positions, past financial position, any red flags, risk factors, past bankruptcy, or disputes, etc. (VIII) Regulatory compliance: the loan application evaluator / writer review and evaluates the application to ensure the purpose of loan, amount, terms, and approval process comply against the local and government regulations.

Figure 5.3 NEM: Stage 2 - Detailed screening

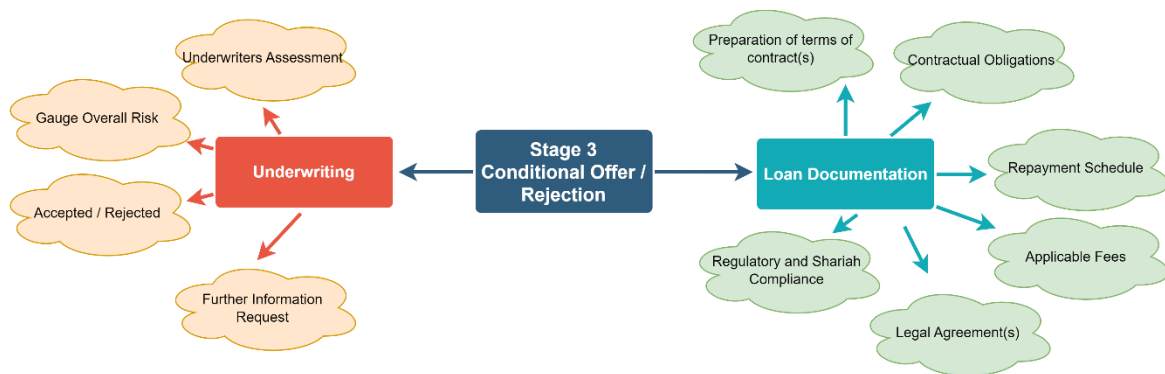


Source: Figure 5.3 developed by author.

Stage 3 – Conditional Offer or Rejection

The underwritings and loan documentation can be prepared at this stage after the successful detailed screening. The underwriters can assess overall risks from the information received and decide to accept, rejected, or request further information to support the application. The information as shown below in figure 5.4 such as repayment schedule, applicable fees, contractual obligations, terms and conditions of contracts, legal agreements should be shared with the borrower. In case of rejection, inform the applicant with the applicable reasons and ensure fair lending practices.

Figure 5.4 NEM: Stage 3 – Conditional Offer or Rejection

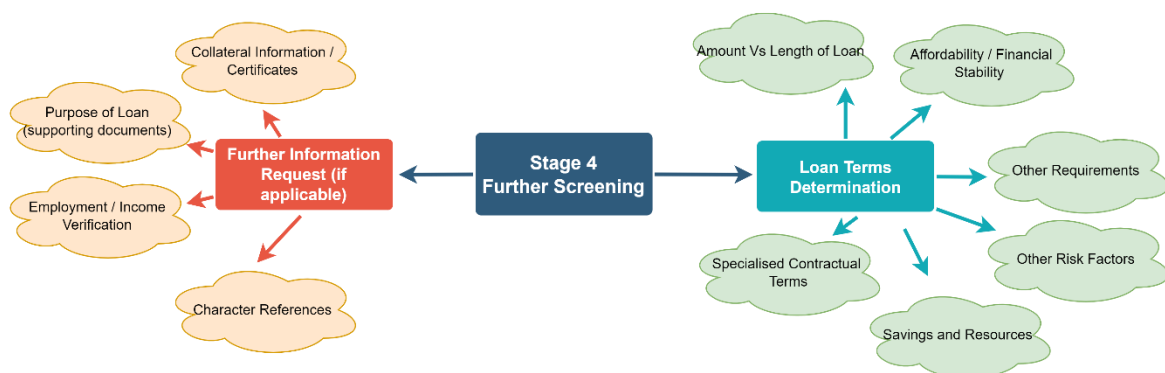


Source: Figure 5.4 developed by author.

Stage 4 - Further Screening (if applicable)

At this stage as shown in figure 5.5, the further information is requested and collected from the applicants, the requested information could consist of confirmation of employment, verification of income, evidence / certificates of collaterals, evidence on the purpose of loan such as quotations to buy IT equipment, etc. and character references or guarantors. Upon the successful scrutiny of further information, the loan terms can be reassessed against the flagged risk factors, the loan terms can be readjusted such as increase or decrease of amount of length, asking for guarantors, pledge request of collaterals, and the development of shariah compliant contractual terms including default fees or possession of collaterals.

Figure 5.5 NEM: Stage 4 - Further Screening (if applicable)

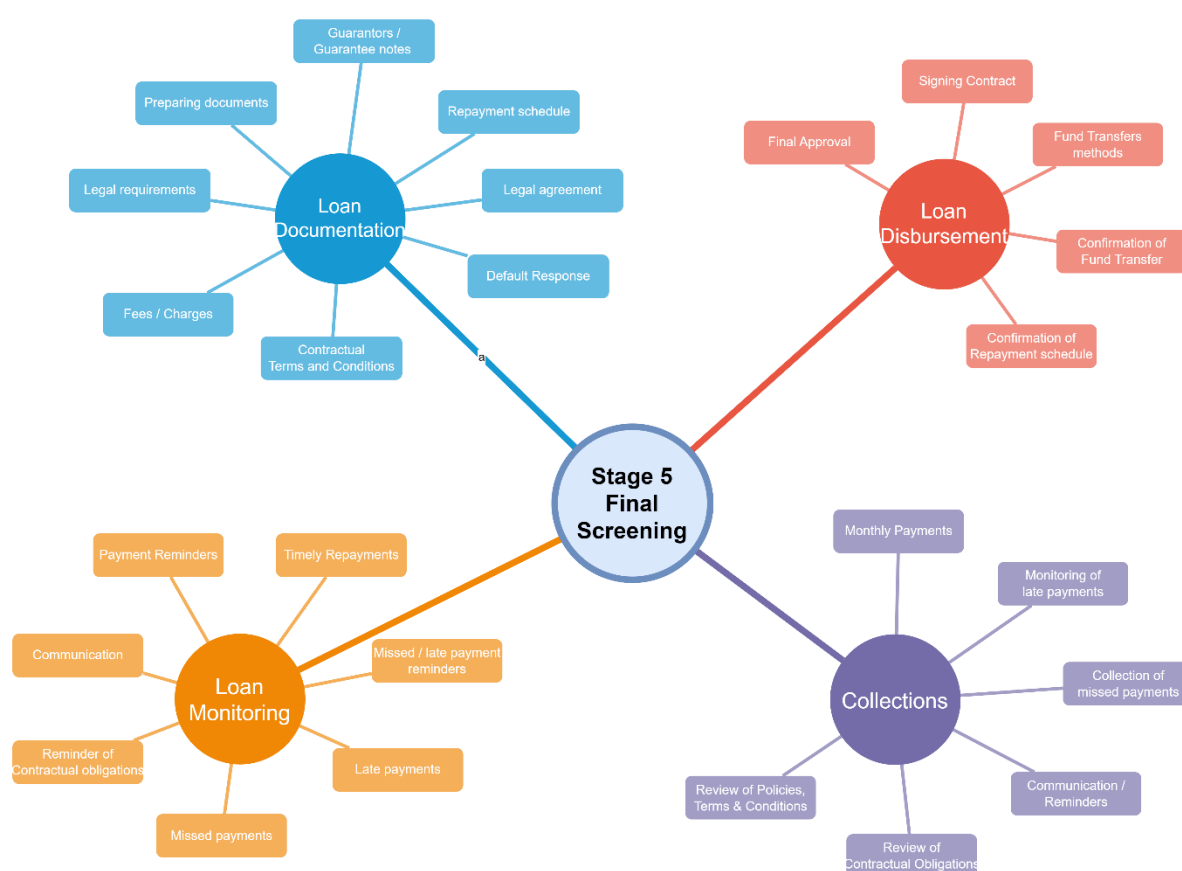


Source: Figure 5.5 developed by author.

Stage 5 – Final Screening

At the final stage as shown below in figure 5.6, loan documentations / contracts are shared and agreed by borrower and lender, such as repayment reschedule, default response, fees and charges, contractual terms and conditions and legal requirements are shared and highlighted. Loan disbursement - once the contracts are signed by both parties the funds will be disbursed as per the agreed methods. The borrower will be informed about the completion of transfer or purchase and repayment schedule. Hereafter the monthly payments will be collected and monitored, communication and reminders can be raised in case of delay or missed payments, contractual obligations can be reviewed against the market factors and other associated risks. As part of loan monitoring, the continues communication with borrowers is the key in successful completion of loan terms, additional steps could be in place as part of contractual obligations such as payment reminders, payments on agreed timescales, etc.

Figure 5.6 NEM: Stage 5 – Final Screening

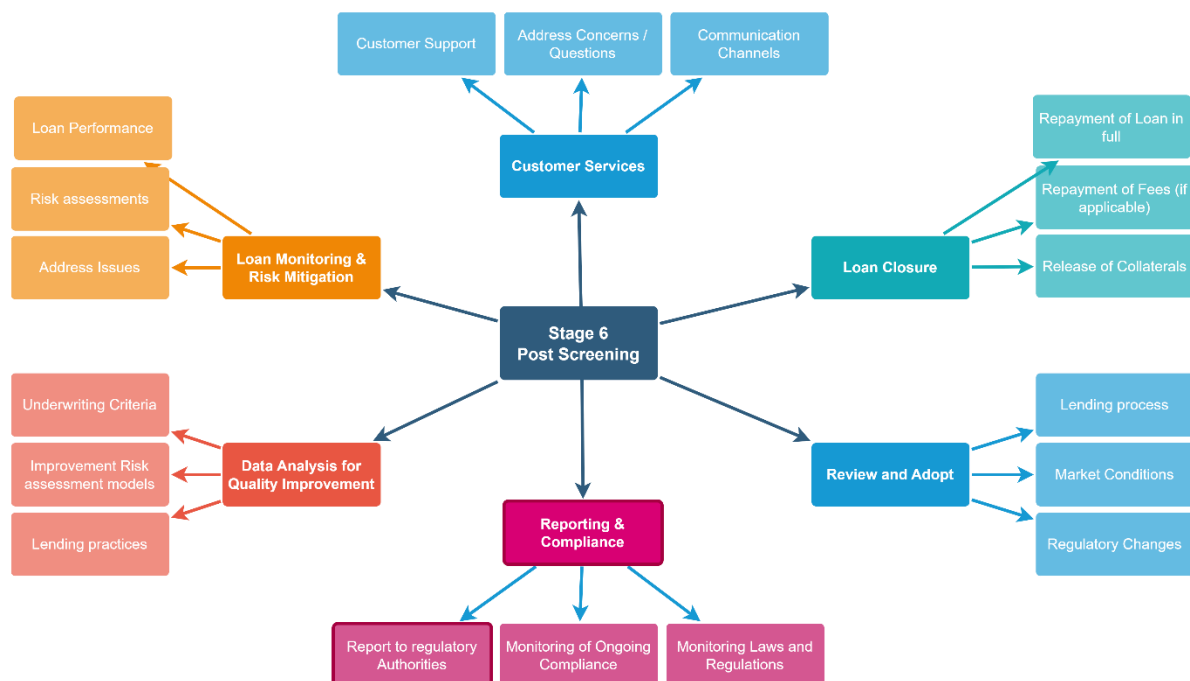


Source: Figure 5.6 developed by author.

Stage 6 – Post Screening

At the final stage (Post screening) and as represented in figure 5.7, the loan performance will be continuously monitored against any risk may arise, any concerns or issues from both the borrower and lenders should be addressed fairly and in shariah compliant way. The regulatory and monitoring authorities should be reported with the agreement and performance hence the credit reports can be kept up to date. The concerned parties should be kept informed on the changes or updates on the laws and regulations. The customer support plays a key role in the satisfaction of consumer and addressing the issues in a timely manner. The contractual obligations will be completed upon the receipt of all the repayments including any charges or fee may occur, the pledged collaterals should be released as soon as loan agreement is marked as completed. Finally, the data analysis has huge importance for quality improvement, enhancing underwriting criteria, flags risk factors and adopting fair lending process while staying up to date with market conditions and any regulatory changes.

Figure 5.7 NEM: Stage 6 – Post Screening



Source: Figure 5.7 developed by author.

5.1.3 Recommendations

As per the aims and first research objective the evaluation methods used by Islamic banks for evaluating loan proposals are identified, explored, and critically analysed. Based on the findings and data analysis it was identified that there are no standardised evaluation models used by any Islamic banks, addition to this there was limited information readily available on the evaluation methods adopted by Islamic banks. Hence the current study contributes to the knowledge and provides an opportunity for Islamic banks to obtain a standardised evaluation model. Furthermore, the study was able to develop and present standardised model for Islamic banks to evaluate loan proposals. However, due to the limitations and focused aims of the current study it was not possible to trail this newly developed model with Islamic banks hence it is recommended to trail this model in future studies to check the viability and practicality of the model, upon the successful trial it can be widely used by Islamic banks to redevelop their evaluation processes and streamline and standardised their offerings. It is anticipated that this newly developed model will immensely contribute to the practicing Islamic banks and equally consumers to understand the overall evaluation process.

5.2 A unique evidence-based brief analysis and prospective of loan proposals - evaluated by the loan experts.

5.2.1 Conclusion

It can be stated that Islamic banks follow thorough process to evaluate the loan proposals. The data collection through questionnaire and interviews clearly reflected that the Islamic banks follows different processes which are considered as use of mix of systematic models or tools and judgment approaches. The evaluation of loan proposals mainly starts from the initial screening of demographic information, enquiry and scrutiny of financial stability, value assessment of collaterals, understanding the purpose of loan to define the ethical and social considerations, credit reports assessment to define creditworthiness and other risk assessments, analysis of market factors to define the risks and potential profit or losses. Though Islamic banks are rigidly following comparatively strict evaluation processes, however it has been observed that there is lack of standardisation in the evaluations and practices by Islamic banks due to their mixed approach and individuals experience and professional knowledge and awareness of risks.

5.2.2 Contribution & Recommendation

The data analysis and findings assisted in the development of new and complete assessment model which could be studied further and implemented to bring the standardisation in the Islamic banking's evaluation processes.

5.3 The distinguishing features, techniques or methods used by Islamic banks to evaluate creditworthiness of loan proposals.

5.3.1 Conclusion

Islamic banks use different financing methods as compared to conventional banks due to their distinct shariah based principles and practices. Therefore, the techniques used by Islamic banks to assess the creditworthiness of loan proposals are comparatively different. It was analysed that the Islamic banks use two main methods to evaluate loan proposals which consist of credit scoring model and judgmental approach. Whereas conventional banks heavily rely on well-established credit scoring models and, to some extent, critical approaches in complex or review cases. It was observed that both Islamic and conventional banks are reliant on the credit scoring model; However, each bank has its own credit scoring models and the weights assigned to each factor are different. Based on the themes developed from data collection through the questionnaire, it can be stated that there are multiple distinctive features, techniques and methods used by Islamic banks to assess the creditworthiness of loan proposals compared to conventional banks. Some of the key features noted were unlike conventional banks, the Islamic banks assess the borrower's character, reputation, and adherence to ethical and Islamic values. The Islamic banks occasionally ask the applicant to submit character references as part of the application. The Islamic banks further scrutinise the mode and nature of work as Islamic banks avoids doing business / invest in sectors considered as unethical (Haram) and prohibited by Islam and shariah boards such as gambling, alcohol, and pork, etc. whereas often conventional banks do not have these restrictions. Typically, the Islamic bank's loan agreements are backed by the applicant's assets. The assets such as house, car, gold, antiques, security bonds, other tangible assets, etc. can be seized in case of default. Whereas the conventional banks heavily rely on interest-based lending.

Islamic banks are strict in screening the purpose and nature of the loan. The reasons for strict screening of the purpose of loan are multi fold. First, Islamic banks encourage and offers financing based on the asset backed financing, which is commonly known as Ijarah, which is leasing and Murabaha which is cost plus financing and Sharia compliant. Whereas the conventional banks typically provide interest based unsecured loans. Secondly, Islamic banks often engage in contract which is profit and loss sharing with the applicant. The banks function as a partner with the borrower and shares the profit and loss. Whereas conventional banks rarely use profit and loss sharing model instead consider fixed or variable interest loans. Therefore, it is important for the Islamic banks to understand, and risk assess the purpose and nature of loan and to not to engage in highly uncertain or defined unethical businesses by their shariah boards. Islamic banks like conventional banks scrutinise the credit reports provided by the applicants and credit reference agencies also known credit information bureau. Unlike conventional banks, the Islamic banks assess the borrower's character, reputation, and adherence to ethical and Islamic values. Islamic banks are abided by the shariah principles, which prohibits any financing activity that are considered unlawful or unethical (Haram) in Islam but equally promotes fair and ethical financial transactions.

5.3.2 Contribution & Recommendation

The current study is able to contribute to the literature by identifying the existing gap in the knowledge and fulfilling the gap by successfully completing second research objective and question. The study identified and critically analysed the distinguishing features, methods used by Islamic banks to evaluate creditworthiness of loan proposals. A brief comparison and contrast will help and contribute to the knowledge for learners, particularly Islamic banking consumers and researchers. The study identified the key difference is of principles behind both Islamic and conventional banking systems. The understanding of key differences and principles behind the workings of Islamic and conventional banking can be studies further as stand-alone study to contribute further to the knowledge for learners, bankers, consumers, scholars, and researcher.

5.4 The methods used by Islamic banks to evaluate creditworthiness of loan proposals are different from conventional banks.

5.4.1 Conclusion

The third objective of the study was to compare the current evaluation methods of creditworthiness of Islamic banks vs conventional banks. The study and evaluation of available literature and the data analysis helped to highlight that Islamic banks use different methods to evaluate credit worthiness of loan proposals as compared to conventional banks due to their differing principles and practices. Islamic banks offer financing products and services led by shariah principles based on Islamic laws which differentiates them from conventional banks in numerous ways. The highlighted principles behind the methods used to evaluate creditworthiness of loan proposals were profit and loss sharing vs charge of interest, regulation and compliance, credit assessment protocols, purpose of financing, collaterals information, risk assessment models, risk sharing and management, types of contracts, social and ethical considerations. To summarise the highlighted findings, the approaches used to evaluate creditworthiness of loan proposals by Islamic banks are on the fundamental principles of Islamic finance which are managed and led by Shariah law and board. According to Islamic principles the charge of interest is prohibited in any mode of transactions. Therefore, the Islamic banks are encouraged to offer financing based on cost plus profit arrangements (Murabaha), partnership (Musharaka), profit and loss sharing (Mudarabah), leasing (Ijara), etc. instead of interest-based lending. Islamic banks pay special attention to the social and ethical considerations on the purpose of loan while ensuring the banks are not involved in excessive and uncertain financing due to shariah laws. Therefore, the evaluation of demographics, character and commitments to ethical business practices, financial information, and reports, the information on the collaterals, purpose and duration of loan, credit reports and market factors are evaluated in detail. Whereas the conventional banks rely on interest-based lending and may engage in wider range of financial activities without due religious obligations.

5.4.2 Contribution & Recommendation

The current study is able to contribute to the literature by identifying the existing gap in the knowledge and fulfilling the gap by successfully completing third research objective and question. The study identified and critically analysed that the Islamic banks use distinct

methods to evaluate creditworthiness of loan proposals as compared to conventional banks due to their differing principles and practices. Islamic banks offer financing products and services led by shariah principles based on Islamic laws which differentiates them from conventional banks in numerous ways. The understanding of key differences and principles behind the workings of Islamic and conventional banking can be studied further as a stand-alone study to contribute further to the knowledge for learners, bankers, consumers, scholars, and researchers. Further study could help in enhancing and empowering the practitioners with relevant knowledge and practices around the globe.

5.5 The impact of methods used by Islamic banks on conventional banks.

5.5.1 Conclusion

There was no specific data readily available to gauge the impact. However, it could be seen from the literature the growth of Islamic banks over the last 2 decades certainly putting an impact on the conventional banks and helping in the development of an enhanced competitive market. However, based on the current research findings it is possible to list and analyse the possible both positive and weak impacts of Islamic banks on conventional banks due to their nature of working, principles, approaches, and techniques. The noted positive impacts of Islamic banking on conventional banks were *increased scrutiny of borrowers*: Islamic banks follow a thorough evaluation process to scrutinise the borrower's personal demographics details, financial information and stability, purpose and viability of loans, market factors, social and ethical considerations of the loan activities. The intensified scrutiny of loan proposals helps Islamic banks to invest in less risky portfolios. *Focus on asset-backed financing*: Islamic banks prefer asset-back financing and their evaluation as per the shariah compliance is a crucial factor. The evaluation defines the viability of assets to potentially generate the returns in case of default. This mode of financing is encouraged to support shariah compliant: profit and loss sharing, lender and borrowers' business partnership. This approach helps to reduce the risk of default or potential loss. Whereas in conventional banks often offer unsecured loans based on borrower's current financial position and ratings, results in higher risk of default or losses. *Positive performance during and after financial crisis (2007-08) and pandemic (Covid-19)*: numerous studies focused on the performance and efficiency of Islamic banks vs conventional banks during and post the last

financial crisis (2007-08) and recent pandemic due to Covid-19 and subsequent current economic crisis in different countries and stated Islamic banks as compared to conventional banks are better capitalised as keep greater proportion of assets to their financing activities and are less competitive, the Islamic banks stayed comparatively more stable and efficient especially in the period of financial crisis, mainly because of shariah principles and profit margins, Islamic banks are better able to manage risks due to their intensified scrutiny of loan proposals etc. *Social, ethical, and environmental financing*: The evaluation methods adopted by Islamic banks are developed and approved by shariah boards which pays detail attention to social, ethical, and environmental impact due to the financing. According to the reports of Global Islamic Finance 2018, Islamic banks are seeming more socially responsible and could have positive impact of conventional banks as this supports the growing demand for socially responsible investments. *Enhanced competition*: The growth of Islamic banks around the globe and increased in the demand of Islamic products and services including financing products has pushed conventional banks to either open stand-alone Islamic branches or offer Islamic products within the conventional settings. For example, according to Islamic Finance Report 2019, The UK is one of leading non-Muslim countries among Europe that has shown greatest demand and interest in the development of Islamic banking, in 2018 alone in the UK the Islamic banking assets grew above 14% and reached to 6.69 billion dollars. The study also highlighted the weak impacts such as Islamic banking is complex in nature, limited products and services, scarcity of resources, etc.

5.5.2 Contribution & Recommendation

The critical analysis of both literature and data drew attention to the positive and influencing factors of Islamic banking system on conventional banking systems. The current study on positive and weak impacts will contribute to existing knowledge, provide opportunity to conventional banks to review and adopt key positive factors, equally provide opportunity to Islamic banks to take advantage of their strengths and pay attention and work on the weak areas such as standardisation issues. Due to the defined aims and limitations of the current study it was not possible to gauge the impact of Islamic banks on conventional banks. However, it is recommended that the further research with the collection primary data on larger scale could help to gauge the impact. The findings will

contribute to the knowledge, provide clear pathway for new learners and researchers, above all will provide opportunities to adopt and expend Islamic banking on wider scale.

5.6 Major risks involved or faced by Islamic banks.

5.6.1 Conclusion

Islamic banks do face several major risks like many other conventional banks. However, there are set of unique risks faced by Islamic banks due to their specific nature and principles. It has been observed that the risk level against each risk is different for Islamic banks as compared to conventional banks. Some of the major risks faced by Islamic banks were highlighted from the data collection and analysis, such as *credit risk*: Islamic banks as like any conventional bank are equally exposed to credit risks. The credit risks can trigger in any mode of financing products. Such as in cost plus profit arrangements (Murabaha) where borrower can default to pay the debt which consists of cost-plus bank's profit, whereas in partnership (Musharaka) and profit and loss sharing (Mudarabah) contracts the borrowers (as partner of the bank) can default by not purchasing the shares owned by the banks as per the agreements. It was analysed from the responses that the loan evaluators pay detailed attention to evaluate borrower's personal information, financial status, credit assessment, collateral details and to further mitigate the risk use of diversified tools such as asset-backed financing techniques. *Market risk*: The risks include commodity price risk, inflation, interest-rate risk, foreign exchange risk, other market factors such as political, social, and cultural, natural disasters or pandemics, etc. From the analysis it was identified that the market likelihood plays key role in the initial screening of loan proposals. The market risk is accessed on the number of factors, as per the responses the Islamic banks the offerings if the market risk is too high. Islamic banks consider current market position, including economic stability, industry trends, operational, market, liquidity, rate of return, equity investment risk, GDP, inflation rate, pandemic, legal and regulatory changes, etc. These factors help Islamic banks assess the feasibility and compliance of loan obligations while adhering to Islamic finance principles. The evaluators have highlighted the factors such as less durability or profitability and high risk of loss contributes negatively to the application even though while having other strong factors such as financial position. *Operational risk*: refers to risk of loss due to the inadequacy or failure of systems, tools, internal processes,

banking reputations, regulatory compliance, legal and governance issues, etc., the operational risks are managed by Islamic banks by keeping effective internal control systems, presence, and guidance from shariah board, governance board and audits, review of staff training needs and robust risk management policies. *Liquidity risk*: Islamic banks face comparatively higher liquidity risk as compared to conventional banks due to mainly stronger step-up of interest-based market and absence of inter-Islamic bank money market. The challenge to Islamic banks is dealing with funding liquidity risks. Although Islamic banks have strong asset-based liquidity. However, it can be analysed from the literature and responses that Islamic banks do not encourage personal loan financing and avoids high risks and interested based investments. In the economies where Islamic banks are more developed, in the past financial crisis they have proved high financial shock absorbing capacity.

Shariah non-compliance risk: The risk can arise when the products or services are offered without the approval of Sharia board. Islamic banks mitigate this risk by pointing shariah advisory board. The board is usually consisting of three to five Islamic well-known and reputed scholars, all the products and services offered by Islamic banks are reviewed and approved by shariah board, the compliance is continuously reviewed by conducting regular audits. *Other risks due to religious and legal non-compliance*: Some of the other risks associated with Islamic banks are the risk of lower returns (profits) on deposits as compared to conventional banks or financial markets. If the Islamic banks appears to return lowers profits or charge higher profit or costs by offering financing product which could lead to dissatisfaction of clients and displaced commercial risk. Islamic banks also face strategic related risks as the economic and technology developments, changes consumer behaviours, etc. putting pressure of Islamic banks, whereas the slow development of Islamic financial products leads to additional barriers.

5.6.2 Contribution & Recommendation

The current study is able to contribute to the literature by successfully completing fifth research objective and question. The major risks faced by Islamic banks as compared to conventional banks were studied and analysed against the research data collection and impact of risks in the evaluation process. The critical analysis helped in highlighting the tools, steps or methods used by Islamic banks to mitigate those risks. The new knowledge

will help and contribute to the existing knowledge for learners, particularly Islamic banking consumers and researchers. The analysis and findings will help Islamic bankers to find alternate solutions to mitigate the risks instead of simply limiting the offerings. Due to the defined aims and limitations of the current study it was not possible to include the impact of risks on loan proposals and risk management techniques used by Islamic banks. However, it is recommended that the further research on the impacts of highlighted risks on loan proposals should be explored further and risk management techniques should also be studies as mitigation factors. The findings contribute to the knowledge, provide clear pathway for new learners and researchers, above all will provide opportunities to expend Islamic banking on wider scale while mitigating the risks.

CHAPTER 06: SUMMARY & LIMITATIONS OF CURRENT STUDY, SCOPE FOR FUTURE AND FURTHER DIRECTIONS OF STUDIES.

The current study can be summarised by saying that the aims of research to identify, explore and critically analyse the methods used for evaluating loan proposals and the credit risk assessment protocols used by Islamic banks have been successfully achieved. The study was able to identify the current methods used by Islamic banks to evaluate loan proposals from the qualitative research analysis. Based on the findings and data analysis it was identified that there are no standardised evaluation models used by any Islamic banks, addition to this there was very limited information readily available on the evaluation methods adopted by Islamic banks. Hence the current study contributes to the knowledge and provides an opportunity for Islamic banks to obtain a standardised evaluation model. Furthermore, the study was able to develop and present standardised model shown in figure 5.1 for Islamic banks to evaluate loan proposals. However, due to the limitations and focused aims of the current study it was not possible to trail this newly developed model with Islamic banks hence it is recommended to trail this model in future studies to check the viability and practicality of the model, upon the successful trial it can be widely used by Islamic banks to redevelop their evaluation processes and streamline and standardised their offerings. It is anticipated that this newly developed model will immensely contribute to the practicing Islamic banks and equally consumers to understand the overall evaluation process.

The study was also able to contribute to the knowledge by highlighting the key distinguishing features, techniques used by Islamic banks to evaluate creditworthiness of loan proposals. The literature review showed that Islamic banks use different financing methods as compared to conventional banks due to their distinct shariah based principles and practices. Therefore, the techniques or methods used by Islamic banks to evaluate creditworthiness of loan proposals are comparatively different. Some of the key highlighted features were assessment of borrower's character, reputation, adherence to ethical and Islamic values, the Islamic banks occasionally ask the applicant to submit character references as part of the application. Unlike conventional banks, the Islamic banks further scrutinise the mode and nature of work as Islamic banks avoids doing business in sectors

considered as unethical (Haram) and prohibited by Islam and shariah boards such as gambling, alcohol, and pork, etc. whereas often conventional banks do not have these restrictions. Islamic banks promote asset-backed financing or profit and loss sharing contracts. Islamic banks are abided by the shariah principles, which prohibits any financing activity that are considered unlawful or unethical (Haram) in Islam but equally promotes fair and ethical financial transactions. While understanding the limitation of the current study it is highlighted that the scope for future study therefore the understanding of key differences and principles behind the workings of Islamic and conventional banking can be studies further as stand-alone study to contribute further to the knowledge for learners, bankers, consumers, scholars, and researcher.

Though there was no specific data readily available to gauge the impact. However, the current study has contributed to the knowledge by identifying and analysing the possible both positive and weak impacts of Islamic banks on conventional banks due to their nature of working, principles, approaches, and techniques. The study highlighted the key positive impacts such as Islamic banks follow a thorough evaluation process to scrutinise the borrower's details. The intensified scrutiny of loan proposals helps Islamic banks to invest in less risky portfolios. Islamic banks prefer assets-back financing therefore the existence of tangible assets and their evaluation as per the shariah compliance is a key factor. The evaluation defines the viability of assets to potentially generate the returns in case of default. This approach helps to reduce the risk of default or potential loss. The number of recent studies focused on the performance and efficiency of Islamic banks vs conventional banks during and post the last financial crisis (2007-08), the recent study on the effects of Covid-19 on the performance of Islamic and conventional in GCC countries reflected that Islamic banks were negatively affected but still performed better than conventional bank, supports the above arguments. The evaluation methods adopted by Islamic banks are developed and approved by shariah boards which pays detail attention to social, ethical, and environmental impact due to the financing. The borrower's personal character, purpose of finance, are evaluated to establish if the financing is for the legal and good purposes. Islamic banking principles and methods have undoubtedly forced conventional banks to learn and adopt their practices. The growth of Islamic banks around the globe and increased in the demand of Islamic products and services including financing products has pushed

conventional banks to either open stand-alone Islamic branches or offer Islamic products within the conventional settings. The study also highlighted the weak impacts such as the Islamic banking processes including evaluation methods are considered to be more complex in nature as compared to conventional banks due to the religious obligations and Shariah principles. The complex nature potentially can lead to cost inefficiencies. Islamic banks offerings are limited in the countries where the conventional banks hold the majority of market shares and particularly in non-Islamic interest-based markets. It is crucial for Islamic banks to have right workforce to develop and offer their products and services while ensuring the compliance of Islamic financing principles.

Finally, the current study findings discussed in table 4.3 helped in analysing the major risks faced by Islamic banks and how they are different from conventional banks. The key highlighted risks were credit risk, market risk, operational risk, liquidity risk, shariah non-compliance risk, other legal and religious non-compliance risks. Based on the findings from the data collection, the study was able to establish and highlight the key differences. While considering the key risks, the study also pointed the current practicing issues of Islamic banks. It has been observed that there is lack of standardisation in the offerings and practices by Islamic banks, which are due to the different interpretation of Islamic financing also known as Shariah principles. Such as the products and services offered by one Islamic bank marked as shariah compliant but may considered as non-compliant by another Islamic bank. Though Islamic banking has been rapidly growing around the globe, comparatively faster in Muslim countries than non-Muslim countries. Despite the tremendous growth still there are limited products and services offered in non-Muslim countries, mainly due to the unavailability of Islamic financing market, ethical and permissible financing options and consumers understanding and trust in the Islamic banking. The approval and certification of financing products and offerings by shariah boards is the crucial characteristic of Islamic banking. However, it has been noticed in the past studies the offering of non shariah compliant products which led to the exploitation, ethical concerns, and creditability issues within the markets. Due to the defined aims and limitations of the current study it was not possible to include the impact of risks of loan proposals and risk management techniques used by Islamic banks. However, it is recommended that the further research on the impacts of highlighted risks on loan proposals should be explored further and risk management

techniques should also be studied as mitigation factors. The findings will contribute to the knowledge, provide a clear pathway for new learners and researchers, above all will provide opportunities to expand Islamic banking on a wider scale while mitigating the risks.

REFERENCES

- AAOIFI. (2020). Shari'ah standards. Retrieved from <https://aaoifi.com/shariah-standards/>
- Abdul Rashid, R., Mohamad, S., & Mohd Ghazali, N. A. (2019). Internal control systems, Shari'ah supervision and compliance in Islamic banks. *Managerial Auditing Journal*, 34(4), 524-547.
- Abdulai, M., & Seidu, A. (2020). Customer awareness and adoption of Islamic banking services in Ghana. *Journal of Islamic Marketing*, 11(5), 1052-1071.
- Abdulla, Y., & Ebrahim, Y. (2022). Effect of COVID-19 on the performance of Islamic and conventional GCC banks. *Review of Financial Economics*, 40, 239–258. <https://doi.org/10.1002/rfe.1151>
- Abdullah, H., & Che Azmi, A. (2021). Ethical and Sustainable Finance: Opportunities for Islamic Finance. *Journal of Sustainable Finance and Banking*, 9(4), 112-128.
- Abdullah, N. H., & Che Azmi, A. N. (2021). The prospect of Islamic finance in sustainability finance: A review. *Journal of Islamic Monetary Economics and Finance*, 7(1), 171-192.
- Abdullah, N. H., Hassan, I., Fazil Ahmad, M., Hassan, N. A., & Ismail, M. M. (2021). Social media, youths and political participation in Malaysia: A review of literature. *International Journal of Academic Research in Business and Social Sciences*, Forthcoming.
- Abdul-Rahman, A., & Tarazi, M. (2014). Shariah governance in Islamic finance: The effects of Shariah supervisory board composition on market perception. *Journal of Banking & Finance*, 44, 174-193.
- Abedifar, P., et al. (2018). The Relationship Between Shariah Supervision, Risk and Performance in Islamic Banking. *The European Journal of Finance*, 24(18), 1656-1684.
- Abedifar, P., Molyneux, P. and Tarazi, A., 2012. Risk in Islamic banking. HAL id: hal-00915115f
- Abreu, R., & Ferreira, L. (2020). Cybersecurity in Banking: The Portuguese Case. *Journal of Information Systems Engineering & Management*, 5(4), e1036. <https://doi.org/10.29333/jisem/8529>
- Abreu, R., & Ferreira, M. A. (2020). Cybersecurity in the Banking Sector: Challenges and Solutions. *Information Systems and Technologies*, 1-8.
- Accenture. (2018). Banking on AI: Unlocking Value from Machine Learning. Retrieved from https://www.accenture.com/_acnmedia/PDF-75/Accenture-Banking-On-AI.pdf
- Acharya, V. V., Richardson, M., & Van Nieuwerburgh, S. (2011). *Guaranteed to Fail: Fannie Mae, Freddie Mac, and the Debacle of Mortgage Finance*. Princeton University Press.
- Afrifa, G. A. (2021). The Importance of Financial Ratios Analysis in Investment Decision Making. *Journal of Accounting and Management Information Systems*, 20(1), 1-20. doi: 10.24818/jamis.2021.01001

- Agarwal, S., et al. (2019). Payment Behavior and Creditworthiness: Evidence from Credit Card Data. *Journal of Finance*, 74(3), 1447-1497.
- Aghion, P., Akcigit, U., Deaton, A., & Roulet, A. (2019). Creative Destruction and Subjective Well-Being. *American Economic Review*, 109(12), 4081-4111.
- Ahmad, N., & Haron, S. (2002). Perceptions of Malaysian corporate customers towards Islamic banking products and services. *International Journal of Islamic Financial Services*, 3(2), 47-66.
- Ahmad, R. B., & Islam, M. S. (2020). Challenges and Prospects of Islamic Banking: A Critical Analysis. *Journal of Islamic Banking and Finance*, 37(1), 24-34.
- Ahmad, S., Shafique, O., & Jamal, W. N. (2020). Impact of perceived corporate social responsibility on banks' financial performance and the mediating role of employees' satisfaction and loyalty in Pakistan. *Journal of Accounting and Finance in Emerging Economies*, 6(3), 765-774.
- Ahmed, H. (2016). *Islamic Banking and Finance: What It Is and What It Could Be*. Edinburgh University Press.
- Ahmed, H. and Khan, T., 2007. 10 Risk management in Islamic banking. *Handbook of Islamic banking*, p.144.
- Akerlof, G. A., & Shiller, R. J. (2015). *Creditworthiness and Economic Performance*. Oxford University Press.
- Akgun, A. E., & Cebeci, U. (2021). The effect of accounting information quality on the credit risk of banks. *Journal of Risk Research*, 24(3-4), 385-405. doi: 10.1080/13669877.2019.1700234
- Alam, M. (2021). Challenges to the growth of Islamic banking and finance. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(5), 656-672.
- Alam, M. S., & Al Mamun, A. (2021). Islamic finance in the age of fintech: Trends, challenges and prospects. *Journal of Islamic Accounting and Business Research*.
- Alam, M., & Al Mamun, A. (2021). Leveraging Technology in the Islamic Finance Industry. *Journal of Financial Innovation*, 14(2), 67-82.
- Alam, N. (2021). Islamic banking: An overview. Investopedia. Retrieved from <https://www.investopedia.com/terms/i/islamicbanking.asp>
- Alam, N. (2021). Shariah compliance and its challenges in Islamic finance. *Journal of Islamic Banking and Finance*, 8(1), 78-94.
- Alam, N., & Syed, J. (2018). Islamic finance in Europe: challenges and opportunities. *Journal of Islamic Accounting and Business Research*, 9(1), 2-17.
- Alam, S. S., & Syed, J. (2018). Sovereign Sukuk in Europe: The Case of France. *International Journal of Islamic Economics and Finance Studies*, 4(1), 1-20.

- Al-Amine, M. (2011). The Islamic banking system: A comparative study. *International Journal of Business and Social Science*, 2(2), 166-175.
- Albrecht, W. S., Stice, E. K., Stice, J. D., & Swain, M. R. (2019). *Accounting: Concepts and Applications*. Cengage Learning.
- Alcaraz, C., Barbosa, K., Kermani, A., & Meyer, B. (2021). Bank Lending During the COVID-19 Pandemic. Federal Reserve Bank of St. Louis. Retrieved from <https://www.stlouisfed.org/publications/regional-economist/second-quarter-2021/bank-lending-covid-19-pandemic>
- Al-Gharaibeh, M., Al-Ma'aitah, A., Al-Smadi, S., & Al-Rawashdeh, W. (2018). Perception and awareness of Islamic banking system: Evidence from Jordan. *Journal of Islamic Accounting and Business Research*, 9(2), 218-230. doi: 10.1108/JIABR-09-2016-0085
- Ali, A., & Al-Mutawa, A. (2021). Legal and Regulatory Framework of Islamic Banking in Kuwait: A Critical Analysis. *Journal of Islamic Banking and Finance*, 38(1), 15-26.
- Ali, H., Ramzan, M., & Al-Humaidi, A. (2021). The impact of culture on compliance with Shari'ah governance regulations in Islamic banks. *Journal of Islamic Accounting and Business Research*, 12(3), 503-526.
- Ali, N., & Llewellyn, D. T. (2016). Islamic Banking and the Global Financial Crisis. In *Handbook of Research on Islamic Banking and Finance* (pp. 353-368). IGI Global.
- Ali, S. (2012). Islamic banking in Pakistan: A critical review. *Journal of Islamic Banking and Finance*, 29(4), 9-17.
- Ali, S., & Asutay, M. (2010). A critical review of Islamic financial instruments. *International Journal of Islamic and Middle Eastern Finance and Management*, 3(4), 306-327.
- Al-Saleh, M. F., & Rahman, A. A. (2021). An overview of the development and future of Islamic finance. *Journal of Islamic Accounting and Business Research*, 12(2), 198-215.
- Al-Saleh, S. (2018). The global Islamic finance industry: Current trends and future prospects. Thomson Reuters.
- Al-Saleh, Y. (2018). The Future of Islamic Finance: The Road Ahead. *Islamic Finance News*, 15(11), 1-6.
- Al-Saleh, Y., & Rahman, A. (2021). Islamic Finance: Growth, Challenges, and Prospects. *Journal of Islamic Banking and Finance*, 8(1), 101-116.
- Al-Sharmani, M. (2010). Muslims in the UK: Integration, multiculturalism and the politics of community cohesion. *Journal of Ethnic and Migration Studies*, 36(3), 401-417.
- Al-Sharmani, M. (2010). The Islamophobia industry and the demonization of the other: Islamophobia in the immigration debate. *Critical Sociology*, 36(6), 799-824.

- Al-Tamimi, M., & Al-Bastaki, H. (2021). Legal Environment of Islamic Banking in the UAE: An Overview.
- Al-Tamimi, M., Albalawi, H., Alkhawaldeh, M., Alazzam, A., Ramadan, H., Altalalwah, M., ... & Hijawi, K. (2022). Multidrug-Resistant *Acinetobacter baumannii* in Jordan. *Microorganisms*, 10(5), 849.
- Altman, E. I. (2018). *Corporate Financial Distress and Bankruptcy: Predict and Avoid Bankruptcy, Analyze and Invest in Distressed Debt*. Wiley.
- Altman, E. I., & Sabato, G. (2007). Modelling credit risk for SMEs: Evidence from the US market. *Abacus*, 43(3), 332-357.
- Al-Twajry, A., Brierley, J., & Gwilliam, D. (2003). The development of corporate social reporting in the Middle East. *Journal of International Accounting, Auditing and Taxation*, 12(1), 47-65.
- Alzoubi, E. S., & Al-Tamimi, H. A. (2021). Factors affecting the demand for Islamic banking services: Evidence from Jordan. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(5), 755-777.
- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of personality and social psychology*, 45(2), 357.
- American Psychological Association. (n.d.). History of banking. *APA Dictionary of Psychology*. <https://dictionary.apa.org/banking>
- Amin, H. (2017). Murabaha: Principles and Applications in Islamic Banking. *ISRA International Journal of Islamic Finance*, 9(1), 7-25.
- Amin, H. M., Rosman, R., & Haron, S. (2017). Islamic banking and economic growth: Empirical evidence from Malaysia. *International Journal of Economics, Commerce and Management*, 5(7), 28-36.
- Amin, H., Naser, K., & Saifullah, M. K. (2017). Islamic banking and finance in the UK: a historical perspective. *International Journal of Financial Studies*, 5(2), 15.
- Ammar, H. S. (2017). Challenges facing Islamic banks in the UK. *Journal of Islamic Banking and Finance*, 34(2), 96-112.
- Ammar, M. (2017). Islamic banking in the UK: Opportunities and challenges. *International Journal of Islamic and Middle Eastern Finance and Management*, 10(1), 98-115.
- Andreeva, G., Zelenyuk, V., & Zheka, V. (2019). Bank credit risk determinants under macroeconomic uncertainty. *Journal of Banking & Finance*, 98, 1-18. <https://doi.org/10.1016/j.jbankfin.2018.10.010>
- Arab News. (2021, April 19). Islamic fintech set to benefit from growth in Islamic finance. <https://www.arabnews.com/node/1841091/business-economy>

- Aracil, E. (2019), "Corporate social responsibility of Islamic and conventional banks: The influence of institutions in emerging countries", *International Journal of Emerging Markets*, Vol. 14 No. 4, pp. 582-600. <https://doi.org/10.1108/IJOEM-12-2017-0533>
- Arafat, M. Y., & Mohd, N. A. (2021). Shariah governance practices: A
- Arafat, M., & Mohd, A. (2021). Challenges in Shariah Compliance Standardization in the Islamic Finance Industry. *Journal of Islamic Finance*, 15(3), 45-58.
- Archer, S. (2010). *Islamic finance: The regulatory challenge*. John Wiley & Sons.
- Archer, S., & Karim, R. A. (2015). *Islamic Finance: The New Regulatory Challenge*. Wiley.
- Archer, S., & Karim, R. A. (2016). *Islamic Finance: Principles, Performance, and Prospects*. Edward Elgar Publishing.
- Archer, S., & Karim, R. A. A. (2010). *Islamic Finance: The New Regulatory Challenge*. Wiley.
- Archer, S., & Karim, R. A. A. (2015). Challenges facing Islamic banking. *Edinburgh School of Law Research Paper*, (2015/06).
- Ariff, M. and Nasruddin, E. (2014). Factors Influencing Customer Satisfaction with Islamic Banking Services in Indonesia. *Journal of Islamic Finance*, Vol. 3, No. 1.
- Ariff, M., & Nasruddin, E. (2014). Customer satisfaction and Islamic banks: Findings from Malaysia. *Journal of Financial Services Marketing*, 19(3), 207-220.
- Ariss, R. T. (2010). Competitive conditions in Islamic and conventional banking: A global perspective. *Review of Financial Economics*, 19(3), 101–108. <https://doi.org/10.1016/j.rfe.2010.03.002>
- Ashfaq, M., & Abbas, A. (2015). Global financial crisis and Islamic banks: Some empirical evidence. *International Journal of Islamic and Middle Eastern Finance and Management*, 8(3), 274-289.
- Ashfaq, M., & Abbas, A. (2015). Islamic banking and financial crisis: a meta-analysis. *Journal of Applied Finance & Banking*, 5(4), 51-62.
- Audretsch, D. B., Keilbach, M. C., & Lehmann, E. E. (2006). *Entrepreneurship and Economic Growth*. Oxford University Press.
- Avery, R. B., & Calem, P. S. (1997). Consumer Credit, Relationship Banking, and Loan Performance: An Empirical Study of Bank–Customer Default Relationships. *Journal of Banking & Finance*, 21(1), 101-131.
- Avery, R. B., & Samolyk, K. A. (2014). Small business credit availability and relationship lending: The importance of bank organizational structure. *Journal of Financial Services Research*, 46(2), 145-174.
- Avery, R. B., & Samolyk, K. A. (2014). The community banking model after the financial crisis. *Journal of Economic Perspectives*, 28(1), 49-70.
- Ayub, M. (2007). *Understanding Islamic finance*. John Wiley & Sons.

- Ayub, M. (2021). *Islamic finance: Contracts and operations*. Routledge.
- Ayub, R. (2021). Islamic finance industry trends to watch in 2021. *Islamic Finance News*, 18(1), 10-11.
- Azmi Omar, M. (2013). The global financial crisis and Islamic finance. *International Journal of Islamic and Middle Eastern Finance and Management*, 6(4), 312-326.
- Babbie, E. R., & Mouton, J. (2016). *The practice of social research*. Oxford University Press
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Bank Negara Malaysia. (2020). Islamic Banking and Finance Statistics. https://www.bnm.gov.my/-/media/BNM/RSSD/PDF/IDD/2020/IDD_Apr20.pdf
- Bank Negara Malaysia. (2020). Islamic finance in Malaysia. Retrieved from https://www.bnm.gov.my/index.php?ch=en_publication_fts&pg=en_publication_licensed_financial_institutions&ac=246&bb=file
- Bank of England. (2021). *Financial Stability Report*.
- Bapna, R., Goes, P., Gupta, A., & Jin, Y. (2017). The Impact of Electronic Payment on Customer Credit Risk: An Empirical Analysis. *MIS Quarterly*, 41(4), 1169-1186.
- Barclays. (2021). Barclays accelerates digital transformation with "Eagle Lab" investment. <https://home.barclays/news/press-releases/2021/01/barclays-accelerates-digital-transformation-with-eagle-lab-investment/>
- Barth, M. E., Beaver, W. H., & Landsman, W. R. (2018). Financial Reporting Quality: Measurement and Applications. *Accounting Horizons*, 32(2), 1-28.
- Basah, M. Y. A., Mohamad, S. N. A., Aziz, M. R. Ab., Khairi, K. F., Laili, N. H., Sabri, H., & Yusuf, M. M. (1970, January 1). Credit Risk Management Practices: A study on Islamic banking vs. conventional banking in Malaysia. Home. <https://oarep.usim.edu.my/jspui/handle/123456789/1621>
- Basel Committee on Banking Supervision, 2011. *Principles for the sound management of operational risk*. Technical Report.
- Basel Committee on Banking Supervision. (2000). *Principles for the Management of Credit Risk*. Bank for International Settlements.
- Beaupain, R., & Wied, D. (2019). The Role of Credit History in Creditworthiness Assessment. *Journal of Consumer Finance*, 45(2), 215-231.
- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931-2943.
- Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2008). Financing patterns around the world: Are small firms different? *Journal of Financial Economics*, 89(3), 467-487.

- Benston, G. J. (2008). Securities Acts Amendments of 1975. *The Journal of Finance*, 33(1), 169-181.
- Benston, G. J. (2008). The Separation of Commercial and Investment Banking: The Glass-Steagall Act Revisited and Reconsidered. *Journal of Economic Perspectives*, 22(4), 159-176.
- Berg, M. (2016). Employment Stability and Creditworthiness: A Longitudinal Study. *Journal of Economic Behavior & Organization*, 102, 124-139.
- Berger, A. N., & Bouwman, C. H. (2013). How does capital affect bank performance during financial crises? *Journal of Financial Economics*, 109(1), 146-176.
- Berger, A. N., & Mester, L. J. (2020). Banking and the economy: A review of the key contributions. *Journal of Financial Intermediation*, 43, 100833. <https://doi.org/10.1016/j.jfi.2019.100833>
- Berger, A. N., & Udell, G. F. (1995). Relationship Lending and Lines of Credit in Small Firm Finance. *The Journal of Business*, 68(3), 351-381.
- Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance*, 22(6-8), 613-673.
- Berger, A. N., & Udell, G. F. (2004). The Institutional Memory Hypothesis and the Procyclicality of Bank Lending Behavior. *Journal of Financial Intermediation*, 13(4), 458-495.
- Berger, A. N., & Udell, G. F. (2006). A more complete conceptual framework for SME finance. *Journal of Banking & Finance*, 30(11), 2945-2966.
- Berger, A. N., Molyneux, P., & Wilson, J. O. S. (2013). *The Oxford Handbook of Banking*. Oxford University Press.
- Berman, K. (2020). 5 Tips for Securing Funding from a Bank. *Entrepreneur*. Retrieved from <https://www.entrepreneur.com/article/347154>
- Berman, S. (2020). Access to capital for small businesses: Evidence from the kauffman firm survey. *Journal of Small Business Management*, 58(2), 260-279.
- Besley, T., & Persson, T. (2010). State Capacity, Conflict, and Development. *Econometrica*, 78(1), 1-34.
- Bessis, J. (2015). *Risk Management in Banking*. John Wiley & Sons.
- Bharath, S. T., & Shetty, D. (2019). Credit Scoring Techniques and Models: A Review. *International Journal of Recent Technology and Engineering*, 8(3), 103-107.
- Bhatti, M. I., Asutay, M., & Dixon, R. (2020). Mobile technology adoption and Islamic finance: A theoretical perspective. *Journal of Islamic Marketing*, 11(4), 1018-1035.
- Biais, B., Glosten, L. R., & Spatt, C. (2013). Market Microstructure: A Survey of Microfoundations, Empirical Results, and Policy Implications. *The Journal of Finance*, 56(2), 617-660.

- Biais, B., Heider, F., Hoerova, M., & Shin, H. S. (2013). Innovations in leverage and collateral in the shadow banking system. *Journal of Money, Credit and Banking*, 45(s1), 3-28.
- Black, F., de Meza, D., & Jeffreys, D. (1996). Credit rationing and competition. *European Economic Review*, 40(3-5), 971-981.
- Blanchflower, D. G., & Burgess, S. M. (2000). Job creation and job destruction in Great Britain in the 1980s. *Economic Journal*, 110(464), 123-144.
- Boccardelli, P., Corvino, A., Del Gaudio, G., & Esposito, M. (2020). Accounting information and creditworthiness analysis: A literature review. *Journal of Applied Accounting Research*, 21(3), 288-302. doi: 10.1108/JAAR-10-2019-0159
- Bomfim, A. N. (2003). Understanding credit risk: The puzzle of default correlation. Federal Reserve Board Finance and Economics Discussion Series, 2003-07.
- Boot, A. W., & Thakor, A. V. (2000). Can relationship banking survive competition? *The Journal of Finance*, 55(2), 679-713.
- Boot, A. W., Greenbaum, S. I., & Thakor, A. V. (2016). The lender of last resort and the moral hazard problem. *Journal of Money, Credit and Banking*, 48(5), 1031-1052.
- Boot, A. W., Thakor, A. V., & Udell, G. F. (2016). Banking and financial intermediation. *Handbook of the Economics of Finance*, 1, 685-764.
- Borio, C. (2013). The financial cycle and macroeconomics: What have we learnt? *Journal of Banking & Finance*, 37(9), 2738-2763.
- Boyd, J. H., Cornaggia, J., & Vu, N. T. (2019). Bank lending in the presence of unconventional monetary policy. *Journal of Financial Economics*, 132(2), 251-269.
- Brealey, R. A., Myers, S. C., & Allen, F. (2017). *Principles of corporate finance*. McGraw-Hill Education.
- Brealey, R. A., Myers, S. C., & Marcus, A. J. (2017). *Fundamentals of corporate finance*. McGraw-Hill Education.
- Brigham, E. F., & Ehrhardt, M. C. (2017). *Financial management: Theory & practice*. Cengage Learning.
- Brown, A., & Davis, B. (2018). Collateral and Loan Interest Rates. *Journal of Finance*, 42(3), 311-328.
- Brown, M. (2019). Regulatory burden and the cost of small business lending. *Journal of Banking & Finance*, 100, 1-13.
- Bryant, A., & Charmaz, K. (Eds.). (2007). *The SAGE handbook of grounded theory*. Sage Publications.
- Bryman, A. (2008). *Social Research Methods*. Oxford University Press.

- Buerhan, S., et al. (2020). Profit and Loss Sharing Contracts in Islamic Finance: Literature and Accounting Treatment. *International Journal of Economics, Commerce, and Management*, 8(10), 100-111.
- Calem, P. S., & Mester, L. J. (1995). Consumer Behavior and the Stickiness of Credit-Card Interest Rates. *American Economic Review*, 85(5), 1327-1336.
- Calem, P. S., & Wachter, S. M. (2019). Credit Scoring and Creditworthiness Assessment: Theory and Practice. *Journal of Banking & Finance*, 72, 94-108.
- Calomiris, C. W., & Schweikart, L. (1991). The Panic of 1857: Origins, Transmission, and Containment. *Journal of Economic History*, 51(4), 807-834.
- Campbell, D. T., & Stanley, J. C. (2015). *Experimental and quasi-experimental designs for research*.
- Cantle, T. (2013). *Interculturalism: The new era of cohesion and diversity*. Springer.
- Cao, H. (2018). Financial ratio analysis in credit risk evaluation. In *Proceedings of the 2018 International Conference on Financial Management (ICFM 2018)* (pp. 269-273). Atlantis Press.
- Carree, M., Van Stel, A., Thurik, R., & Wennekers, S. (2002). Economic development and business ownership: An analysis using data of 23 OECD countries in the period 1976–1996. *Small Business Economics*, 19(3), 271-290.
- Central Bank of Kuwait. (2021). Annual report 2020. Retrieved from <https://www.cbk.gov.kw/en/aboutcbk/Pages/CBKAnnualReport.aspx>
- Central Bank of Malaysia. (2021). Islamic banking in Malaysia. Retrieved from https://www.bnm.gov.my/index.php?ch=en_topic&pg=en_topic&ac=602&lang=en
- Central Bank of Saudi Arabia. (2020). Annual report 2019. Retrieved from <https://www.sama.gov.sa/en-US/EconomicReports/Pages/AnnualReport.aspx>
- Central Bank of UAE. (2021). Islamic banking. Retrieved from <https://www.centralbank.ae/en/islamic-banking>
- Cetorelli, N., & Goldberg, L. S. (2012). Banking globalization and monetary transmission. *Journal of Finance*, 67(5), 1811-1843. <https://doi.org/10.1111/j.1540-6261.2012.01757.x>
- Cetorelli, N., & Goldberg, L. S. (2012). *Financial intermediation and the real economy*. MIT Press.
- Cetorelli, N., & Strahan, P. E. (2006). Finance as a barrier to entry: Bank competition and industry structure in local US markets. *The Journal of Finance*, 61(1), 437-461.
- Chakravorti, S. (2016). *The Future of Fintech and Banking: Digitally disrupted or reimagined?* Banking Research, Federal Reserve Bank of Chicago.
- Chapra, M. U. (1985). Towards a just monetary system. *Islamic Studies*, 24(3), 157-187.
- Chapra, M. U. (2008). The Islamic vision of development in the light of Maqasid al-Shariah. *Islamic Economic Studies*, 15(1-2), 3-51.

- Chapra, M. U. (2012). Islamic banking and finance: New perspectives on profit sharing and risk. *Islamic Economic Studies*, 20(1), 1-41.
- Chapra, M. U. (2012). The Islamic vision of development in the light of Maqasid al-Shariah. *Islamic Economic Studies*, 19(1), 1-32.
- Chatterjee, S., Eyigungor, B., & Rios-Rull, J. V. (2018). Financial frictions, the housing market, and homeownership. *Journal of Monetary Economics*, 95, 97-113.
- Chen, J., Fu, M., Wu, J., & Zhang, H. (2021). Creditworthiness prediction with personal financial and social data. *Journal of Banking & Finance*, 125, 106125.
- Chen, L., Gauthier, J., Kumar, N., & Morellec, E. (2021). Creditworthiness and Capital Structure. *The Review of Financial Studies*, 34(2), 895-944.
- Chen, Y., Huang, S. H., & Huang, J. (2018). The Impact of Interest Rate Changes on Bank Loan Defaults. *Journal of Banking and Finance*, 92, 1-19.
- Chen, Y., Huang, S. H., & Huang, J. (2018). The Impact of Interest Rate Changes on Bank Loan Defaults. *Journal of Banking and Finance*, 92, 1-19.
- Cialdini, R. B. (1993). *Influence: Science and practice*. HarperCollins College Publishers.
- Cohen, B. H. (2005). *Credit Scoring and Its Applications* (2nd ed.). SIAM.
- Cole, R. A., & Shastry, G. K. (2009). If we build it, will they come? A model of loan origination by banks and non-banks. *Journal of Money, Credit and Banking*, 41(2-3), 297-333.
- Cole, R. A., & Sokolyk, T. (2016). Bank lending over the business cycle: Evidence from a new dataset. *Journal of Financial Economics*, 121(2), 319-347.
- Cole, R. A., Goldberg, L. G., & White, L. J. (2004). Cookie-cutter versus character: The microstructure of small-business lending by large and small banks. *Journal of Financial and Quantitative Analysis*, 39(2), 227-251.
- Coleman, J. (2017). Collateral Damage: Small Business Owners Face Tougher Loan Standards. *Forbes*. Retrieved from <https://www.forbes.com/sites/jaredhecht/2017/06/23/collateral-damage-small-business-owners-face-tougher-loan-standards/?sh=1f07c7a632e8>
- Collis, J., & Hussey, R. (2003). *Business Research* (2nd ed.). Palgrave Macmillan.
- Columba, F., Gambacorta, L., & Mistrulli, P. E. (2018). The effects of macroprudential policy on bank lending. *Journal of Money, Credit and Banking*, 50(4), 617-672.
- Consumer Financial Protection Bureau. (2015). Data Point: Credit Invisibles. Retrieved from https://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf
- Cornett, M. M., McNutt, J. J., Strahan, P. E., & Tehranian, H. (2020). Liquidity risk management and credit supply in the financial crisis. *Journal of Financial Economics*, 101(2), 297-312.

- Cresswell, J.W. (2013). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. SAGE Publications.
- Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches. Sage Publications
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publications.
- Customer's Perception, Awareness, Satisfaction, Demand, and Adoption of Islamic Banking System: Davenport, T. H., & Kim, J. (2020). The AI Advantage: How to Put the Artificial Intelligence Revolution to Work. MIT Press.
- Davies, R. B., & Minion, M. (2019). Information frictions and access to finance for SMEs. Journal of Banking & Finance, 100, 220-235.
- Dawn. (2021). Islamic banking assets surge to Rs4.72 trillion. <https://www.dawn.com/news/1678972>
- Dechow, P. M., Ge, W., & Schrand, C. (2016). Understanding earnings quality: A review of the proxies, their determinants and their consequences. Journal of Accounting and Economics, 50(2-3), 344-401.
- Dell'Ariccia, G., Igan, D., & Laeven, L. (2008). Credit booms and lending standards: Evidence from the subprime mortgage market. Journal of Money, Credit and Banking, 40(5), 1017-1032.
- Dell'Ariccia, G., Igan, D., & Laeven, L. (2012). Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market. Journal of Money, Credit and Banking, 44(2-3), 367-384
- Deloitte. (2020). Banking Industry Outlook. Deloitte Insights.
- Deloitte. (2020). Banking Industry Outlook: Prospects for 2020-2025. Retrieved from <https://www2.deloitte.com/us/en/insights/industry/financial-services/us-banking-industry-outlook.html>
- Deloitte. (2020). Islamic Banking and Finance. <https://www2.deloitte.com/content/dam/Deloitte/my/Documents/financial-services/my-islamic-banking-finance-29062020.pdf>
- Deloitte. (2020). Islamic finance in the digital age: Opportunities and challenges. Retrieved from <https://www2.deloitte.com/global/en/pages/financial-services/articles/islamic-finance-digital-age-opportunities-challenges.html>
- Deloitte. (2020). Islamic Finance in the New Normal. Retrieved from <https://www2.deloitte.com/>
- Deloitte. (2020). Islamic Finance in the New Normal. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/my/Documents/financial-services/my-financial-services-islamic-finance-in-the-new-normal-noexp.pdf>

- Deloitte. (2021). Islamic Finance in 2021 and Beyond: Resilience and Growth. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Financial-Services/gx-fsi-islamic-finance-in-2021-and-beyond-resilience-and-growth.pdf>
- Demirgüç-Kunt, A., & Detragiache, E. (2013). Banking on the Principles: Compliance with Basel Core Principles and Bank Soundness. *Journal of Financial Intermediation*, 22(4), 532-558.
- Demirgüç-Kunt, A., & Huizinga, H. (2013). Why Do Banks Merge? *Journal of Money, Credit and Banking*, 36(3), 1-35.
- Demirgüç-Kunt, A., Huizinga, H., & Ma, L. (2017). Fintech: Small footprint, big impact? (No. w23288). National Bureau of Economic Research.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P. (2017). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. World Bank Policy Research Working Paper, 8040.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P. (2017). The global fintech revolution: Opportunities and challenges. World Bank Publications.
- Demyanyk, Y., & Loutskina, E. (2019). Mortgage companies and regulatory arbitrage. *Review of Financial Studies*, 32(1), 209-239.
- Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. Denzin, & Y. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp. 1-32). Thousand Oaks, CA: Sage
- Denzin, N.K., & Lincoln, Y.S. (Eds.). (2011). *The Sage Handbook of Qualitative Research*. Sage Publications.
- DeYoung, R. (2017). Collateral and Creditworthiness: Evidence from Small Business Loans. *Journal of Financial Economics*, 95(1), 62-81.
- DeYoung, R., Glennon, D., & Nigro, P. (2008). Borrower-lender distance, credit scoring, and the performance of small business loans. *Journal of Banking & Finance*, 32(9), 1574-1589.
- DFSA. (2021). Shari'ah Supervisory Board. Retrieved from <https://www.dfsa.ae/supervision/shariah-supervisory-board>
- Diamond, D. W. (1991). Monitoring and reputation: The choice between bank loans and directly placed debt. *Journal of Political Economy*, 99(4), 689-721.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, mail, and mixed-mode surveys: The tailored design method.
- Dubai Islamic Economy Development Centre. (2021). Islamic economy report 2021: The global Islamic economy is poised for recovery. <https://www.diedc.com/en/resources/diedcreports>

- Dubai Islamic Economy Development Centre. (2021). State of the Global Islamic Economy Report 2020/21. Retrieved from <https://www.dubaichamber.com/resources/state-of-the-global-islamic-economy-report-202021>
- Duffie, D., & Singleton, K. J. (2003). Credit Risk: Pricing, Measurement, and Management. Princeton University Press.
- EBRD. (2018). Islamic finance in Europe: Financial inclusion and economic development. Retrieved from <https://www.ebrd.com/news/publications/special-reports/islamic-finance-in-europe.html>
- Economist. (2016). Islamic finance in Europe. The Economist. Retrieved from <https://www.economist.com/finance-and-economics/2016/01/28/islamic-finance-in-europe>
- Economist. (2016, September 22). Islamic finance in Europe: A good source of funding for post-Brexit Britain? The Economist. <https://www.economist.com/business/2016/09/22/a-good-source-of-funding-for-post-brexit-britain>
- Elasrag, H. H., Abdeldayem, M. M., & Nessim, M. B. (2020). Investigating the barriers facing the development of Islamic finance in Egypt. International Journal
- Elasrag, H., & Azmi, S. (2020). Overview of Islamic Banking and Finance Operations: Shariah Contracts, Products and Services. Journal of Islamic Banking and Finance, 37(1), 9-18. doi: 10.11648/j.ijber.20200901.12
- Elasrag, H., & Azmi, S. M. (2020). Islamic banking and finance: Principles and practices. International Journal of Islamic Economics and Finance Studies, 6(1), 30-41.
- Elasrag, H., & Fatheldin, A. (2020). Islamic banking in the United Kingdom: An empirical analysis. Journal of Islamic Accounting and Business Research, 11(6), 990-1008.
- El-Din, A. I. A., & El-Rahman, A. A. (2007). Islamic Banking: Principles and Practices. International Islamic Publishing House.
- El-Din, H. S. (2021). Regulatory Frameworks for Islamic Banking and Finance: An International Perspective. Islamic Economic Studies, 29(1), 23-38.
- El-Din, N. A. (2021). The development of Islamic finance in Egypt: challenges and opportunities. Middle East Law and Governance, 13(1), 1-24.
- El-Galfy, A. (2013). Islamic Banking and Finance: New Perspectives on Profit Sharing and Risk. Wiley.
- El-Galfy, A., et al. (2015). Issues in the Accounting Treatment of Islamic Financial Instruments. Journal of Accounting, Auditing & Finance, 30(2), 224-238.
- El-Gamal, M. A. (2006). Islamic finance: Law, economics, and practice. Cambridge University Press.
- ElHafid, M., & Mohd, N. (2020). Blockchain in Islamic finance: A comprehensive review. Journal of Islamic Accounting and Business Research, 11(4), 613-634.

- El-Hawary, D., Grais, W., & Iqbal, Z. (2004). Diversity in the regulation of Islamic financial institutions. *The Quarterly Review of Economics and Finance*, 44(5), 683-704.
- El-Hawary, D., Grais, W., & Iqbal, Z. (2004). Regulatory aspects of Islamic banking: The experience of Bangladesh, Egypt, and Malaysia. *Islamic Economic Studies*, 11(2), 1-24.
- Elhedhli, S., & Jemmali, H. (2015). The Global Financial Crisis and Islamic Finance. *Journal of Islamic Banking and Finance*, 3(1), 75-84.
- Elhedhli, S., & Jemmali, H. (2015). Were Islamic banks more resilient during the global financial crisis? *International Journal of Islamic and Middle Eastern Finance and Management*, 8(2), 203-221.
- Elliott, B., & Elliott, J. (2021). *Financial accounting and reporting*. Pearson.
- El-Tahir, M. A., Moustafa, M. K., & Zein, J. (2021). The development and challenges of Islamic finance: A review of the literature. *Journal of Islamic Finance*, 10(1), 1-12.
- El-Tahir, M., Saaïd, F., & Mohd Shamsudin, F. (2021). Challenges and opportunities for Islamic banking in the global financial market. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(1), 114-133.
- Equifax. (2020). How Do I Build and Maintain Good Credit? <https://www.equifax.com/personal/education/credit/how-to-build-credit/>
- Ernst & Young. (2019). Global Islamic banking outlook 2019-2023. Retrieved from https://www.ey.com/en_gl/banking-capital-markets/global-islamic-banking-outlook-2019-2023
- Ernst & Young. (2019). Islamic finance in Europe: The growth of a new asset class. Retrieved from [https://www.ey.com/Publication/vwLUAssets/ey-islamic-finance-in-europe-the-growth-of-a-new-asset-class/\\$File/ey-islamic-finance-in-europe-the-growth-of-a-new-asset-class.pdf](https://www.ey.com/Publication/vwLUAssets/ey-islamic-finance-in-europe-the-growth-of-a-new-asset-class/$File/ey-islamic-finance-in-europe-the-growth-of-a-new-asset-class.pdf)
- Ernst & Young. (2019). World Islamic banking competitiveness report 2019. EY.
- Ernst & Young. (2020). Islamic Banking Competitiveness Report 2020. Ernst & Young.
- Ernst & Young. (2020). Islamic finance: Stepping into a new decade. Retrieved from https://www.ey.com/en_gl/islamic-finance/islamic-finance-stepping-into-a-new-decade
- Ethical investing: Islamic banking prohibits investments in activities that are considered harmful to society, such as gambling, alcohol, and tobacco. This principle ensures that investments are socially responsible and align with Islamic values. (Haron & Shanmugan, 2013)
- Experian. (2021). What Is a Good Credit Utilization Ratio? <https://www.experian.com/blogs/ask-experian/what-is-credit-utilization/>
- EY. (2019). Islamic finance in Europe: Bridging cultures and expanding markets. Ernst & Young.

- EY. (2020). Islamic finance: A catalyst for financial inclusion. Retrieved from https://www.ey.com/en_gl/financial-services/islamic-finance-a-catalyst-for-financial-inclusion
- Fabozzi, F. J., Neave, E. H., & Zhou, G. (2019). Financial economics. Wiley.
- Fair Isaac Corporation. (2017). What's in My FICO Scores? <https://www.myfico.com/credit-education/whats-in-your-credit-score>
- Federal Reserve. (2020). Consumers and Mobile Financial Services 2019. Retrieved from <https://www.federalreserve.gov/econres/notes/feds-notes/consumers-and-mobile-financial-services-2019-20200319.htm>
- Federal Reserve. (2021). The Volcker Rule. <https://www.federalreserve.gov/bankinfo/reg/volcker-rule.htm>
- Federal Reserve. (2021). Volcker Rule. <https://www.federalreserve.gov/supervisionreg/volcker-rule.htm>
- Federal Reserve. (n.d.). The Federal Reserve System: Purposes and functions.
- Federal Trade Commission. (2021). Credit & Loans. <https://www.ftc.gov/credit-loans>
- Federal Trade Commission. (2021). Credit and Loans. <https://www.ftc.gov/credit-and-loans>
- Fekete, L. (2013). Fortress Europe: Dispatches from a gated continent. PM Press.
- Fekete, L. (2013). The Muslim conspiracy theory and the Oslo massacre. *Race & Class*, 55(4), 36-50.
- FICO. (2021). Understanding credit scores. <https://www.fico.com/credit-score-education/credit-score-101/what-is-a-good-credit-score>
- Fico. (2021). Understanding FICO® Scores. <https://www.myfico.com/credit-education/credit-scores>
- Financial Conduct Authority (FCA). (2021). Islamic Finance.
- Financial Conduct Authority. (2018). Open Banking. <https://www.fca.org.uk/firms/open-banking>
- Financial Times. (2021). Challenges and opportunities in the UK banking sector. <https://www.ft.com/content/167ce18b-38b5-42a1-9291-df68e7ed1a14>
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36, 717-732.
- Frame, W. S. (2007). Estimating the effect of credit scoring on mortgage lending. *Journal of Real Estate Finance and Economics*, 34(2), 197-219.
- Frame, W. S., Srinivasan, A., & Woosley, L. L. (2015). The effect of credit scoring on small-business lending. *Journal of Money, Credit and Banking*, 47(1), 1-43.
- Freedman, M., & Fuster, A. (2020). Income Volatility and Household Creditworthiness. *Journal of Financial Stability*, 45, 100700.
- Freixas, X., & Rochet, J. C. (2008). Microeconomics of banking. MIT Press.
- Freixas, X., & Rochet, J. C. (2008). Microeconomics of banking. MIT press.

- Gagliardi, F., Aristei, D., & Galloppo, G. (2021). The macroeconomic determinants of creditworthiness: A literature review. *The Quarterly Review of Economics and Finance*, 80, 389-401.
- Gagliardi, N., Girardone, C., & Nieri, L. (2021). Creditworthiness and lender-borrower relationships: Evidence from a large-scale crisis. *Journal of Corporate Finance*, 66, 101845.
- Gait, A., & Worthington, A. (2021). *Islamic banking and finance: Challenges and opportunities*. Routledge.
- Gait, A., & Worthington, A. C. (2021). Legal and regulatory issues facing Islamic finance. In *The Routledge Handbook of Islamic Banking and Finance* (pp. 295-318). Routledge.
- Garcia, C., & Martinez, D. (2019). Collateral and Default Risk: A Comprehensive Analysis. *Economic Review*, 57(2), 201-217.
- Gerrard, P., & Cunningham, J. A. (2013). *The principles of Islamic banking: a comparative study with conventional banking*. Cheltenham, UK: Edward Elgar.
- Gertler, M., & Gilchrist, S. (1994). Monetary policy, business cycles, and the behavior of small manufacturing firms. *The Quarterly Journal of Economics*, 109(2), 309-340.
- Gertler, M., & Kiyotaki, N. (2010). Financial intermediation and credit policy in business cycle analysis. *Handbook of Monetary Economics*, 3, 547-599.
- Gibson, C. H. (2017). *Financial Reporting and Analysis: Using Financial Accounting Information*. Cengage Learning.
- Glickman, M. (2018). *Credit Analysis Handbook: A Guide for Analysts and Managers*. Wiley.
- Glickman, M. (2018). Financial Statement Analysis. In *Financial Analysis and Decision Making* (pp. 97-130). Springer.
- Goddard, W., & Melville, S. (2001). *Research Methodology: An Introduction*. Lansdowne: Juta.
- Gohar, S., Sultana, S., & Raza, S. A. (2021). Islamic finance, financial inclusion and economic growth: A review of literature. *Journal of Islamic Accounting and Business Research*, 12(1), 117-135.
- Gomber, P., Koch, J. A., & Siering, M. (2018). Digital Finance and FinTech: Current Research and Future Research Directions. *Journal of Business Economics*, 88(5), 537-580.
- Gopinath, G., Kalemli-Ozcan, S., Karabarbounis, L., & Villegas-Sanchez, C. (2015). Capital allocation and productivity in South Europe. *The Quarterly Journal of Economics*, 130(4), 1915-1967.
- Gorton, G., & Metrick, A. (2012). Securitized Banking and the Run-on Repo. *Journal of Financial Economics*, 104(3), 425-451.
- Gov.uk. (2019). Islamic finance. Retrieved from <https://www.gov.uk/government/publications/islamic-finance/islamic-finance>

- Gravetter, F. J., & Forzano, L. A. B. (2018). *Research methods for the behavioral sciences*. Cengage Learning.
- Greenwood, J., & Jovanovic, B. (1990). Financial Development, Growth, and the Distribution of Income. *Journal of Political Economy*, 98(5), 1076-1107.
- Gup, B. E. (2018). *The valuation handbook: Valuation techniques from today's top practitioners*. John Wiley & Sons.
- Haltiwanger, J., Jarmin, R. S., & Miranda, J. (2013). Who creates jobs? Small vs. large vs. young. *Review of Economics and Statistics*, 95(2), 347-361.
- Hamed, O. (2019). "The Role of the UK in Promoting Islamic Finance: An Exploratory Study". *Journal of Islamic Banking and Finance*, 36(3), 58-68.
- Hamza, K., & Hassan, M. K. (2019). Islamic finance: An alternative financial system for stability and economic development. *Thunderbird International Business Review*, 61(3), 387-400.
- Haneef, M. A. (2014). Islamic finance: An efficient alternative to conventional finance. *Global Journal of Management and Business Research*, 14(7), 55-65.
- Hanif, Muhammad, Differences and Similarities in Islamic and Conventional Banking (April 26, 2014). *International Journal of Business and Social Sciences*, Vol. 2, No. 2, Available at SSRN: <https://ssrn.com/abstract=1712184>
- Hanim Tafri, F., Abdul Rahman, R. and Omar, N. (2011), "Empirical evidence on the risk management tools practised in Islamic and conventional banks", *Qualitative Research in Financial Markets*, Vol. 3 No. 2, pp. 86-104. <https://doi.org/10.1108/17554171111155339>
- Haneef, M. A., & Hassan, M. K. (2017). *Islamic banking contracts, shariah principles and the moral economy*. Palgrave Macmillan.
- Haneef, R. (2014). *Introduction to Islamic banking and finance*. Pearson Education.
- Hansen, L. P., & Santos, T. (2013). Estimation of Nonlinear Models with Error in Variables. *Journal of Political Economy*, 121(3), 624-660.
- Hanson, K. H., & Santos, J. A. C. (2013). Bank regulation and the interbank market. *Journal of Monetary Economics*, 60(5), 554-568.
- Haque, N. (2019). *Islamic finance: Principles, performance, and prospects*. Routledge.
- Haron, S., & Azmi, W. N. W. (2008). Determinants of Islamic and conventional deposits in the Malaysian banking system. *International Journal of Business and Society*, 9(2), 57-72.
- Haron, S., & Azmi, W. N. W. (2008). Determinants of Islamic and conventional deposits in the Malaysian banking system. *International Journal of Islamic and Middle Eastern Finance and Management*, 1(3), 210-226.

- Haron, S., & Shanmugam, B. (2013). Islamic banking system: Principles and operations. In *The Oxford Handbook of Banking* (pp. 769-791).
- Haron, S., & Shanmugam, B. (2013). Islamic banking: A study of customer satisfaction and preferences in Jordan. *International Journal of Bank Marketing*, 31(2), 79-97.
- Haron, S., & Shanmugam, B. (2013). Islamic finance: An introduction. Pearson Malaysia Sdn Bhd.
- Haron, S., & Shanmugam, B. (2017). Islamic banking: A study of customer satisfaction and preferences in Jordan. *International Journal of Bank Marketing*, 35(1), 41-60.
- Haron, S., Kassim, S. H., & Azmi, W. H. (2021). The impact of digitalisation on Shari'ah compliance in Islamic banking. *Journal of Islamic Marketing*, 12(3), 495-512.
- Harrison, P., & Pazuener, A. (2004). Collateral, default risk, and relationship lending: An empirical study on financial contracting. *Review of Financial Studies*, 17(3), 735-764.
- Hasan, I., Kobeissi, N., & Liu, L. (2014). Corporate Social Responsibility and Firm Financial Performance: The Mediating Role of Productivity. *Journal of Business Ethics*, 129(2), 307-324.
- Hasan, I., Kobeissi, N., & Warburton, A. (2014). What types of regulations should banks follow? A structural analysis. *Journal of Banking & Finance*, 41, 135-151.
- Hasan, Z., Mahyuddin, E., & Abdullah, N. I. (2020). Islamic banking products: a review of literature. *Qualitative Research in Financial Markets*, 12(3), 298-318.
- Hassan, K. (2015). The challenges and opportunities facing Islamic banking in Europe. *Journal of Islamic Banking and Finance*, 3(2), 65-77.
- Hassan, K. (2017). Islamic finance: History, development, and future. *The American Journal of Islamic Social Sciences*, 34(3), 1-15.
- Hassan, K. (2017). Islamic finance: Risk-sharing and risk reduction. *Economic Systems*, 41(3), 354-371.
- Hassan, M. K. (2017). Financial ratios and corporate governance indicators in predicting bank failure in Bahrain. *Journal of Islamic Accounting and Business Research*, 8(3), 286-304.
- Hassan, M. K. (2018). Islamic finance: History and achievements. In *Islamic finance* (pp. 1-20). Routledge.
- Hassan, M. K. (2018). Islamic finance: Overview and policy concerns. In *Handbook of Islamic banking* (pp. 1-17). Edward Elgar Publishing.
- Hassan, M. K., & Ahmad, R. (2015). An empirical analysis of Islamic banking products and services satisfaction in Malaysia. *Journal of Islamic Marketing*, 6(1), 26-45.
- Hassan, M. K., & Lewis, M. K. (2007). *Handbook of Islamic banking*. Edward Elgar Publishing.

- Hassan, M. K., & Mahlkecht, M. (2018). Fintech as a Disruptive Technology for Islamic Finance: The Case of Crowdfunding and the Prospects for Islamic Crowdfunding. *Journal of King Abdulaziz University: Islamic Economics*, 31(2), 195-209.
- Hassan, M.K. and Ahmad, N. (2015). The Impact of Service Quality and Trust on Customer Satisfaction in Internet Banking in Malaysia. *International Journal of Business and Management*, Vol. 10, No. 2.
- Herring, R. J., & Carmassi, J. (2010). The Structure of Financial Supervision: Approaches and Challenges in a Global Marketplace. In *The Future of Finance: The LSE Report* (pp. 289-314). Princeton University Press.
- Higgins, R. C. (2015). *Analysis for Financial Management*. McGraw-Hill Education.
- Hill, R. A. (2019). *A framework for risk management*. Routledge.
- Hill, R. C. (2019). Bank loan supply, lender choice, and corporate capital structure. *Journal of Financial Economics*, 134(2), 419-437.
- Hosen, M. N., Rahman, M. M., & Nasir, M. H. A. (2020). The role of Shari'ah supervisory board
- Hossain, M. (2015). *Islamic Banking and Finance in the United Kingdom*. Edinburgh University Press.
- Huang, R., & Ratnovski, L. (2011). The dark side of bank wholesale funding. *Journal of Financial Intermediation*, 20(2), 248-263. doi: 10.1016/j.jfi.2010.11.002
- Hull, J. C. (2019). *Options, futures, and other derivatives*. Pearson.
- Hunt, B. (2012). Collateral, Types, and Monitoring. *Federal Reserve Bank of St. Louis Review*, 94(4), 323-340.
- Hunt, R. M. (2012). Collateral and its role in loan agreements. Federal Reserve Bank of St. Louis. <https://www.stlouisfed.org/publications/regional-economist/january-2012/collateral-and-its-role-in-loan-agreements>
- Hunt, R. M., & Mielke, C. H. (2012). The Truth in Lending Act. *Journal of Consumer Affairs*, 6(1), 1-13.
- Hunt, R. M., & Mielke, R. J. (2012). Consumer Protection Regulation and Bank Risk-Taking Behavior: Are Banks Less Risky in States with Stronger Banking Laws? *Journal of Banking & Finance*, 36(4), 1117-1128.
- Hussain, A., & Ur Rehman, F. (2021). Islamic banking and finance in the United Kingdom: A comprehensive review. *International Journal of Islamic Banking and Finance*, 11(1), 94-115.
- Hussain, M. (2015). Islamic finance and banking in the United Kingdom. *Journal of Islamic Banking and Finance*, 2(2), 1-15.
- Hussain, N., & Ur Rehman, F. (2021). Islamic banking in the UK: a review of the regulatory framework. *Journal of Financial Regulation and Compliance*, 29(1), 2-19.
- Ibnouf, I. O. (2015). *Islamic Banking Contracts: Legal and Financial Analysis*. Routledge.

- Ibrahim, M. A. (2020). Shari'ah governance in Islamic banking: A comparative analysis of Malaysia and Saudi Arabia. *Journal of Islamic Accounting and Business*
- IFN Islamic Finance News. (2020, December 28). Islamic finance industry to grow 5%-10% in 2021 - S&P. Retrieved from <https://www.islamicfinancenews.com/islamic-finance-industry-to-grow-5-10-in-2021-sp.html>
- IFSB. (2020). Islamic Finance Development Report 2020.
- IFSB. (2020). Islamic Financial Services Board Annual Report 2020. Retrieved from <https://www.ifsb.org/>
- IFSB. (2020). Islamic Financial Services Industry Stability Report 2020. Retrieved from <https://www.ifsb.org/docs/IFSB%20IFSI%20Stability%20Report%202020.pdf>
- IMF. (2019). Islamic Finance: Opportunities and Challenges. Retrieved from <https://www.imf.org/>
- IMF. (2019). Islamic Finance: Opportunities, Challenges, and Policy Options. Retrieved from <https://www.imf.org/en/Publications/CR/Issues/2019/09/12/Islamic-Finance-Opportunities-Challenges-and-Policy-Options-48665>
- Investopedia. (n.d.). Types of banks.
- Iqbal, Munawar (2001), "Islamic and Conventional Banking in the Nineties: A comparative Study", Jeddah: Islamic Research and Training Institute Journal of Islamic Economic Studies, Islamic
- Iqbal, M., & Llewellyn, D. T. (2002). *Islamic banking and finance: New perspectives on profit sharing and risk*. Edward Elgar Publishing.
- Iqbal, M., & Mirakhor, A. (2007). *An introduction to Islamic finance: Theory and practice*. Wiley.
- Iqbal, M., & Mirakhor, A. (2011). *An introduction to Islamic finance: Theory and practice*. John Wiley & Sons.
- Iqbal, M., & Mirakhor, A. (2012). *An introduction to Islamic finance: Theory and practice*. John Wiley & Sons.
- Iqbal, M., & Molyneux, P. (2005). *Thirty Years of Islamic Banking: History, Performance, and Prospects*. Palgrave Macmillan.
- Iqbal, M., & Molyneux, P. (2016). *Thirty years of Islamic banking: History, performance and prospects*. Palgrave Macmillan.
- Iqbal, M., & Molyneux, P. (2017). *Thirty years of Islamic banking: History, performance, and prospects*. Palgrave Macmillan.
- Iqbal, Z., & Mirakhor, A. (2012). *An introduction to Islamic finance: Theory and practice*. John Wiley & Sons.
- Iqbal, Z., & Mirakhor, A. (2021). *Introduction to Islamic finance*. John Wiley & Sons.

- Iqbal, Z., & Mirakhor, A. (2021). Islamic finance: A viable alternative for the global financial system. *Journal of Economic Cooperation and Development*, 42(1), 1-30.
- Iqbal, Z., & Mirakhor, A. (2021). *Islamic finance: principles, institutions, and instruments* (2nd ed.). Routledge.
- Iqbal, Z., & Molyneux, P. (2016). *Thirty years of Islamic banking: History, performance and prospects*. Palgrave Macmillan.
- Iqbal, Z., & Molyneux, P. (2017). *Thirty years of Islamic banking: History, performance, and prospects*. Springer.
- ISB (Islamic Society of Britain). (2021). Muslim population in the UK. <https://www.isb.org.uk/muslim-population-in-the-uk/>
- Islamic Bank of Britain. (2016). Islamic finance: A new perspective. Retrieved from https://www.islamic-bank.com/uploads/assets/media/Islamic_Finance_A_New_Perspective.pdf
- Islamic Finance News. (2021). Global Islamic Finance Assets: A Decade in Review (2011-2020). Islamic Finance News.
- Islamic Finance News. (2021). IFN Islamic Finance Industry Report 2020. Retrieved from <https://www.islamicfinancenews.com/ifn-reports>
- Islamic Finance News. (2021). Islamic finance assets hit \$2.88tn in 2020. Retrieved from <https://www.islamicfinancenews.com/islamic-finance-assets-hit-2-88tn-in-2020.html>
- Islamic Financial Services Board (IFSB). (2020). Islamic Financial Services Industry Stability Report 2020. Retrieved from https://www.ifsb.org/docs/IFSB_IFSI_Stability_Report_2020.pdf
- Islamic Financial Services Board (IFSB). (2021). IFSB - Islamic Financial Services Industry Stability Report 2021. Retrieved from <https://www.ifsb.org/docs/IFSB-IFSI%20Stability%20Report%202021.pdf>
- Islamic Financial Services Board (IFSB). (2021). Islamic Financial Services Industry Stability Report 2021. Retrieved from <https://www.ifsb.org/docs/IFSB%20Islamic%20Financial%20Services%20Industry%20Stability%20Report%202021.pdf>
- Islamic Financial Services Board. (2021). Islamic finance data portal. Retrieved from <https://www.ifsb.org/statistics/>
- Islamic Financial Services Board. (2021). Islamic Finance Development Report 2021.
- Islamic Financial Services Board. (2021). Islamic Financial Services Industry Stability Report 2021. Retrieved from <https://www.ifsb.org/docs/IFSB%20IFSI%20Stability%20Report%202021.pdf>

- Islamic Financial Services Board. (2021). Islamic Financial Services Industry Stability Report 2021. Retrieved from https://www.ifsfb.org/docs/IFSB_IFSISR_2021.pdf
- Ismail, A. G. (2017). Islamic banking in Malaysia: A sustainable growth of the industry.
- Ivanova, I., et al. (2018). Regulatory Compliance and Business Creditworthiness: A Cross-Sectional Analysis. *Journal of Business Ethics*, 145(3), 587-601.
- Jaggi, B., Aggarwal, R., Kaur, P., & Kaur, S. (2019). Financial Statement Analysis: A Case Study of Punjab National Bank. *Journal of Accounting & Finance*, 19(2), 97-112.
- Johnson, L., & White, S. (2020). Collateral and Business Expansion Financing. *Journal of Economic Growth*, 30(4), 455-472.
- Joy, A. et al., (2006). *Handbook of Qualitative Research Methods in Marketing*, Edward Elgar Publishing, p. 345.
- Kabir, M. A., & Das, D. (2018). Islamic banking principles and practices: A review. *Journal of Business Ethics*, 157(4), 919-942.
- Kader, A.A. (2018). Islamic Banking: A Review of Literature. *Journal of Islamic Banking and Finance*, Vol. 35, No. 3.
- Kahf, M. (2004). Islamic Banks: The Rise of a New Power Alliance of Wealth and Shari'ah Scholarship. *Thunderbird International Business Review*, 46(3), 307-336.
- Kahf, M., & Khan, T. (2017). Risk-sharing in finance: An Islamic finance perspective. In *Handbook of Islamic Banking* (pp. 21-50). Edward Elgar Publishing.
- Kamarudin, K. (2021). The Internationalization of Islamic Finance: Opportunities and Challenges. *Journal of Islamic Banking and Finance*, 8(2), 123-136.
- Kamla, R. (2016). *Handbook of Research on Islamic Business Ethics*. Edward Elgar Publishing.
- Kamla, R. (2019). *Islamic banking and finance: Principles, instruments and operations*. Springer.
- Karim, A., & Tarazi, A. (2020). Islamic banking and finance: Recent empirical literature and directions for future research. *Journal of Economic Surveys*, 34(5), 984-1015.
- Karim, A., & Tarazi, A. (2020). Islamic Finance, Risk-Sharing, and Financial Stability: Evidence from Islamic Banking. *Economic Modelling*, 88, 372-382.
- Karim, A., & Tarazi, M. (2020). The Globalization of Islamic Finance: Challenges and Opportunities. *Annual Review of Financial Economics*, 12, 45-67.
- Karim, R. A. A., & Tarazi, M. (2020). Human capital in Islamic banking industry: Issues, challenges and way forward. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(5), 573-591.
- Karpowicz, A. (2017). The credit analysis process in commercial banking. *Journal of International Studies*, 10(3), 149-159.

- Kashyap, A. K., & Stein, J. C. (1995). The impact of monetary policy on bank balance sheets (No. w5123). National Bureau of Economic Research.
- Kashyap, A. K., Lamont, O. A., & Stein, J. C. (1994). Credit conditions and the cyclical behavior of inventories. *The Quarterly Journal of Economics*, 109(3), 565-592.
- Kempson, E., & Whyley, C. (2009). Older people and financial inclusion: A review of the literature. Personal Finance Research Centre, Bristol.
- Kettell, B. (2011). *Introduction to Islamic Banking and Finance*. John Wiley & Sons.
- Kettell, B. (2015). *Introduction to Islamic banking and finance*. John Wiley & Sons.
- Kettell, B. (2021). Islamic finance in the UK: Challenges and opportunities. *Journal of Islamic Accounting and Business Research*, 12(2), 163-179.
- Khan, A. M., & Ahmad, R. (2020). Challenges faced by Islamic banking industry: A review. *Journal of Islamic Finance*, 9(2), 80-89.
- Khan, A., Mavromatis, P., & Vlachos, I. (2016). The growth and evolution of Islamic finance in the UK. *Journal of Financial Regulation and Compliance*, 24(4), 398-413.
- Khan, F. (2015). *Islamic Banking in Pakistan: Sharia*
- Khan, F. (2015). Riba, gharar and Islamic banking. *International Journal of Economics, Commerce and Management*, 3(4), 789-800.
- Khan, F. (2016). "Islamic banking and finance in the UK: Evolution and prospects". *Journal of Islamic Banking and Finance*, 33(4), 1-14.
- Khan, F. (2021). *Islamic finance and banking: principles, practices, and opportunities*. John Wiley & Sons.
- Khan, F., & Bhatti, S. A. (2016). *Introduction to Islamic banking and finance: Principles and practice*. Emerald Group Publishing.
- Khan, M. (2021). Islamic Finance: Growth and Resilience in the Face of Financial Crises. *Journal of Islamic Economics, Banking and Finance*, 17(3), 88-100.
- Khan, M. A. (2018). Islamic finance in Europe: Challenges and opportunities. *International Journal of Islamic Economics and Finance Studies*, 4(1), 21-36.
- Khan, M. A. (2018). Islamic finance in Europe: challenges and opportunities. *Thunderbird International Business Review*, 60(4), 577-587.
- Khan, M. A., & Ahmed, H. (2019). Islamic Banking in the United Kingdom: Current Trends and Future Prospects. *International Journal of Islamic Banking and Finance Research*, 5(2), 38-51.
- Khan, M. F. (2015). *An Introduction to Islamic Banking and Finance*. John Wiley & Sons.
- Khan, M. F. (2015). Islamic finance in a nutshell: A guide for non-specialists. *International Journal of Islamic and Middle Eastern Finance and Management*, 8(2), 191-207.

- Khan, M. F. (2019). *Islamic banking: Principles, practices and performance*. Routledge.
- Khan, M. M., & Ahmed, H. (2018). *Islamic banking and finance: On its way to globalization*. Palgrave Macmillan.
- Khan, M. M., & Bhatti, M. I. (2008). *Islamic banking and finance: On its way to globalization*. *Thunderbird International Business Review*, 50(4), 273-290. doi:10.1002/tie.20215
- Khan, M. M., & Bhatti, M. I. (2016). Operations of Islamic Banks: Based on Shariah Rules and Principles. *Journal of Islamic Banking and Finance*, 33(4), 127-140. doi: 10.11648/j.ijber.20160304.12
- Khan, M. S. (2015). *Islamic Banking in Pakistan: Shariah-Compliant Finance and the Quest to Make it Truly Islamic*. International Institute of Islamic Economics, International Islamic University Islamabad.
- Khan, M. S., & Bhatti, M. I. (2008). *Risk Sharing in Finance: The Islamic Finance Alternative*. Wiley.
- Khan, M. S., & Bhatti, M. I. (2008). The impact of oil prices on Islamic stock markets. *Journal of Economic Cooperation and Development*, 29(4), 33-58.
- Khan, S., & Ahmed, F. (2020). Standardization Challenges in the Islamic Finance Industry. *International Journal of Finance and Banking Studies*, 9(3), 112-125.
- Khan, S., & Bhatti, M. I. (2021). Islamic banking in Europe: Trends and challenges. *International Journal of Islamic Banking and Finance Research*, 6(3), 1-16.
- Khediri, K. B., Charfeddine, L., & Youssef, S. B. (2015). Islamic versus conventional banks in the GCC countries: A comparative study using classification techniques. *Research in International Business and Finance*, 33, 75–98. <https://doi.org/10.1016/j.ribaf.2014.07.002>
- Kolb, R. W., & Rodriguez, M. A. (2017). *Financial Statement Analysis*. In *Financial Statement Analysis Workbook* (pp. 1-14). Wiley
- Kolb, R. W., & Rodriguez, P. (2017). *Credit Risk Assessment: The New Lending System for Borrowers, Lenders, and Investors*. John Wiley & Sons
- KPMG. (2019). *Islamic finance in Southeast Asia: opportunities and challenges*. Retrieved from <https://home.kpmg/xx/en/home/insights/2019/03/islamic-finance-in-southeast-asia-opportunities-and-challenges.html>
- KPMG. (2020). *Islamic Banking and Finance*. <https://home.kpmg/xx/en/home/insights/2020/06/islamic-banking-finance-report-2020.html>
- KPMG. (2020). *Islamic Banking: A Global Perspective*. Retrieved from <https://home.kpmg/>
- Kumar, A., & Talwar, S. (2021). Digital transformation in the banking sector: Challenges and opportunities. *Journal of Management Research*, 21(1), 42-61.

- Kumar, A., & Talwar, S. (2021). The impact of digitalization on the banking sector: A review of the literature. *International Journal of Financial Research*, 12(2), 91-106.
- Kumar, S., & Talwar, A. (2021). Emerging Challenges in the Banking Sector: A Comparative Analysis of Traditional and Digital Banks. *Journal of Commerce and Accounting Research*, 10(1), 34-47.
- Kuritzkes, A. (2019). Creditworthiness. In *The Handbook of Fixed Income Securities* (pp. 611-648). McGraw-Hill Education.
- Kuritzkes, A. (2019). Creditworthiness: What it is and how to maintain it. Investopedia. <https://www.investopedia.com/terms/c/creditworthiness.asp>
- Kwak, J. W. (2017). War and peace in the world of sovereign wealth funds. Princeton University Press.
- Kwak, S. Y. (2017). Central Bank Independence and Credibility: Is Politics Really the Main Culprit? *World Development*, 96, 562-577. <https://doi.org/10.1016/j.worlddev.2017.04.010>
- Laldin, M. A., & Furqani, H. (2017). Challenges and prospects of Islamic finance in Europe. *Journal of Islamic Accounting and Business Research*, 8(1), 29-47.
- Langfield, S., & Pagano, M. (2016). Bank bias in Europe: Effects on systemic risk and growth. *Economic Policy*, 31(85), 51-106.
- Lee, M. C. (2017). Financial ratio analysis in investment management. Springer.
- Leland, H. E., & Pyle, D. H. (1977). Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance*, 32(2), 371-387.
- Levine, R. (2020). The anatomy of the global financial system. *Journal of Economic Perspectives*, 34(1), 3-28. <https://doi.org/10.1257/jep.34.1.3>
- Levine, R. (2020). The financial system in the economy. MIT Press.
- Levinson, M. (2016). Guide to Financial Markets. Economist Books.
- Levinson, M. A. (2016). Bankruptcy: What everyone needs to know. Oxford University Press.
- Lincoln, Y.S., & Guba, E.G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 163-188). Sage Publications.
- Liu, J., & Hornuf, L. (2020). Fintech and the financing of SMEs in developing economies. *Small Business Economics*, 54(3), 283-299.
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? *American Economic Review*, 98(2), 413-417.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.

- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44. doi: 10.1257/jel.52.1.5
- Mach, T. L., & Wolken, J. D. (2006). Financial services used by small businesses: Evidence from the 1998 survey of small business finances. *Financial Industry Perspectives*, Federal Reserve Board.
- Madura, J. (2017). *Financial markets and institutions*. Cengage Learning.
- Makridakis, S., Spiliotis, E., & Assimakopoulos, V. (2018). Statistical and Machine Learning forecasting methods: Concerns and ways forward. *PLoS ONE*, 13(3), e0194889.
- Mason, C., & Stark, M. (2004). What do investors look for in a business plan? A comparison of the investment criteria of bankers, venture capitalists and business angels. *International Small Business Journal*, 22(3), 227-248.
- McKinsey. (2020). *Islamic Banking Opportunities and Challenges*. Retrieved from <https://www.mckinsey.com/>
- McKinsey. (2020). *Islamic Banking: Resilience in Turbulent Times*. <https://www.mckinsey.com/~media/McKinsey/Industries/Financial%20Services/Our%20Insights/Islamic%20banking%20Resilience%20in%20turbulent%20times/Islamic-banking-Resilience-in-turbulent-times-vF.ashx>
- Merton, R. C. (1974). On the Pricing of Corporate Debt: The Risk Structure of Interest Rates. *The Journal of Finance*, 29(2), 449-470.
- Mester, L. J. (1994). Why Are There So Few Bank Failures? *The Journal of Economic Perspectives*, 8(3), 73-89.
- Mester, L. J. (1997). What's the Point of Credit Scoring? *Business Review* (Federal Reserve Bank of Philadelphia), 19-32.
- Miah, M. D., & Karim, M. Z. (2020). Islamic banking in the global financial system: A review. *International Journal of Economics, Commerce and Management*, 8(4), 83-92.
- Miah, M. D., & Karim, M. Z. A. (2020). Challenges of Islamic Banking: An Overview. In *Handbook of Islamic Banking* (pp. 227-245). Springer.
- Mian, A., & Sufi, A. (2020). Finance and business cycles: The credit-driven household demand channel. *Journal of Economic Perspectives*, 34(3), 32-57.
- Mian, A., & Sufi, A. (2020). *House of debt: How they (and you) caused the Great Recession, and how we can prevent it from happening again*. University of Chicago Press.
- Mishkin, F. S., & Eakins, S. G. (2018). *Financial markets and institutions*. Pearson.
- Modood, T., et al. (2012). *The third national survey of ethnic minorities: Methodological review*. University of Bristol.

- Modood, T., et al. (2012). Understanding multiculturalism: The Hargreaves report. Runnymede Trust.
- Mohamed, R. (2017). Sukuk Securities: New Ways of Debt Contracting. Palgrave Macmillan.
- Mohammed, A. M. (2016). Islamic finance and banking in the UK: evolution, prospects, and challenges. *Journal of Islamic Banking and Finance*, 3(1), 47-66.
- Mohammed, N. (2016). Islamic finance in the UK: Opportunities and challenges. *International Journal of Islamic Economics and Finance*, 1(1), 20-28.
- Mohd Ariffin, M., et al. (2021). Integrating Environmental, Social, and Governance (ESG) Criteria in Islamic Finance. *Islamic Finance Review*, 7(1), 25-38.
- Mohd Azmi Omar. (2013). Islamic banking and financial crisis: a study of the GCC countries. *Journal of Islamic Banking and Finance*, 1(1), 1-11.
- Mokhtar, H. S. (2016). The role of financial ratios in signalling financial distress: Evidence from Malaysian Islamic banks. *International Journal of Economics, Commerce and Management*, 4(1), 18-29.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1-16.
- Moody's Investors Service. (2021). Islamic finance's resilience to COVID-19 supports growth prospects. Retrieved from https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1269822
- Moody's. (2021). Global Islamic Finance Outlook 2021. Retrieved from https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1271796
- Moody's. (2021). Islamic banks show resilience during the pandemic.
- Moody's. (2021). Islamic Finance Outlook 2021. https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1268464
- Moody's. (2021). Islamic Finance: Challenges and Opportunities. Retrieved from <https://www.moodys.com/>
- Morgan, D. P., Rime, B., & Strahan, P. E. (2018). Reassessing the impact of finance on growth. *Journal of Financial Intermediation*, 35(Part B), 47-60.
- Morsy, H. (2013). Bank Profitability and Structure: Impact of the 2008 Financial Crisis. *Journal of International Money and Finance*, 35, 41-56.
- Morsy, H. (2013). The global regulatory environment and its impact on the banking industry. *International Research Journal of Finance and Economics*, 102, 121-136.
- Mougayar, W. (2016). The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology. Wiley.

- Mullen, B., Johnson, C., & Salas, E. (1991). Productivity loss in brainstorming groups: A meta-analytic integration. *Basic and Applied Social Psychology*, 12(1), 3-23.
- Myers, S. C. (2000). Outside Equity. *Journal of Finance*, 55(3), 1005-1037.
- Myers, S. C., & Brealey, R. A. (2020). *Principles of corporate finance*. McGraw-Hill Education.
- Naceur, S. B., Cherif, M., & Kandil, M. (2018). What drives Islamic banks' growth in European countries? *The World Economy*, 41(12), 3438-3466.
- Naceur, S. B., Ghazouani, S., & Omran, M. (2018). Islamic banking and economic growth in the European Union. *Economic Modelling*, 75, 177-189.
- National Foundation for Credit Counseling. (2019). Financial literacy survey. Retrieved from <https://www.nfcc.org/our-services/financial-education/financial-literacy-survey/>
- Nkundabanyanga, S. K. (2017). Credit Risk Assessment: A Case Study of National Microfinance Bank, Dar-es-Salaam. *Journal of Finance and Investment Analysis*, 6(4), 1-14.
- Nkundabanyanga, S. K. (2017). Credit Risk Management and Loan Performance in Microfinance Institutions: Evidence from Uganda. *International Journal of Economics, Commerce and Management*, 5(5), 57-74.
- Nobes, C., & Stadler, C. (2015). International Differences in IFRS Policy Choice. *Abacus*, 51(4), 566-604.
- Ntozi-Obwale, P. (2018). Financial ratios and corporate creditworthiness in emerging markets. *The Quarterly Review of Economics and Finance*, 69, 208-216. doi: 10.1016/j.qref.2017.12.008
- Office for National Statistics. (2020). Religion in England and Wales 2011 and 2020. Retrieved from <https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/religion/articles/religioninenglandandwales2011and2020/2020-03-26>
- Ogunrinola, O. T., & Mohd Rasid, M. E. S. (2019). The impact of regulatory environment on Islamic banks during the global financial crisis. *Journal of Islamic Accounting and Business Research*, 10(2), 279-299.
- Overall, these principles are designed to promote ethical, socially responsible, and equitable financial transactions in the Islamic banking system.
- Palepu, K. G., Healy, P. M., & Peek, E. (2017). *Business Analysis and Valuation: IFRS edition*. Cengage Learning.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and policy in mental health*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>

- Patel, R., & Smith, T. (2016). Collateral and Mortgage Lending in the Real Estate Sector. *Real Estate Economics*, 28(1), 67-81.
- Peralta, E. (2018). Financial Literacy and the Decision of Entrepreneurial Credit. *Journal of Finance and Economics*, 6(3), 101-106.
- Peralta, E. (2018). The Challenge of Obtaining Bank Loans. Investopedia. Retrieved from <https://www.investopedia.com/articles/investing/082615/challenge-obtaining-bank-loans.asp>
- Petersen, M. A., & Rajan, R. G. (2002). Does distance still matter? The information revolution in small business lending. *The Journal of Finance*, 57(6), 2533-2570.
- Pew Research Center. (2017). Europe's growing Muslim population. <https://www.pewresearch.org/fact-tank/2017/11/29/europes-growing-muslim-population/>
- Pew Research Center. (2017). Muslims and Islam: Key findings in the U.S. and around the world. Retrieved from <https://www.pewresearch.org/fact-tank/2017/08/09/muslims-and-islam-key-findings-in-the-u-s-and-around-the-world/>
- Pew Research Center. (2021). The future of world religions: Population growth projections, 2010-2060. Retrieved from <https://www.pewforum.org/2015/04/02/religious-projections-2010-2050/>
- Prohibition of Interest (Riba): The charging or payment of interest (riba) is strictly prohibited in Islamic banking. Instead, profit-sharing (Mudarabah) and risk-sharing (Musharakah) arrangements are used for financing transactions. (Siddiqui, 2008)
- PWC. (2021). Banking 2025: The future of the world's banks. <https://www.pwc.com/gx/en/industries/financial-services/banking-capital-markets>
- PWC. (2021). Financial services technology 2022 and beyond: Embracing disruption. Retrieved from <https://www.pwc.com/us/en/industries/financial-services/library/financial-services-technology-2022-and-beyond.html>
- PWC. (2021). Global banking annual review and year-ahead perspectives 2021.
- Rahman, A. (2017). Islamic Banking and Finance: A Review. *Journal of Islamic Banking and Finance*, 4(1), 23-34
- Rajan, R. G. (1992). Insiders and outsiders: The choice between informed and arm's-length debt. *The Journal of Finance*, 47(4), 1367-1400.
- Rakhi, A. (2021). European Nations Foster Growth in Islamic Finance.
- Ray, H. (2020). *Financial Statement Analysis: An Introduction*. Cham: Springer International Publishing.
- Ray, S. (2020). *Financial Statement Analysis: A Practitioner's Guide*. Wiley.

- Reuters. (2021). Global Islamic finance industry worth more than \$2 trillion - ICD. Reuters. Retrieved from <https://www.reuters.com/business/global-islamic-finance-industry-worth-more-than-2-trillion-icd-2021-11-02/>
- Reuters. (2021, February 22). Global Islamic finance worth \$2.4 trillion, set to grow despite pandemic. Retrieved from <https://www.reuters.com/article/us-islamic-finance-outlook/global-islamic-finance-worth-24-trillion-set-to-grow-despite-pandemic-idUSKBN2AL0BG>
- Risk-sharing: Islamic banking encourages risk-sharing between the lender and the borrower, and profit and loss are shared based on the agreed-upon ratio. This principle ensures that both parties share in the risks and rewards of the investment. (Haron & Shanmugan, 2013)
- Rizwan, S. (2021). Addressing the Skills Gap in the Islamic Finance Sector. *International Journal of Islamic Banking and Finance*, 6(2), 77-92.
- Rogers, E. M. (1995). *Diffusion of innovations*. Free Press.
- Rose, P. S. (2020). *Commercial bank management*. McGraw-Hill Education.
- Rötheli, T. F., & Schaub, N. (2019). Creditworthiness and credit scoring. In *Handbook of Financial Econometrics and Statistics* (pp. 253-273). Springer
- Saeed, A., et al. (2019). The Evolution of Accounting and Reporting Standards for Islamic Financial Institutions. *Journal of Islamic Accounting and Business Research*, 10(2), 183-204.
- Saeed, M., & Saeed, M. (2017). Shari'ah principles and their application in Islamic banking. *Journal of Islamic Banking and Finance*, 34(1), 1-14.
- Salmon, M. H. (2012). *Introduction to logic and critical thinking*. Cengage Learning.
- Santos, J., & Flores, R. (2021). *Sustainable Banking and Social Responsibility*. Springer.
- Santos, J., & Flores, R. (2021). *Sustainable Banking and Social Responsibility*. Springer.
- Sarno, D. (2020). *Credit Scoring Models: A Comparison*
- Sarno, L. (2020). Credit Scoring and the Value of Credit Information. In *The Oxford Handbook of Banking and Financial History* (pp. 461-482). Oxford University Press.
- Saunders, A., & Cornett, M. M. (2018). *Financial institutions management: A risk management approach*. McGraw-Hill Education.
- Saunders, A., & Cornett, M. M. (2020). *Financial institutions management: A risk management approach*. McGraw-Hill Education.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students*. Pearson Education.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson Education.

- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students*. 8th Edition, Pearson Education.
- Schroeder, R. G., Clark, M. W., & Cathey, J. M. (2019). *Financial Accounting Theory and Analysis: Text and Cases*. Wiley.
- Seidu, A. A., Abdulai, A., & Aninanya, G. A. (2021). Factors Influencing Documentation in Nursing Care by Nurses at the Tamale Teaching Hospital, Ghana. *UDS International Journal of Development*, 8(1), 540-558.
- Seidu, A. S., Yenli, E. M. T. A., Sheriff, M., Yakubu, M., Abdulai, A. B., Akorli, E., & Akorli, P. (2020). Rare Case of Incarcerated Bilateral Spigelian Hernia in Ghana: A Case Report and Literature Review. *American Journal of Medical Case Reports*, 8(12), 528-531.
- Sekaran, U. and Bougie, R. (2016) *Research Methods for Business: A Skill-Building Approach*. 7th Edition, Wiley & Sons, West Sussex.
- Seslen, T. (2018). Why Banks Don't Lend to Small Businesses Anymore. *Forbes*. Retrieved from <https://www.forbes.com/sites/thesba/2018/07/09/why-banks-dont-lend-to-small-businesses-anymore/?sh=77a1f38a5c0d>
- Shafique, M. A., et al. (2020). Determinants of customers' adoption of Islamic banking products and services in Pakistan. *Journal of Islamic Marketing*, 11(3), 606-621.
- Siddiqi, M. N. (2008). *Islamic Banking and Finance in Theory and Practice: A Survey of State of the Art*. Islamic Research and Training Institute, Islamic Development Bank.
- Siddiqui, A. (2016). Islamic Banking and Finance in the UK: A Historical Perspective. *International Journal of Islamic and Middle Eastern Finance and Management*, 9(1), 5-24.
- Siddiqui, A. (2016). Islamic banking and finance: On its way to globalization. *Journal of Islamic Banking and Finance*, 4(1), 1-7.
- Siddiqui, D. A., Akhtar, M. F., & Hussain, J. (2020). Factors affecting customers' perception of Islamic banking products and services: Evidence from Pakistan. *International Journal of Bank Marketing*, 38(3), 744-769.
- Silverman, D. (2017). *Doing qualitative research: A practical handbook*. Sage Publications.
- Singh, A. K., & Pandey, A. (2020). Collateral and loan requirements for bank loans. In *Handbook of Research on Accounting and Financial Studies* (pp. 298-312). IGI Global.
- Sinha, A., & Bose, S. (2018). Loan Collateral and Credit Access in Emerging Markets. *The World Bank Research Observer*, 33(2), 232-262.
- Smith, A. (2019). *Real estate finance and investments*. McGraw-Hill Education.
- Smith, C. W. (2012). The Relationship between Credit Default Swap Spreads, Bond Yields, and Credit Rating Announcements. *Journal of Banking & Finance*, 36(2), 571-582.

- Smith, J. (2017). *Islamic Banking and Finance*. Oxford University Press.
- Smith, J. C. (2017). *Credit Analysis and Lending Management*. Oxford University Press.
- Smith, J., & Johnson, M. (2017). Collateral and Loan Approval Rates. *Journal of Banking and Finance*, 22(4), 521-539.
- Smith, J., & Jones, A. (2020). The Digital Transformation of Conventional Banking in the UK. *Banking Trends*, 42(3), 12-25.
- Smith, K., et al. (2019). Collateral and Lending Markets: A Cross-Country Analysis. *International Journal of Finance*, 35(1), 123-138.
- Srairi, S. A. (2016). Financial ratios, external governance, and bank performance in MENA countries. *Corporate Governance: The International Journal of Business in Society*, 16(3), 490-515.
- State Bank of Pakistan. (2021). *Islamic Banking Bulletin*. Retrieved from https://www.sbp.org.pk/ibd/IBD_Bulletin/IBD-Bulletin-Mar-2021.pdf
- State Bank of Pakistan. (2022). *Islamic Banking Bulletin - December 2021*. https://www.sbp.org.pk/ibd/2022/Islamic%20Banking%20Bulletin_December2021.pdf
- Statista. (2021). Global mobile payment transaction volume 2019-2023.
- Statista. (2021). Mobile payment transaction volume worldwide from 2016 to 2023. Retrieved from <https://www.statista.com/statistics/975946/worldwide-mobile-payment-transaction-volume/>
- Stickney, C. P., Weil, R. L., Schipper, K., & Francis, J. (2016). *Financial Accounting: An Introduction to Concepts, Methods*
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393-410.
- Sundaram, R. K., & Das, S. (2020). *Derivatives: Principles and practice*. Tata McGraw-Hill Education.
- Tan, T. H. (2020). The challenges facing the banking industry in the 21st century. *International Journal of Business and Society*, 21(1), 1-12.
- Tan, Y. (2020). The impact of regulatory pressure on banking operations. *Journal of Economics and Business*, 3(1), 91-97.
- Tarazi, A., & Mersch, Y. (2016). *Investment banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions*. Wiley.
- Tawfik, S. (2021). Islamic banking in the UK and Europe: Growth and challenges. *International Journal of Islamic Financial Services*, 3(2), 85-100.
- The Economist. (2013). A sukuk milestone. Retrieved from <https://www.economist.com/finance-and-economics/2013/06/22/a-sukuk-milestone>

- The Edge Markets. (2021, January 12). Malaysia's Islamic finance market to remain resilient despite pandemic challenges. <https://www.theedgemarkets.com/article/malaysias-islamic-finance-market-remain-resilient-despite-pandemic-challenges>
- The Express Tribune. (2022). PM's Kamyab Jawan programme: Rs46b disbursed to youth through Islamic banking. <https://tribune.com.pk/story/2360032/pms-kamyab-jawan-programme-rs46b-disbursed-to-youth-through-islamic-banking>
- The Guardian. (2014). "UK becomes first non-Muslim country to issue Islamic bond". Retrieved from <https://www.theguardian.com/world/2014/jun/25/uk-islamic-bond-sukuk-non-muslim>
- The National. (2022, January 9). Islamic banking assets to reach \$3.8tn globally by 2023, says report. <https://www.thenationalnews.com/business/banking/islamic-banking-assets-to-reach-3-8tn-globally-by-2023-says-report-1.1233882>
- Thomas, L. C., & Edelman, D. B. (2019). Credit Scoring and Its Applications (2nd ed.). SIAM.
- Thomson Reuters. (2021). Islamic Finance Development Report 2021.
- Thomson Reuters. (2021). Islamic finance development report 2021. Retrieved from https://www.refinitiv.com/content/dam/marketing/en_us/documents/reports/islamic-finance-development-report-2021.pdf
- Trad, N., Rachdi, H., Hakimi, A., & Guesmi, K. (2017). Banking stability in the MENA region during the global financial crisis and the European sovereign debt debacle. *The Journal of Risk Finance*, 18(4), 381–397. <https://doi.org/10.1108/JRF-10-2016-0134>
- TransUnion. (2018). Debt to Income Ratio: What It Is and How to Calculate It. <https://www.transunion.com/blog/credit-education/debt-to-income-ratio>
- UK Government. (2021). UK Government issues Sukuk to support Islamic finance. <https://www.gov.uk/government/news/uk-government-issues-sukuk-to-support-islamic-finance>
- Usman Tariq, Mateev, M., M., & Sahyouni, A. (2023). Efficiency, market concentration and bank performance during the COVID-19 outbreak: Evidence from the MENA region. *PloS one*, 18(5), e0285403. <https://doi.org/10.1371/journal.pone.0285403>
- Usmani, M. T. (2002). *An Introduction to Islamic Finance*. Idaratul Ma'arif, Karachi.
- Van Horne, J. C., & Wachowicz, J. M. (2018). *Fundamentals of financial management*. Pearson.
- Vertovec, S., & Peach, C. (2010). Islam in Europe: The politics of religion and community. In S. Vertovec (Ed.), *Muslims in Europe: Cities and networks* (pp. 29-51). Palgrave Macmillan.
- Vertovec, S., & Peach, C. (2010). *Islam in Europe: The politics of religion and community*. Palgrave Macmillan.

- Vissing-Jorgensen, A. (2020). Economic perspectives on the implications of public credit registries. *Journal of Accounting Research*, 58(3), 665-692. doi: 10.1111/1475-679X.12321
- Vissing-Jorgensen, A. (2020). The Creditworthiness Premium. *The Journal of Finance*, 75(4), 1997-2042.
- Warde, I. (2000). *Islamic finance in the global economy*. Edinburgh University Press.
- White, L. J. (2010). *The \$10 Trillion Hangover: The Deadly Aftermath of America's Faith in Housing*. Crown Business.
- White, L. J. (2010). *The Next Step: The Importance of Financial Reform in the 21st Century*. American Enterprise Institute.
- Wild, J. J., Shaw, K. W., & Chiappetta, B. (2020). *Financial Accounting*. McGraw-Hill Education.
- World Bank. (2018). *Access to finance: A key to economic development*.
- World Bank. (2018). *Finance for all: Unlocking access to finance for SMEs in emerging markets*. World Bank Group. <https://openknowledge>
- World Bank. (2020). *Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. World Bank.
- World Bank. (2020). Islamic finance can play a key role in expanding financial inclusion. Retrieved from <https://www.worldbank.org/en/news/feature/2020/10/19/islamic-finance-can-play-a-key-role-in-expanding-financial-inclusion>
- Yang, H., & Lee, S. (2018). Regulatory Changes and Collateral Requirements: Impact on Bank Lending. *Journal of Financial Regulation*, 25(3), 301-319.
- Yin, R. K. (2017). *Case study research and applications: Design and methods*.
- Yinger, J. (1998). Evidence on discrimination in consumer markets. *Journal of Economic Perspectives*, 12(2), 23-40.
- Yusoff, M. F. M., Shamsuddin, A., Ismail, R., & Ramli, R. (2020). The impact of artificial intelligence on Islamic finance. *International Journal of Islamic Business and Management*, 1(2), 9-18.
- Zafar, M. B., & Sulaiman, A. A. (2019). Corporate social responsibility and Islamic banks: a systematic literature review. *Management Review Quarterly*, 69, 159-206.
- Zakat: Islamic banking promotes the payment of Zakat, which is a form of charitable giving, and encourages the redistribution of wealth to reduce poverty and promote social justice. (Khan & Bhatti, 2008)
- Zavgren, C. V. (1983). Assessing the vulnerability to failure of American industrial firms: A logistic analysis. *Journal of Business Finance & Accounting*, 10(1), 63-93.
- Zavgren, C. V. (1983). The Association Between Voluntary Disclosure and Information Usefulness: The Case of Corporate Debt Ratings. *The Accounting Review*, 58(3), 527-550.

- Zhang, C., Xu, X., & Wang, Y. (2021). The Importance of Accounting Information in Credit Risk Assessment: Evidence from China. *International Journal of Financial Research*, 12(3), 220-232. doi:10.5430/ijfr.v12n3p220
- Zhang, C., Yang, J., Zhang, M., & Zhang, Y. (2021). Accounting Information Quality, Credit Default Swap Spreads, and Banks' Loan Loss Provisions. *Journal of Banking & Finance*, 125, 106086

APPENDICES

APPENDIX 01 METHODS TO EVALUATE LOAN PROPOSALS

RQ1 - Methods to evaluate loan proposals	
Stage 1 - Initial screening	1. Applications Received
	2. Documents Verifications
Stage 2 - Detailed screening	1. Demographic Screening
	2. Collaterals Screening
	3. Financial Position Screening
	4. Purpose of Loan Screening
	5. Market risk assessment
	6. Advance risk screening
	7. Credit Report Screening
	8. Regulatory Compliance screening
Stage 3 - Conditional Offer or Rejection	1. Underwriting
	2. Loan documentation
Stage 4 - Further Screening (if applicable)	1. Request further information
	2. Loan terms determination
Stage 5 - Final Screening	1. Loan documentation
	2. Loan disbursement
	3. Loan monitoring
	4. Collections
Stage 6 - Post Screening	1. Loan monitoring
	2. Risk mitigation
	3. Reporting and Compliance
	4. Customer support
	5. Loan Closure
	6. Data analysis for quality improvement
	7. Review and Adopt

APPENDIX 02: GLOSSARY OF ISLAMIC BANKING AND FINANCE

Allah: The Creator, God

Amanah: Trust, with associated meanings of responsibility, truthfulness and sincerity. As an important secondary meaning, the term also identifies a contract where one party keeps another's funds. This is in fact the most widely understood and used application of the term and has a long history of use in Islamic commercial law. Now a days HSBC has maintained Amanah bank accounts.

Arbun: Down payment; a non-refundable deposit paid by the buyer to the seller upon finishing a contract of sale, with the condition that the contract will be completed during the prearranged period.

Gharar: (Uncertainty) is a sophisticated concept that covers certain types of insecurity or contingency in an agreement. The prohibition on Gharar is often used as the grounds for criticism of conventional financial practices such as short selling, speculation and derivatives.

Halal: Any activity or transaction that is according to law and also permitted in Islam is known as Halal.

Haram: Any business or contract that is unlawful and also prohibited in Islam is known as Haram.

Islamic banking: Financial services that meet the requirements of the Shariah or Islamic law. While designed to meet the specific religious requirements of the Muslim customers, Islamic banking is not restricted to Muslims: both the financial services provider and the customer can be non-Muslim as well as Muslim.

Ijara: Ijara is a kind of lease; it allows the bank to earn profits by charging rentals on the assets leased to the customer.

Maysir: (Gambling) one of three fundamental prohibitions in Islamic finance. The prohibition on Maysir is often used as the grounds for criticism of conventional financial practices such as assumption, traditional insurance and derivatives.

Mudarabah: is an investment partnership, whereby the investor (the Rub ul Mal) provides capital to another party (the Mudarib) in order to undertake an investment activity. While profits are shared on a pre- agreed ratio, loss of investment is born by the investor only. The mudarib loses its share of the expected income.

Mudarib: The mudarib is the entrepreneur or investment manager in a Mudarabah who invests the investors funds in a project or portfolio in exchange for a share of the profits.

Murabaha: Purchase and resale. Instead of lending out money, the capital provider purchases the desire commodity from a third party and resells it at a prearranged higher price to the capital user. By paying this higher price over instalments, the capital user has successfully obtained credit without paying interest.

Musharaka: profit and loss sharing. It is a partnership where profits are shared as per as agreed ratio whereas the losses are shared in proportion to the investment of each partner.

Prophet: Hazrat Muhammad Mustafa (PBUH)

Quran: The Holy book of Muslims revealed on Hazrat Muhammad Mustafa (PBUH)

Qard: A Qard is a loan, free of interest. Bank use this arrangement for current accounts holders. In essence, it means that Current Account is a loan to the bank, which is used by the bank for investment and other purposes.

Riba: Interest, Usury. The legal concept extends beyond just interest but in simple terms Riba covers any return of money on money-whether the interest is fixed or floating, simple or compounded, and at whatever the rate. Riba is strictly prohibited in Islam.

Shariah: Islamic law as revealed in the Quran and through the example of Prophet Muhammad (PBUH). A Shariah compliant product meets the requirements of Islamic law. A Shariah board is the committee of Islamic scholars available to an Islamic financial institution for guidance and supervision in the development of shariah compliant products.

Shariah advisor: An independent professional, usually a classically trained Islamic legal scholar that advises an Islamic bank on the compliance of its products and services with the shariah, or Islamic law. While some Islamic banks consult individual Shariah advisor, most establish a committee of Shariah advisors.

Shariah Compliant: An act or activity that complies with the requirements of shariah or Islamic law.

Sukuk: Sukuk is the Arabic name for a financial certificate but can be seen as an Islamic equivalent of bond. However, fixed income, interest bearing bonds are not permitted in Islam, hence Sukuk are securities that comply with the Islamic law and its investment principles, which prohibits the charging, or paying of interest. Sukuk is a certificate of equal value representing entire shares in ownership of tangible assets and services or the assets of particular projects or investment activity.

Sunnah: way of life of Prophet Hazrat Muhammad Mustafa (PBUH); They said about anything, they act anything is called as Sunnah.

Surah: Chapters of Quran; there are 540 Sura in Quran.

Takaful: Islamic insurance. Planned as charitable collective pool of funds based on the idea of mutual assistance, takaful schemes are designed to avoid the elements of traditional insurance (i.e., interest and gambling) that are challenging for Muslims.

Wakala: Wakala is an agency contract which generally includes in its terms a fee for the skill of the agent.

Zakat: Zakat is one of the five pillars of Islam. It is obligatory for Muslims to pay their wealth to specified categories in society when their annual wealth exceeds a minimum level.

APPENDIX 03: QUESTIONNAIRE

EVALUATION SHEET		
Evaluator's Job Title:		
Evaluator's Job Experience:		
QUESTION	RATING	COMMENTS
1. Please rate the overall viability of the loan application? Can you please briefly explain / justify your ratings?	EXCELLENT	
	GOOD	
	FAIR	
	POOR	
	VERY POOR	
2. Please rate after the initial screening test? Can you please briefly name / tell about the possibly initial screening protocols / check list?	EXCELLENT	
	GOOD	
	FAIR	
	POOR	
	VERY POOR	
3. Please rate the financial position of the applicant? Can you please briefly explain what financial factors most important for financial scrutiny?	EXCELLENT	
	GOOD	
	FAIR	
	POOR	
	VERY POOR	
4. Please rate, how is the market likely against the application? Can you please briefly explain which market factors can have negative impact?	EXCELLENT	
	GOOD	
	FAIR	
	POOR	
	VERY POOR	
5. Please rate the applicant's Credit rating? Can you please briefly explain the importance of credit rating and its impact on application?	EXCELLENT	
	GOOD	
	FAIR	
	POOR	
	VERY POOR	

6. Please rate the appropriateness of current application? And briefly explain how the application collates with financial data and ratings?	EXCELLENT	☐	
	GOOD	☐	
	FAIR	☐	
	POOR	☐	
	VERY POOR	☐	

7. Please rate the viability of the application for further scrutiny/ screening? Please briefly explain about the steps in further scrutiny.	EXCELLENT	☐	
	GOOD	☐	
	FAIR	☐	
	POOR	☐	
	VERY POOR	☐	

8. Please rate, the chances of an applicant to be given a conditional offer? Please briefly explain the conditions and/or rejection reasons.	EXCELLENT	☐	
	GOOD	☐	
	FAIR	☐	
	POOR	☐	
	VERY POOR	☐	

9. Please rate this application after all risk assessments? Can you please briefly explain if there are any possible risk factors involved?	EXCELLENT	☐	
	GOOD	☐	
	FAIR	☐	
	POOR	☐	
	VERY POOR	☐	

INTERVIEW QUESTIONS	RESPONSE
1. Which factors make loan applications more viable?	
2. What are the possible steps / protocols for initial screening of loan applications?	
3. Which factors are most important for financial scrutiny of loan applications?	
4. Does market conditions impact the loan applications?	
5. What is the importance of credit rating in loan applications?	