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The Role of Central Bank Regulations in Enhancing Islamic Bank Performance in Egypt

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Submitted By:

Aliaa Abdallah Tammam

Supervised By:

Prof. Dr. Eleri Jones

Prof. Dr. Claire Haven-Tang

Prof. Dr. Sameh Sakr

Prof. Dr. Mohamed Moustafa

Dedication

To my husband *Hisham Massoud*, my sons *Muhammad and Ibrahim*, my mom *Afaf Ahmad Ali*, my dad *Abdallah Tammam*, my sister *Afaf Tammam* and my brother *Amr Tammam*. Their love, patience and support, have made this possible. I love you all and thank you for always being there for me!

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Abstract

One of the key success elements of economic development is a well-established, banking system. This sector is often considered for mobilising savings as credit or investment tools. In addition, the banking system plays a vital role in increasing investments to serve the financial resources essential for developmental needs (Etab, 2016). However, continual financial crises have resulted in troubles in many conventional banks all over the world. By contrast, the Islamic banks (IBs) were safeguarded against these crises (Johnes et al., 2014). In fact, Islamic banking broadened its requests to more investors other than just traditional Muslims ones. Recently, more than 300 Islamic financial institutions were established in 70 countries across the world (Johnes et al., 2014).

This study explored the key problems and challenges in the development of Islamic banking in Egypt, considering the extant rules and regulations set by the Central Bank of Egypt (CBE): the legal reserve policy, bank examination system, credit ceiling, liquidity limit, capital adequacy policy, discount rate, financial policy, ban on dealing in moveable and immoveable assets, and open market operations.

Through the development of a regression model, the aspects of the regulations with the most impact on Islamic banking performance were identified, and proposals for amendments were developed as necessary. These proposals were discussed with experts from Islamic banking sectors as well as the CBE.

This study will be of great importance for banks' managers, regulators, depositors, investors and shareholders. It reflects the real condition of the Islamic banking system in Egypt, providing a complete picture of IB's place in the Egyptian

banking sector. Further, it provides a full analysis of how the current regulations affect the achievement of Islamic banks in comparison with the achievement of conventional banks in Egypt.

Data was gathered by interviewing 30 bank employees, chosen via non-probabilistic convenient sampling techniques, to help in developing the research hypotheses. In addition, secondary data on banking performance using CAMEL was gathered from the Fitch solution database. Hypotheses were answered by analysing the data collected from 347 questionnaires; the data was distributed using regression and correlation analyses to test the relationships and the relative importance of the variables. Finally, the researcher developed a set of proposals to amend the central bank regulations and discussed them with an expert panel.

According to the relative importance and the regression models, it was concluded that the performance of IBs was low due to the absence of the following factors: the current legal reserve policy, current bank examination system and credit ceiling.

Contents

List of Tables xi

List of Figures xiv

List of Abbreviations xv

Chapter 1: Introduction 1

1.1 Background 1

1.2 Research Problem 4

1.3 Research Aim 6

1.4 Research Importance 6

1.5 Research Objectives 7

1.6 Contributions of the Study 9

1.7 Research Limitations 10

1.8 Structure of the Thesis 11

Chapter 2: Overview of Islamic Principles and Economy and Islamic Banking 15

2.1 What is Islam 15

2.1.1 Shariah and its Sources 15

2.1.2 Islamic Economy 17

2.1.3 Islamic Finance 18

2.1.4 Distribution of Resources in Islam 19

2.1.5 Zakah 19

2.1.6 Riba 20

2.1.7 Interest, its Origin and History 22

2.2. The Islamic Banking System 24

2.2.1 The History of Islamic Banking 24

2.2.2 Islamic Banking and Finance 27

2.2.3 The Aims and Objectives of Islamic Banking 32

2.2.4 The Benefits of an Islamic Banking and Finance System.....35

2.2.5 Central Bank's Role and Islamic Banking 39

2.2.6 The Operational Framework of Islamic Banking.....42

2.2.7 Islamic Banking in Different Countries 47

Chapter 3: Background and Literature.....57

3.1 Conventional Banks 57

3.1.1 Payment Services.....59

3.1.2 Deposits and Lending Services.....59

3.1.3 Investment, Pensions, and Insurance Services 60

3.1.4 E-banking.....60

3.2 Islamic Banks.....60

3.2.1 Deposit Services.....62

3.2.2 Financing Services.....63

3.3 The Role of Central Banks 66

3.4 Comparison between Conventional and Islamic Banks 77

3.5 Islamic Banks and the Central Bank.....79

3.6 Social Norms, Religiosity and Governance 83

3.7 Banks' Performance Measurement 87

3.8 Conclusion.....107

Chapter 4: The Egyptian Context 109

4.1 Background on Egypt 109

4.1.1 The Administrative Profile.....110

4.1.2 Politics 111

4.1.3 The Economic Environment in Egypt.....113

4.1.4 The Reform of the Banking System in Egypt and Implications 115

4.2 The Importance of Studying Islamic Banking in Egypt 121

4.3 The Central Bank of Egypt..... 127

4.3.1 Historical Overview: The Central Bank of Egypt..... 127

4.3.2 The Central Bank of Egypt Aims 129

4.3.3 Central Bank of Egypt Functions 129

4.4 Islamic Banks within the Structure of the Egyptian Banking System 130

4.5 The Relationship of the Central Bank of Egypt and Islamic Banks..... 134

4.6 Role of the Central Bank of Egypt..... 135

4.6.1 The Supervisory Role of the Central Bank Egypt and Islamic Banks 135

4.6.2 The Financing Role of the Central Bank and Islamic Banks..... 153

4.7 The Conclusion 154

Chapter 5: Research Methodology 156

5.1 Introduction 156

5.2 Triangulation: Use of Multi-Research Methods..... 158

5.3 Rationale for Choosing Qualitative Research..... 159

5.4 Research Design..... 160

5.5 Dependent Variable: Islamic Bank Performance..... 161

5.5.1 CAMEL..... 162

5.6 Control Variables 164

5.6.1. Ownership Structure 164

5.6.2 Macroeconomic Indicators..... 166

5.6.3 Leverage..... 166

5.6.4 Bank Size..... 167

5.6.5 Liquidity..... 169

5.6.6 Operating Costs..... 169

5.7 Research Methods 171

5.8 Conducting the Research: Fieldwork 171

5.9 Objective 2: Exploring the Key Challenges Faced by IBs Operating in Egypt under the Current Regulations of the Central Bank of Egypt; Interviews..... 171

5.9.1 Preparation for the Interviews 173

5.9.2 Interview Sample 174

5.9.3 Interview Stages 176

5.9.4 Conducting the Interviews 176

5.9.5 Analysing the Interviews: Thematic Analysis 176

5.10 Objective 3: Undertake a Survey of Managers and Senior Employees Working in the Islamic Banking Sector in Egypt to Test the Relationship between the Dependent (Islamic Bank Performance) and Independent Variables. 180

5.10.1 The Goals of the Questionnaire 181

5.10.2 Questionnaire Preparation Stages and Drafts 181

5.11 Expert Panel Interview 188

Chapter 6: Interview Analysis 191

6.1 Introduction 191

6.2 Analysis of the Interviewees' Perceptions of the Egyptian IBs 194

6.2.1 The Level of Adaptation of IBs in Egypt 194

6.2.2 The Role of the Central Bank in Developing the IB Sector in Egypt 195

6.3 Conceptual Framework 201

6.4 Hyptheses 205

Chapter 7: Secondary Data and Questionnaire Statistical Analysis 206

7.1 Introduction 206

7.2 Methods of Statistical Analysis 207

7.3 Reliability and Validity Analysis 209

7.4 Descriptive Statistics **209**

7.4.1 Descriptive Statistics for CAMEL. **210**

7.4.2 Descriptive Statistics for the Questionnaire **217**

7.5 Correlation Analysis **234**

7.6 Model 1 ..... **242**

7.6.1 Model for Capital Adequacy **242**

7.6.2 Model for Asset Quality **244**

7.6.3 Model for Management Quality **246**

7.6.4 Model for Earning Ability **247**

7.6.5 Model for Liquidity **248**

7.7 Model 2 ..... **251**

7.7.1 Creating Indicators **251**

7.7.2 Model for Capital Adequacy **251**

7.7.3. Model for Asset Quality **253**

7.7.3. Model for Management Quality **255**

7.7.4. Model for Earning Ability **256**

7.7.5. Model for Liquidity **258**

7.8 Regression for Answering Hypotheses **261**

Chapter 8: Expert Panel **271**

8.1 The Report **271**

8.2 The Participants' Opinions **276**

Chapter 9: Conclusion and Recommendations **280**

9.1 Introduction **280**

9.2 Overview of the Research Study **280**

9.3 Contribution to Literature **286**

9.4 Recommendations **287**

9.5 Contribution to Practice **291**

9.6 Limitations **293**

9.7 Future Research **295**

References **297**

Appendix **333**

Appendix 1: Questionnaire **333**

Appendix 2: Interview **354**

Appendix 3: Expert Panel **358**

Appendix 4: Correlations **364**

List of Tables

Table 1: The Relative Importance of Islamic banks in the Structure of the Egyptian Banking System on 31 December 2019 (Egyptian Pounds) 134

Table 2: Components of the Percentage of the Legal Reserve in Egyptian Pounds 136

Table 3: Components of Liquidity Ratio in Local Currency 140

Table 4: Components of Liquidity Ratio in Foreign Currency 141

Table 5: Calculation of Capital Adequacy Standard 146

Table 6: Banks from where the Interviews were Gathered 192

Table 7: Roles of the Interviewees in the IBs 193

Table 8: Results of Cronbach's Alpha for the Questionnaire Dimensions 209

Table 9: Descriptive Statistics for Egyptian Banks 211

Table 10: Descriptive Statistics for the Other Banks 213

Table 11: Comparison between Countries 215

Table 12: Educational Qualifications 218

Table 13: Years of Work in an Islamic bank 218

Table 14: Primary Roles 219

Table 15: Obstacles Employees Perceive in Developing Islamic Banking in Egypt 219

Table 16: How Islamic Banks Initially Developed in Egypt 220

Table 17: Islamic Banking Products Most Commonly used in the Islamic Bank . 221

Table 18: Extent of Dependency of Islamic Banks on each of these Deposit Categories (Percentage of Respondents according to the Rate) 222

Table 19: Extent of Islamic Banks' Dependency on each of these Investment Categories as a Source of Income (Percentage of Respondents according to the Rate) 223

Table 20: The Relative Importance of the following Factors in Hindering Performance of Islamic Banks (Percentage of Respondents according to the Rate) 224

Table 21: According to Customers, the Relative Importance of Each of these Factors in Affecting the Performance of Islamic Banks (Percentage of Respondents according to the Rate) 225

Table 22: The Relative Importance for each of these Elements in Determining the Performance of Islamic Banks (Percentage of Respondents according to the Rate) 227

Table 23: Opinions on Islamic Banks 228

Table 24: The Effect of Each on Providing Various Islamic Bank Products 229

Table 25: Extent to which Banks Apply the following Investment Methods 229

Table 26: Acceptable Level of Return on Equity (ROE) for a Bank 231

Table 27: Acceptable Level of Return on Asset (ROA) for a Bank 231

Table 28: Opinion on whether your Bank Achieves the Acceptable Level of ROE and ROA? 232

Table 29: Perception regarding your Bank's General Performance vs. Conventional Banks in Egypt 232

Table 30: Percentage of Respondents according to their Answers 233

Table 31: Q15, Q11 and 12 236

Table 32: Q15 and Q14 238

Table 33: Q15 and Q16 240

Table 34: Model Summary 242

Table 35: Coefficients 243

Table 36: Model Summary 243

Table 37: Coefficients 244

Table 38: Model Summary 244

Table 39: Coefficients 245

Table 40: 246

Table 41: Model Summary 246

Table 42: Coefficients 246

Table 43: **247**

Table 44: Model Summary **247**

Table 45: Coefficients **248**

Table 46: **248**

Table 47: Model Summary **248**

Table 48: Coefficients **249**

Table 49: Model Summary **249**

Table 50: Coefficients **249**

Table 51: Model Summary **251**

Table 52: Coefficients **252**

Table 53: Model Summary **253**

Table 54: Coefficients **253**

Table 55: Model Summary **255**

Table 56: Coefficients **255**

Table 57: Model Summary **256**

Table 58: Coefficients **257**

Table 59: Model Summary **258**

Table 60: Coefficients **258**

Table 61: Results of the Regression Analysis **261**

Table 62: ANOVA[b] **261**

Table 63: Coefficient a and VIF **263**

Table 64: Present the Results of the Regression Analysis **264**

Table 65: Anova[b] **264**

Table 66: Coefficients[a] **265**

List of Figures

Figure 1 204

Figure 2 216

List of Abbreviations

BIMB	**Bank Islam Malaysia Berhad**
CAMEL	**Capital, Assets, Management, Earnings and Liquidity**
CBE	**Central Bank of Egypt**
IB	**Islamic Bank**
IIAB	**Islamic International Arab Bank**
JIBFI	**Jordan Islamic Bank for Finance and Investment**
LOLR	**Lender of Last Resort**
OMO	**Open Market Operations**
PLS	**Profit and Loss Sharing**
ROA	**Return on Assets**
ROAA	**Return on Average Assets**
ROE	**Returns on Equity**
SRS	**Simple Random Sampling Technique**
UAE	**United Arab Emirates**

Chapter 1: Introduction

1.1 Background

The banking sector is one of the most effective and manageable economic sectors, and it is subject to changes both internationally and domestically. It is one of the basic tools of financial policy that influences the economic growth. One of the key success elements of economic development is a well-established, authentic and profitable banking system. This sector is often considered for mobilizing savings as credit or investment tools and working to turn them into more influential and beneficial productive sectors and activities. In addition, the banking system plays a vital role in increasing investments to serve the financial resources that are essential for development (Etab, 2016).

Unfortunately, the continual financial crises have resulted in troubles for many conventional banks all over the world. In contrast, Islamic banks (IBs) were safeguarded against these crises (Johnes et al., 2014). It is argued that operations are highly controlled by Islamic and Shariah laws, disallowing the investment of any type of financial item – the main element that negatively affected conventional banks and caused the financial crises. Thus, Islamic banking increased the scope of its requests to involve more investors instead of just traditional Muslims. Recently, more than 300 Islamic financial institutions were established in 70 countries across the world (Johnes et al., 2014).

Islamic banking is a financial system that depends on the Islamic or Shariah laws, governed by Islamic economics. Islamic law particularly prohibits usury or Riba that is the collection and payment of interest. Further, Shariah law prohibits investments

in illegal businesses. Many banks were recently established to suit the growing demands of Islamic finance. The reason for this growing demand is globalisation and the huge wealth of some Muslim states in the Middle East and Southeast Asia. Islamic finance has moved from being merely in a corner position to turning into the main component of the global banking system worldwide (Etab, 2016).

IBs work to attract monetary resources and operate them effectively so as to ensure the proper performance of financial intermediation in accordance with the Shariah law (Ariff, 1990). The main principle of IB is the prohibition of interest in all trading activities (Chapra, 2000). Due to the mid-2007 liquidity crisis in the United States, researchers and financial experts started to evaluate the current financial system of the country (Kumati, 2008), suggesting that the financial crisis had arisen due to the debt financing regimes employed (Shaukat et al., 2013).

Unfortunately, Islamic banking all over the world has been encountering several difficulties, with socio-political instability being the primary concern. The situation in the Middle East and Africa, especially for those investors and businessmen who are guided by Shariah, became worse because of the Arab Spring. Further, the absence of an Islamic financial regulatory framework hindered the progress of IBs, particularly in the countries where IBs run within a conventional regulatory system. Moreover, most IBs are quite small, and their business is concentrated in one or two markets at most (Nazim and Bennie, 2012).

Islamic banking assets were estimated to have grossed USD 1.7 trillion in 2013, with a yearly growth rate of 17.6% (Nazim and Bennie, 2012). This growth was supported by the inventive attitude of Islamic finance and reforms in regulatory and

taxation frameworks, whose purpose was to engage new Islamic financial boom (Fayed, 2013).

Previous research on the development of IBs in Egypt showed that their performance and development have been restrained by government policies and regulations (Mouawad, 2009); according to El-Ghamrawy (2012), the Islamic banking system has the potential to enhance the development of the Egyptian banking system. Despite being the first country to develop IBs in 1963, this sector in Egypt has not grown as quickly as other countries, since the central bank's regulations favour traditional commercial banks. Egypt has been regarded as the cradle of Islamic finance since its advent, however, its growth has obviously lagged behind the other countries. It was speculated that those behind the formation of Islamic organisations also had a political agenda.

The Egyptian government's policies regarding Islamic finance have changed among oppositions due to opportunism and attempts to manipulate and master the motives and targets of the movement. There was a common assistance for Islamic finance; however, the government was hostile and wanted to compromise the movement towards Islamic finance despite some members of the royal family of Saudi Arabia being involved, particularly Prince Mohamed Bin Faisal, the founder of the Faisal Islamic Bank (Wilson, 2006). Thus, Mubarak sought to apply a more secular financial system escaping any Islamic or religious formation. In 2009, Islamic banking in Egypt contributed only 3–4% to Egypt's $193 billion banking system in comparison to its 46% contribution in the United Arab of Emirates. Currently, there are 14 Egyptian banks offering Islamic products through 211 Islamic branches, three of which are completely

Islamic: Faisal Islamic Bank of Egypt, Al-Baraka Bank and Abu Dhabi National Islamic Bank (Etab, 2016).

What makes this research essential is that there is a crucial need to compare the achievement of IBs in Egypt with conventional banks and determine the effect of the Central Bank of Egypt's (CBE) regulations and influence on the performance of these banks. Accordingly, this study explored the key problems and challenges in the development of Islamic banking in Egypt, considering the extant rules and regulations set by the CBE. Through the development of a regression model, the aspects of the regulations with the most impact on Islamic banking performance were identified, and proposals for amendments were developed as necessary. These proposals were discussed with experts from the Islamic banking sectors as well as the CBE.

This study is of great importance for bank managers, regulators, depositors, investors and shareholders, as it is reflects the real condition of the Islamic banking system in Egypt. This study provides a holistic understanding of the IBs' place in the Egyptian banking sector and a full analysis of how the current regulations affect the achievements of IBs in comparison with those of conventional banks in Egypt.

1.2 Research Problem

In general, the topic of Islamic banking and its comparable performance with its conventional counterparts has resulted in a great debate. Studies previously conducted to evaluate the factors that affect the performance of IBs reached varying conclusions concerning the same. Simultaneously, the results of many these studies did not match the theoretical background. To the best of our knowledge no study has evaluated the effect of the current CBE's regulations and how it negatively affects the performance of

IBs in Egypt, as measured by CAMEL. All accessible studies have tried to monitor the performance of IBs alone or in comparison with conventional banks but with no estimation of how the industry is affected by the current regulations.

Moreover, the Islamic banking industry in Egypt has encountered several hindrances and restrictions to its development. It can be stated that the current operations of IBs in Egypt show less than ideal assets–liabilities management. Since IBs have a tendency to and preference for short-term financing and investments, likewise, Egypt does not have a real Islamic financial market to support IB operations other than the conventional options, such as treasury bills, borrowing from the central bank or from other conventional banks that are all interest-based. In addition, the Islamic field lacks sufficiently trained personnel, thereby providing ineffective customer service. Also, the absence of a convenient Islamic framework regarding regulations and taxations is regarded as a significant hindrance for IBs operating in Egypt (Etab, 2016). Therefore, we can conclude that there is a glaring need for further knowledge regarding the present situation of IBs and how they operate in Egypt. There is also a need for knowledge regarding how the present CBE's regulations influence the performance of IBs the implication that these regulations do not accommodate the nature of IBs' operations as well as a discussion of the expected solutions to this situation.

All these facts emphasise the significance of a comprehensive study that investigates the effect of the existing CBE regulations on IBs' successes while highlighting how the CBE can assist in the smooth performance of IBs without the need to accommodate the current circumstances, which are not applicable under Sharia law.

1.3 Research Aim

This research served as a trial for providing an expansive picture about the present state of IBs in Egypt. Egypt was selected as the core focus of this study because, even though contemporary Islamic banking started in Egypt, the development of IBs has been rather simple compared to other countries that began their Islamic banking practice several years afterwards; for instance, Bahrain, which began its first Islamic bank in 1979, is currently the global leader in Islamic finance and banking with the strongest concern for Islamic financial organisations in the Middle East (Ali, 2000).

Thus, the aim of this study was to **"develop a regression model to identify the aspects of the CBE regulations that have the most impact on IB performance and, therefore, are in great need of modification"**.

1.4 Research Importance

The purpose of this study emerges from the importance of highlighting the present state of the Islamic banking sector in Egypt and current CBE practices influencing their achievements. It is evident that there are increasing observations of Islamic banking and evaluations of IBs' performances in Egypt without linking them to the influencer – the current regulations of the central banks. The literature available is mainly related to the Asian and Far East countries and not the developing countries. As a result of the importance of Islamic banking and its effect on internationalisation nowadays, it is very important to explore the current position of Islamic banking operations in Egypt.

Egypt has endured many economic stages in its modern history that helped form both its economic and financial systems. Hence, the results of this study will help lessen

the gap in literature regarding Islamic banking and the central banks' regulations stimulating their performance levels in developing countries (case study Egypt).

The research serves as a guide for both practitioners and researchers who require more evidence regarding the current operations and performance of IBs, as compared to conventional banks, working under the same regulations that control the conventional banking practices. Further, the study can help measure whether the current CBE's regulations impact the performance of IBs in Egypt. Moreover, the study can help legislators recognise that IBs need different rules and regulations that comply with their nature and the Sharia laws in order to work effectively and efficiently in the Egyptian market. Finally, this study can help bank managers recognise different methods to improve the profitability levels and positively influence their achievements.

1.5 Research Objectives

This study aimed to address five objectives, which are as follows:

- **Objective One**: To conduct a literature review on Shariah-compliant banking systems and the challenges faced by Islamic banking development in Egypt in developing a conceptual framework. This was achieved by critically reviewing the relevant literature and constructing a conceptual framework of the key challenges that face Islamic banking operations and practices under the current regulations of the CBE.

  Keyword searches of electronic databases (notably, ProQuest, Emerald and Business Source Premier) and systematic review of papers generated and synthesised regarding the conceptual framework were conducted.

- **Objective Two**: To explore the key challenges faced by IBs operating in Egypt under the current regulations of the CBE. This was achieved through exploratory interviews with Islamic bank employees. Exploratory interviews help in developing the research hypotheses and understanding the respondents' thoughts on the topic of research (Oppenheim, 1992). The data gathered was analysed to understand the potential problems related to the sector and develop the hypotheses to be tested in alignment with Objective Three. 30 bank employees, chosen using non-probabilistic convenient sampling techniques (10 from each of the three IBs in Egypt – Faisal Islamic Bank, El Baraka bank and Abu Dhabi Islamic Bank), were interviewed. The interviews were conducted at the respective banks. Each interview took 30–45 minutes and was conducted in Arabic. The interviews were audio-recorded, translated and transcribed, followed by a manual analysis of the interview transcriptions. Access to the employees had already been negotiated with the mangers of the three IBs who selected the employees from each of the different departments depending on their availability on the day of the interview.
- **Objective Three**: To collate secondary data on banking performance from the Fitch solution database. Secondary data (CAMEL) was used for Islamic bank performance, and the data collected from the questionnaires (from objective 4) were analysed using regression and correlation analysis to test the relationships and the relative importance of the variables.

  IBs' performances in Egypt, as identified in Objective Three, were examined to develop a regression model to identify the major aspects of the regulations which negatively impact their performance and to make proposals for

amendments to CBE's regulations to enhance the development of IBs in Egypt. For this, a survey of managers and senior employees (15 years' experience or more) working in the Islamic banking sector in Egypt was conducted to test the relationship between the dependent variables (Islamic bank performance) and independent variables (developed in Objective Two). Surveys were conducted in the only three Islamic banks in Egypt. 500 surveys were distributed, and only 347 were answered based on non-probabilistic convenient sampling techniques. The researcher pursued the respondents' opinions and general attitudes regarding the effect of the CBE regulations on the performance and development of Islamic banks in Egypt.

- **Objective Five**: To develop the proposed amendments to the CBE regulations after discussing them with key experts in central bank of Egypt and the Islamic banking sector. The researcher developed a set of proposals to amend the CBE regulations and discussed them with an expert panel.

1.6 Contributions of the Study

Realising the gap in the literature on how the current central bank regulations influence the performance of IBs motivated this research. Further, this research was intended to be conducted in a developing country; currently, there are comparably fewer studies on Islamic banking operations and legislations in developing countries in general and on how the CBE's practices affect the performance of IBs in Egypt in particular.

Egypt was the first country to apply Islamic banking practices, making it a favourable choice for this productive study. However, the growth rate of the Egyptian Islamic banking sector has been poor compared to other countries that began the Islamic

procedure after Egypt did. Moreover, there is a resistance from the Egyptian government towards the growth of Islamic banks due to a fear of facing a financial calamity such as the one that occurred because of the Islamic money management companies in the eighties.

1.7 Research Limitations

This study concerns how central bank regulations affect the IB practices and performance in Egypt; however, the results cannot be globally applied. Only three IBs have been included as they are the only ones operating in Egypt, and this affected the sample size. Also the researcher experienced some difficulties in collecting primary data:

1- Difficulty in collecting primary data from bank officials in order to know their opinions, in particular, on the procedures followed by the central bank of Egypt and the government role in IBs performance.

2 - The lack of transparency has resulted in the researcher not obtaining full information required for the study to be fully fulfilled.

4- Some participants were reluctant to answer some of the researcher's questions, thinking that this might negatively affect the bank’s reputation.

5 - Unresponsiveness of some employees considering that the information required is a business secret and should not be owned by any person, although the researcher proves official documents that all information will be used only for research purposes.

1.8 Structure of the Thesis

The thesis consists of nine chapters. The following provides an overview of the content of each chapter.

Chapter One: Introduction

Chapter One outlines the research and its importance, summarising the research background, aim and objectives. This chapter can be considered a preface to the study.

Chapter Two: Islamic Principles, Economy and Banking

This chapter consists of a few basic sections. The first section offers an overview of the religious domain of the Islamic economic system as well as an explanation of the traits and features of the Islamic economic system and the concepts of Riba and Zakah. The second section concentrates on the Islamic banking system, providing a detailed presentation of its history, targets and objectives, and benefits. Additionally, it illustrates the monetary policies and the central bank's relevance with respect to IBs. Finally, the last section explains how the Islamic banking system is applied in different countries.

Chapter Three: Literature Review and Theoretical Background

This chapter consists of various sections. The first part supplies an overview that describes the nature of banks. The second section also presents an explication of the characteristics and features of the Islamic economic system and the concepts behind IBs. It also supplies a detailed history of Islamic banking, goals and targets, and benefits. In addition, it shows the investment and financing alternatives in an Islamic banking system along with the operational domain of Islamic banking.

The third section clarifies how social norms, religiosity and double-layer governance affect banking performance, while the fourth section explains the role of central banks. Finally, the last section highlights the studies that have dealt with the performance measures used in the present study.

Chapter Four: Egyptian Context

The aim of this chapter is to identify the CBE, its functions, the Egyptian banks which are subject to it, and the relative importance of IBs in the structure of the Egyptian banking sector. Also, the chapter highlights the relationship between the CBE and the IBs, the viability of the regulatory tools, financing and whether the CBE regulations are applicable to IB operations in Egypt.

Chapter Five: Methodology

This chapter reviews the methods applied to test the variables included in the research and provides a detailed explanation of how the research was conducted, how the data was collected, and the other methods used. It illustrates the research processes and procedures as well as the reasons for applying those methods. Moreover, it highlights the research design, sample, and data collection and variable measurement methods used. Finally, the chapter depicts the kinds of statistical analyses used. Analytical procedures are introduced, and the chosen analytical processes are justified. The primary aim of this chapter is to offer a link between the theoretical and the empirical stances of this study.

Chapter Six: Interview Analysis

This study, as mentioned previously in the introduction chapter, explores the key problems and challenges that face the development of IBs in Egypt in the light of the extant rules and regulations set by the CBE. The exploratory interviews with IB employees helped in developing a set of research hypotheses and obtaining an enhanced understanding of IBs in Egypt. 30 bank employees were interviewed – 9 departmental managers and 21 employees from different departments (operations department, credit department and legal department).

The first section of this chapter reveals the criteria for the interviewees' sample. The second section explores their perceptions of the Egyptian IB sector, the challenges that hinder the sector's development, and how it is affected by the CBE regulations. The third and last section consists of a revised conceptual framework that was formed after the interviews were transcribed and analysed.

Chapter Seven: Secondary Data and Questionnaire Analysis

The findings of the research are discussed in this chapter, offering answers to the research questions and hypotheses and clarifying the statistical tests used to analyse the data. The chief goal of this chapter is to answer the research hypotheses regarding the performance of IBs and how they are affected by the current CBE regulations. The results are summarised to determine whether the developed hypotheses are supported. Moreover, this chapter talks about the results of the study, followed by a detailed discussion and analysis of the main results while comparing them to the previous assumptions. Last, this chapter reviews the present research results and offers a detailed and thorough conclusion of the research.

Chapter Eight: Expert Panel

This chapter discusses the expert panel. The first section of this chapter consists the report submitted to the expert panel and the questions they were to answer. The second section explores their opinions on the report. The third and last section consists of the chapter conclusion.

Chapter Nine: Conclusions

In this chapter, the conclusions reached after summarising the findings and contributions deduced from the work are provided. The chapter also provides a summary of this research with an assertion of the thesis contribution, both academically and practically. Further, this chapter highlights suggestions for policymakers and managers of IBs in Egypt as well as the research limitations, while suggesting recommendations for expected future research.

Chapter 2: Overview of Islamic Principles and Economy and Islamic Banking

This chapter consists of basic sections. The first section offers an overview of the religious domain of the Islamic economic system, an explanation of its traits and features, and the concepts of Riba and Zakah. The second section concentrates on the Islamic banking system via a detailed presentation of the history of Islamic banking, its targets and objectives and its benefits. Additionally, it illustrates the monetary policies and the central bank's relevance in terms of IBs. Finally, the last section demonstrates how the Islamic banking system is applied in different countries.

2.1 What is Islam

Islam involves peace and surrender to God, the Creator of everything, i.e. the complete surrender of man to God in all life affairs. Since religion intervenes with people's economic behaviours, it can be said that religion is linked to economics, and a disconnect between them would be uncommon and unjustifiable (Kahf, 2005). The eternal Sharia of Islam, which is valid in reforming every time and place, also involves public assets and controls the rules for economic studies of wealth, money, investment, production, etc. Economic investigations are among the requirements of the perfection of Islamic law (Kahf et al., 1998). Islam includes all of life's practices and is regarded as a personal matter between a person and God (Farouk, 2006).

2.1.1 Shariah and its Sources

Sharia is defined as what God prescribed to His worshipers through the rulings, whether doctrinal or practical rulings or morals, for them to believe in so as to ensure their happiness in this world and the hereafter. Shariah is what was revealed to

Muhammad, may God's prayers and peace be upon him, in the form of rulings that can reform the conditions of people in this world and the hereafter; it is a concept which means the way to be followed. Muslims believe that by applying Shariah in every aspect of their life, they can be closer to God. Islamic law dominates and regulates all public and private manners; it has both personal and general inclusions that emerge from rules for etiquette, hygiene, diet, group interaction, and settlements of internal and external disputes. The Muslim world regards Islamic law as a vehicle that is able and suitable to solve all problems – civil, criminal and international (Albalawi, 2006).

Islamic law or Sharia comprise the sources of legislation through which rulings and laws are established, and the first reference to Islamic Sharia is the Book of God – the Quran, the Muslim holy book. After the Book of God in status is the Sunnah of His Messenger – may God's prayers and peace be upon him – with all its components, actual, anecdotal and decisive, and anything other than what was narrated by him – may God bless him and grant him peace –has been authenticated and transmitted by him. These two sources of legislation are agreed upon among scholars of the jurists Trustworthy. The Sunnah conveys and interprets the Quran. (Nomani and Rahnema, 1994).

Third, the Ijma refers to determination and agreement. Consensus is defined, according to Sharia, as the jurisprudence and agreement of Muslim scholars on the validity and legal rulings of matters. It is also a means to obtain legal evidence on a jurisprudential issue that's inferred from a Sharia ruling. Fourth, Qiyas is for comparative measurement. In legal terms, it is the procedure of derivation by which the law of a text is applied. It depends on the law established by the Quran, Sunnah or Ijma

and must not depend on a law that is specific to a certain attitude or set of facts (Albalawi, 2006).

Thus, it can be concluded that the Sharia helps regulate the society and determines how the matters of its members are conducted, assigning rules that relate to the division, production and consumption of resources, the working of markets, and the distribution of income and wealth. However, except for a short time at the beginning of Islam, it has never been applied in its completeness (Iqbal and Mirakhor, 1987).

2.1.2 Islamic Economy

Islam allows the freedom of work and projects and the establishment of the Islamic economy in everything, including agriculture, industry and trade, as mentioned in several sections of the Holy Quran. The Islamic economy depends on the fair distribution of income, marketing, investment trade, alternatives and wages, and it is one of the most important conditions and principles for restoring and ensuring freedom of the individual within the state of social welfare. The balance is in establishing justice and achieving the Islamic goals of the Islamic economy, according to Islamic law, which requires trying to clear the idea of interest rates from financial institutions (Chapra, 1996).

Economic matters are treated by Muslims as comprising the production, distribution and consumption of goods and services. In Islam, human manners, whether economic or otherwise, are neither value free nor value neutral; they are linked to the ideological establishment of faith (Farouk, 2006).

2.1.3 Islamic Finance

Kahf (2005) debated that the origins of Islamic finance go back many centuries and can be traced the birth of Islam as a religion. It is one of the forms of financing based on the principles of Islamic law, as dictated by the Holy Quran and Sunnah (which are the teachings and practices of the Prophet Muhammad, peace be upon him) and scholars of Sharia. Islamic finance is fundamentally different from conventional finance in that the charging and payment of interest is strictly prohibited.

Given that it is based on concepts such as ethical investment and ethical purchasing, Islamic finance is governed by a set of rules and laws that define how business and trade are conducted in an economic system based on achieving justice for all stakeholders. The following are the basic principles that govern Islamic finance: prohibition of charging and paying interest on loans (which is called usury); sharing of profit, loss and risks, given that Islam encourages partnership and social integration and is not keen on guaranteeing a fixed amount of returns without taking risks; prevention of speculation to ensure that returns are linked to effort and not luck; prohibition of concealing any aspect of the contract (such as the price, the nature of the commodity or its description) in contractual transactions and relationships, so that they are clear and fully documented; prohibition of the hoarding of money and wealth to ensure the spread of economic development and its dissemination in a manner that benefits society as a whole; prohibition of unethical investments and trade, including certain products or sectors such as alcoholic beverages, weapons, gambling, pork, and suspicious financial deals (Iqbal and Mirakhor, 1999).

The norm of justice is fundamental in all types of Islamic financing. In the system of profit and loss sharing (PLS), when an IB provides methods of payment to the

producers, both parties share the outcomes of the project, regardless of it being favourable. The target is not just to throw the risk on one side but also ensure that the owner of the resources has full rights to the rise, growth, benefits and profit associated with their possession. By the same code, this owner carries the responsibility of any loss or damage that may occur to their possession (Kahf, 2005).

2.1.4 Distribution of Resources in Islam

Islam especially regards resources division as an economic problem. As Islam differentiates between essential needs and luxuries, there exists no conception of relative lack of resources. The resources provided on Earth are adequate to meet the essential needs (food, clothing, and shelter) of human beings. So far, the existing hunger, poverty and economic backwardness are results of mal-distribution created by man-made laws and systems. As the Islamic system mirrors the wisdom of the Creator, its enforcement can make a society capable of addressing the necessities of humanity based on the right understanding of life (Farouk, 2006). Natural resources are classified as public property and a right for all citizens, Muslims or otherwise (Farouk, 2006).

2.1.5 Zakah

Zakah is one of the most important pillars of Islam, standing for purification, cleanliness, growth and increase. So, the amount of money that is in excess of a Muslim's needs should go towards the poor and needy; it is estimated to be 2.5% of the total wealth, income and capital (Al-Qaradawi, 2000). It represents the first technique for ensuring economic justice and providing sustenance to the economically unfortunate (Kahf, 2005). In Islam, individuals with resources above the determined exemption

limit are to pay an amount levied on their wealth, thereby purging the individual's soul and wealth.

2.1.6 Riba

The forbiddance of Riba (usury) is indicated in the Holy Quran in four surahs (chapters):

1. "That which you give in Riba for increase through the possession of other people, will have no increase with Allah: But that which you give for charity, seeking the countenance of Allah, will grow: it is these who will get a substitute multiplied" (Surah 30, verse 39).

2. "O you who believe! Devour not Riba, doubled and multiplied; but fear Allah; that you may really prosper" (Surah 3, verse 130).

3. "That they took Riba, though they were forbidden; and that they devoured Men's wealth wrongfully. We have prepared for those among them who reject Faith a grievous chastisement" (Surah 4, verse 161).

4. "O you who believe! Fear Allah, and give up what remains of your demand for Riba, if you are indeed believers. If you do it not, take notice of war from Allah and his messenger: but if you repent you shall have your capital sums: deal not unjustly, and you shall not be dealt with unjustly. If the debtor is in difficulty, Grant him time till it is easy for him to repay. But if you remit it by way of charity, that is best for you if you only knew. And fear the day when you shall be brought back to Allah. Then shall every soul be paid what it earned, and none shall be dealt with unjustly" (Surah 2, verse 278-281).

Riba generally means growth or increase in something, and in Sharia it refers to additions to the principal sale, debt of money without entitlement, or increase after a certain period of time without compensation – an increase on the original is called usury – whether at the same moment or after a specific period of time (Choudhury and Malik, 1992). The technical meaning of Riba is the premium, no matter how small or large, which must be given to a lender in addition to the principal as a case for a loan or an extent of its rationality (Etab, 2016). It is confirmed that all kinds of predetermined constant returns, which are linked to the size and the length of the loans, with no regard as to their aim, are regarded by Muslim scholars as Riba (Chapra, 1985).

The God Almighty forbids usury due to the severe harm it can cause society, the economy, and production. Some of these reasons why it is prohibited are as follows: It is unfair to the borrower who will need to pay more than the loaned amount, which creates enmity in society. Further, it is to ensure that relations between people do not become only material, for usury erases the meaning of a good loan that increases love and bonding and the spirit of cooperation in society. It causes damage to the economy; the poor get poorer, and the rich get richer. As investments decrease, with money confined to the hands of lenders, economic inflation persists. It is harmful for productivity – if the trader or importer borrows a loan, he is forced to raise the price of the commodity to compensate for the increase resultant from the interest-based loan, thereby reducing production because of the lack of demand from the high prices (Khan and Mirakhor, 1992).

2.1.7 Interest, its Origin and History

Interest is defined as a fee that is paid in exchange for the use of another party's funds. For the borrower, it is the cost of renting money; for the lender, it is the income obtained upon lending money. Before discussing the definition of the interest rate, the history of interest needs to be highlighted. Interest is an ancient practice, but social norms in the ancient Middle Eastern civilisations, up to the Middle Ages, viewed imposing fees on loans as a kind of sin. This moral view on fees imposed on loans declined during the Renaissance; people began to borrow money to grow their businesses in an attempt to improve their situation, and the growing markets and the movement of the economy made loans more commonplace and the imposition of interest more acceptable. During this period, money became a commodity, and the opportunity for lending was considered worthy of imposing a fee. Laws and moral codes organising the charging of interest can be traced from the code of Hammurabi of Babylon 1800 B.C. in the Old and New Testaments to the set of medieval forbiddances, the rules of the Quran and the modern frameworks of the contemporary world (Mohieldin, 1997).

Over time, excuses were made concerning the charging of interests, such as the matter of charging interest to political foes. The borrower was penalised if he failed to repay the principal on the given date. It was seen as a compensation for the lender if he suffered from loss during the lending duration because of the loan. On the other hand, interests were also used as a form of gift, a recompense given by bankers to the depositors in the early phases of deposit banking as incentive. These practices became plentiful to the extent that they left interest forbiddance as an empty shell of a concept (Mohieldin, 1997).

The interest rate is a compensatory payment to lenders for parting with funds for a specific period at some expected risk. To recompense savers for investing their money, interests are rewarded for giving up the capacity to consume and changing their attitude about saving. There is also a need to encourage people to save at zero or even negative interest rates since they will need money for old age or future durations of zero income (Howells and Bain, 1998).

In Islam, interest is forbidden and regarded as guilt because of the idea that there is no utilisation or fairness. Basically, the major reasoning behind the forbiddance of interest is that the lender is assured of a positive return without doing any work or sharing any type of risk, while the entrepreneur is not assured of such positive returns despite their work (Björklund and Lundström, 2005).

It is a fault in contemporary theory that deals with interest as the price of, or return for, capital. Money is not capital, not even representative capital; it is merely possible capital and demands the service of the entrepreneur to transform it into real fruitful use – the lender has nothing to do with this transformation of money into capital and with using it productively (Iqbal and Mirakhor, 1987). Money must be put to fruitful use, and thus a risk must be undertaken to justify this return. In addition, returns should not be constant with no regard to profits. Hence, the controversial (to Islam) theory of secured constant interest rates, as in the case of banks' deposits, is used by Muslim scholars to clarify the repetitive financial shocks in the western banking system (Akacem and Gilliam, 2002).

The problem with interest is that it has to be paid in good or bad times alike, unlike dividends that can be decreased in bad times or, in ultimate conditions, even not

paid at all. Thus, the burden of financing by shares is much lower than with debt. This element tends to basically decrease business setbacks and thereby keep the economy away from economic instability (Chapra, 2007).

2.2. The Islamic Banking System

2.2.1 The History of Islamic Banking

The Mit-Ghamr savings/investment house in the Egyptian rural area is generally recognised as the first IB in Egypt and the world; it took the shape of a savings bank relying on profit-sharing (Ariff, 1988). Mit-Ghamr was founded in 1963 by Ahmad Al-Najjar and operated until the Egyptian government disposed of it in 1973. The founder intended to build an IB in Egypt relying on the German savings bank model, which he had become familiar during his studies in Germany. Al-Najjar never referred to the bank as an Islamic one for fear of being viewed as an aspect of Islamic fundamentalism which was a curse to the political regime. Neither the country nor the public were aware that the urge behind the foundation was an Islamic one (Henry and Wilson, 2004).

The banking experience of Mit-Ghamr savings/investment house, which neither charged nor paid interest, consisted of investing primarily by taking part in commerce and industry directly or in partnership with others and sharing the gains with the depositors (Siddiqi, l988). So, it worked as a saving–investment establishment rather than as a commercial bank. The Nasser Social Bank, founded in Egypt in l971, was announced as an interest-free commercial bank; however, its charter made no indication to Islam or Sharia law (Ariff, 1988).

Another effective experience, in this respect, occurred approximately at the same time as the Mit-Ghamr savings bank was founded –the Pilgrims Fund Corporation, or Tabung Haji, began operations in Malaysia in 1963. The following were its purposes:

I. To qualify Malay Muslims to save progressively in order to boost their expenditure during Hajj (pilgrimage) and for other useful aims

II. To qualify Malay Muslims to have efficient and influential collaboration in investment activities which are allowed in Islam through their savings

III. To preserve and protect the interests and guarantee the well-being of pilgrims during the pilgrimage by providing several facilities and services (Ariff, 1988)

Caring about these aims, Tabung Haji has been successfully operating since then. It has provided outstanding and inclusive services to please the pilgrims' needs prior, during and after their pilgrimage. Since starting its business in 1963 with merely 1281 members and a total deposit of $15,400 across three branches, Tabung Haji has now developed into a large corporate structure that efficiently administers to some 26,000 pilgrims and more than five million depositors, with a total deposit of about $9 billion. Tabung Haji works as a substitutional financial foundation to interest-based banks, providing Halal investment opportunities to Malaysian Muslim savers (Ishak, 2011).

Any Malaysian Muslim can open their account with Tabung Haji. The amounts collected are invested in selected investment projects, ranging across a various investment portfolios in accordance with the Sharia rules and their powerful development potential. Presently, the overall value of its investment is around US$ 4

billion. This covers short and long-term investments, equity investments, unit trust investments, schemes provided by the government, actual estate investments as well as investments in the 12 subsidiary companies they are engaged with – from the traditional sectors of agriculture, plantation or actual estate business to the most contemporary information technology sectors. Since 1995, Tabung Haji has been permitted to extend its operating domain; now, its business activities have expanded even outside Malaysia (Chachi, 2005).

In the seventies, alterations occurred in the political atmosphere of several Muslim countries such that there was no longer a necessity to found undercover Islamic financial institutions. A number of IBs were founded in the Middle East, e.g., the Dubai Islamic Bank (l975), the Faisal Islamic Bank of Sudan (l977), the Faisal Islamic Bank of Egypt (l977), and the Bahrain Islamic Bank (l979). The Philippine Amanah Bank (PAB) was founded in l973 by a Presidential Decree as a specialised banking foundation without indication to its Islamic trait in the bank's charter. The foundation of the PAB was a reply by the Philippines Government to the Muslim revolt in the south, designed to serve the private banking needs of the Muslim community (Ariff, 1988).

Another controversy behind the onset of the Islamic financial system has been stated by Kuran (1997). He debated that the roots of the Islamic financial sector provide a distinguished Islamic explanation of economic growth and societal justice. Islamic economics originated in the Muslim world as an ideological paradigm embedded in the condition of regional and national disputes for political power and a search for a distinguished Islamic character. Siddiqi (2006) debated that Islamic economics was understood in the early part of the 20th century as an antidote to socialism and capitalism, i.e. an Islamic reply to what were known as God-less western ideologies.

The assertion was on fairness and freedom from imperialistic rule; in terms of utilisation and injustice, it was a ploy to return to Islam that stood for the removal of poverty and the decreasing of unfair allocation of wealth.

Bassens et al. (2010) also added that as all-encompassing model for social, economic and political life, Islamic economics was a substitute to western economic concepts. It was thought to avoid the in-egalitarian excesses of modern capitalism while simultaneously unleashing the energies of entrepreneurs and sellers.

Nowadays, Islamic banking is rated to be running funds of US$ 1.7 trillion. However, the dimension is hard to identify. Its clientele is not limited to Muslim countries but also expand over Africa, Asia, Europe and the United States. A growing number of conventional banks offer different Islamic products as well. These Islamic windows are not separate financial establishments but sections within the conventional banks that provide products to suit Sharia; for instance, Hong Kong and Shanghai Corporation (HSBC), and others. Islamic bankers in keeping pace with developed techniques and the latest developments, have promoted investment instruments that are both gainful and ethically stimulated (Nazim and Bennie, 2012; Bjorklund and Lundstorm, 2005). Today, there are 360 foundations reporting Sharia-compliant activities. Of these, 111 are conventional banks operating semi-separated Sharia windows, while 248 are fully compliant, separate foundations (DiVanna and King, 2015).

2.2.2 Islamic Banking and Finance

The main purpose of the Islamic finance system is to complete the teachings of the Holy Quran, as opposed to reaping utmost returns on financial assets. The major

rule in the Sharia is that exploitative contracts based on Riba or unjust contracts that include danger or contemplation (Gharar) are inapplicable. However, the Holy Quran does not include damnation of ethically agreeable investments that introduce equality and lawful gains and economic/social added value (Siddiqi, 1999).

Though the concept of Halal banking has occasionally been employed as a depiction for Islamic banking operations, the broader concept of Islamic banking indicates a system that stands for the integration of the other religious aspects and social aims of the Islamic financial system, including several charitable establishments with spiritual principles and social equality, economic growth and the reduction of poverty (Hassan and Lewis, 2009).

Samad (2004) asserted that, to comprehend the strengths, weaknesses and achievements of IBs, it is fundamental to know the major atmosphere in which they work, which is what distinguishes Islamic banking from other types. In accordance with the Sharia, Islamic financial foundations must be based on four major rules:

1. All transactions must be interest free, i.e. free from Riba. The Quran clearly forbids Riba, but it does not explicitly clarify whether Riba is interest in its modern shape. The insufficiency of clarity resulted in an argument among the Muslim scholars in the past. However, at present, there is a generic consensus that Riba indicates any amount charged over and above the principal. The payment or receiving of interest, which is the basic rule of conventional banking and financing, is clearly forbidden in Islamic banking and finance.

2. Activities or transactions including speculation (Gharar) must be evaded. Gharar is speculation or gambling; Islam permits risk-taking in business transactions,

but it forbids speculative activity and gambling. Any transaction involving the factor of speculation, such as purchasing shares at a low price and selling them at a higher price in the future, is regarded as unlawful. Conventional banks, otherwise, have no restrictions in financing investment speculation.

3. The enforcement of Zakah, the obligatory Islamic tax. Zakah is an obligatory religious payment/tax on the wealthy payable to the needy. It is a built-in mechanism in Islam for guaranteeing the redistribution of wealth and the safeguard of a just standard of living for the needy. Zakah is one of the five pillars of Islam. Each Islamic bank must found a Zakah fund and pay Zakah on the gains earned. The payment of Zakah is in addition to any conventional tax obliged; so, the IB pays double taxes (Zakah and corporate business tax). The interest-based conventional banking system, otherwise, is subjected to only corporate business tax, and thus have specific advantages over IBs.

4. No involvement in the production or consumption of goods and services which are Haram, i.e. unlawful from the Islamic perspective. Muslims are not allowed to invest in production, distribution and consumption enterprises related to alcohol, pork, gambling, illegal drugs etc., although these enterprises may be gainful. Hence, it is prohibited for an Islamic bank to finance activities or items that are not allowed by the Sharia. The restriction of investment and financing is expanded to include any activity or business that may be harmful to the citizen or the society. Therefore, investing in the production or consumption of tobacco, alcohol, or pornography is also forbidden. This restriction limits the profitability of IBs. Further, conventional banks do not encounter any such limitations in their financing investments.

The banking services provided by Islamic banks to business customers are fundamentally restricted to letters of guarantee, letters of credit, and current/demand accounts (Karim, 2001). However, this does not mean that Islam frowns on making money or requires that Muslims return to an all-cash or barter economy, but it denotes that all parties of a financial transaction should share the risk and profit or loss of a venture and no one in a financial contract should get a predetermined return. For instance, the depositors in Islamic banks are shareholders who gain dividends when the banks turn a profit, or lose a share of their savings if it obtains a loss. In fact, the Islamic financing system works like western equity financing. This explicit connection between investment and profit distinguishes Islamic banking from conventional or western banking (Zahier and Hassan, 2001).

An IB can be explained as a financial intermediary whose aims and operations as well as rules and practices must fit Sharia laws, and thus is adjusted to run all its activities without interest. An IB is not merely a financier but also a partner in a business. The system basically includes sharing of risks between the owner of the capital and entrepreneurs in addition to sharing the effect of the mutual efforts (Alam, 2003). In other terms, the IB may be depicted as a combination of commercial and investment bank models (Karim, 2001). IBs' generic target is to improve the economy in accordance with the Islamic rules (Bjorklund and Lundstorm, 2005).

The basic description of Islamic banking is that money should be based on equity rather than debt. The idea of a financial structure working without a rate of interest would be strange to those familiar with a fractional-reserve banking system. The answer is in the profit and loss system; instead of ensuring a constant rate of return (interest), the IB and the borrower share the profits and losses from the venture to be

financed. Therefore, the idea of getting a return for money deposited in a bank is not accepted in Islam; money must be put to fruitful use, and risk must be undertaken to justify returns (Akacem and Gilliam, 2002).

The forbiddance of interest payment under Islamic law emerges from the idea of money being firmly used as a medium of exchange, i.e. money itself does not have any value and thus should not lead to more money. Even if the money is placed in a bank or lent to somebody, a particular return shouldn't be derived from it. The supplier of the capital (lender) is entitled to rewards from a business venture as long as the supplier is also willing to share the burden of losses with the user of the capital (borrower) (Ghannadian and Goswami, 2004). Islam considers profit, rather than interest, to be closer to its concept of virtue and justice, because gaining profits mainly includes sharing risks. Profit-making follows the Islamic ideals of social equality because both the entrepreneur and the lender share the risk of the investment project (Dhumale and Sapcanin, 1998; Kahf, 1997).

To sum up, Islamic banking advances the following series of beliefs: Interest as a recompense for saving has no base as an ethical establishment; abstaining from spending current income deserves no financial recompense; to benefit from money is to convert the money into investments, accept risks and bringing other elements of the production altogether. According to Ebrahim and Joo (2001), there are two preconditions of Islamic financial contracting:

1. Financial and contractual contracts must be obviously documented with good intentions, as asserted in the Quran.

2. Islamic financial contracts should include no components of Riba, Gharar or Maysir.

While the prohibition of interest is established in the Islamic dogma, supporters of Islamic finance provide economic rationales to boost the forbiddance of interest. Some of these rationales are depicted by the international association of Islamic banks (1995). First, in an Islamic profit-sharing contract, the return on capital relies on productivity, and the distribution of funds is originally based on the validity of the project, thereby enhancing capital distribution competence. Second, the Islamic profit-sharing system guarantees a more equitable allocation of wealth and the creation of further wealth for its owners. This system undoubtedly minimises the unfair allocation of wealth under the interest system. Third, the profit-sharing regime may enhance the volume of investments and, hence, provide more jobs. The interest regime accepts merely those projects whose anticipated returns are higher than the cost of debt, subsequently filtering out projects that suit the Islamic profit-sharing system. Fourth, the Islamic finance system minimise the speculation in financial markets but still allow for a secondary market for trading stocks and investment certificates based on profit sharing rules. Fifth, under the profit-sharing model, the equipping of money should not surpass the equipping of goods, thereby curbing inflationary pressures in the economy (Zahier and Hassan, 2001).

2.2.3 The Aims and Objectives of Islamic Banking

IBs seek to provide banking services that are in accordance with Islamic rules and Sharia, thus bringing the most benefit to society in terms of justice and prosperity rather than concentrating on merely making maximum returns on capital. They seek to

accomplish the socio-economic Sharia targets, which are good employment rates, economic development, fair allocation of wealth, socio-economic justice and flow of both investments and savings that guarantee fair return for all parties; thus, they ensure the stability of money value (Badreldin, 2009; Chapra, 2008; Hassan and Mervyn, 2007). Furthermore, it is asserted in the Handbook of Islamic Banking (1983) that their main target is to provide financial facilities by enhancing financial instruments that adjust to the Sharia laws (Hassan and Lewis, 2009).

Kahf (2005) debated that the main rules of Islamic banking are extracted from the presuppositions of equity and conformity, with reality on one hand and the human nature on the other hand. He added that the core of Islamic banking practices is the provision of goods and services, while payments for them are postponed to subsequent dates. He also stated that Islamic banking provides methods of payments in the form of producers' principal amounts for projects on the basis of sharing the actual, real life outcome of a production process.

One of the most remarkable aims of Islam is to achieve greater equality in human society. This is not possible unless all human foundations involving the financial system participate positively to this end. One of the essential needs for this is to subject all sides of human life – social, economic, political and international – to moral values. This will assist in curbing greed which has made maximisation of wealth and gaining satisfaction as the highest measures of human accomplishments (Chapra, 2008).

The financial system may be capable of boosting equity if, in addition to being powerful and constant, it satisfies at least two conditions. One of these is that the financier must also participate in the risk so as not to put the whole burden of losses on

the entrepreneur, and the other is that a fair share of financial resources should become available to the needy to help eliminate poverty and decrease inequalities of income and wealth (Chapra, 2008). Through the domain of Islamic norms, it is not possible to achieve potential development without justice; inequality ultimately leads to demolition (Al-Quran, 57:25).

One of the major rules of Sharia and Islamic finance is “No risk, no gain”. This is foundational to the achievement of the main target of Islamic finance, which is equity. If a financier desires gain, he must be ready to share the risk. The introduction of risk/reward sharing in the financial system contributes to inducing financial foundations that determine the risks more precisely and regulate the use of funds by the borrowers more effectively. The dual estimation of risks by both the financier and the entrepreneur helps inject greater punctuality into the financial system and decrease extravagant lending, making the financial system healthier (Chapra, 2008).

Ebrahim and Joo (2001) clarified that the major aims of an Islamic banking financial system are to carry out the value system of the Quran and the Sunnah in the domain of the Muslim socio-economic system, to reinforce the development of the economy of Muslim nations by developing financial markets, financial foundations and instruments and, eventually, to minimise the shocks of extreme economic output by promoting risk-sharing instruments whose payoffs are accurately contingent on the profitability of a firm or project at a micro level. This is because the financial facilities with constant costs can harshly decline the resources of borrowers during a slowdown, which can result in bankruptcies and structural weakening of the economy.

Islam regards economic activity as a means to an end and not an end in itself. It urges Muslims to benefit from natural resources, which are a trust from God, for implementing legitimate activities but forbids exploitation and man-made inequalities of income and wealth. In addition, Islam is pointedly attentive to the problem of economic growth but deals with this as a significant aspect of the wider problem of total human evolution. The essential duty of Islam is to ensure that human evolution moves along the right lines and occurs in the right way. It treats all sides of economic growth but always within the domain of total human growth and never detached from this sight (Ebrahim and Joo, 2001).

2.2.4 The Benefits of an Islamic Banking and Finance System

Under the Islamic finance system, the actual values of assets and liabilities are equivalent at all points of time since the nominal values of deposits are not ensured. In contrast, the conventional system maintains the values of deposits, and thus, in the short run, there are differences between the actual assets and liabilities. The Islamic system doesn't require any government interference to conform to shocks, while the conventional system requires such an interference to reform the disequilibrium between assets and liabilities, without which the difference would persist in and lead to a banking crisis (Mohieldin, 1997).

The Islamic banking system does not participate in the myopic action of banks in times of crisis, which take the shape of intense competition for deposits by bidding up the interest rates or the quick decrease of loans to increase reserves at the expenditure of other banks, which may at last result in insolvency and bankruptcies (Mohieldin, 1997).

Since the interest rates are exchanged with the expected rates of return in the Islamic banking model, Mirakhor (2000) stated that with the return to liabilities being a direct task of the return to assets and assets made in response to investment opportunities, the return to financing is eliminated from the cost and added to the profit, consequently permitting the rate of return to financing to be specified by productivity in the actual sector. So, in the Islamic financial system, it is the actual sector that specifies the rate of return to the financial sector.

The interest-free model of finance can contribute in lowering the debt burden of the less developed countries (LDCs) through the idea of debt/equity swap. Since, in the early 1980s, the LDCs were becoming increasingly incapable of serving their debt duties, banks started to sell their debts in the secondary market. Interested banks, multinationals and investors could purchase the LDCs' debts in the secondary market at a discount and transform them into equities for the debtor's country (Akacem and Gilliam, 2002). Islamic banks should take the lead and in taking equity in different projects in developing countries. Several developing countries could make use of a debt/equity swap program facilitated by the leading Islamic banks, since these economies experience the classical economic problems impacting most LDCs. The controversy behind the adoption of this approach is the time given to the economies of developing countries to permit them to reform and grow. Although the debt/equity swaps is an ideal investment for Islamic banks, it is yet to be embraced.

Another minor benefit is the minimised dependence on a country's level of international reserves. Since most non-oil LDCs depend on hard-currency earnings from their exports of a single or few merchandises, their economies become subject to external shocks whenever their term of trade turns against them. In such cases, those

countries have no way out other than resorting to commercial borrowing, which increases their debt burden. However, if Islamic banks become partners with those LDCs, they can share the profits from the venture, and the LDCs will not be obliged to pay any principal or interest, ultimately leading to a reduction in the debt burden (Akacem and Gilliam, 2002).

Regarding the idea of socio-economic justice, proponents of the interest-based financial system debate that interest is forbidden to stop the exploitation of the needy, emerging from the excessively high rates of interest that were predominant in those days. Moreover, they debate states that rates of interest are much lower today, and the recent welfare state has also decreased a number of measures to achieve the needs of the needy to stop them from resorting to exploitative borrowing. Though this is valid to a certain extent, the living beyond denotes that the interest-based system in both the public and private sectors results in an oblique exploitation of the needy in different ways (Chapra, 2007).

Primarily, the conventional banks tend to distribute financial resources among borrowers, mostly on the basis of their capability to ensure the repayment of the principal and the adequacy of cash flow to serve the debt. Even though the cases linked to the collateral and cash flows are very significant, they do not form the basic criterion and disregard the actual goal behind the borrowing. Thus, financial resources go fundamentally to the rich who own the collateral and the cash flows. Furthermore, the ease of borrowing has authorised a number of developing countries to borrow exceedingly big amounts. The debt-servicing burden keeps rising with the increase in debt and becomes unbearable, especially if the borrowed amount is not used productively. The consequence is that those governments becom incapable to provide

sufficient budgetary resources for some of the most significant national needs like education, health, infrastructure projects, and rural and urban development. Thus, it is crystal clear that mostly the needy and the lower middle classes are the ones who suffer as a consequence. Poverty does not decrease, and inequities of income and wealth continue to increase (Chapra, 2007).

The ease of borrowing also causes problems for rich countries. For instance, the breakdown of the US hedge fund long-term capital management (LTCM) in 1998, which was caused by strongly leveraged short-term lending. Many of the top commercial banks in the US, monitored by the Federal Reserve and regarded as healthy and sound, had lent large amounts to these funds. The LTCM experienced huge losses that eroded its equity from $4.8 billion to merely $600 million, leading to an increase in the leverage up to 167 times of the capital (IMF, 1998).

Second, one of the most significant pre-requisites for conquering the unemployment problem is looking at the rise in the savings levels in the economy which is indispensable, and accomplishing this rise in a non-inflationary manner and without an increase in foreign debt. Unfortunately, there has been a drop in savings in nearly all countries all over the world. Chapra (2007) debated that there are a number of reasons for this general trend worldwide, one of which is living beyond means by both the public and private sectors. This saving shortage has been the reason for constantly high levels of actual interest rates, which has thus resulted in a reduction in the investment level. This has influenced the employment rate of several developing as well as industrial countries. However, if banks are requested to share in the risks, and recompenses of financing and credit are made available, essentially for the purchase of actual goods and services – which the Islamic system tries to guarantee – the banks will

be more cautious in lending and credit expansion will tend to be in step with the development of the economy. Consequently, unproductive and speculative spending may slump and launch the potential for more resources to become available for fruitful investments and development, which will eventually lead to a higher growth rate in output and employment and a drop in unemployment.

2.2.5 Central Bank's Role and Islamic Banking

The central bank is the government's bank as it keeps the deposits of the government and advances loans on it. The central bank achieves a significant function in curbing commercial banks and their different activities (Ahmad, 2000). It is capable of controlling the volume of money in the economy by influencing the money provision or monetary aggregate to dominate the amount of money that commercial banks lend to people (Kiaee, 2007).

The central bank is also regarded as a banker's bank, as commercial banks retain deposits, and they may advance loans at the time of necessity by working as the lender of last resort. All these tasks form remarkable dimensions of central banking operations; supposedly, the most remarkable function of a central bank is to monitor the credit made by commercial banks. This is a lever through which the monetary policy of the country is planned and performed. The techniques to which central banks resort to control commercial banks' credit creations involve legal reserve ratio, bank rate or discount rate policy, open market operations, qualitative or selective credit control and moral suasion (Ahmad, 2000).

The aim of imposing a legal reserve ratio is not to merely make deposits safer or to keep banks liquid. Actually, its basic target is to control the credit creating capacity

of commercial banks. The commercial banking system has the ability to create credit at many times the reserve ratio. Consequently, by increasing or decreasing the reserve ratio, the central bank can respectively minimise or increase the credit creating capacity of commercial banks. The discount rate or the bank rate is the interest charged by central banks on any progresses made to commercial banks. By presenting divergences in the bank rate, the central bank controls the price of the credit made by commercial banks. As a result, the request for credit can be decreased or increased due to alterations in the central bank's rate. Open market operations mention the purchase and sale of government securities by central banks and other financial foundations and persons in the open market. By purchasing and selling securities in the open market, the central bank can extend or contract the reserves of commercial banks, which affects their credit-creating capacities (Ahmad, 2000).

Banking operations are certainly different and sophisticated under the Islamic system as compared to the traditional banking system. However, nearly all economists writing on this subject are in agreement that the central bank in an Islamic economy would keep accomplishing all those tasks performed by central banks elsewhere (Ahmad, 2000; Ahmed, 1989).

According to Iqbal and Mirakhor (1987), the major function of central banking in an Islamic financial system is the supply of an institutional domain for the smooth operation of financial markets in compliance with the guidelines of the Sharia. The central bank must take the lead in promoting Islamic financial institutions, deposits and loan instruments, and a yield structure conducive to the effective motivation of savings and distribution of resources. Another task of the monetary authorities is the implementation of Islamic regulations regarding contracts and property rights. This

lessens the uncertainties can hinder private investments and encourage lending of funds on the basis of viability and profitability of investment projects rather than solvency, creditworthiness or collateral strength of entrepreneurs.

Iqbal and Mirakhor (1987) debated that the frequent regulatory, supervisory and controlling tasks of the central bank regarding the banking system can be continued and supported in an Islamic financial system. Additionally, in accordance with Khan and Mirakhor (1986), the organisation and control of commercial banks is constantly within the domain of a monetary policy in which specific instruments and tools are employed to accomplish predetermined targets. To accomplish its goals, the central bank has to control the provision money, the reserve ratios on liabilities, and the assets which the banks can allocate to their PLS activities.

Another way to increase control over the banking system is the central bank obtaining it through its purchases of equity shares of banks and other financial intermediaries. Through the fulfilment of its regulatory, supervisory, and controlling tasks, as well as its last resort lender role, the central bank can go on exerting a radical effect on the financial system. Furthermore, opportunities exist for central banks to invest immediately in the real sector on a profit sharing basis, as well as to take equity positions in joint ventures along with other banks (Khan and Mirakhor, 1986).

Moreover, it has been proposed that the central bank can organise profit-sharing ratios between banks and borrowers as well as between banks and depositors. Distinctions in these ratios can alter the rates of return and have the same effect as interest rates on the overall flow of financial resources. While the adoption of this policy instrument can certainly boost the control of the monetary authorities over the

volume of credit creation, it can influence resource distribution and restrict the freedom of contracts and the sharing of losses by partners (Iqbal and Mirakhor, 1987). However, it is debated whether such a policy is correct, since it represents a restriction on the freedom of contract which may be unfair. The matter of inequity would appear if the profit sharing rules imposed by the central bank demanded, say, a lower return from profits than the share in losses (Khan and Mirakhor, 1986).

One of the most remarkable and pivotal tasks of the central bank is its role as the last resort lender to commercial banks: If any commercial bank encounters a liquidity problem and is short of cash, the central bank may bail it out by supplying it with a suitable loan. In an interest-based economy, such loans are provided on the basis of interest. In an Islamic economy, the central bank can achieve this task by supplying interest-free loans (Qard Hassan), with or without service charge (Ahmad, 2000).

2.2.6 The Operational Framework of Islamic Banking

2.2.6.1 Sharia Principles of Operations

Each IB must contain an in-house Sharia committee to guarantee that their transactions and activities are compliant with the teaching of Islam and the Sharia. The Shariah committee should include persons who are specialised in the Islamic Fiqh Al-Muamalat (Islamic commercial jurisprudence). The committee should perform five different activities: 1) certifying allowable financial instruments through Fatwas (religious opinions), 2) verifying that all trades act in accordance with issued Fatwas, 3) calculating and paying Zakat, 4) disposing any earnings that are not Shariah-compliant and 5) counselling on the allocation of any profit or losses among shareholders and investment account holders. The committee also should publish a report to ratify that all

financial activities and transactions are in compliance with Shariah principles (Olson and Zoubi, 2008).

Moreover, several IBs generally work within a traditional banking atmosphere and have working relationships with traditional banks. Consequently, they accumulate overwhelming interest balances in their accounts with traditional banks. Since Sharia laws state that interest cannot be regarded as an income and must be distributed to the needy in a way that does not directly benefit the bank (Zakat), those IBs that happen to gain interests spend them on charitable social activities. In another meaning, while profit maximisation is equally fundamental to IBs as other conventional banks, these financial foundations are conducive toward social commitment and activities that generally cannot be interpreted due the urge for profit maximisation (Kahf et al., 1998).

Modern IBs have been established on the banking model that existed in Europe and North America, concerning their basic layout, departmental structure and major tasks of mobilising financial resources and employing them to finance those who are in need for investible funds. Clearly, the distinction lies in the area of modes of financing that are, in the case of IBs, extracted from the Islamic system and constructed within the Islamic legal domain (Kahf, 2005).

2.2.6.2 The Investment and Financing of an Islamic Bank

There is a great debate about the idea that Islamic banking only changes conventional financing so as to please the Sharia scholars, raising the following questions: What remains characteristic about the Islamic system? What is the fundamental starting point between the two systems? Should the adaptive devices come to control the system and be considered just as legal fictions (Hiyal)? Further, there is a

risk of Islamic banking looking like a matter of branding, such as Mecca Cola instead of Coca Cola (Hassan and Lewis, 2009).

The controversy about whether Islamic banking and finance can be a substitutional approach to contemporary banking will last for a long time. However, the banking business is generally no more than a potential method to satisfy the needs of society in accordance with the prevalent situations and circumstances. Islamic banking is a system that provides financing and attracts savings on the basis of profit and loss sharing (PLS), contrary to the conventional banking system based on interest paid and charged. For Muslims, this system corresponds to their belief in the forbiddance of interest and helps mobilise unused funds for investment and new job opportunities. As for non-Muslims, the Islamic banking system does not disagree with their faith but supplies the society with substitutional ideas for venture capital and other instruments of investment. However, it can be observed that the idea of Islamic banking has become exceedingly accepted and suitable, evidenced by the many international banking foundations initiating Islamic banks or windows. Today, Islamic banking is practiced by some western banks and financial foundations in Switzerland, the UK and US (Kahf et al., 1998).

A country's financial and banking system is important for its development and prosperity. Playing the role of a financial intermediary, banks can help the economy by collecting or pooling deposits from small deposit holders and making great sums of money available to borrowers and entrepreneurs for their use (Brown, 2003).

Financial intermediation is the main task of the contemporary banking system; it is perhaps the raison d'être of banks. In conventional banks, this is achieved on the basis

of loan contracts. Banks borrow funds from those who have extra money and lend them to those who need funding for their production projects or to purchase consumable goods and services. Additionally, IBs fulfil the same role of financial intermediation by collecting savings from those who have surplus and allocate them to entrepreneurs and consumers who need them to finance their purchases of goods and services. However, IBs create their financial intermediation on the basis of many contracts that do not involve lending and borrowing because interest is forbidden in the Islamic law. Instead of the loan contract, these banks depend on a blend of three principles: sharing, leasing and sale. What is fundamental in their task of financial intermediation is that IBs leave the initiative of investment and use of funds to the entrepreneurs and other users of funds (Kahf, 2005).

Generally, the major aim of a financial system is to ease the flow of funds from savings-surplus-units to savings-deficit-units in the most influential manner, and commercial banks play this remarkable role as an intermediary. In the non-presence of intermediaries, funds would directly flow from the lenders to the borrowers, and such direct financing has many problems such as the non-presence of double coincidence in terms of maturity. Commercial banks play a pivotal role as financial intermediaries and interfere with the two groups to solve such problems and distribute funds in the most effective way (Obaidullah, 2005).

According to Obaidullah (2005), commercial banks perform four basic services:

1. They are capable of producing an extensive range of denominations by pooling several persons' funds and investing them in direct securities of different sizes.
2. They are capable of creating securities with an extensive range of maturities.

3. They are capable of spreading danger by investing in an extensive range of assets.
4. They are capable of providing liquidity by minimising the transactions costs linked with turning financial assets into money.

In an interest-based banking model, the interest rate is the changeable that determines the demand and the provision of money, and this gives information about the overall market, helping decrease the information searching cost for substitutional financing schemes. Otherwise, the profit-sharing mode of finance does not provide a systematic mechanism by which these profit shares are reached. Consequently, the search for the most profitable investment alternative under this model will most likely take longer and be costly. An additional cost for IBs that conventional banks do not have is their commitment to monitoring projects in which they are partners more closely, and this demands managerial skills and expertise (Akacem and Gilliam, 2002).

In terms of profit sharing activities, the standard of credit-worthiness of the borrower that underlies conventional banking systems must be altered to further assert the viability and profitability of the specified project being suggested. Furthermore, there must be an organisation for any returns of the various economic activities that banks have to take into consideration. Project appraisal, profit sharing ratios and the foundation of a procedural domain for the processing, supervising, and auditing of different projects open up new requirements for commercial banks. On the liability side, banks would have to catch depositors on the basis of profits and dividends, rather than through interest rates. In one word, commercial banks in an Islamic system would have to be converted into incorporations that would closely resemble investment banks in western financial systems (Khan and Mirakhor, 1986).

One of the basic rules of Islamic banking is risk sharing, denoting that Islamic banks should work merely using PLS arrangements. The entrepreneurs share the profit or loss with the IB in accordance with an agreed upon ratio. The bank then pools all profits and losses from different investments and shares the profit with depositors of funds, according to a predetermined percentage. IBs are partners with both depositors and entrepreneurs, and they share risks with both (Olson and Zoubi, 2008).

2.2.7 Islamic Banking in Different Countries

2.2.7.1 England

Islamic finance institutions are requesting the British government to implement tax reforms, as some Sharia-compliant products are hindering their growth. (Reuters). Since Islamic finance prohibits interest payments, most of its transactions usually require transfers of ownership of the underlying assets, this causes double or even triple tax fees. Britain has extended its Islamic finance operations to become its largest centre in the Western world, and banks are now seeking to ensure tax equality in areas such as mortgage refinancing while competing with their traditional counterparts.

Britain previously addressed the negative tax treatment of Islamic bonds and residential mortgages, which helped Islamic banking assets to exceed five billion pounds in 2016, while London attracted more than 65 listings of Islamic bonds totalling 48 billion pounds, according to the lobby group City UK. The UK Tax Authority told Reuters that it wanted to ensure that the tax implications of Islamic mortgage refinancing would not affect conventional mortgages and that work was in progress (Reuters).

The Bank of England promised to develop a Sharia-compliant liquidity tool for IBs' use, and in the latest move, London has taken to attracting business activities from major centres of Islamic finance in the Middle East and Southeast Asia. The central bank issued a consultation paper on a fund-based facility deposit model that may help IBs meet regulatory requirements for liquid asset reserves (Reuters).

London has long aimed to become a global centre for Islamic finance, and it issued Islamic sovereign bonds in 2014; tools supporting its Islamic banking sector help it adapt to the economic impact of its separation from the European Union. The Bank of England said in its consultation paper that the pricing of the proposed model would be similar to conventional instruments, making it attractive to IBs (Reuters).

2.2.7.2 Bahrain

The banking system in Bahrain consists of conventional banks and IBs, and it constitutes the largest component of the financial system, as it is unique to more than 85% of the sector's total financial assets. The total number of financial sector institutions in the country reached 367 at the end of September 2020, which includes 31 retail banks, 62 wholesale banks, 17 branches of foreign banks and eight representative offices. These institutions also include 34 insurance companies, 53 investment business companies, and 86 specialised licensed companies. The value of banking sector assets by the end of June 2020 amounted to more than US$ 212 billion, over five times the annual GDP of Bahrain (Central Bank of Bahrain).

The sector has achieved growth as a result of the open market economy, stable and prudent macroeconomic and government fiscal policies, the credibility of the regulatory framework in line with international standards, and a capable and qualified

local workforce. All these factors have combined to support the Bahrain Centre as a regional banking hub that has succeeded in attracting many foreign banking institutions to establish offices in the Kingdom (Central Bank of Bahrain).

The Kingdom of Bahrain has become a global centre for Islamic financial services and the host country for the largest concentration of Islamic financial institutions in the Middle East. Bahrain today includes important organisations and bodies for the development of Islamic services: six IBs in the retail sector, 13 IBs in the wholesale sector, nine windows belonging to traditional banks, six takaful insurance companies, and two companies for re-takaful operating in the Kingdom (Alqahtani *et al* 2017). Bahrain has also become a leading market for Islamic bonds (sukuk), including short-term government sukuk and Ijarah sukuk. The Central Bank has played a key role in introducing these innovative products. Growth in the Islamic banking sector has been substantial, with total assets in this sector jumping from $1.9 billion in 2000 to $32.7 billion in July 2020, an increase of more than 17 times the earlier amount. The market share of IBs increased from 1.8% of total banking assets in the year 2000 to 15.3% in July 2020 (central bank of Bahrain).

The Central Bank of Bahrain has put in place a comprehensive reporting framework that is tailored to the developments and needs of the Islamic banking and takaful insurance sector. The IB guidelines cover areas including licensing requirements, capital adequacy, risk management, business conduct, financial crime, and disclosure/reporting requirements. The insurance directive volume also deals with specific characteristics of takaful and re-takaful companies. The two volumes constituted the first comprehensive regulatory framework to regulate the Islamic financial services sector in the region (Alqahtani *et al* 2017).

In addition, the Central Bank of Bahrain recently established a special fund called the “Endowment Fund” in the field of Islamic financial services for research, education and training (it works in partnership with the sector and bodies concerned with standardizing the markets). In addition to the many Islamic financial institutions in the Bahraini financial sector, the Kingdom of Bahrain also hosts a large number of important organisations and bodies for the development of Islamic services, including the following:

- Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI)
- International Islamic Financial Market
- General Council for Islamic Banks and Financial Institutions
- Islamic International Rating Agency
- Bahrain Institute for Banking and Financial Studies – Centre for Islamic Finance Studies (Daly and Frikha 2017)

2.2.7.3 Malaysia

Malaysia is one of the most important Islamic countries in Southeast Asia, and in four decades, this country has managed to achieve tremendous leaps in human and economic development, and becoming the first industrialised country in the Islamic world. This was achieved by expanding the industrial sector, opening wide areas for foreign investment, and creating great opportunities to improve the level of income for individuals; it has largely succeeded in treating the problems of poverty, illiteracy, unemployment and others.

The rapid economic development of Malaysia within the Asian Tigers group has given a strong impetus to the Islamic financial development. Malaysia is considered one of the Islamic countries most interested in the field of Islamic banking. There is political desire or government support for the Islamic banking sector, as the Malaysian government fully supports the system. In all its financial, political and legal aspects, government institutions have been established that support this system as well as its development and spread (Burhonov 2006).

A combination of several factors have pushed the Malaysian government to work on the adoption of the Islamic financial system in the country. Perhaps the most important of these factors was the ethnic unrest of late 1969, with the Muslim Malays protesting against the Chinese domination of the commercial sector and disparities in income and wealth. These are experiences that married the Islamic and traditional systems; through this review, we aim to identify the stages that Islamic banking in Malaysia went through to reach its current reality in the country's financial system (Dodoev 2018).

The emergence of IBs in Malaysia began in 1963 when Malaysian Muslims were interested in creating a mechanism to save money to enable them to perform Hajj, and they established an organisation called Tabung Haji (founded in November 1962, and officially operating in 1963). The idea of establishing such a fund can be traced to the economist Aziz Ungku, when he called for the establishment of a non-governmental institutions. Usury is based on saving the money of Malaysians wishing to perform Hajj and investing it in ways that are compatible with Islamic Sharia. After the success of this model, the government was interested in creating independent IBs. It was translated into reality in the year 1981 via the establishment of a public commission consisting of

20 banking experts to study the possibility of operating and then expanding IBs in Malaysia. This was actually embodied on 7 April 1983 through the issuance of the Islamic banking law which gave full authority to the Bank of Negara to supervise and regulate IBs. On 1 July 1983, the first independent IB was set up under the name “Bank Islam”, whose objectives were written in accordance with the principles of Islamic law, in light of the Malaysian government’s strategy to support Malay Muslims (Burhonov 2006).

After the encouraging performance of Bank Islam, the Malaysian government set its goal for Malaysia to be one of the most important global centres for Islamic banking, and in 1993, Bank Negara Malaysia (the Central Bank of Malaysia) introduced a dual banking system called the “Islamic Banking System” (IBS) or the Islamic Branches System for Traditional Banks in order to accelerate the deployment of Islamic banking products to local customers in the shortest possible period. As a result, conventional banks were permitted to participate, providing they had Islamic banking products on offer through its existing facilities, and 24 traditional banks responded to present Islamic products through its 1663 branches (Nawawi 1999).

After the financial crisis of 1997 and the change in the environment incubating Islamic banking services in Malaysia, the government established a second IB in 1999, the Malaysia Mumalat Bank, to accelerate progress in the Islamic banking industry, followed by the Financial Sector Scheme that was introduced in 2001. The gradual development of the Islamic financial system in Malaysia in the early years led to the increasing interest of the international community in Islamic finance (due to its close connection with economic activities and basic pillars of integrity, transparency, risk-sharing, and prohibition of abuse and speculation) (Lestari and Hardiyanti 2020).

The Malaysia International Islamic Financial Centre (MIFC) provided Malaysia with a platform to expand the reach of Islamic financial services to international markets and opened the way for financial institutions to expand Islamic financial activities by taking advantage of the system. This was further reinforced in 2011 by the development of a second long-term blueprint for the financial system called the "Financial Sector Blueprint 2011–2020" as part of "Vision 2020".

The year 2013 witnessed an important development in strengthening the regulatory and supervisory framework for the Islamic financial industry in Malaysia with the adoption of the Islamic Financial Services Act (IFSA), which came into effect on 30 June 2013. The law paved the way for the establishment of a framework for the Sharia-integrated compliance of the functioning of Islamic financial institutions in Malaysia. Two laws were founded to regulate Malaysia's financial sector – one to regulate the traditional financial sector and the other to regulate the Islamic financial sector. Under a unified law, it compiled all laws related to IBs, takaful companies, and payment systems with institutions monitoring the money market and the Islamic foreign exchange market. The IFSA (2013) states that Islamic financial institutions should strive to ensure compliance with the Sharia objectives in all its administrative, operational procedures and products. However, the Sharia provisions in this context are determined by the decisions of the Sharia Consultative Council. The Council makes legitimate governance binding with the force of law (Dodoev 2018).

For the standards set by the central bank, each institution should appoint an internal Sharia body that ensures their competence according to commitment in its

procedures and activities to its provisions, and no member of this body can be appointed or removed unless written permission is obtained from the central bank. This Sharia board is entitled to obtain all documents from the management of the institution, and these documents should be accurate, complete and not misleading, and a member should maintain confidentiality. If an institution becomes aware of a violation, it must inform the central bank directly and stop all actions related to the violation(Lestari and Hardiyanti 2020).

The central bank establishes Sharia governance standards related to the role of boards of directors and Sharia bodies, as well as criteria for assessing eligibility of the members of Sharia bodies, criteria for disqualifying them, and standards related to internal departments for Sharia compliance. The bank shall appoint, in the cases it deems appropriate, an external person to undertake the external control of compliance or the institution shall be required to do so. Furthermore, the law states that the central bank has the power to set Sharia standards upon the advice of the advisory board. Also, the Sharia standards issued by the bank aim to achieve Sharia compliance in all the stages that the product goes through until it reaches the customer; in this context, the bank can issue many Sharia standards, including standards for mortgage, loan, musharakah and mudarabah.

2.2.7.4 Indonesia

The legitimacy of Sharia banking in Indonesia has gone through a long and dynamic path both socially and politically. Banking is the most important financial institution for the development of the country. Article 1 of Law No. 10 of 1998, amendment of Law No. 7, states that the bank collects funds from the society in the

form of savings which are directed to the community in the form of loans or other forms in order to improve the standard of the community (Anwar 2016).

Islamic banking is an important component of Indonesian economy. Nowadays this sector is developing rapidly, the current banking works in competence with the introduction of the Islamic banking system. The idea IBs flourished in 1988, when the government issued a bundle of decisions and policies in October and stated that banks can set the interest at 0%.Indonesia's financial market regulators worked in developing the Islamic banking sector. The roadmap drawn up by the Indonesian Financial Services Authority includes an extensive agenda that addressed many issues, including reducing fees on products that comply with Islamic law, and developing education and training programs. The roadmap aims to encourage the Islamic banking sector in Indonesia, which has lagged behind in terms of similar markets in other countries. IBs in Indonesia possess only about 5% of the total banking assets in the country, compared to more than 20% in neighbouring Malaysia, and much less than 50% in Saudi Arabia. The authorities want the share of IBs to reach at least 15% of the country's banking market by 2023, an ambitious target given the stalled growth in the sector.

"It is difficult for them to reach the target without significant reforms in the field of Islamic banking activities," states Khaled Holladar, Global Head of Islamic Finance at Moody's. Globally, the sector continues to witness positive growth overall. A survey conducted by the Financial Services Authority showed that some of the problems lie in the general public's lack of financial knowledge, particularly with regard to Islamic finance. The roadmap extends to education and developmental activities as well as rules and procedures developed by Sharia experts to emulate in approving Islamic financial products. The rules and obligations related to Islamic bonds (sukuk) was set, and a draft

law for Islamic securities was prepared. The authority plan to speed up registration procedures for Islamic securities and ease restrictions on holdings of Islamic funds, aiming to publish rules related to margin trading, buyback agreements and hedging in accordance with Islamic law. They are also expected to increase the volume of coordination between the various government agencies, including the Central Bank and the Ministry of National Development and Planning (Anwar 2016) .

Chapter 3: Background and Literature

Although IBs face several challenges, they have experienced growth and expansion in the last decade (Aggarwal and Tarik 2000). Some of these seem to challenge the very existence of the IB system. First, instead of operating according to the Sharia-compliant rules, IBs operate in an environment regulated by interest-based regulations, even in Muslim communities. Second, financial industry practitioners doubt whether the IB system can serve the total needs of trade. Finally, a large proportion of Muslims perceive IB practices as a copy of conventional practices under the Sharia's umbrella (Hanif 2014).

The coming sections explore how conventional banks and IBs operate, identifying the similarities and differences of both systems. Finally, the conclusion summarises the chapter with a set of proposed amendments to the CBE's regulations so that IBs can operate in a Sharia-compliant environment and introduce financial products that satisfy its customers and financial practitioners.

3.1 Conventional Banks

There are numerous institutions in the financial markets that can be classified as banks or nonbank competitors. The nonbank institutions include the following:

- Insurance companies and pension plans: Their main role is to provide customers with long-term saving plans and risk protection.
- Mutual funds: These help investors in cash management and investing services.
- Credit unions and other thrift institutions: These offer customers credit and savings deposits.

- Mortgage companies: These offer their customers financing for their real estate needs.
- Security brokers and dealers: They provide investments and saving plans (Rose 2002)

A bank is one of the most important financial institutions in the global financial market. It acts as an intermediary between savers and investors by offering a wide range of services. However, deposit, loan and payment services are considered to be the banks' distinctive features. Deposits are characterised as small in size, with low risk and high liquidity. On the other hand, loans are large in size, with higher risk and low liquidity. So, the role of the banks is to perform size, maturity and risk transformation functions to minimise the gap between the needs of savers and investors (Casu et al. 2006).

Nowadays, modern banks work as full-service financial institutions. They offer investment and financial planning, brokerage services, cash management functions, etc. The banks today have multiple roles which are as follows:

- The intermediary role between savers and borrowers
- The payment role of making payments on behalf of their customers
- The guarantor role of issuing letters of credit to their customers
- The risk management role of attempting to optimise clients' risk profiles to maximise the value of their businesses.
- The saving/investment advisor role

- The safe keeper role
- The agency role
- The policy role of serving as a channel for government policy to enhance the economy (Rose 2002).

Customer deposits are the major source of funding for banks. These funds can be invested in loans, other investments and fixed assets. Normally, banks earn profits by charging interest rates on the loan they offer that are higher than the interest rates they pay to depositors (Casu et al., 2006). So, modern commercial banks are an interest-based system that provide the following major services to its customers:

- Payment services
- Deposits and lending services
- Investment services
- E-banking

3.1.1 Payment Services

The banks facilitate their customers to make payments through an organised arrangement for transferring value between participants. The payments are done using several tools, such as checks, credit transfers, standing orders, direct debits, and plastic cards.

3.1.2 Deposits and Lending Services

Banks offer a variety of both deposits and lending services. These can be categorised into the following:

- Current or checking accounts: These accounts are usually used for payments and they pay zero to low-interest rates.
- Time or saving deposits: The banks offer deposit facilities for a set period of time for a predetermined or variable interest rate.
- Consumer loans and mortgages: Consumer loans are offered to the retail customers, usually for short to medium time period. Mortgage services are to facilitate purchase of property.

3.1.3 Investment, Pensions, and Insurance Services

- Investment products
- Pensions and insurance services

3.1.4 E-banking

- E-money
- Remote payments

3.2 Islamic Banks

Islamic banking refers to banking practices that comply with the Islamic Sharia. Islamic teachings forbid any operations with interest, but this is hard to apply in some Muslim societies as they are controlled by conventional banking system. The idea of modern banking did not exist in Islam before. Further, Islam encourages the adoption of new modernisations as far as they are useful to humanity and do not contradict with the Islamic Sharia rules. That is why the idea of Islamic banking exists. While conventional banks rely on interest rate mechanism to perform their intermediation role, Islamic

banking focuses on trade and profit sharing (Ahmad, 2002). Islamic banking not only involves the prohibition of interest but also requires banking operations to be performed in an ethical manner and in accordance with the Sharia. That's why the Islamic banks cannot be engaged with liquor trade, gambling businesses, or any activities prohibited by Islamic rules.

IBs operate differently across countries. For instance, banks operate under religious bodies in Pakistan. There are also banks that operate under a binary system, such as in Malaysia where Islamic banks co-exist with conventional banks. Nowadays, Islamic banks have expanded their operations to non-Muslim countries. Some banks openly identify with their Islamic character, while others refrain from doing so. IBs work as both commercial and investment banks; although their operations must be in accordance with Islamic Sharia and norms, they must offer their customers an acceptable rate of return. Instead of dealing with interest, IBs work through PLS. This can be applied when IBs are engaged in trading activities, leasing activities or direct financing in profit and loss contracts (Bjorklund and Lundstrom, 2005).

IBs assess projects that are anticipated to deliver high profits, reasonable risks and are socially beneficial, and they finance the most suitable projects. The banks share the profits of these projects, which are then shared between the bank and its depositors (Al-Omar et al., 1996). By achieving this, IBs fulfil their main goal which is promoting economic development along the lines of Islamic norms.

A lot of people think that the aim of IBs is to only promote economic development with operations that are compatible with Islamic norms (Al-Harran, 1993). Some authors debate that IBs have a social role as well. Ray (1997) argued that IBs have an

important social aim through the zakat funds (alms giving) targeting poor people, and also believed that their main aim is to transfer the capital among millions of Muslims from different sectors and small traders.

To compete with conventional banks, IBs must provide different services to satisfy different customer needs without charging interest. These services can be classified into two broad areas: deposit services and financing alternatives.

3.2.1 Deposit Services

Deposit services are the main sources of finance in banks. Alike conventional banks, IBs' sources of funds consist of capital and deposits. However, instead of interest, IBs depend on a partnership with their depositors rather than a debtor–creditor relationship (Ainley et al., 2000).

3.2.1.1 Current Accounts

Sometimes called demand or checking deposits, current accounts allow the customer (depositor) can withdraw their money at any time without any restrictions. Similar to conventional banks, IBs do not offer any returns on that account (Zineldin, 1990; Warde, 2000). Although the customer does not receive any extra profits, they are offered other accompanied services such as chequebooks, ATM cards and traveller's checks (Obaidullah, 2005). Usually IBs charge fees for such services and are not to use these funds in risky or long-term investments. Any profits arising from these investments are to be kept by the bank and not distributed among the depositors (Zineldin, 1990).

3.2.1.2 Saving accounts

This type of account is preferable for customers who want to save money and earn some profits. Customers can withdraw their money anytime, the banks usually use these funds for short-term investments. The bank guarantees the deposit value but not the expected return (Al-Omar et al., 1996). This means that the depositors get nothing in case the bank incurs any losses, and the depositors' returns are variable in nature as it depends on the PLS and not the interest rate. Some references categorise this as investment accounts.

3.2.1.3 Investment Accounts

This type of account is an important source for pooling funds in IBs and is based on mudarabah (PLS). Usually, investment accounts offer higher rates of return than saving accounts, and the funds collected from these accounts are targeted for long-term investments. That is why depositors are not as free to withdraw their money with the use of a savings account. Further, in the case of any withdrawal, depositors will bear the cost of foregoing the profit share. There are two types of investment accounts – general investment deposits and special saving deposits (Bjorklund and Lundstrom, 2005).

3.2.2 Financing Services

While conventional banks rely mainly on loans and other interest-based activities, IBs depend on risk-return sharing activities. They consist mainly of mudarabah and musharakah – forms of PLS where the bank shares the profits and losses of productive activities on a partnership or equity basis (Obaidullah, 2005). Akin to Weitzman's analogy, PLS suggest replacing fixed rates with revenues sharing. This is argued to have a positive impact on the economy as it provides incentives to

organisations to exert more effort as they are sharing profits and losses with the bank rather than bearing a fixed interest rate (Mills and Presley, 2003).

3.2.2.1 Mudarabah

Sometimes referred to as a trustee partnership, in this agreement the bank is the owner of the capital and is called the rabb-al-mal. The entrepreneur is called mudarib. Profits are shared in accordance with their agreements. Usually, financial losses are borne by the owner of the capital. The entrepreneur is responsible for operating the project, and the bank is not to interfere with the management. The entrepreneur will be responsible for any losses if he is in default or violates the agreement (Al-Jarhi and Iqbal, 2001).

Mudarabah combines the two sources of investment – capital and expertise – to encourage investment. Upon comparing the interest and mudarabah contracts, one finds that interest ties the compensation to the input of capital. On the other hand, mudarabah financing ties compensation to the outcome of the project, motivating the investor to work efficiently and exert great effort, since it affects the relationship between capital investment and the outcome of the project (Mills and Presley, 2003).

3.2.2.2 Musharakah

In musharakah, both the bank and the entrepreneur participate in the capital and the management of the project. Comparable to mudarabah, profits are to be shared according to an agreement between the two parties (Rosly, 2005), but losses are usually shared as per each partner's share of the capital (Al-Jarhi and Iqbal, 2001).

3.2.2.3 Murabaha

It is a type of short-term financing that depends on mark-up purchase. In this contract, the customer asks the bank to make a purchase for them. The bank possesses the commodity and sells it later to the customer with a profit margin. The bank here could be a buyer of raw materials, equipment, etc., and both parties should be familiar with the original price and the mark-up percentage. Once the price of the good is agreed upon, no extra charges are to be included even if the customers' payments are not in time. In this contract, the mark-up does not compensate for time. It is compensation for the services provided by the bank, which include locating and purchasing the goods (Al-Omar et al., 1996). According to Clement and Wilson (2004), murabaha contracts are considered to form about half of IBs' assets.

3.2.2.4 Other mark-up services

- **Bai Al Salam:** It is a sale contract by which the bank pays in advance the value of the commodity at the time of the contract, and the producer delivers it at a specific future date (Al-Jarhi and Iqbal, 2001). This contract is usually used to finance farmers and small traders. Here, the trader needs short-term finance, so he sells his goods to the bank with a promise of future delivery. The bank in this contract pays the full price. Then, the bank sells the goods in the market. Any gains or losses are borne by the bank (Obaidullah, 2005).

- **Bai Istisnaa:** It is an agreement to manufacture a certain commodity with a definite price, delivery date and payment date set in the contract. In this contract, the manufacturer delivers the goods to the customer upon completion (Akhtarzaite, 2006). The payment in the istisnaa contract can be made in advance or upon completion (Nawawi, 1999). The istisnaa contract can be

cancelled by any of the parties with notice before the production starts, but once the manufacturer starts work, the contract is binding and cannot be cancelled (Usmani, 2007).

3.2.2.5 Ijara

Ijara is a leasing contract where the lessee is the asset's owner, while the leaser benefits from using it for a predetermined cost (Serag, 1989). In the ijara contract, the bank is requested by the customer to acquire a certain asset and promised a lease on it (Al-Jarhi and Iqbal, 2001).

3.2.2.6 Ijara Wa Iqtinaa

It is a leasing and purchasing contract between the bank and its customer. The bank finances the purchase of a certain asset; the bank and its customer become partners in this asset. The customer pays rental fees for the bank, and the fees' value decreases by time as the bank's shares in the asset decrease. In the end, the leaser's commitment to the bank ends, and he owns the asset (Serag, 1989).

3.3 The Role of Central Banks

Banks are closely and heavily regulated by governments because of their vital roles in and impact on the economy. Banks hold public savings, and any failure or bank crimes could cause tragic loss to many individuals; if they experience group failure, the whole economy may suffer. This is one of the reasons why governments deeply supervise banks through a set of regulations (Rose, 2002). The central bank is the institution responsible for this overseeing.

The central bank is a financial institution, preferably independent from the government that is responsible for monitoring the country's monetary system to achieve

price stability. This is needed to eliminate any possible liquidity crises, money market disorders, and financial crises and ensure the smooth functioning of markets. The central bank performs multiple tasks to promote economic growth and control inflation. Controlling the money supply and the amount of credit money created by banks are examples of these tasks. Moreover, the central bank acts as both the government's banker and the official agent in dealing with precious metals and foreign exchange matters (Casu et al., 2006). Controlling the monetary policy is a primary function of central banks. It involves influencing both the availability and cost of money and credit. This is maintained by controlling the money supply and levelling and structuring of interest rates. It was observed that high and fluctuating inflation negatively affects both long-term growth and employment. As price stability is essential for achieving stable levels of growth and employment, governments have recently started emphasising monetary policies within their policy packages as the preferred approach for influencing prices. This is due to two reasons – the role of central banks as the sole issuer of the monetary base (bank notes and bank reserves) and the long-term neutrality of money (Casu et al., 2006).

Price stability is the one of the most important long-term objectives of central banks. This can be accomplished by monitoring and controlling a set of short-term operational goals, such as interest rates, exchange rates and banks' reserves. These are accompanied by other intermediate goals, such as controlling the monetary aggregate by stabilising the money demand. The central banks have some tools of monetary policy such as open markets operations (OMO), discount lending, and reserve requirements (Frederic and Stanley, 2012).

One of the OMO tools that central banks use to control the money supply is the government debt (treasury securities). For the discount window, it allows banks to borrow money from central banks (called corridors in the Egyptian monetary system). As for the reserve requirements tool, raising the required reserve lowers the amount of funds available to banks and borrowers and vice versa (Frederic and Stanley, 2012).

The types of regulations imposed on the financial sector are systemic regulation, prudential regulation, and conduct of business regulation. The systemic regulation is concerned with the safety and accuracy of the financial system, focusing on public policy regulation designed to minimise the risk of bank runs. This is done by applying both deposit insurance arrangements and the lender of last resort (LOLR) function. The deposit insurance promises that savers' deposits will be paid if the bank fails. The LOLR is one of the main functions applied by the central banks to assist banks with financial difficulties and without any access to other credit facilities. The problem of deposit insurance is that it encourages banks to maximise their risk (Casu et al., 2006).

The prudential regulation focusses on consumer protection through monitoring and supervising financial institutions. The conduct of business regulation is concerned with how banks conduct their businesses, targeting information disclosure, fair business practices, and competence of financial institutions. Also, there are common regulations for international banks, which are provided by the Basle Committee (Casu et al., 2006).

There are two issues regarding the relationship between commercial banks and the central bank. First, the central bank pays interest to commercial banks from the reserves kept with them. Second, the central bank is considered to be LOLR to the banking sector, which involves interest. In both cases, IBs cannot deal with interest

rates, and since IBs cannot receive a return on their deposits with the central bank, they lose potential earnings and profitability. Also, IBs cannot pay interest for liquidity reserves obtained from the central bank; thus, to comply with Islamic Sharia, they may get higher priced funds from the money market. This problem cannot be resolved unless the central bank develops an Islamic deposit facility which is based on PLS to IBs on their deposits, and the commercial banks similarly develop an Islamic loans instrument (Iqbal and Molyneux, 2006). Another suggestion by Chapra (1992) is that commercial banks should pool funds to assist liquidity-constrained banks. However, it seems unclear why profit-oriented organisation would participate in such a thing, for if the bank turns are severe enough, this will cause both banks to fail.

Another problem arises when discussing the relationship of commercial and central banks in terms of the issue of OMO regarding both the sales and the purchases of government interest-based securities. Due to the lack of Islamic government bonds, some countries in the Middle East and Pakistan have established a different way to eliminate the negative effects that arise from this limiting factor by allowing their banks to operate a hybrid banking operation based on both traditional interest-based savings and various investment tools in Islamic windows. IBs cannot borrow from the overnight money market or the central banks, as these carry interest charges; so, they are forced to keep higher non-earning liquidity reserves, and thus loose profitability.

The central bank's regulatory standards also have the ability to manage the risks of IBs as opposed to traditional banks. Central banks already have various regulations that help monitor the risk exposure of the financial sector. These relate to capital, assets management, earnings and liquidity (CAMEL). The PLS concept is the core of IBs' operations, and it carries much higher risks than that conventional banks' operations and

should have higher capital adequacy ratios (Errico and Farahbaksh, 1998). While Islamic banking does not guarantee the principal of various financing contracts, such capital requirements convey greater solvency and protect the principal liabilities of both depositors and investors. Another general factor contributing to IBs' risk exposure is related to the business environment in which they operate. South and West Asia and the Middle East are marked by underdeveloped financial markets with very weak governance attributes, political instability, weak property rights and legal structures. In the case of Pakistan, the weak legal structure is evidenced from the fact that the Supreme Court ruling on prohibition of interest has been challenged and quashed and the matter remains unresolved by the Sharia Court (Ahmad and Bandey, 2010).

The Basle Committee for Banking Supervision was established in 1975 by a decision of the governors of the central banks of a group of 10 industrialised countries, a committee composed of senior representatives of the banking supervision authorities and central banks from a number of countries. The committee usually meets at the headquarters of the Bank for International Settlements (BIS) in Basel, Switzerland, where its permanent secretariat exists. This committee was established after the increase in the amount of doubtful debts granted by the world banks that caused the crisis, and its purpose is to improve the level of banking supervision.

3.3.1 Basel I and Islamic banks

After several research and experiments, Basel I established a global ratio of capital adequacy based on the ratio of the latter to assets, according to their degree of seriousness and in a weighted manner, estimated at 8%. The Commission continued to

apply this ratio till the end of 1992 and was to be applied gradually within three years, beginning from 1990.

First, credit risk according to Basel 1: The decisions of the Basel 1 Committee focussed on credit risks from the following:

- Classification of States: Differentiation between states in terms of risk.
  - Low risk states: The group of 10 countries, as well as Switzerland and Saudi Arabia.
  - The rest of the world: Characterised by a high degree of risk, given the circumstances (economic and political).
- Identifying risk weights: Dividing the assets into two types
  - Budget assets: The bank's inability to recover its funds varies from one asset to another, and from one customer to another, divided into categories ranging from 0 to 100%.
  - Extra-budgetary assets: They are converted into credit assets by multiplying their amounts in specific conversion transactions and weighted by the corresponding weights, according to the beneficiary (Ali, 2004).

3.3.2 Basel II and Islamic banks

Several amendments were made to Basel I, and new decisions were issued in Basel II in 1999, and the final version was adopted and applied in 2004. Credit risk under Basel II: Decisions of the Basel II Committee reconsidered how to assess the credit risk to which banks are exposed, using two methods:

- Standard Input: A method (standard or modular) based on credit ratings provided by the rating institutions (international classification institutions, Standard and Poor's, Moody's) and other rating agencies with specific criteria as put forth by the Basel Committee, where these institutions give risk weights according to risk centres (governments, banks and companies).
- The input of the internal classification (basic and advanced): This method is considered an advanced method of measuring risk, where the banks rely on their own estimates in the measurement of the components of the hazard (assisting the supervisory authorities); thus, they reach the weights of the assets in the advanced classification approach and then calculate the capital to be retained if the base method is used (Al-Tamimi and Al-Mazrooei, 2007).

The proposed formula for the application of Basel II in IBs, as we have already noted, involves a few good metrics to measure the credit risk of traditional banks, and the experts of IBs (such as Chapra, Khan, etc.) believe that the classification approach procedure is best for IBs. Although the choice of this approach depends on the approval of the regulators for several reasons, as the problem remains in the IBs and their ability to apply the internal classification method, this method requires advanced systems in risk management and high efficiency in information systems. It is known that the internal classification approach is based on four basic inputs: the probability of tripping, expected losses in the case of faltering or failure in payment, the size assets or placements at risk at the time of exposure, and failure to pay; determining the maturity period all of this is not currently available to IBs. Therefore, IBs can apply the standard approach method based on the external classification of credit (through credit rating

institutions), so that they are able to provide what is required to apply the internal classification methodology (Hasan and Dridi, 2010).

The Islamic Financial Services Council has worked hard to set standards that are compatible with the work of IBs and the risks involved by adapting Basel II to serve these banks and providing valid standards for application and guidelines and controls for the management of all institutions. For providing Islamic financial services, the most important standard approved by Basel II decisions is the capital adequacy standard.

In 2005, the Islamic Financial Services Council issued a standard on how to calculate capital for Islamic financial institutions other than insurance institutions; capital adequacy is calculated according to this criterion after measuring the three risks: market risk, operating risk and credit risk. The latter arises in Islamic finance from the receivables of murabaha contracts, the risks of the parties involved in salam contracts, receivables in ijara contracts and the instruments that are kept until their maturity dates in the bank register. In this standard, the risk of credit is measured in accordance with the harmonised approach (standard method) of Basel II. Banks that provide Islamic financial services may use the internal credit risk classification method after approval by the supervisory authority, according to its estimates, which has been referred to earlier. However, the market risk is measured by the standard method, while the operating risk is measured by the base indicator method (Archer and Haron 2007).

3.2.3 Basel III and Islamic Banks

Basel III was the result of several amendments to Basel II, and this agreement covers five main areas:

1. Improvement of the quality ratio and transparency of the bank's capital base: This involves improving the quality of capital improves the ability to absorb losses, and consequently the banks' robustness and solidity in the face of crises. The new agreement obliges banks to raise the minimum amount of capital (reserve or initial) from 2% to 4.5%, starting from the beginning of 2015, and to add another reserve margin consisting of 2.5% of the bank's assets and pledges to be used in response to different and potential future crises by 2019, to arrive at a total of 70%, the same way that the base capital is raised from 40% to 60%.
2. Cover the risks of the corresponding borrowers: This arises from derivatives' operations and the financing of debt securities by imposing additional capitalisation requirements for these risks as well as to cover losses resulting from revaluation of financial assets in the light of their market price fluctuations.
3. Crane ratio: The Basel Committee introduced a new ratio in the form of a crane measuring the capital multiplier, which is calculated by the ratio of total risk (inside and outside) of the budget to capital.
4. The reduction of bank followers is designed to be more economical than necessary, because its activity is linked to the cycle, since in the case of (growth and prosperity) banks are heavily active in financing economic activities, in the event of economic recession, lending activity decreases to prolong the recession.
5. The Convention set the minimum liquidity requirements and proposed two relative approvals:

   Short-term liquidity standard, also known as liquidity coverage, was implemented in 2015. It aims to make the bank self-responsive to liquidity needs in the event of a crisis.

Long-term liquidity criterion, was established to provide the bank with stable sources of funding for its activities (Ahmed, 2015).

In December 2013, the Islamic Financial Services Council issued standard IFSB 15, the capital adequacy standard for institutions offering Islamic financial services other than Islamic insurance institutions – takaful – and Islamic Group investment programs as well as the standard included guidance on applying the new characteristics provided by the Basel III Committee, with the necessary modifications for the Islamic financial services institutions. There was particular focus on the additional financial margins planned for the preservation of capital as well as the margins established to counter cyclical fluctuations and leverage ratio to finance (base capital to total risk exposure). This standard involves six sections, the third section presents further guidance provided in the standards and guidelines of the Islamic Financial Services Council on risk accounting credit that is logistic and operational. To adapt to international capital standards (Basel III), a section on the measurement of credit risk was reformulated to deal with modern methods to mitigate those risks; in section IV, the threshold requirements were presented as minimum capital adequacy for each of the risks (credit and market) and all the financial instruments derived from the provisions of Islamic Sharia. Accordingly, in this standard, the methods of measuring credit risk are defined in detail for each of the formulae (tools) that the IBs deal with.

This theme shows how the Islamic Financial Services Council (BCCC) is adapting all decisions of the Basel Committee (I, II, III). After all the decisions of the Basel, they adapted these decisions and the requirements of IBs and made the necessary adjustments. When Basel 1 was issued, the specialists in this field recognised that the internal classification method is preferable for IBs, but there are several reasons why

these banks do not apply it. So, it is advisable to apply the standard approach based on the external classification of credit and thereby obtain what is needed to apply the internal classification method in this standard. The risk of credit is measured in accordance with the standard approach (the standard method), and with respect to Basel III, it has been adapted by issuing the modified capital adequacy standard for institutions providing Islamic financial services (excluding the insurance institution Islamic takaful). The methods of measuring credit risk are defined in detail in the IFSB 15 Islamic Collective Investment Program for each of the formulas (tools) that the Islamic bank deals with.

3.4 Comparison between Conventional and Islamic Banks

Conventional banks rely mainly on debtor–creditor contractual relationships and use interest as the price of credit to reflect money's opportunity cost. On the other hand, IBs' operations are or ought to be interest free. According to Islamic laws, the creditor is not to exploit the borrower, because this could lead to injustice. Also the Islam Sharia states that no rewards on capital without taking any business risk. That's why IBs' intermediation role is based on PLS rather than interest (Rahman, 2007).

The following paragraphs consider the different features of both conventional banks and IBs. All conventional bank functions are based on man-made principles, where both the lender and the borrower are assured of a predetermined interest rate. Zakat fund and social welfare are not obligatory in conventional banks' operations. Accepting deposits and lending money is totally based on interest, which is the key function for conventional banks. In the case of defaulters, conventional banks can charge extra penalties and interest from their borrowers. Since conventional banks rely on fixed interest rates, they do not emphasise on project appraisals and the feasibility of the projects as much as the credit-worthiness of its customers. Conventional banks usually guarantee all types of deposits (Rahman, 2007).

In contrast, it is found that IBs rely on Islamic Sharia in all its functions. That is why their operations mainly focus on both risk sharing and PLS between the investor and the entrepreneur rather than fixed interest rates. IBs in nature have a very effective social role, usually through the zakat funds. Islamic banks cannot charge extra penalties to defaulters, as this is against Islamic Sharia, but sometimes, according to the regulations of central banks (as in Egypt), Islamic banks accept small compensations and direct it towards charities. They focus more on appraisals and feasibility of projects

rather than clients' credit-worthiness. Islamic banks only guarantee current and savings accounts, and investment accounts are PLS (Rahman, 2007).

Why IBs? The Islamic banking system has many advantages over the conventional kind. What is interesting is that not all the merits are only concerned with economic development but also with social development and welfare. Some of the advantages reported in the literature are highlighted as follows. To start with, Islamic banking is based on the concept of prohibition of interest and in support of PLS. It was found by many economists that to reach an optimal allocation of resources is to have nominal interest rates with zero value (Friedman, 1969). If interest rates reach zero, investors will not prefer to substitute physical resources for money, leading to direct these resources to both investment and consumption. This was tested within the general equilibrium models and the efficiency of allocation of resources was reached when the interest rate was zero (Cole and Kocherlakota, 1998; Wilson, 1979; Correia and Teles, 2001).

Conventional banks allocate their resources based on whether the borrower can repay both the loan principal and interest. On the other hand, IBs direct their resources depending on equity and PLS. This mode of finance tends to drift financial resources to more productive projects and investments, thus increasing their efficiency in the real sectors (Al-Jarhi and Iqbal, 2001).

It is also argued that Islamic banking is more stable than conventional banks. Under conventional banking systems, the banks' liabilities include all types of deposits which the bank must guarantee. Moreover, the assets side is composed mainly of debt instruments that qualify in accordance with the debtor's ability to repay the loan and its

interest. During crises, the defaulters increase and the banks are unable to meet their obligations. Regarding Islamic banking, while current and savings deposits are guaranteed, investment deposits are based on profit and loss. This means that at the time of crises, the depositors share the risk as the bank. So, compared to conventional banks, IBs are less likely to fall and are more stable (Khan and Ahmed, 2001).

The Islamic banking system never offers present cash for future cash. Different Islamic modes of finance include cash toward one side and commodities on the other. Financial flows through Islamic money-related modes need to be tied specifically with product streams. As it were, Islamic banking minimises the differences between financial and real activities. As a result of this, speculations due to interest rate expectations become obsolete. This can be observed when any changes in spending is seen in the changes in the demands and supply of goods. It is noteworthy that the markets operate more efficiently and have a great role in strengthening the economy. (Al-Jarhi and Iqbal, 2001).

3.5 Islamic Banks and the Central Bank

The central bank's role in supervising banks' activities is vital. Part of its role is to cover checking registers and books for the purpose of validating sound assets and operations. Further, the central bank is responsible for developing regulations to control bank operations in general. The cooperation between Islamic and the central banks of the states in which they operate is an important aspect to help the development of IBs (Chapra 2001).

IBs need to be supervised differently regarding the fulfilment of some of the central bank requirements, such as regulation regarding general and special reserves,

limitation on equity, voting rights, etc. That is why some central banks in several countries have established an Islamic Financial Services Board to develop Sharia compliant financial services, characterised by prudence and transparency, through the adoption of the international standards compatible with Islamic banking principles and methods (Ibrahim, 2006).

The relationship between IBs and central banks varies from one country to another; it depends on the legal framework which govern the IBs within these countries. Some states have special legislation regarding IBs along with legislation for conventional banks. Others take the initiative to develop regulations which can allow the establishment of IBs. Yet, there are three aspects regarding the relationship between central bank and Islamic banks which are LOLR, a clearing house, and supervisor with regards to monetary policy (Chapra 2001).

As a LOLR, the central bank can control the money supply to the commercial banks, and hence to the public; it can lend to banks directly to provide liquidity aid, especially to ones that cannot acquire funding from any other source. Also, it supervises the financial sector to prevent crises, safeguard depositors' money, and avoid any widespread panic and thus protects the economy from damages due to the collapse of banks. Since the central bank sometimes finances conventional banks through interest-based debts, mostly short-term, which are prohibited in Sharia, it provides liquidity to IBs on the basis of mudarabah or musharakah. (Siddiqi 1986). The central bank could have a share in the profits generated by the IBs over the period for which the fun-ds were lent (Hamed and Ahmad 1993).

The central bank should offer short-term temporary facilities that are interest-free or based on profits sharing for the period of the shortfall to IBs, where they can deposit compensatory funds of equal amounts for the same duration. As a supervisory role, and with regards to monetary policy, the central bank impacts the credit availability and inflation through money to provide stable economic growth. It designs patterns and forms of regular data required from IBs, to be developed and approved by the central bank, and to comply to the nature of IB operations (Chandavarkar 1996).

There are central banks that use lower liquidity ratios when dealing with Islamic banks in comparison with other conventional banks, taking into account the nature of their operations. Still, there are other areas where various controls need to be set for Islamic banks. These controls embrace cash reserve requirements, liquidity ratios, credit ceilings, distribution of Islamic banks' profits, and inspection of banks. In fact, while controlling IBs, the central bank should take into account their operational needs; the statute of an IB must be affirmed by the central bank before the last grants the authorisation to work. Subsequently, control of the IBs' operations and examination of its procedures ought to be led as per its statutes (Chapra 2001).

Central banks should have a set of special guidelines to inspect IBs based on their nature as well as regulations to protect investors' deposits. There are other considerations that central banks should take into account when applying credit ceilings to IBs. Moreover, instead of applying interest rates to pay on savings and time deposits, the central bank should apply weighting systems to be given to IBs' deposits for the purpose of profit distribution by the banks (Khan 2004).

Under the Islamic system, banking operations will undoubtedly be more varied and complex than those of the traditional banking system. However, almost all economists in this subject are in agreement that the central bank in an Islamic economy would continue to perform all those functions performed by central banks elsewhere (Ahmad, 2000; Ahmed, 1989).

According to Iqbal and Mirakhor (1987), the main task of central banking in an Islamic financial system is the provision of an institutional framework necessary for the smooth operation of financial markets in compliance with the rules of the Sharia. The central bank would need to take the lead in promoting Islamic financial institutions, deposits and loan instruments, and yield a structure conducive to the efficient mobilisation of savings and allocation of resources. Another function of the monetary authorities is the enforcement of Islamic regulations concerning contracts and property rights. Such enforcement reduces the uncertainties that tend to discourage private investments and thereby encourages the lending of funds on the basis of viability and profitability of investment projects rather than the solvency, creditworthiness or collateral strength of entrepreneurs. Iqbal and Mirakhor (1987) argued that the usual regulatory, supervisory and control functions of the central bank with regard to the banking system could be expected to continue and be reinforced in an Islamic financial system. Furthermore, according to Khan and Mirakhor (1989), the regulation and control of commercial banks is always within the framework of a monetary policy in which certain instruments and tools are used to achieve predetermined goals. To accomplish its policy objectives, the central bank controls the supply of high-powered money, the reserve ratios on the liabilities, and the assets which the banks can allocate to their profit sharing activities. A further opportunity for enhancement of the control

over the banking system is available to the central bank through its purchases of equity shares of banks and other financial intermediaries.

Additionally, the central bank can regulate profit-sharing ratios between IBs and borrowers on the one hand and IBs and depositors on the other. Variations in these ratios can change the rates of return and have the same impact as interest rates on the overall flows of financial resources. While the adoption of this policy instrument would undoubtedly strengthen the control of the monetary authorities over the volume of credit creation, it would affect resource allocation and put limitations on the freedom of contracts and sharing of losses by partners (Iqbal and Mirakhor, 1987). There is, however, debate on whether such a policy is valid, since it represents a constraint to the freedom of contract and may be unfair. The issue of inequity would arise if the profit sharing rules imposed by the central bank required, for example, a lower return from profits than the share in losses (Khan and Mirakhor, 1989).

One of the most important functions of the central bank is its role as LOLR for commercial banks. This means that if any bank faces any liquidity problem, the central bank may support it by lending it an appropriate loan. This is acceptable in an interest-based economy, as these loans are provided on the basis of interest. According to Islamic banking system, the central bank performs this role by providing loans without interest (Qard Hassan) with or without service charge (Ahmad, 2000).

3.6 Social Norms, Religiosity and Governance

The administrative work in Islam has its doctrinal components based on Sharia restrictions and limitations, and charts a path for it to govern the behaviour of both the management and the organisation. It also governs the individuals working in the

organisation, whether their relations to each other or with the surrounding society, and then it becomes a comprehensive message for all worship, transactions and ethics in an integrated framework that cannot be separated from each other (Fawzi 2003).

Conventional banks include four basic elements of governance, represented in the shareholders, the board of directors, management and other stakeholders. IBs include all of the four elements in addition to a fifth component, which is the Fatwa and Sharia Supervisory Board, which monitors whether the bank's operations are conforming with the provisions of Islamic Sharia. We can say that IBs are faced with double-layer governance (Umer and Ahmad, 2002).

Abdelsalam et al. (2016) tested how organisational religiosity affects the earnings quality of banks operating in the Middle East and North African region. They tested the IBs operating using both religious norms and accountability constraints, and compared them with conventional banks. The study was done for the period of 2008 to 2013. The study deduced that the earning quality in IBs was less than that of the conventional banks, due to the fact that they used more conservative accounting policies. They also concluded that both religious norms and moral accountability constraints in Islamic banks have a substantial effect on the financial reporting quality and agency costs.

They compared different constraints between Islamic and conventional banks. First, constraints on the finance model in conventional banks were absent while Islamic banks prohibit Riba, Gharar and Maysir, depending mostly on PLS. Second, there are no prohibited activities in conventional banks. On the other hand, Islamic banking prohibits investment in any activities that contradicts Islamic norms. Third, regarding

corporate governance, conventional banks are subject to one layer of governance mechanism, as it is managed only by a board of directors. On the other hand, IBs are subject to two layers of governance mechanisms which are the board of directors and the Sharia supervisory board. Finally, the accountability constraints in conventional banks are reflected in the legal accountability constraints, while in IBs there are both legal and moral accountability constraints (Abdelsalam et al., 2016). So, we can conclude that IBs are more constrained than conventional banks and it affects their performance.

Elnahass et al. (2014) studied the loan loss provisions (LLP) in evaluating banks operating in the Middle Eastern and North African regions from 2006 to 2011. They tested the LLP for both Islamic and conventional banks. It was concluded that LLP has positive value in both banking sectors, with lower value for IBs. They believed that this could be a result of the differences that arise due to the difference in the products offered, governance structures, the religious and conservatism aspects of Islamic banking operations and bank regulators. So, we can say that Islamic banks have a unique nature that should be regulated in accordance so that their performance so as not to be negatively affected.

Another study examined the effect of religiosity on earnings quality, using a sample of 1283 listed banks operating in 39 countries. The study covered the time period from 2002 to 2018 and showed that religiosity has a significant effect on the banks' earnings quality. Religiosity is considered one of the strong social norms that affect values and practices. It was observed that high religiosity has a negative effect on the unethical activities performed by the bank's managers and this can work as a control tool (Abdelsalam et al., 2020).

Another study observed how banks' performance in a dual banking system that applies both Islamic and conventional banking is affected by asset securitisations. It was concluded that banks applying asset securitisation are considered to be riskier and have problems concerning their financial stability. It was also observed that Islamic securitisation have lower bank risk than the conventional banks. The findings were stated a result of the unique mode of operations of IBs and how they are monitored and regulated (Abdelsalam et al., 2020). The study highlighted novel visions of different structures of bank securitisation in IBs, providing new policy amendments for regulators of countries working with dual-banking systems. This is due to the fact that the nature of Islamic bank's operations, regulations, ethical and social norms are different from that of conventional banks operating in the same country.

Belal et al. (2015) studied the effects of ethics on enhancing the performance of an IB from 1983 to 2010. The study conducted interviews to find out more about both the ethical performance and disclosures used in preparing the banks' financial reports. The study concluded the following: IBs use intensive ethical disclosures, a Sharia compliance disclosure to enhance their status and build a different position from that of conventional banks. The study also showed how IBs rely more on debt-based financial instruments than investment based ones, thus failing in achieving the expected social objectives of Islamic finance.

Leventis et al. (2013; 2018) found that both religiosity and social norms help reduce unethical practices. Both studies revealed how religiosity and social norms affect the audit firms' pricing decisions. It was found that religious adherence acts as a monitoring tool that leads to decreases in both audit risk and audit costs. It was also

found that religiosity and morals affect the way shareholders bear the costs of monitoring agents – this is important for both market participants and regulators.

In understanding how asset securitisation is an important process that assists banks in managing their credit risk and increasing their credit, the effect of social norms and ethics is crucial. Abdelsalam et al. (2017) measured the factors that affect banks' decisions in asset securitisation. The study measured the effect of both organisational ethics and geographic religiosity on the economic decisions of banks in asset securitisation. It was concluded that religiosity indicators have significant influence on banks' decisions and that banks abiding by religion and social norms have a more constrained model for asset securitisation, and thus require a great level of monitoring. The study also revealed how important religiosity's effects are for the monitoring mechanism in banks (Abdelsalam et al., 2017).

3.7 Banks' Performance Measurement

In the new economic environment, the bank's performance evaluation is a comprehensive assessment process. Banks that are concerned with assessing the financial performance using financial indicators can easily create short-term behaviour and quick reactions that affect their long-term development plans, while banks that overemphasise the significance of the non-financial indicators for assessment may lack financial flexibility, which eventually results in financial failure and distress. However, the combination of the financial and non-financial indicators can result in a full range of a comprehensive strategic performance appraisal system (Hongbo and Fangfang, 2010). Yet, most of the researchers studying banks' performances have adopted financial measurement tools as they are more suitable to examine and test the banks' performances.

Studies on Islamic finance and economics can be divided into three stages. The first is descriptive, consisting mainly of historical discussions about the nature of an economic system based on the perception of Islam and its institutions. The second examines the theoretical framework of such a system using modern tools of analysis. The third, which is very much in its infancy, focuses on evaluating the experience of economies which have either totally reformed and adopted their financial system to be according to the Islamic law and Sharia (like Sudan, Iran and Pakistan) or have Islamic financial institutions performing within the boundaries of conventional economic, legal and financial systems (Ahmed, 1989). Yet, there is a serious lack of empirical studies on Islamic banking performance (Iqbal, 2001).

The problem is that few studies have really tackled the actual behind-the-scenes operations of this unusual banking scheme. The actual operations of a banking system are mainly for asset–liability management. An efficient asset–liability management system requires maximising the banks' profits as well as controlling and lowering various risks. Early literature on Islamic banking and finance focuses primarily on the viability and sustainability of Islamic finance. The literature shows that the performance of Islamic banking has been measured in a variety of ways.

The development of the banking industry, its complexities, expansion and diversification of its operations have created the need to provide advanced monitoring systems that help in measuring the soundness of banks' financial conditions, and to highlight the risks to which the banking system is exposed, and disclose them in a manner that helps users of financial statements to judge the bank's ability to manage and control risks.

To this end, the CAMEL method began to be used at the beginning of 1980 by the US Federal Bank where it was represented via a set of indicators through which the financial function of any bank could be analysed and the degree of its classification known. This method is considered one of the direct monitoring methods practiced by the supervisory authorities on banks. The CAMEL banking evaluation system consists of five components: capital, adequacy, asset quality, management quality, earning management and liquidity position.

The purpose of using the CAMEL evaluation system is to identify the banking risks that constitute weaknesses in the financial, operational and administrative operations of a bank, which require special supervisory attention and necessary control priorities, or the intervention of the monetary authority to address the matter. CAMEL has proven to be an effective oversight tool for uniformly assessing the strengths of financial institutions and in identifying institutions that need special attention.

The most important features of CAMEL can be summarised as follows: classifying banks according to a unified standard, standardising the style of writing reports, reducing the evaluation time by focussing on five main items and not dispersing efforts in evaluating unnecessary items, and reliance on digital evaluation more than the constructive method in writing reports, reducing the volume of reports and increasing their credibility.

A study in the Gulf countries, including a panel of 101 banks through six different Gulf economies was conducted where CAMEL was used to compare the performance of both Islamic and conventional banks from 1998 to 2012. It was observed that IBs performed better than the conventional banks in terms of

capitalisation, profitability and liquidity. On the other hand, conventional banks outperformed the IBs in terms of efficiency (Alqahtani et al., 2017).

Financial ratios are widely used to measure banks' performances through different ratios in different areas such as profitability, liquidity and credit quality. A study of five of the largest banks operating in South Africa for the period of 2005 to 2009 showed a rise in the overall banking performance. It was noted that there was a decrease in all the ratios, the profitability, liquidity and credit quality in the commercial banks under the study (Kumbirai and Webb, 2010). The idea of measuring the financial performance of banks by using the different financial ratios is widely used in the literature. It also affects the financial performance of banks all over the world.

A study in Bangladesh was conducted to investigate the financial performance of IBs (Islami Bank Bangladesh Limited, Export Import Bank of Bangladesh Limited, Shahjalal Islami Bank Limited) from 2007 to 2014 in Bangladeshi banking sectors. The CAMEL rating analysis was used and it was observed that all three selected IBs in the study had a solid position on their performance. They performed well with respect to capital adequacy, asset quality, management quality, earning capacity and liquidity conditions (Ahsan 2016).

Anwar (2016) conducted a study to evaluate the performance of both IBs and conventional banks around the implementation of the Islamic Banking Act 2008. The performance was measured by CAMEL for the period 2006 to 2010. This research was conducted to show the positive impact of the application of the Act to develop the performance of IBs operations in Indonesia.

Jaffar et al. (2012) measured the effect of macroeconomic changes in bank performance using the British dataset from 2004 to 2011. Different financial ratios were used in the study to measure the LLP, lending rate, income level and return on asset (ROA). The study concluded that there was a fall in asset prices, high capital requirement, and a reduction in the lending and loss in the bank balance sheet.

Differences were observed in the performance between both Islamic and conventional banks before the act implementation in 2008 (the ratio of CAR, ROA and efficiency of conventional banks were better than IBs'). On the other hand, after applying the Islamic Banking Act, both ROA and efficiency measurements of IBs improved more than conventional banks. This indicates that the Islamic Banking Act improved the performance of IBs regarding both ROA and efficiency (Anwar 2016).

Although Indonesia is considered to be an Asian country with the largest Muslim population, Islamic banking operations are still lacking as compared to Malaysia. Lestari and Hardiyanti (2020) compared the financial performance of Islamic banking operations in both Indonesia and Malaysia using CAMEL, from 2014 to 2018. The results showed significant differences between both countries regarding the asset quality, management quality and earning management. On the other hand, there was no significant differences between the countries in capital adequacy and liquidity.

In their study, Saif-Alyousfi et al. (2017), over the period of 2000 to 2015, concluded that IBs in Saudi Arabia contribute more to the shareholders' value than conventional banks. They observed that although the capital ratio and credit risk were high in conventional banks, they negatively affected the shareholders' value. They also found that conventional banks had higher liquidity.

Hassan et al. (2017) studied IBs in Pakistan from 2011 to 2015. It was noticed that pure IBs' capital adequacy ratios, assets quality, management quality, cash ratio and ROE are more compatible as compared to Islamic windows in conventional banks. Conversely, Islamic windows' ROA and current ratios are better than that of IB ratios. Although the average liquidity ratios of IBs are not good, they are improving annually They stated that IBs' capital adequacy and assets quality and management quality ratios are acceptable because they can recover their operational costs with its profit.

Suresh (2016) compared and assessed the performance of both Islamic and conventional banks operating in Bahrain using the CAMEL ranking approach from 2007 to 2014. Previous studies have indicated that IBs are more efficient and profitable than conventional banks as a result of their institutional factors. This study tested this claim by analysing the performance of both conventional banks and IBs working in Bahrain using the CAMEL approach. IBs showed better performance as compared to that of the conventional banks under all CAMEL factors. This study showed that IBs have better performance compared to conventional banks despite the fact that their operations are guarded by the Sharia rules, which prohibits them from accepting all profit making activities.

Dodoev (2018) conducted a comparative study that examined the performance of IBs and conventional banks operating in Malaysia, from 2006 to 2016. The financial performance was tested using the CAMEL ratios. Moreover, two tailed t-tests were also used to inspect the variance in each of the CAMEL's components of both Islamic and conventional banks. Overall, CAMEL revealed that there is no significant difference between Islamic and conventional banks. On the other hand, IBs performed better than conventional banks in each of the CAMEL components.

Islam (2019) conducted a study in Bangladesh from 2013 to 2017. Eleven CAMEL ratios were used to display the performance of IBs vs. conventional banks, and both showed quality performance. All the banks under the study revealed an adequate position for capitals. Although both the ROA and ROE were up to mark, they needed more improvements. Moreover, the management ratios were quite good. Apart from that, it was concluded that IBs' percentages of NPL were lower than that of conventional banks, thereby affecting their profitability.

Hazman et al. (2018) examined the performance of IBs vs. conventional banks operating in Malaysia using the CAMEL model. Financial data were collected from 10 banks in Malaysia from 2004 to 2016. The study concluded that conventional banks' performance excelled beyond that of IBs. The development of a conventional banking system, highlighting Malaysia's financial market, could be the reason behind the results. The study suggested that the regulators should improve Islamic banking operations through more reforms to develop its capital, assets, management, earnings and liquidity.

Daly and Frikha (2017) examined the determinants of performance in IBs as compared to conventional banks in Bahrain for the time period of 2005 to 2009. They tested the performance using a comparative study of 12 banks of both kinds. Various banking characteristics were used to measure this performance, the primary ones being the return on assets (ROA), return on equity (ROE), and efficiency (EFF). The following points were concluded in this study: Both the size of IBs and the growth in the customers' deposits affect the banks' performance. Furthermore, they stated that government intervention negatively impacted the banking performance.

According to Akber and Dey (2020), conventional banks excelled over IBs in terms of both the management and asset quality. On the other hand, IBs excelled in the capital adequacy and liquidity position. This study was conducted in Bangladesh for the period of 2015–2019; the researchers examined the performance of both Islamic and conventional banks operating in Bangladesh. They used the CAMEL to examine the performances and compared the performance of five Islamic and five conventional banks. It considered the average ratio of each year, and the reliability of the data was tested using t-tests.

Tamanni (2002) analysed the performance of Islamic banking operations at three foreign banks in Malaysia to evaluate the performance of the Islamic banking scheme versus its conventional counterpart. He discovered that the ROA of the foreign banks and IBs were considerably higher than that of their counterparts, and this shows that the Islamic banking operations have been more profitable than the conventional ones. On average, ROA of the IBs was more than 1.58%, while the conventional banking at large was only 0.80% from 1996 to 2000. He also concluded that Islamic banking operations at foreign banks were performing considerably well in 1996–2000, during and post the Asian crisis.

Metwally (1997), Samad and Hassan (1999), Iqbal (2001), Samad (2004) and Ariss (2009) evaluated the performance of IBs in comparison to conventional banks by analysing financial ratios. In his study, Metwally (1997) mainly focused on finding out whether the application of the PLS principle had resulted in any structural differences between interest-free banks and conventional banks in terms of five financial dimensions: liquidity, leverage, credit risk, profitability and efficiency. By using the CAMEL ratios technique, he discovered that there was almost no difference between

the Islamic and conventional banks concerning efficiency and profitability, while there was a remarkable difference in the ability of attracting deposits and granting loans in favour of conventional banks. He determined that the two groups of banks may be different in terms of liquidity, leverage and credit risk and argued that interest-free banks rely more heavily on their equity in loan financing and face more difficulties in attracting deposits than interest-based banks. Interest-free banks hold a higher cash/deposit ratio because they tend to be relatively more conservative in using their deposited funds and lack lending opportunities. The PLS principle has made it difficult for interest-free banks to finance personal loans and has pushed them to channel a greater proportion of their funds into direct investments (using musharakah and mudarabah tools of finance). Metwally (1997) added that both banks offer their depositors similar returns and direct the largest proportion of their funds towards the financing of durables. Interest-free banks rely heavily on the murabaha mode of finance which is same as charging interest and is based on the use of a mark-up.

In their exploratory study of Bank Islam Malaysia Berhad (BIMB), Samad and Hassan (1999) also used the financial ratio analysis of major financial indicators to investigate the performance of BIMB in comparison to a group of eight conventional banks from 1984 to 1997. The results suggested that, in general, the management's lack of knowledge was the main reason for the slow growth of loans under profit sharing. Despite that, the bank was found to perform well compared to its conventional counterparts in terms of liquidity and risk measurement. They found that BIMB is relatively more liquid and less risky compared to a group of eight conventional banks.

Iqbal (2001) evaluated the performance of IBs using both trend and CAMEL analysis, in comparison with a group of conventional banks of equivalent size, from

1990 to 1998. He studied deployment efficiency in addition to profitability, liquidity, risk and capital adequacy and found that, generally, IBs did fairly well. Based on the key financial ratios used in the study, he found that IBs are well capitalised, profitable and stable and do not suffer from excess liquidity; they are also more cost-effective and profitable than their conventional counterparts. However, Ariss (2009) found no significant differences in profitability levels across Islamic and conventional banks. Also, it was found that IBs have lower financial risk due to their high dependability on equity and exhibited lower competition too in comparison to the conventional banks.

Samad (2004) based his study on the banking system in Bahrain and compared the performance of IBs with conventional banks during the post-Gulf War period with respect to profitability, liquidity risk, and credit risk, depending on the use of nine financial ratios. He, like the previous researchers, discovered that there was no major difference in the performance of the two banks Islamic banks with respect to profitability and liquidity. In addition, IBs were exposed to less credit risk compared to conventional banks, with a superior credit performance.

Kader et al. (2007) examined the performance of UAE IBs for five years from 2000 to 2004. To test the performance of IBs in comparison to that of conventional banks, 11 financial ratios were used, which concentrated on the profitability, liquidity, risk and solvency, and efficiency of the banks. The study found that IBs in the UAE are different from conventional banks when considering the financial performance. The UAE IBs are relatively more profitable, less liquid, less risky and more efficient compared to the UAE conventional banks.

Hanif et al. (2012) performed a comparative study to analyse the performance of the two kinds of banking in Pakistan. They collected a sample composed of 22 conventional banks and five IBs. The study was conducted in two phases. The first phase consisted of financial analysis for five years (2005–2009) and included profitability, liquidity, solvency and credit risk. The second part of the study used a customer survey consisting of 200 questionnaires filled in by customers representing the five IBs and five conventional banks. The results showed an outperforming of conventional banks in profitability and liquidity while IBs showed superiority in credit risk and solvency. The qualitative part of the study conducted through the survey exhibited results that supported the quantitative study.

Wasiuzzaman and Gunasegavan (2013) conducted a study to analyse the differences that exist in bank characteristics of Islamic and conventional banks in Malaysia. The characteristics used to compare the two types of banks were profitability, capital adequacy liquidity, operational efficiency and asset quality. They also included corporate governance and economic conditions to test for their effects. Their sample consisted of a total of nine conventional banks and five IBs over the period of 2005 to 2009. First, they conducted descriptive statistics to understand the differences that exist in the characteristics of both types of banks. Afterward, a t-test was performed to assess the significance of those differences. Finally, they performed a regression analysis to analyse the determinants of profitability for both. The results showed supremacy of conventional banks in ROA, bank size and board size, while IBs outperformed them in terms of operational efficiency, asset quality, liquidity, capital adequacy and board independence. The results were significant for all the variables included in the study.

Furthermore, Bashir (2000) performed a regression analysis to test the underlying determinants of IB performance. Cross-country bank-level data were used in this study, compiled from income statements and balance sheets of 14 IBs from 1993 to 1998 in eight Middle Eastern countries. The paper shed some light on the relationship between banking characteristics and performance measures in IBs. Three measures of performance were used in this study – the net non-interest margin, ROA, and ROE. He argued that the IBs' profitability measures respond positively to the increases in capital and loan ratios. It indicated that adequate capital ratios and loan portfolios play an empirical role in explaining the performance of IBs. Second, the outcomes also indicated the importance of customer and short-term funding, non-interest earning assets, and overhead in promoting the banks' profits. He also added that as the IBs grow in size, the operating risk decreases (Bashir, 2000).

In his attempt to confirm the major determinants of profitability in Islamic banks and how the bank characteristics and overall financial environment affect the performance of Islamic banks, Bashir (2003) found that Islamic banks' profitability measures respond positively to increases in capital and loan ratios. The novelty of this study, which set it apart from the previous ones, were the results that indicated that foreign-owned banks are expected to be profitable; further, taxes negatively affect the bank performance and profitability, while favourable macroeconomic conditions positively impact performance measures. The same results were confirmed by Hassan and Bashir (2003) who examined the determinants of Islamic banks' profitability. Their paper analysed how bank characteristics and the overall financial environment affect the performance of Islamic banks. Utilizing bank-level data, the study examined the performance indicators of IBs worldwide in 1994–2001. 108 internal and external

banking characteristics were used to predict profitability and efficiency. In general, their analysis of determinants of Islamic bank profitability confirms the previous findings.

Mamatzakis and Remoundos (2003) studied the performance determinants of Greek commercial banks from 1989 to 2000. They measured the banks' profitability using ROA and ROE. They considered internal factors, such as management policy decisions, and external factors, such as the economic environment, to explain the performance of the banks. The conclusions suggested that the variables related to management decisions assert a major impact on the profitability of Greek commercial banks.

Pasiouras and Kosmidou (2007) examined how bank's specific features and the overall banking system affected the profitability of both domestic and foreign banks operating in the 15 European Union countries in 1995–2001. This study used return on average assets (ROAA) to evaluate bank performance.

In 2003, an important study was conducted by Ben Naceur to investigate the profitability determinants of the Tunisian banking industry's performance. He investigated the effect of the financial structure and macroeconomic indicators on Tunisian banks' net interest margins and profitability from 1980 to 2000.

Peters et al. (2004) analysed the performance and balance-sheet characteristics of banks in post-war Lebanon for the years 1993–2000 and for a control group of banks from five other countries in the Middle East for the years 1995–1999. They employed the accounting return-on-equity (ROE) model to investigate profitability and leverage.

Heffernan and Fu (2008) identified the determinants of Chinese banks' performance and assessed whether recent reforms had any effect on the profitability

level. The sample covered 76 banks between 1999 and 2006. 10 bank-specific independent variables and three macroeconomic explanatory variables were analysed in this study. The researchers used four dependent variables as the performance measures of banks: economic value added (EVA), return on average assets (ROAA), return on average equity (ROAE), and net interest margin (NIM). In line with this study, Sufian & Habibullah (2010) studied the Indonesian banks' profitability during the period of 1990–2005 using ROA as a proxy for profitability.

Al-Tamimi (2010) compared the factors that affected the profitability of Islamic banks with those of conventional banks for the period of 1996–2008 in the UAE. The regression model used ROA and ROE as the dependent variables. Khrawish et al., (2011) investigated the factors that affected the Jordanian Islamic banks' profitability during the period of 2005–2009. The analysis revealed that there is a significant and negative relationship between ROA and bank size. Furthermore, Akhtar et al. (2011) conducted research to identify the factors affecting the profitability of Islamic banks in Pakistan for the period of 2006–2009. They used ROA and ROE as the independent variables measuring profitability.

Kanwal and Nadeem (2013) conducted research to investigate the impact of macroeconomic variables on the profitability of public limited commercial banks in Pakistan for the period of 2001–2011. They used the pooled ordinary least square method to examine the effect of three major external macroeconomic variables on performance. The external variables constituted GDP, inflation rate and real interest rate, while the dependent variables used to measure profitability were ROA, ROE and equity multiplier.

In 2015, Chowdhury conducted a comparative study to analyse the determinants of profitability of Islamic banks operating in Malaysia for the period of 2007–2013. The study was performed on 11 Islamic banks in Malaysia, and it used ROA as the performance indicator for profitability. Another study was performed by Samhan and Al-Khatib in Jordan in 2015. The aim of this study was to measure the determinants of financial performance of Jordan Islamic bank in 2000–2012. The dependant variables measuring financial performance were ROA and ROE.

It is clear from the above presentation that the central focus of previous studies was, more or less, the measurement of banks financial indicators with the financial ratio technique and their analysis using various statistical tools. It is also clear that this empirical work has relied mainly on the analysis of descriptive statistics. The majority of empirical studies have reached almost the same conclusions, and they are more or less consistent concerning the performance of Islamic banks.

Some empirical studies examined the performance of Islamic banks and conventional banks. The comparative and practical study of Iqbal (2001) considered Islamic banks and conventional banks in the 1990s. Data from 1990 to 1998 was used along with multiple hypotheses to obtain the results of application. Analytical equations were used for the measurements, and the results were compared with those of conventional banks from the same group. It was concluded that Islamic banks are well capitalized, profitable and stable. Moreover, it was obvious that IBs make effective use of their resources. Thus, this comparative study showed that Islamic banks as a group outperformed conventional banks mostly in all areas and years. On the other hand, this study showed that they are not cost-effective in their operations. Further, there are some variations among Islamic banks in terms of growth as well as performance.

The efficiency of Islamic banks in the Middle East was tested from 1993 to 1998 (Bashir, 2000). The data collected and tested reflected the banks' profits and the determinants of clarifying this performance feature. This research on Islamic banks tested the efficiency and outcome of both foreign banks and local banks with equal conditions and data.

Nienhaus (1988) examined the financial statements of Islamic banks working in various countries. He found out that there was only one Islamic bank operating in some countries. He then performed a comparison between banks in different countries, particularly Islamic banks' performance with that of conventional banks. He found out that Islamic banks were feasible but not as profitable as conventional banks. Another article by Zahier and Hassan (2001) concluded that there is no differentiation in performance between conventional and Islamic banking in Saudi Arabia. Also, many Islamic banks operating in Pakistan had non-Islamic bank transactions despite attempts to comply with the Islamic principles of financial system.

Zineldin (1990) stated that IB is a possible alternative to the conventional banking system. Ali (1996) compared the efficiency of both banking systems in Bangladesh and concluded that Islamic banks showed higher efficiency than conventional ones. Kazarian (1993) examined both banking systems working in Egypt and emphasised on the creativity of the financial products offered by the IBs. Samad and Hassan (2000), Ariff (1988), Wong (1995), and Samad (1999), conducted studies on Bank Islam Malaysia.

Samad and Hassan (2000) evaluated the efficiency of the IB from 1992 to 1996 and compared it with conventional banks. They found that Bank Islam Malaysia had

higher managerial efficiency that that of the conventional banks. Samad and Hassan (2000) also found that Bank Islam Malaysia was more liquid and, therefore, exposed to less liquidity risk.

Although Islamic banking and finance have developed in recent years, the studies focusing on the efficiency of the IBs are still limited (Yudistira 2003; Sufian 2007). A lot of the studies conducted evaluate the performance of Islamic banks with respect to the relationship between both profitability and bank characteristics. Bashir (2000) and Hassan and Bashir (2003) used bank data in a regression analysis to define the underlying determinants of Islamic banking performance. Samad and Hassan (2000) and Kader and Asarpota (2007) applied financial ratio analysis to evaluate the performance of the Malaysian and UAE IBs.

Likewise, to measure IBs' efficiency in Bangladesh, Sarker (1999) used a banking efficiency model and stated that IBs can survive even within conventional banks, where the PLS modes of financing are less present. Sarker (1999) noted that Islamic financial products have different risk characteristics, and consequently, different prudential regulations should be used.

Samad (2004) comparatively tested the performance of Bahrain's IBs and conventional banks from 1991 to 2001. He used nine financial ratios to measure their performances with respect to profitability, liquidity risk, and credit risk. His work concluded that there was no significance difference the profitability and liquidity measurements for the two banks.

Kader and Asarpota (2007) used bank data to assess the performance of the UAE IBs. Balance sheets and income statements of three IBs and five conventional

banks, from between 2000 to 2004 were used to collect data. Financial ratios were utilised to measure the performance of the IBs assuming profitability, liquidity, risk, solvency, and efficiency. The study illustrated that IBs of UAE are more profitable and efficient than conventional banks. On the other hand, they are considered less liquid and less risky. They found out that there are two noticeable implications associated with these findings. First, attributes of the Islamic PLS banking paradigm are due to the fast growth in the Islamic banking sector in UAE. Second, IBs need be regulated and supervised differently as Islamic banks operate differently from conventional banks.

Saleh and Rami (2006) evaluated IBs' performance in Jordon by measuring the performance of Jordan Islamic Bank for Finance and Investment (JIBFI), and Islamic International Arab Bank (IIAB) in Jordon. They discussed both the domestic and global challenges faced by the IB sector in Jordon. They used profit maximisation, capital structure, and liquidity measures to evaluate the banks' performance. The findings reveal several results. First, both efficiency and the ability of the banks increased, and the banks expanded their investments and operations. Second, both banks had a vital role in financing projects in Jordan. Third, the banks focussed on short-term investments rather than long-term. Fourth, the JIBFI profitability was high. Finally, the study determined that IBs have high growth rate in both credit facilities and profitability.

Bashir (2000) tested the factors that affect IBs' performance across eight Middle Eastern countries from 1993-1998. He used cross-country bank-level data on both income statements and balance sheets of 14 IBs operating in the eight Middle Eastern countries, and examined the relationships between banking characteristics and profitability. The work displays some important findings.

First, the profitability indicators of the IBs show a positive relationship with the capital and loan ratios, which is consistent with previous studies. Second, the work shows the role that capital ratios and loan portfolios play in clearing up the performance of IBs. Third, the findings show that customers and short-term financing, non-interest earning assets, and overhead are all important for enhancing banks' profits. Fourth, the study revealed that foreign-owned banks are considered more profitable than the domestic counterparts. Fifth, keeping other things constant, there is a suggestion that implicit and explicit taxes have a negative effect on the bank's performance. Sixth, favourable macroeconomic conditions affect performance measures positively. Last, the findings show that stock markets are complementary to bank financing.

Many empirical studies have tested factors affecting bank performance. A study observed the factors that affected the performance of banks that operated in Greece during the EU financial integration (1990–2002) was conducted by Kosmidou (2008). He used a time series of 23 banks. He used the return on average assets (ROAA) to measure performance and classified them into two sets of determinants. The internal set included some factors such as cost to-income ratio, ratio of equity to total assets, ratio of bank's loans to customer and short-term funding, ratio of loan loss, reserves to gross loans and, finally, the bank's total assets. The external set included the changes in GDP, the inflation rate, the money supply growth rate, the stock market capitalisation to total assets, and the ratio of total assets to GDP and concentration. The results showed that the ROAA was associated with well-capitalised banks and lower cost-to-income ratios. The results also indicated that the impact of size and growth on the GDP were positive.

Some studies considered satisfaction with banking services as the main determinant of bank performance. An example of such studies is the one conducted by

Jham and Khan (2008), in which they demonstrate how adoption of satisfaction variables can lead to better performance, and how customer satisfaction is linked with the performance of the banks.

Wum et al. (2007) investigated how financial development is measured by financial interrelation ratio, size, age of the bank, etc. The results indicated that the higher the levels of financial development, the better the ROA. However, a negative impact of both the size and the business orientation on the ROA was found.

Unal et al. (2007) conducted a study where they did a comparative performance analysis between the Turkish public and private commercial banks during the period from 1997 to 2006. They used net profit-loss, return on assets and return on equity as proxies to measure profitability. To measure operating efficiency, they used net profit, net assets efficiencies relative to total employment, and the total number of branches. The findings suggested that state-owned banks are as efficient as private banks.

Chirwa (2003) tested the relationship between market structure and profitability of commercial banks in Malawi using time series data, from 1970 and 1994. He concluded that there was a positive relationship between concentration and performance Naceur and Goaied (2001) examined the determinants of the Tunisian deposit during the period of 1980–1995. The results indicated that the principal determinants of a bank's performance were by, order of importance, labour productivity, bank's portfolio composition, capital productivity and bank capitalisation.

In Saudi Arabia, the banking sector has been studied by Ahmed and Khababa (1999). Three measures of profitability were used as dependent variables – ROE, ROA and percentage change in earnings per share. On the other hand, they used four

independent variables: business risk measured by dividing the total loans of the bank by its total deposits, market concentration, the market size measured by dividing the deposits of the bank by the total deposits of the commercial banks under study and the size of the bank. The results indicated that business risk and bank size were the main determinants of the banks' performances.

Kim and Kim (1997) conducted a comparative study on the structure–profit relationship of commercial banks in Korea and the US; to evaluate the profitability of the banks included in the sample, they used ROA and ROE as dependent variables.

In summary, it can be concluded that CAMEL have been widely used as measures of banks' performances. Therefore, in the present study, CAMEL ratios have been used as dependent variables, and the independent variables are discussed thoroughly in both the following chapter and the analysis of the interviews held.

3.8 Conclusion

In this chapter, the main concepts related to IBs were fully defined. The articles used in this chapter combine different authors' perspectives to develop an overall framework for the subject being examined in the study, i.e. to develop acceptable IB regulations in Egypt enhance the banks' performances.

A regulatory legal framework that supports the Islamic financial system has not been developed yet. The existing IB regulations in some Islamic countries depend on western banking. Also, some Islamic financial institutions meet difficulties in non-Islamic countries due to the lack of an appropriate regulatory body operating in accordance with Islamic Sharia (Iqbal, 1997).

There are conflicts between the current central bank regulations and IBs' operations, and the relationship between them is unclear. Issues might additionally arise when an IB is set up in a non-Muslim country and is subject to its rules and requirements (Mirakhor, 1997).

Moreover, there is a conflict between conventional banks and IBs. It is obvious that conventional banks experience continuing difficulty in implementing Islamic banking practices, and both the Islamic financial system and individual IBs face challenges that need to be addressed (Mirakhor, 1997).

Chapter 4: The Egyptian Context

This chapter identifies the CBE's functions, the Egyptian banks under the CBE's purview, and the relative importance of Islamic banks in the structure of the Egyptian banking sector. It also highlights the relationship between the CBE and IBs in Egypt as well as the viability of the regulatory tools and financing and whether the CBE regulations are applicable to Islamic banking operations in Egypt.

Part of the CBE's role is to supervise banks operating in Egypt to ensure their proper functioning and fiscal positions as well as protect their depositors' funds. This is due to the effective direct impact of banking activities on the national economy, which represents the cash supply of most economic activities in society and governs the banks' inter-relationships. Hence, the importance of CBE lies in monitoring the work of Egyptian banks (Dawaba, 2005).

Since the economic reform program was implemented in Egypt in the early 1990s, Egypt has given importance to the reform of the banking system by merger and acquisition to take on the global banking competition, extend the capital base of banks and reconstruct banks to cope with global challenges (Kenawy, 2009).

The monitoring role of CBE is very important for both conventional and Islamic banks. The IBs in Egypt are subject to the same tools, methods and regulations applied to traditional banks by the CBE without taking into consideration the nature of operations in Islamic banks, which impairs their investment objectives (Dawaba 2005).

4.1 Background on Egypt

Egypt is the most overcrowded country in the Middle East. A great majority of its 89 million people, as estimated in 2015, live close to the banks of Nile River. Nearly half of Egypt's population live in the urban areas, with the majority spread across the

densely crowded centres of Greater Cairo, Alexandria and other major cities in the Nile delta and near the Suez Canal. Islam is the most common religious and cultural force in Egypt; almost 90% of the population is Muslim, and the majority are Sunni Muslims. The remaining 10% (Copts 9%, other Christians 1%) represents an important Christian minority, primarily the Coptic Orthodox denomination (CIA, 2015).

4.1.1 The Administrative Profile

The constitution of the country, adopted in 1971 and amended in 1980, instituted a democratic system and established the role of public authorities. Accordingly, the executive power resides with the president of the country, who is selected by the people via public referendum for a term of four years. He formulates and monitors the enforcement of general state policies. The People's Assembly is the legislative department of the state and includes 444 directly-elected members and 10 members selected by the president, all of whom serve for a period of 5 years. The Shurah Council is a consultative body that suggests new laws and regulations to the People's Assembly. Administratively, Egypt is divided into 27 governorates and 246 districts. The governorates are managed by a governor who is selected by the president. In districts, the governmental units cooperate closely with locally-elected bodies to run the public utilities and provide services (CIA, 2015). The constitution in Egypt has passed through many stages. The last one was approved by a constitutional committee on December 2013 and then a referendum held in January 2014; it was thereafter ratified by the interim president on 19 January 2014 (CIA, 2015).

4.1.2 Politics

Change is a widespread word in the Egyptian political scene. President Hosni Mubarak declared on 28 February 2005 that the constitution would be adjusted to permit multiple presidential candidates. The opposition parties were suspicious of Mubarak's loyalty to effect electoral reform, while the public opinion was divided regarding the scope of the suggested changes and how speedily any reform should be carried out (Emerging Egypt, 2007).

The country is getting ready for a political transition with a number of options in argumentation being improved for the post-Mubarak political landscape. In the last few years, press freedom as well as general freedom of speech has extended in Egypt; nevertheless, legal restrictions, such as press laws of defamation that can result in jail terms for journalists, continue to encourage a high degree of self-censorship in the media (Sharp, 2006).

In terms of political development, determined in terms of prevalence of sensitiveness, responsibility, participation, free and fair elections, rule of law and respect of human rights, Egypt has lagged behind in its pace, scope and quality. This limited political development has not only led to a less than optimal allocation of social and economic benefits but also revealed the welfare of Egyptians in having and taking control of their equal human rights (CIA, 2005).

In light of the high-pressure situation described above a mass revolution occurred in Egypt in 2011, which removed the then President of Egypt Hosni Mubarak from power. Even though actual socio-economic injustices may have been the reason for the revolution, they were not responsible for Egypt's rapid politicisation. Protestors

peacefully demonstrated against the high rate of unemployment, lack of opportunities, free elections and democracy, food inflation and corruption (Badran, 2014).

Since then, the political scenario in Egypt has been quite unsettled. In May 2012, the presidential elections began and ended with the success of Mohamed Morsi, the Muslim Brotherhood's candidate on June 30. During his one year of presidency, people were rather unsatisfied. Morsi gave himself more and more power and released a decree permitting himself to take any measure he deemed necessary to protect the country. This move sparked protests once again.

Additionally, the draft of the reformed constitution was completed in November. It sidelined women, Christians, and intellectuals. In April 2014, a group of young activists called for Morsi to step down and put in a public referendum. By mid-June, this request had 22 million signatures. At last, on June 30, millions of Egyptians poured into the streets calling for Morsi to step down on the first anniversary of his election to office. After Morsi refused to step down from the presidency, the armed forces, under the guidance of former General Abdel Fatteh el-Sisi, removed Morsi. Instead, the Supreme Court Chief Justice Adly Mansour was selected to step in as Egypt's interim president. In January 2014, voters ratified a new constitution by referendum, and presidential elections took place in June. Abdel Fattah El-Sisi was voted in as the president of Egypt with a 97% approval rating (Childress, 2013).

4.1.3 The Economic Environment in Egypt

Egypt is a low-to-middle-income country. The economy is based fundamentally on agriculture, tourism, media and petroleum exports. There are more than three million Egyptians working abroad, especially in Saudi Arabia, the Persian Gulf and Europe. Egypt has been receiving U.S. foreign aid since 1979, at an average of $2.2 billion per year, and is the third-largest beneficiary of such funds from the United States following the Iraq war. However, its basic earnings come from tourism as well as traffic through the Suez Canal (CIA, 2015).

Egypt has been an economy in transition since the early 1990s, after undergoing an economic reform and structural amendment program; it resulted in a movement from a centrally planned economy towards a market economy. Despite the advancements over the first ten years, economic development was negatively influenced by internal problems (slow pace of economic reform) and external factors (slowdown in the international economy and increased global competition) towards the end of the 90s (Etab, 2016).

The economic growth rate fell pointedly in the first few years after 2000, as did the Egyptian share of world exports. The public sector, which had traditionally ensured a great number of jobs, had to undergo downsizing and privatisation, and the private sector was not yet strong enough to create new jobs to realise the labour market competitors. Unemployment became the main problem. However, in 2004, an economic revival began, with economic growth averaging at 5% as opposed to 3.3% from 2001 to 2003 (Etab, 2016).

In accordance with reports by the United Nations and governmental ministries, the rich–poor division in Egypt is considerable, particularly in rural areas. In addition,

refinements in the gap between the rich and poor are minor. Poverty remains plenteous. In the new development classification, Egypt ranks 119th out of 173 countries (IRIN, 2007b). Eliminating poverty remains Egypt's primary challenge (WHO, 2006). 20% of the population was below the poverty line in 2005 (CIA, 2015). Further, the basic socio-economic challenges facing Egypt involve the size of the population despite a reduction in its growth rate (WHO, 2006).

The Middle East Economic News Report (2002) uncovered that Egypt is in the throes of an economic crisis. It's macroeconomic condition worsened after 11 September. Egypt was particularly undergoing an intense liquidity crisis as a consequence of the loss of hard currency from the tourism sector, which ranged US$ 2–3 billion, while the airline and shipping industry was struck by a 50% rise in insurance premiums due to a decline in the number of passengers, mostly tourists. Other elements causing the crisis included a drop in the earnings from Suez Canal; reduced oil prices after September 11 because of the deepening recession in the US and surplus of Egypt's oil exports by nearly $0.5 billion a year; lower foreign direct investments, going from $1.6 billion between 1999–2000 to $507 million between 2000–2001; and reduced remittances from Egyptians working abroad, going from $3.8 billion in 2000 to $3 billion in 2001 (Etab, 2016).

The government has heavily invested in communications and physical infrastructure (Emerging Egypt, 2007). Egypt has become one of the leaders in the technology sector across the Arab region, with progress in computer programming inspiring plans to computerise schools, the establishing of public Internet access centres and the general promotion of technological development (Sobeih, 2005).

The stock market flourished and the gross domestic product (GDP) grew about 5% per year from 2005 to 2006. Despite these accomplishments, the government could not promote the living standards of the intermediate Egyptian and had to continue providing subsidies for basic needs. These subsidies have added to a growing budget deficit (CIA, 2006). In accordance with World Energy Outlook (WEO), Egypt's natural gas output will outpace oil to become the controlling fuel. Natural gas will account for 48% of the demand by 2030, in line with government policies which support turning to gas for power generation and their use in petrochemicals, fertilizers and the cement industry. Egypt has enlivened its position as a petrol state and is now the world's sixth-largest exporter of natural gas (Emerging Egypt, 2007).

Thus, after the revolution in 2011 and the ensuing political disorder and instability in Egypt, the revolutionary regime gave considerably greater preference to economic growth, which has continued to be a major governmental issue since then. Since 2011, Egypt has drawn down foreign exchange reserves and relied on foreign aid to finance imports and energy products and stop any further devaluation of the Egyptian pound (Etab, 2016).

4.1.4 The Reform of the Banking System in Egypt and Implications

Egypt began an overall economic reform and structural adjustment program in 1991. This reform program was supported by a stand-by arrangement from the IMF and a structural adjustment support from the World Bank, besides the bilateral debt forgiveness/debt service relief of the Paris Club. The fundamental aim of this reform, as summed up by the IMF (1991), is "to make, over the medium term, a decentralized market based, outward-oriented economy where private sector activity will be supported by a free, competitive, and settled atmosphere with autonomy from government

interference." For this reason, controls on economic activity and investment are to be dismantled and essential dependence established on market forces for resource allocation (Etab, 2016).

The reform of the banking sector over the 1990s took three basic steps. First, the liberalisation of the financial variables. Second, as a section of the banking reform program, one of the basic priorities of the authorities was enhancing the regulatory domain. New prudential measures were presented in 1991 for capital sufficiency and asset classification and provisioning after setting bank liquidity demands for local and foreign currencies in 1990. Third, the banking sector was involved in the privatisation program which was akin to the privatisation of the public sector shares in joint venture banks and public banks (Deabes, 2006; Wijnbergen, 1993).

The most visual side of the reforms was the government's strong adherence to selling state-owned bank assets and leaving the business to the private sector. Beginning in 2005, the ministry of investment started to push the big four public sector banks – which themselves held minority stakes in about 20 other banks – to begin selling those stakes back to respective joint venture partners or new foreign banks. The privatisation drive culminated in the sale of 80% of the bank of Alexandria, the smallest of the big four banks, to San Paolo IMI of Italy in October 2006 The government's plan for banking reform followed recommendations of the joint 2002 IMF-World Bank Financial Sector Assessment Program for Egypt. The plan called for the unification and sale of government shares in JV banks and restructuring of public banks to involve a resolution for the non-performing loans issue in planning for privatisation (Etab, 2016).

The Egyptian People's Assembly (Parliament) also exceeded the unified banking law in 2003, which most notably increased the banks' minimum paid-in-capital requirement from LE 100 million ($17.8 m) to LE 500 million ($89 m), and set the risk weighted average capital adequacy at 10% (NBE, 2005).

In September 2004, the Egyptian government, encouraged by the banking developments on the international domain, the structure of the banking system and the growing contest, presented its plan for reforming and reconstructing the banking system financially and managerially, with a vision to improving its competitiveness locally and internationally. The aforementioned plan, anticipated to be finalised within five years, relies on six pivots, as follows (NBE, 2005):

1. First pivot: Integrating small banks into larger entities
2. Second pivot: Addressing NPLs through the CBE's arbitration committee and a follow-up unit for NPLs
3. Third pivot: Reconstructing the public sector banks financially and managerially, with the possibility of privatising one of them in the future
4. Fourth pivot: Extending the ownership base in joint banks via selling the public banks' equity participations therein, and distributing the sale proceeds to their financial reconstructing
5. Fifth pivot: Strengthening banks' supervision to be at par with international criteria, protecting the banking system and unifying banking and non-banking financial systems in one system
6. Sixth pivot: Improving the role of the CBE in managing and monitoring the reform process

In July 2005, the deadline for banks to meet a new capital demand of LE 500 million, stipulated in the Unified Banking Law of 2003, expired following a grace period of one year. Since August 2004, the Central Bank's decree involving organising capital increase demands and requesting a capital adequacy ratio of at least 10%, saw many mergers and acquisitions happen that influenced nearly 20% of licensed banks (Etab, 2016).

Before the reform strategy, the Egyptian banking system involved 63 banks – 28 commercial banks (involving four public sector commercial banks), 11 investment and business banks, in addition to three specialised banks (entirely possessed by the government). This was in addition to 19 branches of foreign banks (six of which are non-operative) and two banks unregistered with the CBE – namely, the International Arab Bank and Nasser Social Bank (NBE, 2005).

In the context of the unification of the banking system by decreasing the number of banks, the government also declared, in August 2005, the merger of the second and third largest state-owned commercial banks (Banque du Caire and Bank Misr) as well as of two housing and real estate banks, Egyptian Arab Land Bank and Housing and Development Bank, to make one large real estate finance bank (NBE, 2005).

Different other mergers and unifications of small banks occurred in 2005 as well as the divestiture of public sector shares to 15 joint venture banks. However, all these mergers have not been converted into ownership and governance structures, as the legal and technical mergers of these banks are yet unfinished (Mohieldin and Naser, 2007).

The first bank to be merged was Misr Exterior Bank; it was absorbed by Banque Misr in September 2004 (NBE, 2005). By 2006, 11 small banks had been merged into

bigger banks and the CBE had started legal procedures to liquidate branches of three foreign banks that had not met the capital requirement. In June 2006, the Islamic International Investment Bank, United Bank of Egypt and Nile Bank were reconstructed as a private bank under the name of United Bank (UB), with a paid-in capital of LE 1 billion. However, the three merged banks could not meet their LE 500 million capital requirement and had 920 cases of distressed assets worth LE 5.6 billion. In addition to a capital boost, the CBE granted UB a further subordinated loan amounting to LE 3 billion to support the acquisition. This was the first time that the CBE founded a new banking entity constructed as a private bank. Currently, the CBE possesses 99.9% of the entity, but its possession will end once the bank's loan portfolio is strengthened and the initiating funds from CBE are compensated.

Along with unification, the government's reform policy requested the divestiture of government shares in JV banks, the proceeds of which were to be distributed for financial reconstructing of state-owned banks. So far, 10 banks have been divested of public shares which are the MIBank, NSGB, Misr-America International Bank, Egyptian-Commercial Bank, Misr-Romania Bank, Suez Canal Bank, Delta International Bank and the Cairo Far East Bank. In 2006, about 75% of a large JV bank, the Egyptian-American Bank (EAB), was sold to Calyon Corporate and Investment Bank, part of the French Credit Agricole Group. Trading in Calyon Bank Egypt, the EAB was deactivated in August 2006 upon the fulfilment of merger procedures, and de-listed from the stock exchange on August 31. Credit Agricole Egypt, the new bank formed from the merger, began trading its shares in September. In February 2006, the government's share of the largest JV bank, CIB, was sold to a US consortium. These divestitures have slightly changed the status of these banks in the market. CIB shifted

from first to second place, in terms of market share of loans and deposits, while NSGB is now first. Egypt's third largest private bank is now Credit Agricole. Arab African International bank acquired Misr America International Bank and the EAB acquired American Express Bank's branches. Additionally, Credit Agricole Indosuez (Egypt) and Credit Lyonnais Bank's branches in Egypt were merged to create the Calyon Bank-Egypt (CBE, 2007).

Government transparency concerning the position of NPLs in Egypt has been enhanced. Resolution of the NPL problem started in 2004, when the government founded an Arbitration Committee and an NPL unit at the CBE to resolve bad debts, handle disagreements between banks and borrowers and develop a long-term settlement for the NPL problem. The CBE also asked banks to found their own units to preserve information on NPLs, and on observing advancements in recovery, to move towards settlement and write-offs. Though the majority of banks still do not uncover their level of distressed assets, different estimates point to the fact that NPLs as a percentage of total loans has been reducing and stands on average at 20–25% currently (CBE, 2007).

The financial crisis that hit the international markets in late 2008 did not significantly harm the Egyptian banking sector as it had "abundant liquidity due to the accelerated projects by various investors in booming business sectors over the last three years" (International Finance Corporation, 2009). It was not active in the provision of mortgage banking, factoring operations or financial leasing (Reda, 2008).

At the end of 2010, the Egyptian banking industry contained 39 banks. This number involved 37 commercial banks, three of which were public and yet accounted for a large share of banking activities. Furthermore, there were 27 private banks and

seven off-shore banks. Out the 39 banks, there were two specialised public banks providing mid- and long-term financing to the agriculture and real estate sectors (CBE, 2010).

4.2 The Importance of Studying Islamic Banking in Egypt

Throughout the eighties, banks were highly liquid. Time and foreign currency deposits increased from nearly LE 3.6 billion to LE 34 billion between 1980 and 1988, or at an annual rate of 32.4%. Part of the increase came from the revaluation of foreign currency deposits against the depreciating pound. The greatest shares of the rise were those of time deposits and foreign currency. It was hard to define the savings rate, because the Central Bank did not detach time deposits from the foreign currency. Some estimates indicated that Egypt had a savings rate of 17% of the GNP, one of the highest in the world. This was mostly private savings; public savings fell frequently in the 1970s and 1980s because of military expenses, the high cost of subsidies, and the increase of foreign debt. The mostly good performance of the banking sector was marred by depravity, fraud, smuggling of hard currency abroad, and a rough encounter between the government and the Islamic investment companies. In one case in 1984, a black marketer, through bribery, obtained loans worth US$3 billion and then smuggled the funds abroad. It was thought that in 1981, about 54% of hard currency deposits in private banks were positioned with overseas branches or corresponding banks (Etab, 2016).

Moreover, at the religious level, Sheikh Tantawi, Mufti of Egypt, an interpreter or expounder of Sharia, stated that saving certificates are not a sort of Riba and that the interest given by the conventional banks on deposits should be considered as profit, rather than usury or Riba. The significance of this religious view was that it came from

the Mufti who is a very impressive and influential person for the Muslims in Egypt and a high percentage of the Egyptians obey him in all aspects of their lives. As a result, dealing with conventional banks became legitimate from an Islamic perspective for those who accepted this fatwa (religious opinion). This fatwa was decreed in 1989 i.e., at the last year of the study, and its influence could be seen in the results (Zahier and Hassan, 2001).

The foundation of the Islamic financial system urged the governments of Muslim countries to reform their legal and economic systems so as to adjust their financial institutions to the Islamic financial principles. While some countries fully Islamised their financial systems and removed interest rates, like Pakistan, Iran and Sudan, the greatest number founded Islamic financial institutions alongside conventional interest-based ones (Zaher and Hassan, 2001). Egypt is among those countries that employed the second policy as it neither encouraged nor opposed IBs to work within its financial system. In fact, Egypt is among those countries where no laws have been enacted to govern the Islamic financial institutions, and they work under the same laws governing conventional banks (Hawary et al., 2007).

In Egypt, Islamic banking has been on the decline since the first merger occurred between an IB (the Islamic International Bank for Investment and Development) and two conventional banks (the United Bank of Egypt and the Nile Bank). Jointly, they formed one financial structure working conventionally under the United Bank, of which 99.9% is possessed by the CBE. The purpose behind the merger, as stated before, was to maintain the rights of depositors by not declaring bankruptcy. However, the government could have acquired the bank without merging with conventional banks in order to safeguard the identity of the Islamic institution in the same way that Dubai's

government treated the Dubai Islamic Bank crisis. As a consequence, there are merely two IBs in Egypt, Faisal Islamic Bank of Egypt and Al Baraka Bank, in addition to some of the Islamic outlets of conventional banks. Unfortunately, they have no actual market among themselves to place short-term funds, pushing up the cost of financing (Al-Nasser, 2008).

However, the Egyptian government policies were evident as being completely against the development of Islamic financial institutions (Mouawad, 2009). The behaviour of the Egyptian government towards the Islamic financial system was evident as the development process of Islamic banking in Egypt inverted how the government policies had been politicised. According to Warde (2000), such politicisation points to the Egyptian government's mix between Islamic finance and political Islam. The Egyptian government assumes that the Islamic financial institutions are channels for financing political Islamite movements, more of which in turn can threaten the government power and political stability. The Egyptian government prevents any encouragement of Islamic banking as it fears that some Muslim fundamentalist groups might employ it to advocate their religious propaganda, particularly after the assassination of President Sadat in 1981 by an Islamite brotherhood (Albalawi, 2006).

Also, it is believed that any extension of Islamic finance can result in an instability of the current economic system, leading it to being in conflict with Islamic finance principles, particularly the matter of interest forbiddance (Moawad, 2009). Such a behaviour was evidenced in the repression of the first experiment of the Mit Ghamr Bank which resulted in its closure because of political and economic fears. Such an approach used by the Egyptian government was also seen in the experience of Nasser Social Bank, which was converted from its Islamic nature to work as a tool in the

government's social programs (Mohieldin, 1997). The combination of all these may explain why the Egyptian government has become more careful about using Islam as a symbol in state affairs, and this may be regarded as one of the reasons why the development of Islamic banking and finance in Egypt has been so slow.

Even though this phase was succeeded by the government's approval of the foundation of some private IBs, however, this movement emerged from the government's commercial inclination to attract Arab investments rather than from the belief in the idea of Islamic finance itself (Moawad, 2009). After that came the experience of the Islamic Investment Companies of which several founders began their activities as foreign exchange black marketers. The government was disregarding those companies because they lubricated the wheels of trade and dollars (Warde, 2000), and they were recognised as promoters of foreign currency in the economy. Those companies had plenty of cash and found themselves surrounded by businessmen who could not finance imports through the formal channels because of the non-functioning capital market and malfunctioning banking sector. Moreover, the government itself wanted the help of black market traders in order to finance the imports of some basic goods (Mohieldin, 1997).

Afterwards, the government changed its behaviour completely towards those companies and aided their fall by enacting the law of 1988, which was in part a reply to the external pressure imposed by the IMF, and in part because of the deterioration in the level of savings in public banks. However, it is worth pointing that the government didn't interfere quickly enough and this lateness in interference was partly due to the fear of accusation of being anti-Islamic and believing that a basic run on those companies would endanger banks and government agencies that had been dealing with

them. Additionally, at that time, the government didn't have an approximate figure of the number of these companies or their depositors (Mohieldin, 1997) and made use of the disastrous repercussions of the Islamic investment companies and employed it as a tool to shake people's understanding of Islamic finance and explain its preference in providing Islamic financial services via state-owned banks (El-din, 2005).

On the legal level, the Constitution of Egypt Article 2 declares Islam as the official religion of the country and considers Islamic Sharia as a principle source of Egyptian legislation. Since the Egyptian government was controlled by a secularist party, neither the government not the courts exerted any effort to change the laws to reflect the Islamic laws. However, with the growing power of the Egyptian Islamist movement, the government was obliged to modify the constitution in 1980 to give Islamic law a pivotal and fundamental role in Egyptian society. The wording of Article 2 was thus changed from "Islamic Sharia is a principle source of Egyptian legislation" to "Islamic Sharia is the principal source of Egyptian legislation (Albalawi, 2006). Even with the adjustment in the law, the government never showed any tendency to forbid interest in the banking system.

To ensure this fact, Nomani (2003) suggested that the constitutional adjustment did not mean that the Sharia had become a positive law in Egypt; it was only a guiding principle for future legislation because of a suit before the supreme constitutional court – the most important court with regard to the application of the Sharia – pleading against a lower court judgment obliging Al-Azhar (the top religious establishment and one of the oldest and most influential Islamic universities in the world) to pay a debt and a 4% interest on it in accordance with the related article of the civil code. The court discarded the case stating that the Sharia rulings could not be retroactively applied to the

already existing legislation without causing confusion and instability in the commercial and judicial process.

Along with the government policies, the CBE forces the performance of Islamic banks via regulations of liquidity, reserve requests and credit rates ceiling. Additionally, there is some degree of dissent from the conventional banking system to the extension of IBs in Egypt for fear that labelling any bank as Islamic indicates implicitly that the commercial conventional banks are not Islamic, and this can result in the loss of credibility of these conventional commercial institutions (Business Today, 2007).

At the religious level, the condition worsened due a public fatwa released in September 1989 by Sheikh Tantawi, the Mufti of Egypt (an interpreter or expounder of Islamic law Shariah), confirming, contrarily to what he had said before, that saving certificates are not a sort of Riba and that the interest paid by the conventional banks on deposits should be considered as profit, rather than usury or Riba. As a consequence dealing with conventional banks became legitimate from an Islamic view for those who accepted this fatwa. He asserted that the saving certificates are a contemporary transaction which are beneficial to citizens and the whole society alike, and do not result in exploitation of one party by the other (Nomani, 2003). Despite intense opposition to this opinion from the plurality of Muslim scholars, IBs lost additional depositors who followed the opinion of the Mufti. As a result, the CBE, encouraged by this fatwa, permitted banks to increase interest rates to encourage savings in the local currency and attract funds to the conventional banking system.

Moreover, several problems exist today concerning the current practices of Islamic banking in the Egyptian economy, one of which is regarding the practice of

Islamic banking conception generally, which differs from the explanation of Riba. This denotes that some IBs may provide products and services that other Islamic banks find unacceptable. Unfortunately, the annual reports show that different IBs publish do not offer a detailed discussion concerning how Riba is determined in each bank (Olson and Zoubi, 2008).

4.3 The Central Bank of Egypt

The CBE is the financial institution stands on top of the banking system. The main objectives and functions of the CBE are as follows (Al Halw 1979):

- Realising price stability and ensuring the soundness of the banking system.
- Formulating and implementing the monetary, credit and banking policies.
- Issuing banknotes and determining their denominations and specifications.
- Supervising the banking sector.
- Managing the foreign currency international reserves of the country.
- Regulating the functioning of the foreign exchange market.
- Supervising the national payments system.
- Recording and following up on Egypt's external debts (public and private)

4.3.1 Historical Overview: The Central Bank of Egypt

The CBE was established when the National Bank of Egypt was founded in 1898. It was performing the functions of the central bank in terms of taking over operations in the issuance of banknotes, the withholding of the government accounts, in addition to the regular banking commercial role (National Bank of Egypt). In 1951, the

CBE was established by the State Law No. 57 of 1951, and the National Bank of Egypt was given the authority to supervise other commercial banks and the responsibility to control the money supply and credit policies (National Bank of Egypt).

In 1957, the law of banks and credit No. 163 of 1957 was issued to increase the authority of the National Bank of Egypt with regards to organising the credit policy and banking supervision and their implementation in accordance with the plans of the state, to help support the national economy and the stability of the money market (Egyptian Law Association, n. a). However, the nationalisation of the National Bank of Egypt in the early 1960s via the Law No. 250 of 1960 concerning the Egyptian Central Bank and the National Bank of Egypt, led to the division of the National Bank of Egypt to two completely independent institutions: The National Bank of Egypt, working as a commercial bank, and the CBE concerned with the conduct and functions of the central bank's operations only.

The two institutions have become the property of the state under the laws of the socialist nationalisation issued in 1960, following which the laws of the organisation of the Central Bank issued the banks law No. 120 of 1975, stipulating the Egyptian Central Bank and the banking system (Law No. 88 of 2003).

4.3.2 The Central Bank of Egypt Aims

The aim of the CBE is to achieve economic stability and development of the state. “The central bank is to achieve price stability and safety of the banking system in the framework of the general economic policy of the State”. The CBE aims to achieve these objectives through the resurrection of many functions.

4.3.3 Central Bank of Egypt Functions

The functions of the CBE are closely related to the national economy as a whole, as well as the relationship between it and other banks in the state. These can be summarised as follows (Law No. 88 of 2003):

1. To implement the monetary policy in agreement with the government, as well as maintaining credit policies and monitoring banking activities.
2. The management of cash liquidity in the national economy through the supervision and control of the money supply.
3. Influencing the banking credit policies to meet the needs of the various aspects of economic activity.
4. Issuing banknotes.
5. Working as the government bank regarding the implementation of monetary policies. Acting as adviser and financial agent, holding current accounts, and deputising the issuance of government bills and bonds. The CBE is also forms the central administration of the state reserves of gold and foreign exchange, and helps in the organisation of the foreign exchange market and follow-up of the external indebtedness of the government.

6. Controls and monitors the banking system to provide credit to the banks in case of emergencies, as well as to ensure that the funding and credit facilities obtained by those banks are according to certain controls.

4.4 Islamic Banks within the Structure of the Egyptian Banking System

Egypt initiated the idea of Islamic finance and is recognised the birthplace of the first IB in the World. While Mit Ghamr may be known for being the centre of aluminium production in Egypt, it is also famous as the city where the first IB was established in 1963 by Dr Ahmad El Najjar that merged the idea of German savings banks at that time with Sharia principles and rules of the Islamic banking system. Though it was not labelled as an Islamic financial institution, the bank was the first Sharia compliant establishment in modern times. Najjar started it based on the German savings bank model, which he had become familiar with during his studies in Germany. With the help of both Germans and his family contacts, he was able to get the official approval from the Egyptian government. El Najjar never mentioned Islam during the process of founding the bank for fear that his project would be rejected in an anti-Islamic era.

Neither the state nor the public were informed that the motive behind the creation of the bank was an Islamic one. Still, the Mit Ghamr bank is recognised as the first IB, which inspired other Muslim countries to found Islamic alternatives to the existing ones (Henry et al., 2004). Henry argued that there is a difference between the very first IBs and the ones today as the former were created to fill a gap in social and economic life and to support the poor by increasing the population's awareness of saving and by mobilising their resources.

Although Egypt was a pioneer in Islamic banking, the massive development of Islamic investment companies in the Egyptian market led to the development and later collapse of finance houses. This was due to the lack of regulation and supervision. The most famous company was the El Rayan Company. It was mobilising depositors' resources by offering highly attractive returns, and competing with other institutions at that time. These companies claimed to be Sharia compliant; however, they collapsed in the late 1980s, ruining many small depositors.

This era damaged the reputation of the Islamic finance idea in Egypt, and led the authorities to doubting the potential benefits of Islamic finance and delayed its revival in the country. In 1971, the Nasser Social Bank was founded and its role limited to social activity. Thoughtfully, the authorities allowed the existence of the first Islamic financial provider, an Islamic window set up by Bank Misr, and the establishment of the first fully fledged IB, the Faisal Islamic Bank of Egypt (FIBE) in 1979. However, Egyptian authorities remained cautious vis à vis Islamic finance for a very long time.

According to Henry and Zineldin (1990), the first distinguished IB in Egypt was FIBE, which is one of 44 commercial banks in the country. Among the bank's shareholders are political, economic and religious figures. FIBE's main objective is to be a bank which follows Islamic Sharia in all its operations (Ray, 1995). Two other IBs operate in Egypt today, the Al-Baraka bank and Abu Dhabi Islamic Bank. All three banks are often referred to as private IBs.

Egypt now has 14 Islamic banking licenses, of which three are IBs. The other licences were offered to conventional banks with Islamic windows, including the National Bank of Egypt and Al-Ahli United Bank. The roughly 200 branches and 120

billion Egyptian pounds of assets in Egypt's Islamic banking industry are dwarfed by Egypt's conventional banks. According to Warde (2000), Egypt's top religious establishment approved of interest-based lending, which might be due to its government's suspicions about Islamic finance. The government worries about the threat to the state from the Islamic sector (Warde, 2000).

Ray mentions that conventional banks in Egypt open what is called Islamic branches. By 1995, this new trend had grown to include eleven non-Islamic banks. The underlying motives for opening so-called Islamic branches, Ray states, are not only the desire to compete in a market opened by FIBE and other IBs, but also an attempt to weaken strong IBs such as FIBE. This phenomenon, however, will lead towards an Islamisation of the banking system as a whole.

Both Ray and Henry still claim that Islamic banking has not, in practice, been the monopoly of the Islamic movement nor of its founders. Most of the people involved in Islamic banking businesses are apolitical and some of them move back and forth between Islamic and conventional banks (Henry et al., 2004). The same concepts and rules control all Islamic banks, which forms a consistency in the practice between the banks. According to Ray, FIBE also collects alms tax (zakat) on the shareholder's equity, which provides aid for the needy and sponsors Quran recitation classes (Ray, 1995).

Both the regulations measures and established institutions supporting Islamic finance have come a long way and are still evolving, varying across authorities and commands. Some countries have endorsed different Islamic banking laws and regulations, while others extend the general banking law to Islamic banks. Sometimes a

special law is legislated to control the establishment of a specific institution. Heretofore, Egypt had no general law for Islamic banks. It deals with them through tailor made legislations for specific institutions or regulations, under the general umbrella of the banking law and supervision of the central bank. This affects IBs' performance, operations and even their existence in some cases.

From the following table, we can see the relative importance of IBs in the structure of the Egyptian banking system by 2014, where the number of IBs with independent budgets under the supervision of the CBE is three: FIBE, Abu Dhabi Islamic Bank, and Al Baraka Bank. It is clear that this sector represents almost 5% of the total banking system in Egypt.

Table 1: The Relative Importance of Islamic banks in the Structure of the Egyptian Banking System on 31 December 2019 (Egyptian Pounds)

Statement	**Faisal Islamic Bank**	**Abu Dhabi Islamic Bank**	**El Baraka Bank**	***Islamic banks***	**Egyptian banking system (EBS)**	**% of IB to EBS**
Common equity	11,394.70	4,248.20	4,068.76	19,711.66	156,652	12.5
Total assets	102,740.30	60,324.70	72,518.11	235,583.11	6,584,681	3.58
Total deposits	86,035.80	51,161.10	64,167.33	201,364.23	4,894,195	4.11
Employees #	1797	2319	968	5087	82,048	6.2

Source: Fitch solution Database

4.5 The Relationship of the Central Bank of Egypt and Islamic Banks

The relationship between the central banks and IBs in Islamic states can be classified as follows:

- IBs in Islamic countries had to change their banking systems fully to the Islamic banking system, as in Pakistan, Iran and Sudan.
- IBs in Islamic countries under traditional banking systems, organised by the banking laws based on the Western style and, at the same time, special laws are issued to regulate the work of IBs as in UAE, Malaysia and Jordan.

- IBs in Islamic countries with the traditional banking systems organized under the banking laws of the Western style, which apply to both traditional and Islamic banks as in Egypt.

In this framework, the relationship between the CBE and the Egyptian IBs is regulated based on law No. 88 of 2003 of the CBE. The Islamic banks operate in Egypt in accordance to this law without any distinction from traditional banks. Although the law differentiates between the public sector banks and the private sector, it does not adopt the same approach for IBs. Under these conditions, it is worth considering whether the methods, tools and financial controls applied to traditional banks are applicable to IBs in Egypt. The coming section will discuss the role of the CBE and its effect on the IB sector.

4.6 Role of the Central Bank of Egypt

4.6.1 The Supervisory Role of the Central Bank Egypt and Islamic Banks

The CBE exercises its supervisory role through a set of methods and regulatory tools, to be applied to both banks, and the most important of these tools include the following:

i. The legal reserve (cash)

The CBE requires the other banks' subject to keep in a special account with no return on credit balances at a rate of not less than 14% of its deposit balances in the Egyptian pound, 10% of total deposits in dollars and a three-month deposit prevailing in the London market; the following table shows the components of the legal reserve ratio in Egyptian pounds.

Table 2: Components of the Percentage of the Legal Reserve in Egyptian Pounds

Numerator	**Denominator**
Bank balances in Egyptian pounds at the Central Bank from the records of the Central Bank **Excluding from them:** • Balance of the central bank account for financing that is not cash in the bank's coffers. • Treasury bills remaining due for a period of not more than 15 days and maximum 10% of the extension of the reserve ratio to exclude these permissions from the spread of the liquidity ratio in local currency.	Total deposits in Egyptian Pound **Excluding from them:** • Balances of savings schemes with a period of three years or more on the basis of the contract term, with the approval of the Central Bank

(Dawaba, 2005)

If any of the banks violate the decisions of the Central Bank's management regarding the rules of calculating the reserve ratio, the Central Bank Board of Directors may deduct a sum from the bank's credit balance with the Central Bank, equivalent to the value of the return at the discount rate on the amount of the deficit in the credit balance, for the period during which the deficit occurred. The Central Bank Board of

Directors may carry out the previous deduction in addition to other penalties based on law No. 88 of 2003 of the Central Bank.

The lower the ratio, the greater the bank's ability to grant credit, and thus increase their ability to create money. Therefore, the CBE considers this policy as a tool to control the inflationary effects of the ability of these banks to expand granting credit and create money (Johnsin et al., 1989). The CBE also aims to use this policy to secure customers' requests for any emergency withdrawals on their deposits. This policy enables the CBE to support other banks in these circumstances to protect depositors' funds and ensure their repayment (Horvitz, 1984).

Some have argued that the primary objective of the CBE's management of the legal reserve is to ensure the proper implementation of monetary policy, not the protection of depositors' funds. The legal reserve is not sufficient to achieve the protection target as it represents a small percentage of deposits (Weiner, 1992). Law No. 88 of 2003 provides for the establishment of a Central Bank fund called the Insurance Deposit Fund in banks, which shall then have a legal personality and an independent budget. They shall have a Board of Trustees headed by the Governor of the Central Bank. The membership shall include all the banks registered with the Central Bank. If this fund is established, it will not be based on inter-bank cooperation but on the interest rate mechanism on deposits of banks, that is not in line with the Islamic banking system.

Given the Central Bank justification in implementing the legal reserve policy, it was found that they do not match the nature of the funds in Islamic banks because they differ from the nature of deposits in conventional banks. These funds were provided by the depositors to IBs for the purpose of investing them according to the actual results of

the investment and PLS. Hence, there is no obligation on part of the IB to return them in full to the depositors. On the other hand, the IB uses these funds in real investments and does not resort to monetary lending, which means that the ability of IBs to create money and increase monetary supply is very limited when compared to the situation of financing loans in conventional banks. The legal reserve policy leads to the disruption of IB resources and reduces their full monetary investment which adversely affects the return distributed to the owners of investment accounts, resulting in less profits for IBs than expected (Chapra, 1970). This policy also favours conventional banks to Islamic ones. Traditional banks benefit from offering treasury bonds to extend the legal reserve, while IBs do not deal with treasury bills because they are considered to be forbidden Riba.

The legal reserve in the US dollar is also calculated as an interest rate at the deposit rate in the London market which prevents IBs from taking advantage of that interest, because they are considered Riba. On the other hand, traditional banks benefit from them, making them more capable of utilising their resources than IBs. It is fair that IBs accept the application of the legal reserve policy on current deposits but not on investment deposits, as the Islamic bank guarantees to return those deposits to its clients. On the other hand, some see that the exemption of Islamic banks' investment accounts from the legal reserve gives them an advantage over the traditional banks. This might not be acceptable under the pretext of fair competition (Chapra, 1970).

ii. The cash liquidity

According to the instruction control manual of the CBE, it requires other banks under its control to maintain some high liquidity assets so as to facilitate quick and easy cash flow if depositors' withdrawals exceed the expected rate. The minimum order of the CBE is 20% in local currency, and 25% in foreign currency. The following tables show the components of liquidity ratio in the local currency and foreign currency, respectively.

Table 3: Components of Liquidity Ratio in Local Currency

Numerator	Denominator
A- Cash B- Surplus in reserve balances with the CBE for minimum reserve requirement C- Checks, transfers, coupons and purchased papers D- Treasury bills (excluding the balances of permits included in the spread of the reserve ratio within the limits prescribed) E- Egyptian government bonds that are negotiable with the CBE and/or traded in the stock market F- Bonds held by the Bank in local currency issued by other banks under the supervision of the CBE, provided they are registered on the Stock Exchange G- Net due to local banks (after clearing between the total amount owed by local banks and the amounts owed to them)	A- Checks, transfers and letters of credit payable periodically B- Net due to local banks (after clearing between total amounts owed to local banks and amounts owed to them) C- Due to foreign banks D- Customer deposits 50% of the value not covered by cash from the letters of guarantee issued, does not include the non-cash value of the letters of guarantee of the primary and those guaranteed by the banks of the first degree abroad – banks with high creditworthiness – in the case of a bank issuing a final letter of guarantee upon request Other Bank With its guarantee, the non-cash value of this letter is included in the liquidity ratio of the two banks

(Dawaba, 2005)

Table 4: Components of Liquidity Ratio in Foreign Currency

Numerator	Denominator
A- Gold and cash B- Balances with the CBE C- Checks, transfers and coupons of purchased securities D- Development bonds in US dollars traded on the stock exchange E- Discounted commercial papers payable within three months F- Net due to local banks (after clearing between total amounts owed to local banks and amounts owed by them) G- Due to foreign banks H- Treasury bills, government bonds, bonds issued by banks and financial institutions, and certificates of deposit issued by banks, provided that such investments have certain controls	A- Checks, transfers and letters of credit payable periodically B- Net due to local banks (after clearing between the total amounts owed by local banks and the amounts owed to them) C- Due to foreign banks D- Deposits of the CBE E- Customer deposits F- 50% of the value not covered by cash from the letters of guarantee issued, (does not include the value not covered by cash from letters of guarantee primary and those guaranteed by the banks of the first degree abroad - banks with high credit worth – in the case of a bank issuing a final letter of guarantee upon request of the other bank with its guarantee, the non-cash value of this letter is included in the liquidity ratio of the two banks

(Dawaba, 2005)

According to Law 88 of 2003, if any of the banks contradicts the decisions of the Central Bank's management on the rules of calculating the liquidity ratio, the Board of Directors may decide to deduct an amount, from the bank's balance, that does not

exceed the maximum return from the deficit in the liquidity ratio at the discount rate for the period during which the deficit occurred. For a period exceeding one month, the Central Bank may take other measures in addition to deducting this amount. The central bank aims to implement the liquidity policy to prevent private banks from being exposed to sudden liquidity crises by ensuring their ability to meet the sudden withdrawal requests that these banks may face and may not be able to meet.

The justification provided by the Central Bank in the implementation of this policy was it does not correspond to the nature of funds in IBs, as the relationship between the IB and its depositors is based on PLS, there is no obligation on the IB to fully refund the owners, as in the case for time deposits in conventional banks. Moreover, IBs do not provide not credit loans as in traditional banks, but are directly linked to the process of production and investment.

Moreover, many of the liquid assets determined by the Central Bank to calculate the liquidity ratio cannot be kept by IBs, such as bonds and permits of different types. These elements represent a large proportion of conventional banks. At the same time, IBs are limited to cash in bank and cash balances with the Central Bank and other banks, which usually do not generate any financial returns, while most of the elements of liquid assets of conventional banks do.

Thus, the application of the liquidity policy on IBs lead to the retention of a large proportion of investment customers' deposits in the form of liquid assets, which reduces the investment strength of these deposits, and thus lowers profitability. Hence, the equality between the banks when imposing this ratio places IBs in an unequal and unfair position because if it applies the obligatory liquidity ratio of conventional banks

to IBs; the liquidity of these banks is well below the permissible limit between the Central Bank and Islamic banks (Al Hindi, 1986).

The importance of having a liquidity ratio in IBs as a regulatory and basic factor to protect the national economy is recognised by them as well as their clients. However, this requires distinguishing between IBs and conventional banks in the components of the liquidity ratio. Money and the nature of the elements of liquid assets available at IBs include commercial papers, shares and documents of investment funds and other negotiable securities regulated by Sharia.

iii. The discount rate

The discount rate represents the interest rate at which the banks deal with the central bank. If banks need cash, they target the central bank to deduct some commercial paper, such as the money, on the basis of the interest rate set by the central bank. Through the discount rate, the central bank can influence the volume of credit. The increase in the discount rate means banks are advised to expand credit.

According to Law 88 of 2003, the discount rate is an indication of the interest rate used by commercial banks. The CBE leaves each bank the authority to determine the rates of return on its banking operations, according to the nature of the transactions and the discount rate specified by the central bank. The discount rate is the indicator on which commercial banks depend on for determining the interest rate at which their loans are granted.

If the central bank raises the discount rate, the commercial banks transfer this burden to their customers by raising the interest rate on loans, which limit the desire of individuals to obtain credit, thus shrinking the volume of credit, and vice versa in the

event that the central bank reduces the discount rate. IBs cannot benefit from this discount rate policy as it is inconsistent with its approach of non-interest.

Law 88 of 2003 also states that the central bank establishes the concept of the rate of interest as a legal mechanism and considers it a measure and indication of its calculations, although it is considered Riba by IBs. For example, the CBE enforces many penalties and fines that are calculated on the basis of the discount rate. This is not incompatible with the nature of the system and the operations of IBs.

iv. Open Market Operations

The entry of a central bank as a buyer or seller in open market operations is to influence the volume of credit by expanding and shrinking the money supply (Law 88 of 2003). In the case of recession and depression, the central bank enters the financial market as a buyer of government securities. This results in an increase in money supply and cash balances for banks, which increases their ability to grant credit. Moreover, increasing the amount of money available to individuals lead to increased demand for goods and services, leading to an increase in operation and production.

On the contrary, in the case of inflation and high prices, the central bank enters the stock market as a seller of government securities, which reduces the money supply, and withdraws money from banks to buy these securities, which reduces the ability of banks to grant credit. This policy opposes the nature of work of IBs for government securities are subject to interest rates. Islamic banks can only benefit from this policy if the issued government securities are regulated by Sharia rules (Dawaba, 2005).

v. Capital adequacy standard:

According to the instruction control manual, the CBE requires other banks, excluding branches of foreign banks, to maintain a ratio of 10% between capital elements on one hand and elements of contingent assets and liabilities weighted by risk weights ranging from 0% to 100% on the other at any date or time. The following section shows how to calculate such criteria.

Table 5: Calculation of Capital Adequacy Standard

Nominator	Denominator
A- Basic capital (excluding goodwill and losses). It includes: -Payment in capital -Reserves - Retained earnings Added to it: **B-** Supporting capital (provided that it does not exceed 100% of the basic capital) It includes:- General risk provision for regular loans and contingent liabilities provided that they do not exceed 1.25% of the contingent assets and liabilities weighted by risk weights. - Loans from the shareholders of the bank or others (without loans provided by the CBE), which exceed the period of five years, and consume 20% of the value of these loans in each of the last five years for loans, and to increase the value of loans supporting 50% of the basic capital. - 45% of the increase between the market value and the book value of financial investments held for retention.	Accidental assets and liabilities are weighted at their respective risk weights These include:- Loans, securities and investments due to banks - Purchased checks (20% of the value) - Fixed assets after deduction of accumulated depreciation (100% of value) - Incidental liabilities

(Dawaba, 2005)

The commitment of IBs to the capital adequacy criterion is considered a legitimate objective, as it strengthens the financial position of the bank and the importance of this ratio – even in light of the nature of such banks, it seems to be considered as unsecured by the bank, only in cases of infringement or negligence. The bank's capital is a supporting factor for preserving the rights of the depositors, and thus achieving confidence in the banking system. The central bank shall take into account the nature of the work of the IBs. The CBE is required that the subsidy loans are included in the supporting capital under two conditions:

- The loan contract shall include the acceptance of the lender to pay the loan by absorbing the losses incurred during the work. The arrangement of repayment of the loan to the lender at liquidation shall be in accordance with the rights of the depositors and creditors, to offset the losses, if any, after the paid up capital, reserves, retained earnings and the funds of depositors and creditors, provided the loan is free and not allocated or reserved for a specific activity or to meet the same assets.
- The loan shall be fully paid and shall not be subject to guarantees provided by the borrower's bank. Islamic banks do not deal with interest-bearing loans at all. Moreover, obtaining a loan backed by speculation does not comply with the first conditions, which makes the arrangement of repayment of the loan to the lender at the liquidation of the rights of depositors and creditors applicable at the theoretical level only. It is difficult for the IBs to find someone who offers a good loan as a donation (Qard Hassan), where the lender accepts that the loan will be paid by absorbing the bank losses that occur during the work. This is included in the instruction control manual of the CBE.

In addition, the inclusion of the balances of commercial securities provided by other banks within the balances owed by the banks, as well as the inclusion of the specific securities of the customers in loans, securities, and investments, is not commensurate with the nature of the work of IBs, for they do not deal in discounting commercial papers (Riba).

vi. Credit ceilings

Under this policy, the central bank determines the other banks' maximum limit with respect to the loan portfolio, its areas, scope and other credit aspects. The central bank may aim to direct economic activity by influencing certain sectors of the national economy, diversifying the risks that may be exposed to depositors' funds, or controlling the banks' abilities to grant credit, and thereby limiting their ability to create money and contribute to inflation. As stated in Law 88 of 2003, within the framework of the establishment of the CBE, there are several credit limits, including the following:

The maximum concentration of bank deposits abroad: The CBE shall require the banks registered with it to be permitted to deal in foreign currencies, except for the branches of foreign banks, with a maximum of 10% of the total foreign investments or US$ 3 million, whichever is greater, provided that in all cases this does not exceed 40% of the capital in accordance with the Capital Adequacy Standard. Foreign banks and nonbank institutions and branches of foreign banks operating in Egypt are included in the framework of foreign banks as well as Egyptian foreign and foreign banks wholly owned by Egyptian banks. This is stated in the instructions control manual of the CBE.

The maximum limits of the bank's investments in securities, mortgage finance and finance leasing: In this context, the CBE prohibits banks from exceeding the nominal value of the shares or shares held by the bank – other than for trading purposes – from the amount of the capital base of the bank. The capital adequacy criterion is the basis for calculating the capital base of the bank.

In terms of real estate finance, the loans granted by banks for financing are in accordance with the provisions of the Real Estate Finance Law No. 148 of 2001 and its executive regulations, which state that the loans should not exceed 5% of the total loan portfolio of the bank (this does not apply to the Arab Egyptian Land Bank and the Housing and Development Bank). This is limited to the practice of banks' finances leasing to contribute to specialised companies for this activity, in light of the provisions of Article 1 of Law No. 95 of 1995 on financial leasing, taking into account compliance with the controls regarding the area of contribution. This is stated in the instructions control manual of the CBE.

Maximum employment limits for one customer and associated parties: Client-related parties are controlled by the customer. The CBE has set a maximum limit for one customer and their associated parties which should not exceed 30% of the bank's capital base. In principle, it is believed that the policy of credit ceilings, if they are regulatory for the credit process, and in order to achieve economic stability and diversification of the risks, is not a problem for the origin of IBs. However, there must be a policy exception based on investments not trade in debt and money as in conventional banks, so that this policy is not a major obstacle to the essence and nature of its activity. This is determined in Law 88 of 2003.

Therefore, the importance of the central banks' regulations regarding the concentration of deposits abroad to achieve the local interest and needs is clear. It is fine to set maximum limits for one customer to diversify the risks and save from placing a large part of the money in one basket that may be lead to a loss. As for the restrictions on mortgage financing and contribution to companies and leasing finance, these restrictions in their current situation are not compatible with IBs and represent an impediment to their investment activities. These activities are considered a major factor in the employment of these banks and their money in real investment operations that can benefit the national economy. If it is necessary to put in place regulatory provisions for the purposes of influencing specific sectors of the national economy or diversifying the risks, these restrictions should have a higher ceiling than what is prescribed for traditional banks and allow IBs to finance leasing themselves without limiting the contribution to companies specialised in this activity.

vii. The prohibition of dealing in moveable and fixed assets:

The CBE prohibits banks subject to it from dealing in movable or real estate assets via buying, selling or exchanging, except if the following conditions are met:

- The property is designated for the management of the bank's business or the entertainment of its employees.
- The movable person has transferred ownership to the bank in fulfilment of a debt owed to him by third parties, provided that the bank shall act on it a year from the date of his property transfer with respect to the moveable asset, and five years in relation to the contract; the Central Bank Board of Directors shall extend the period if necessary and may exempt some banks from this

prohibition, according to the nature of their activities. This is mentioned in law 88 of 2003.

The CBE aims to implement this policy, taking into account the prudent requirements. The lending operations in traditional banks are linked to the receipt of deposits, most of which are payable on demand or after a short period of time; therefore, these are short-term deposits with frozen assets that cannot be disposed of in the short term.

If this logic is consistent with the nature of conventional banks, it is not compatible with IBs, whose investment activities differs from the nature of lending in traditional banks. This activity requires IBs to treat fixed and movable assets for use in their investment operations, which often requires the ownership of these assets. Therefore, the treatment of IBs in fixed and movable assets is considered a necessity, an preventing them from doing so impedes their achievement of their investment objectives.

viii. The data

The CBE requests the banks subject to it to provide periodic data such as monthly data on its financial position and tables of analysis of assets and liabilities by business sectors, economic activity sectors, and other financial and supervisory data within a period not exceeding the eighth day of the month following the date of the financial position. These banks are also required to provide a copy of each report submitted to the shareholders at least 21 days before the date of the General Assembly, as well as a copy of the minutes of the meeting of each General Assembly within 30 days from the date of the meeting.

The CBE does not distinguish between the two banks in terms of the data included in these models, despite the different natures of their respective work. At the same time, the CBE has developed several models for traditional banks. There is a special model for commercial banks and investment and business banks, a second one for private banks for real estate, a third for agricultural banks and a fourth for industrial banks. This is pointed out in the instruction control manual of the CBE and law 88 of 2003.

It can be said that the CBE obtaining periodic data from banks, whether Islamic or conventional, is at the heart of its supervisory work, which must be adhered to by IBs. The CBE analyses these data to ensure that the banks comply with the instructions issued for them. At the same time, the CBE should take into account the specificity of the IBs in terms of the nature of the periodic forms of data, especially the requirements of names in the field of finance or investment, as well as the financial centres of IBs, independent of the financial centres of traditional banks. Only then is it possible to disclose the activity of IBs and their statuses in the banking system.

ix. Inspection

The CBE shall require each of the banks subject to it to submit the required data and clarifications of the operations they undertake, and it shall have the right to inspect the books and records of the banks in order to obtain data and clarifications for achieving its purposes.

This role of the CBE represents an important tool of supervision of the work of banks to ensure the safety of its financial position, and to preserve the funds of depositors, and this role requires the CBE to be aware of the nature and the functioning

of IBs. The CBE should be concerned with the Sharia supervision of the Islamic banking businesses as much as the attention of normal banking supervision, through the establishment of a legitimate inspection department of legal and banking experts to ensure the integrity of the areas and legitimacy in the work of IBs. This is stated in law 88 of 2003.

4.6.2 The Financing Role of the Central Bank and Islamic Banks

The central bank plays an important role in providing loans as the LOLR to banks operating in the country when they lack liquidity due to the inability of the cash balances in these banks to meet payment requests in some emergency or exceptional economic circumstances. This usually occurs in cases of mistrust, where banks find no recourse to meet their needs except for the central bank, which keeps those banks from collapsing.

The central bank also plays a role when the state pursues an expansionary policy and wants to increase loans provided by banks to its customers. They charge pre-determined interest on these loans from borrowing banks, either in the form of direct loans, or in the form of the readiness of the central bank to purchase the property of these banks of government securities, to provide the required liquidity in the least possible time without exposure to capital losses caused by the need to sell these papers. This is controlled by law 88 of 2003. The central bank aims to implement this policy to facilitate the settlement of payments between the different monetary institutions, to ensure a minimum liquidity of the banking system, as well as to maintain stability of the banking system in general by providing safety and security for banks.

Due to the nature of IBs and their non-interest, they cannot resort to the central bank when they lack liquidity, and thus will be unable to benefit from the central bank as the LOLR. This indirectly affects the activity of these banks, leading them to maintain a high liquidity ratio to meet expected and sudden withdrawal requirements, either in the form of unexploited cash resources or short-term liquid investments, which of course hinders the investment activity of these banks.

In this context, the central bank can take into account the nature of IBs by lending to them a loan without interest when they need liquidity (Qard Hassan). In return, the IB will lend the CBE the same loan value in the same period later, without interest.

4.7 The Conclusion

This chapter summarises the significance of applying this study in Egypt, and why Egypt is regarded as an exceptional and unique context for research on the Islamic banking system. Since the onset of the first Islamic bank in 1963, without a welcome or encouragement from the government, the Islamic banking system in Egypt has always jousted to compete in the same market with conventional banks. This makes this research a prominent step to answer many questions regarding the present situation of the Islamic banking system in Egypt. Thus, the central bank, its functions, and the banks subject to it have been identified. The relative importance of IBs in the structure of the Egyptian banking sector, although modest, is a good indicator of the numerical proportion of IBs and the total number of banks in the Egyptian banking system as a whole.

The relationship between the CBE and the IBs in Egypt have also been identified as well as the validity of the regulatory and financing tools of the CBE to

apply to these banks. The relationship between the CBE and the IBs in Egypt is governed by Law No. 88 of 2003 concerning the CBE, the banking system and cash. The provisions of this law do not distinguish between Islamic and conventional banks, but, at the same time, distinguishes between public sector banks. It was also found that the supervisory and financing tools applied by the CBE on IBs do not agree with their current status and nature of work of these banks. Among these are the legal reserve policy, cash liquidity, credit ceiling, discount rate, open market, capital adequacy standard and the prohibition of dealing in fixed assets, data and inspection, and lending by interest rate as the last resort, which is an impediment to its activities and investment objectives.

Chapter 5: Research Methodology

5.1 Introduction

This study presents the main problems and challenges that face the development of Islamic banking in Egypt in the light of the extant rules and regulations set by the CBE and government authorities. Through the development of a regression model, it identifies the aspects of the regulations which have the most impact on Islamic banking performance and develops proposals for amendments as necessary. These proposals were discussed with both experts in Islamic banking sectors and the CBE.

Formulating the research issue was the first advancement in the research method towards achieving these objectives and goals. The second was choosing techniques and procedures and the scheme to be followed in directing the research i.e., the methodology. A research technique is a specific operation or approach for performing a research question or addressing it.

The study strategy is a means to address the issues of the research. The word methodology implies a collection of techniques and strategies used to carry out a specific activity (Wehmeier et al., 2000). Numerous scholars and academics accept methodology as the system for conducting a general philosophical research issue. Miller et al. (2005), for instance, consider methodology as a set of standards and processes to assess the claims of scholars and academics. It is, thus, crucial to the development of all types of knowledge. Kumar has expanded the position of methodology by expressing that research methodology supports various aspects and academic areas such as health, government health, psychology, social work, education, nursing, library studies and marketing research.

Comprehensively, the data gathering for study purposes is based on two methods, qualitative as well as quantitative methodologies. Nevertheless, the qualitative method began to receive higher recognition between the 1970s and 1990s. The term qualitative research started to be utilised in numerous areas during this era, overwhelmingly so in social science studies. By utilising this methodology, the scholar must search for hints, inspirations and keywords underneath the subject's surface to challenge and expose the contradictions (Hancock, 2002).

Since qualitative research is focused on the data quality, not quantity, it is intended to speak to comparatively to few individuals in a target audience. Hancock (2002) claimed that the purpose of a qualitative study is to obtain the response to the questions that start with why and how. As it were, a qualitative study tries to enhance the researcher's comprehension as to why things are the way they are in their area of research, as well as why individuals act in the manner in which they do. Hence, qualitative research can be regarded, to a huge degree, as the fundamental methodological structure which in the social sciences follow distinct methods.

The purpose of this section is to highlight the methodology of the research study and the techniques utilised. The first part of this chapter describes the triangulation of studies or the utilisation of techniques of multiple studies. The subsequent section describes the structural design of the research. The third segment addresses the basis for selecting the qualitative research. The fourth segment discusses the scope of the research methodology and extent of the exploration field. The fifth segment describes the preparations for the interview such as the list of questions, the problem to be regarded and addressed through the interviews, the samples for the interviews and the direction and behaviour of the interviewer. The following parts assess and evaluate the

procedures of the questionnaire, for example, sampling, pilot study performance, preparing the primary questionnaire, data analysis and the statistical techniques utilised as well as the panel of experts. The final section summarises the methodology of the research.

5.2 Triangulation: Use of Multi-Research Methods

Because of the complex nature of the research, the scholar considered it essential to finish the study utilising more than one research technique. Thus, in this study, triangulation was utilised to enhance the consistency, validity and evaluation of the results of the research. As stated that in the case of this study, the advantages of triangulation are enhanced confidence in research information, help in the making of creative methods to comprehend the application of Islamic banking in Egypt and its development, and provision of a better comprehension and grasp of the research issue.

Grewawell and Miller characterised triangulation as a validity operation in which scholars and academics try convergence to produce a theme or classification in a research on distinct sources of data. Patton (2002) proposed using triangulation for it strengthens a study. This implies utilising different techniques or data types, which includes the qualitative and quantitative methodologies. As far as triangulation is concerned, it can be of two categories – first, the inter-method triangulation that involves two or more approaches of distinct nature and origin, and second, the intra-method triangulation that uses two or more similar scheme techniques.

The researcher thought that the quantitative and qualitative techniques can be used together as an alternative for obtaining supplementary findings and enhancing the outcomes for this research. Therefore, and to attain the goals and objectives, both the

qualitative technique in the form of interviews, and quantitative techniques in the form of a poll study were used to acquire all the data. Furthermore, a third technique of information collection with vivid information and distinct analysis was used to construct literature chapters based on textual analysis as well as secondary information in both quantitative and qualitative data types. These three techniques were used to improve, strengthen and decrease the weakness of each technique.

5.3 Rationale for Choosing Qualitative Research

Despite being the first country to develop Islamic banks (1963), the IB sector in Egypt had not grown as quickly as other countries; this might be because the CBE's regulations favour traditional commercial banks, which could be due to the Egyptian government's previous experience with some Islamic financial institutions' practices and its suspicion of their nature and associations with Islamist terror groups. The researcher realised that qualitative study can play a significant part in the research as a strong instrument. First, to start with, a qualitative study enables a scholar to utilise a range of study instruments like questionnaires and interviews. This allows the development of a general image about the topic. an in-depth perspective of it and in its multiple forms in the Egyptian banking phenomenon. Second, a qualitative study is a very helpful in examining why and how choices and decisions are made in the Egyptian banking structure as well as exploring the factors behind some other elements of the sector's performances and behaviours. Third, the strategy can assist in creating credibility and consistency of the data collected from the interviews to a certain degree. Nevertheless, this data cannot be handled or mathematically presented. Fourth, since Islamic banking is suffering from a lack of published data and a deluge of banking

guidelines, the strategy can assist in clarifying some of Egypt's modern financial and banking approaches towards Islamic banking.

The researcher aims to accomplish the above by interviewing reliable, qualified, experienced and educated people connected to the Islamic economy. In particular, the scholar believes that the qualitative study can assist in overcoming the obscurity of certain Islamic banking facilities as exploratory research. Furthermore, a qualitative study can be an appropriate instrument for highlighting the most significant barriers that impede the Egyptian banking sector from attaining its rehabilitation objectives and exploring the option of establishing an IB in Egypt.

5.4 Research Design

There are a range of different research design models – biographies, phenomenological studies, grounded theory studies, ethnographies, and case studies are the five kinds of qualitative studies most requested and often found in the literature. A research design is utilised to build a study to demonstrate how the core research issues are addressed by all the main elements of the study project. Kumar described the research study as a procedural plan of the academic scholar to provide effective, objective, accurate and economic answers to issues. Bryman (2001) stated that study designs have two configurations: first, the identification and progress of procedures and the essential logistical plan to carry out the research, and second, to guarantee that these methods are suitable to answer the study questions in an objective and precise manner.

One of the other methods utilised in qualitative research is the case study. According to Simon, the case study is almost synonymous with the illustrative type of research. When the research represents a distinctive or extreme situation, one of the

fundamental factors is to choose a case study and not only a revelatory case, where academic scholars are researching delicate fields for the study to be conducted and explored.

Thus, in order to disclose the significant characteristics of its nature, Bryman (2001) considered a case study as a social survey study on a single case that must take reviewers into the considerations of the case. The case study technique, therefore, is utilised when a how or why question is raised regarding a modern phenomenon.

The case study technique needs various sources of proof in terms of information gathering. With reference to Gary (2006), this may incorporate the utilisation of planned, semi-structured interviews, field perceptions or report analysis. Because the survey is based on a domestic, random sample of the workforces and employees of Egypt's IB populace established solely through qualitative studies, can be regarded as a case study for IB's prospective growth in Egypt. Nonetheless, in reality, a limited number of Egyptians understand the required amount about Islamic banking.

5.5 Dependent Variable: Islamic Bank Performance

The Secondary data collected to measure the banks' performance where gathered from Fitch solution database. The data were collected for the period of 2015 to 2019. In order to apply the linear regression, five indicators were created, one for each dependent (capital adequacy, asset quality, quality management, earning ability and liquidity).

First, we compared the performance of IBs operating in Egypt against Islamic banking operating in other countries, namely Bahrain, Malaysia and Indonesia.. The control variables used in this model are ownership structures, measured by both

business ownership and foreign ownership and macroeconomic indicators measured by GDP growth, inflation and unemployment rates. Note that Egypt is a dummy variable, taking 1 for Egyptian banks and 0 for non-Egyptian banks. Second, the performances of Islamic and conventional banks operating in Egypt are compared also using CAMEL. The control variables used in this model are age, size and ownership structure (business ownership and foreign ownership). In order to apply the linear regression, five indicators were created, one for each dependent. The dummy variable takes a value of 0 for conventional banks and 1 for IBs. The Durbin Watson test was used to measure the autocorrelation of the residuals in the regression analysis.

5.5.1 CAMEL

The CAMEL method began to be used at the beginning of 1980 by the US Federal Bank, where this method was represented in a set of indicators through which the financial function of any bank could be analysed, and the degree of its classification is known. This method is considered one of the direct monitoring methods practiced by the supervisory authorities on banks. The CAMEL banking evaluation system consists of five components: capital, adequacy, asset quality, management quality, earning management and liquidity position.

- Capital adequacy: The use of capital adequacy emerged in the middle of the last century with a simple equation expressing the relationship between capital and deposits. In the study, capital adequacy is measured using two equations which are capital to asset ratio and Imp. Loans less Loan Loss Allowances/Equity (%).
- Asset quality: It is of particular importance in the evaluation system because it is the crucial part of the bank's activity that leads its operations towards achieving

revenues. This is because the bank's possession of productive assets mean the generation of more income and a better evaluation of liquidity, management and capital. This is measured using Imp. Loans (NPLs)/Gross Loans (%) and the LLP.

- Management quality: It measures the control and audit processes where the degree of formation of basic operations and their effectiveness in managing risks at the level of the organisation is evaluated by evaluating the internal control system and the quality of internal and external audits. Also it evaluates the efficiency and effectiveness of the information system in providing accurate and timely annual reports. Finally, it determines whether the institution has developed an integrated approach to short and long-term financial projections, and whether the development plan has been updated. This is measured by the following ratios: Non-Interest Exp./Avg. Assets (%) and Tot EXP/Tot INC Ratio.
- Earning ability: The bank's management views profits as one of the important elements to ensure the continuity of the bank's performance. They are directly affected by the quality of the assets, and their effectiveness is measured by determining the rate of return on average assets as the starting point for assessing profits. Usually, profitability ratios are determined for classification purposes based on the performance of lower banks with similar characteristics, but focussing on them in isolation from other factors can lead to misleading results. For example, the bank may reflect very high profits, but the source of profits may come from a one-time event or one or more non-traditional activities (high risk), and despite the high rate of profitability, the retention of profits

remains insufficient to allow capital growth and maintain the linear growth of assets. This is measured using ROAA, ROAE, and the net interest margin (NIM).

- Liquidity: Liquidity in the bank is one of the most important indicators that customers rely on in comparing banks, as liquidity is the most important means of protecting the bank from bankruptcy risks through its ability to meet obligations that are characterised by immediate payment. Banks are distinguished by this characteristic from other institutions because they cannot postpone cashing a check or postpone payment of a deposit payable, and it cannot ask debtors to pay their loans and finances before their maturity dates. In addition, it is difficult to predict the size and timing of the movement of funds to and from the bank, which is a great difficulty for the management.

The bank liquidity can be defined in general as the ability to convert assets into cash quickly and without a loss. As for liquidity in the bank, it can be defined as the bank's ability to fulfil depositors' withdrawals and meet the needs of financiers in a timely manner, without having to sell securities at large losses or borrow at high interests. The researcher used Loans/Deps. & ST Funding (%) and Growth of Total Customer Deposits to measure the liquidity.

5.6 Control Variables

In this section, we discuss the different control variables used in the study.

5.6.1. Ownership Structure

Due to the extreme importance of the ownership structure to corporations, many studies have discussed its effect on the financial performance of these companies. Many

researchers believe that it reflects the extent to which companies can continue to operate and succeed; the ownership structure has been widely discussed previously. According to Shan and Gong (2017), the ownership structure is significant in determining corporate goals, shareholder wealth, and manager discipline.

The ownership structure is defined not only by the allocation of shares in terms of votes and percentage of capital but also through the identity of the shareholders. The idea behind the concept of ownership structures is understanding the manner in which shareholders interact with corporate managements and enhancing the performance of the company. It is considered one of the basic rules in corporate governance, as diversity in the ownership structure is seen as a monitoring tool for the executive management of companies and reflects the nature of the owners (Phung & Mishra, 2016).

The ownership structures used in the study are:

- Business ownership: It means that companies are owned or controlled by some institutions, such as banks or insurance companies.
- Foreign ownership: Foreign ownership is control over a business or natural resource in a country by individuals who are not citizens of that country or by companies headquartered outside this country. Generally, when multinational companies operating in more than one country make long-term investments in a foreign country, it is usually in the form of foreign direct investments (FDIs) or acquisitions (Bhattacharya & Graham, 2009).

5.6.2 Macroeconomic Indicators

In many countries, the banking sector plays an important role in developing and directing investment through directing economic activities to investment projects that contribute to the growth of the country's economy. In order to develop economically, countries need to possess an advanced and efficient banking system.

The existence of a developed financial and banking system positively affects economic development through its direct role in the growth and improvement of overall productive efficiency of the available elements and acceleration of technological progress. Further, it plays a pioneering role in encouraging and mobilising savings and attracting and securing investments. It enhances employment opportunities and reduces unemployment rates.

Inflation, GDP growth and unemployment rate are economic indicators that directly affect all economic sectors. The banking sector is one of the most sensitive components of the economy towards these indicators, as they affect the financial performance of banks and other banking activities. These three are some of the factors affecting the performance of the financial sector. An increase in the rate of inflation negatively affects the performance of the financial sector and economic growth.

5.6.3 Leverage

Leverage can be defined as the relationship between banks' debts and equity. According to Pandey (2008), it is the existence of debt in the organisation's capital structure. Dare and Sola (2010) stated that leverage is the use of debt alongside equity. In this study, the researcher has measured leverage using the survey questions.

How does financial leverage affect bank performance? Different studies have given various answers to this question. While some believe that leverage has a negative impact on performance (Majumdar 2009; Mesut 2013), others have a different opinion. Brigham and Houston (2005) stated that leverage has a positive relation to performance. Abbadi and Abu Rub (2012) tested how financial leverage affects the performance. The study sample consisted of banks operating in Palestine from 2007 to 2010. It was concluded that banks' leverages have a significant negative relationship with performance.

5.6.4 Bank Size

Bank size is defined differently among different literatures; many references agree that a bank's size is to be measured by its assets value (Brav, 2009). In this research, the bank's size has been measured from the respondents' answers to the survey.

A study was conducted by Rahman et al. (2015) to test how bank characteristics affect banks' performances. The pooled regression estimation method was used. The sample of the study consisted of 25 banks from Bangladesh, from 2006–2013. The results indicated that size has a positive influence on companies' performances. Another study by Hashem (2016) supported this by examining the factors that affect banks' profitability and liquidity in Egypt over the period from 2004–2014. The study investigated the relationship between some variables such as liquidity, capital adequacy, and bank size.

According to Naceur (2003), size has a negative relationship with the bank's performance. Contrary results were concluded by Sufian and Habiballah (2009) when

studying the performance of Bangladeshi banks from 1997 to 2004. They found that banks' sizes have a positive impact on performance. Gul et.al (2011) measured the effect of some variables on bank profitability through data collected from 15 Pakistani banks from 2005 to 2009. They investigated the effects of assets, loans, equity, deposits, economic growth, inflation and market capitalisation on performance and concluded that all the variables have a negative relationship with banking performance.

A Turkish study by Alper and Anbar (2011) examined factors affecting the banks' ROA and ROE in Turkey, from 2002 to 2010. They concluded that asset size has both a positive and significant effect on bank profitability, measured by ROA and ROE. Shaher et al. (2011) evaluated several factors that seemed to influence a bank's performance in the Middle East. The researchers applied the factor analysis technique and demonstrated six factors that determine a bank's performance, of which are bank characteristics as measured by size, deposits, loans, net charge of loans, capital, bank overhead cost and finally concentration in lending activity. They stated that the size and other bank characteristics are the most vital causes of banks' performance. Alkhatip (2012) measured the bank performance of Palestinian banks from 2005 to 2010 and revealed a positive significant effect of bank size on performance.

5.6.5 Liquidity

Liquidity can be defined by the value of cash or cash-like assets included on the balance sheet. Banks need to have enough funds to operate easily; they must have the ability to repay their own debts, meet any withdrawal requests and offer any required fund for customers. A lack of liquidity will lead to bank failure. In the study, liquidity is measured by survey participants' responses.

Al-Tamimi (2009) identified some influential factors on banks' performance in the UAE from 1996 to 2008. He concluded that liquidity had the most effect on performance. Hashem (2016) examined the factors that affect banks' profitability in Egypt from 2004 to 2014. The study investigated the relationship between some variables such as liquidity, capital adequacy, and banks' size and established that banks' profitability was negatively related to liquidity.

Azar et al. (2016) studied the determinants of banks' performance in Lebanon. He identified eight internal factors that have an effect on banks' profitability such as overhead cost credit risk, capital adequacy, liquidity, etc. The study used data gathered from 39 banks over the period of 2003 to 2014, and liquidity was found to be statistically significant in affecting performance.

5.6.6 Operating Costs

Operating expenses include many costs incurred by the bank such as employee compensation, legal fees, consulting services, supplies, and depreciation expenses. The researcher measured this through the survey.

Naceur (2003) examined the effect of several factors that influence bank performance from 1980–2000. He concluded that operating costs have an impact on

both interest margins and banks' profitability. Also, a study conducted by Sufian and Habiballah (2009) stated that operating costs affect bank performance. The study measured the performance of Bangladeshi banks for the period of 1997 to 2004. Shaher et al. (2011) evaluated several factors that seem to influence bank performance in the Middle East. The researchers applied the factor analysis technique and showed that six factors determine bank's performance, of which were bank characteristics as measured by size, deposits, loans, net charge of loans, capital, bank costs and finally concentration in lending activity. They stated that the operating costs and other bank characteristics were the most vital causes behind bank performance.

Another study was conducted by Rahman et al. (2015) where they applied the pooled regression estimation. The sample of the study consisted of 25 banks from Bangladesh, from 2006 to 2013. The results indicated that bank costs have significant negative effect on performance. Ramadan et al. (2011) studied the internal and external factors that affect banks' profitability at 10 banks in Jordan, over the period of 2002 to 2010. They used both ROA and ROE to measure the profitability and concluded that a significant part of the variation in bank profitability was due to efficiency in banks' cost management.

Azar et al. (2016) studied the determinants of bank performance in Lebanon. He identified eight internal factors that affect profitability of banks such as bank costs credit risk, capital adequacy, liquidity, etc. The study used a dataset of 39 banks over the period of 2003 to 2014. The operating cost was found to be statistically significant, explaining the variation in performance.

5.7 Research Methods

Analysts are required to utilise suitable study tools to carry out their studies. In some cases, scholars need to define their study tools in order to contextualise their results. Nevertheless, the analyst will utilise three types of methods to examine and collect data and information with a view to guarantee depth. The primary technique is the interview which critically study and review the foundation of the Islamic banking scheme in Egypt with its background data and for a chance to enhance and improve it.

The second method is the utilisation of the survey questionnaire as an instrument for studying the effect of current central bank regulations on IBs' performances. It should be noted at this stage that the analyst thinks that both instruments are crucial to carry out a qualitative research on the topic under study.

The third and last technique is the expert panel where the results generated from the questionnaire are summarised in a report form. This report was sent to an expert panel to for their opinions about the results generated.

5.8 Conducting the Research: Fieldwork

In 2016, fieldwork was carried out in Egypt for seven months with a view to achieve the study goals and objectives. The main objective of the fieldwork was to gather the key data associated with the banking sector in Egypt and explore the option of establishing an Islamic banking industry in Egypt.

5.9 Objective 2: Exploring the Key Challenges Faced by IBs Operating in Egypt under the Current Regulations of the Central Bank of Egypt; Interviews

Interviews are means to collect a wide range of qualitative information and data about a specific research problem from a group of individuals. Interviews can therefore

be defined as qualitative study and adopted strong tool for obtaining useful data and critically examining individuals' perspectives and the implications that underpin their lives and behaviours.

Saunders et al. (2003) stated that where interviewees see the subject as appropriate to their present employment, individuals collaborate and favour the interview instead of the questionnaires. There are numerous kinds of interviews that can be utilised to generate a transcript. The analyst may determine to use more than one interview method based on the study's objectives and goals.

It was pointed out by Walliman (2000) that when an analyst chooses to carry out an interview, the key factor is to determine the exact needs to achieve and what he anticipates to do with the data. Another significant issue in carrying out an interview is to build a relationship based on trust and confidence. This provides the interviewees the trust to convey and communicate their thoughts and opinions which help in demonstrating and expand their unique as well as original reactions and answers.

A semi-structured interview is comparable to the reports exercise. In particular, it is a guided discussion and certain questions are asked. The questions should not restrict the discussion and dialogue, and as a consequence of the debate and conversation, fresh complementary questions can emerge. The semi-structured interview may be non-standardised and comparatively informal as well. It may be a kind of easy debate based on prearranged subjects. In conjunction with other methods like questionnaires, semi-structured interviews can also be employed.

The flexibility of semi-structured interviews has made them become one of the most generally used instruments in studies. Another form of interview is the friendly

causal interview, where most questions depend on the impulsive and improvised generation of questions and answers as the interview advances. Gary (2006) considered it as the most open-ended type interview. The benefit of this strategy, as considered by Gary (2006), is the flexibility it provides with respect to what route the interview can take and the freedom of the interviewees to answer. The interviewees might not realise that an interview is taking place. Nonetheless, in a community with distinctive characteristics and situations, like the Egyptian culture, a semi-structured interview can be a helpful instrument for information collection, and this research consequently utilises it to gather some of the main information and data.

5.9.1 Preparation for the Interviews

Planning and preparing of interviews began in November 2015. A list of subjects and issues was to be utilised in a specific order. The semi-structured interview was originally chosen as the main interviewing method. The analyst attempted to achieve equilibrium and use open-ended questions to investigate problems and get answers. Consequently, these answers can be reviewed and compared.

Each and every interviewee was given a list of subjects and issues, two weeks before each interview. A complete introduction was provided on the research and study's goals and objectives and how the data would be utilised. The transcription was converted into Arabic for those less proficient in English. Once an agreement was reached, the following points were highlighted and emphasised as follows. First, the interviewees would be completely anonymous, and no one would know who took part in this study apart from the analyst. Second, there were no correct or incorrect answers to the questions. Third, any question the interviewees did not want to answer should be

indicated to the interviewers. Fourth, interviewees must feel free to withdraw or stop their involvement at any point in the interview. The interviewees, nevertheless, asked the interviews to be conducted individually and not as part of a group or with two interviewers. This helped in providing a great opportunity for the analyst to address multiple sensitive problems.

5.9.2 Interview Sample

Concurring with Kumar, the problem of sampling has minor importance in a qualitative study as the primary objective of every qualitative investigation is either to investigate or define the variety in a scenario, phenomenon or issue. Nonetheless, the analyst planned to utilise a completely random specimen at the preparation phase. However, as they had never met the analyst before, some potential participants declined. They were hesitant and unwilling to be part of the interview and distrusted the objective. This may have been due to the unfounded fear that their responses would be handed to their employer. In particular, an absence of basic understanding of the objective of the scientific study has led numerous analysts, including this analyst, to being incapable to communicate with these individuals' views and attitudes. Thus, no results will reflect their views and attitudes which will not agree with those of the others. Nonetheless, it should be indicated that this scenario is present in all closed societies and groups and not specific to this research but rather a general issue.

Since the populace was very similar, the importance of personal interaction and contacts in the industry led the analyst to select the specimen using the non-probabilistic convenient sampling techniques (10 from each of the three IBs in Egypt). With a wide range of possibilities to obtain useful data, particularly when the populace is very

similar, this sampling method is regarded as being very flexible. Bryman also stated that over the years, the method has become very appealing among scholars and analysts.

This assisted the analyst to meet culturally diverse, unique and passionate interviewers who were able to comprehend the research goals. The researcher set the sample size to include all views till there were no fresh perspectives. The analyst also choose to utilise the semi-structured and informal interview methods and observation.

5.8.2.1 Interview Sample Characteristics

As mentioned earlier, 30 bank employees were selected on non-probabilistic convenient sampling techniques. The target interviewees were employees working in Egyptian IBs. Employees that joined the interview were from various departments among the only three Islamic banks operating in Egypt.

The experience was the primary factor in selecting the sample. The duration of experience in each of their respective areas ranged between 5 to 30 years. In addition, most of the participants were over 50 years of age and none under 28. With regards to the distribution of gender, all the participants were male and female. Since some of the participants had vast and extensive experience but with a significantly weaker academic and research orientation than others, the analyst choose not to consider the participants' different education levels.

The final size was 30 respondents, a tiny sample should give a reasonable representation of the complete populace, particularly when individuals are working in the same setting and encounter the same legislation.

5.9.3 Interview Stages

Throughout the interviews, some participants seemed to have confused ideas about the effect of central bank regulations on the performance of IBs and attitudes and culture of the Egyptian society. They strongly believed that Egypt might not be prepared and set for the development of IBs.

5.9.4 Conducting the Interviews

All interviews were conducted at the participants' place of work which did meet their own requirements, and they purposed the time of the interviews that suited their time schedule. This facilitated the analyst's way of merging the interviews with observing the banks' daily jobs. The participants were not bothered or concerned with the fact that their interviews were being recorded on tape. Therefore, note-taking and tape recording were utilised to log the meetings. The analyst attempted to explain and extend the significance of the statements and questions to prevent any misunderstanding and misconception during the interviews. In addition, the original use of general subjects was split progressively into numerous sub-topics. One at a time the questions were asked in the interview to make it easy on the participants. Each interview was distinct and different due to the variability in interview methods and capacity of participants to convey their viewpoints and ideas. The analyst went over the notes of the interview and the tapes recorded immediately afterwards in order to provide a clearer picture of each interview and gathered the feedbacks according to the topics.

5.9.5 Analysing the Interviews: Thematic Analysis

Semi-structured and informal interview methods were used for acquiring qualitative data, which can be regarded as suitable waves. In this way, unexpected

subjects can also arise. Furthermore, open-ended queries and questions might demonstrate hard, well-synthesised and sufficient to achieve clear outcomes, like the information may not be suitably accurate to permit statistical analysis or use of any software to construct matrices on it. Thus, throughout the interviews, the analyst used the thematic technique to analyse replies and feedback.

- **Thematic analysis and why it is used**

This method was used as it is commonly applicable for a set of texts, such as interview transcripts. The researcher thoroughly read and surveyed the data in order to determine the common themes and ideas that repetitively appeared. The researcher used the narrative method to present the data, where the frequencies for the participants' responses for both agreements and disagreements were used.

Thematic analysis methodology is an appropriate approach while investigating participants' responses, including their views, opinions, knowledge, experiences gathered from qualitative techniques such as the semi-structured interviews used in this study.

The data gathered from the interviews were analysed using thematic analysis as it gives a better understanding of the data. Further, it enables the organising and categorising of data into specific understandable themes that go along with the literature gathered, thereby helping construct the research hypothesis. Unfortunately, using this method might result in missing some of the views and opinions gathered. This is due to the fact that this method is considered a subjective one that heavily depends on the researcher's personal senses. So, it needs a lot of reading and preparations from the

researcher so that the data coding and theming are not biased or presenting untrue responses from the participants.

- **Thematic analysis approaches**

To use thematic analysis, it is necessary to choose between the inductive and deductive approaches as well as the semantic and latent approaches.

- The inductive approach is used when the collected data are used to define the themes. The deductive approach is applied when there are already existing and predetermined themes that you want to reflect on with respect to the data. These predetermined themes might rely on a theory or a well-constructed knowledge.
- The semantic approach focusses on an explicit analysis of the data gathered. The latent approach involves reading the suggestions and assumptions gathered.

The researcher used the inductive approach as the conceptual framework will be developed on the findings by the end of the interview analysis. The semantic approach was used in this research as the researcher is more interested in the participants' stated views and opinions.

The Braun and Clarke (2012) approach was used in this research, which is as follows:

1. Familiarisation: In this step, the researcher listens to the taped interviews records carefully and transcribes the data gathered. The transcription is read several times before the data are analysed.

2. Coding: The second step is coding the interview data where the researcher underlines the transcripts text and codes them with labels that define their meaning. This is an example of how the coding was done:

    - Interviewee A5 stated that, "*IBs find it hard to operate and adopt itself due to the lack of regulations and support from the government*". The codes generated are: Lack, regulations and IBs hardly operate.
    - Interviewee B2 mentioned that, *"The role of the government represented by regulations set by the central bank of Egypt hinders the Islamic banks operations and performance in Egypt"*. The codes generated are regulations, IBs hindered operations, performance.

At this stage, the researcher highlights different sentences using different colours. Each colour is linked to a code. Each of the codes emphasise and define the main knowledge, views and opinions highlighted in the text. The researcher thoroughly reads all the transcripts and notes all relevant and related points as mentioned by the participants. By the end of this step, the data are combined into groups that are identified by code. This process helps us in understanding the general meaning of the collected data.

3. Generating themes: The researcher, after scanning the codes generated, acknowledges a trend among them and creates the themes. Usually, themes are more extensive than codes. Examples of themes are *"lack of regulations and IBs performance"*.

The researcher discards some of the codes at this point, because sometimes the codes are irrelevant to the study. Codes are pooled together under one theme, and themes are formed to help in using the data for the research purposes.

4. Reviewing themes: At this point, the researcher wants to make sure that the themes represent the data gathered. We review both the themes and data gathered to illustrate whether there is any data not represented by any of the themes.

5. Defining and naming themes: After reviewing the themes, they are named and defined. This step helps us better understand the data gathered. For example, we can define *"Lack of regulations" as "lack of central banks' regulations".*

5.10 Objective 3: Undertake a Survey of Managers and Senior Employees Working in the Islamic Banking Sector in Egypt to Test the Relationship between the Dependent (Islamic Bank Performance) and Independent Variables.

The questionnaire was the second tool needed to gather the main data for this study. The questions and wording of these issues are significant. A good survey should be ambiguity-free; moreover, it should be satisfactory with clear objective in order to achieve the purposes of the survey, each question must address one single idea.

Referring to Gary (2006), who claims that the analyst must capture the interviewee's values, attitudes and interests when using a survey, he describes the survey as a tool with which individuals are requested in a pre-set order to answer a set of questions.

Based on Kumar (2005), the participants must go through the questions in the survey, interpret what is anticipated and then write the responses. He claimed that "in

the case of survey, since there is nobody to clarify and elucidate the meaning of questions to the participants, therefore it is vital to have a sharp and simple to comprehend the questions". He further add that this contrasts the situation in interviews where the evaluator can ask, clarify the questions and then recover the responses of the participants. He considers this as the distinction between surveys and interviews.

Burgess (2001) claimed that an analyst ought to review the literature and, in some instances, make initial studies on their target population, since surveys are basic components that can address the requirement of the analyst and is not a mechanism for evaluating participants. Burgess (2001) strongly believed that this can then lead analysts to design their surveys and choice appropriate questions that are effective and concise. It could be summarised that the structure, format and categorisation of surveys must be clear and comprehensible to encourage the participants to deliver the required data and information.

5.10.1 The Goals of the Questionnaire

Objective setting can be an important instrument as it improves and focuses on creating goal-setting approaches. The main objectives of the survey in this context are first, to obtain the key data needed to address the research questions, second, to find the views of the participants and overall attitudes concerning the impact of CBE role in supervising Islamic banks in Egypt, and how it affects the IBs' performance.

5.10.2 Questionnaire Preparation Stages and Drafts

The survey preparation required numerous drafts and phases. The first draft was written in English, then revised and evaluated by the academic supervisor. The survey

was very brief; some sections were difficult and inadequate, and some questions had to be deleted in favour of incorporating extra ones.

The analyst read and evaluated many research methods textbooks for this study which integrated many concepts in the survey design. Moreover, the analyst also regarded and evaluated other researcher's past experience and work. Afterwards, some changes were proposed and the researcher's supervisor checked and evaluated a second proposed draft. The design of the survey was made in consultation with other faculty members in the department, and the draft was altered and checked several times.

A member of the faculty employees at Ain Shams University, specialising in translation and interpretation into English/Arabic, converted the final draft into Arabic. This was considered essential as some respondents might prefer to receive the results in Arabic.

5.1.1.1 The Conditions of the Questionnaire design

The questions were set-up to meet the following requirements: First, the question had to be designed to such a degree that they were suitable and applicable to the subject. Second, a guarantee of anonymity had to be given to all the participants to obtain free answers. A data protection notion had to be asserted which provides a no scope to disclosing any private data like the names of the participants.

5.1.1.2 Questionnaire Design

The survey was used to gather opinions of the participants and their attitudes towards how the current CBE regulations affect the Islamic banks operations and performance in Egypt. The questionnaire was divided into three sections as seen below.

First, the objective of the profile was to review the attributed skills, age as well as education, etc., of the backgrounds of the participants. All the questions about the context were checkbox survey questions. In addition, the background information was obtained to investigate the views of the participants on the present working setting of the Islamic Bank. In this section of the survey, questions 4 to 10 were integrated and included.

The survey took into account the attitudes of the participants towards the CBE regulations and their effect on IBs' performance; IBs operations, products and investments and deposits maturity. The third section of the survey was based on questions 11 to 23. This section was designed using the 5-points Likert scale.

An accompanying cover letter elucidated the objective of the research and the way to complete the survey was enclosed. In addition, participants were asked to collaborate by giving accurate answers to all the questions. The articulation, "This survey is not a will nor does it have any legal impact", was merely an instrument that had been incorporated in the covering letter to assist draft the views of the participant after they complete the survey. It was a way to get the participants to answer the questions.

5.1.1.3 The Pilot Study of the Questionnaire

To evaluate practical views and attitudes, this survey was planned and designed this way. Thus, a pilot survey was performed and conducted by choosing participants randomly before the final survey was generated and circulated. The pilot questionnaire was conducted as if it were the primary research, and a group of 30 participants received the survey.

The objective of carrying out the pilot research was to find any shortcomings or contradictions in the questions and rectify them before the primary and final research while simultaneously testing the difficulty and ambiguity and enhancing the validity and consistency the questions presented. Additionally, evaluating the time frame that participants might need to complete the survey was crucial.

5.1.1.4 Questionnaire Distribution and Collection

The survey was given to each respondent by the analyst to reduce any misinterpretation and confusion regarding the objective and nature of the survey and thereby avoid vague and partial answers. The survey was completed by each respondent at their workplace.

5.1.1.5 The Questionnaire Sample

Analysts are generally unable to obtain direct findings for the populace they are studying. The phrase populace or research population relates to all individuals of the analysts' interest group or community. Sampling is the method of choosing a collective of people from the populace to establish a foundation for estimating, reviewing and forecasting the population-related facts, attitudes or results in general; the outcome of the prior method can be called a sample. Thus, the specimen is a sub-set of the populace that is generally selected to incorporate all individuals and groups of the populace to accomplish the research objective. Lee (1993) emphasised that sampling is a theoretical matter rather than a technical one.

5.1.1.6 The Sampling Method

This survey is meant for a research plan; the sample was randomly selected from senior staff and executives of the IBs. The participants mainly held professional certifications or were post graduates. The respondents had no less than 15 years of experience.

5.1.1.7 Sample Size and data analysis

The sampling size is often a problem. Nevertheless, Lee (1993) claimed that in the event of delicate subjects, it is not always feasible and possible to adequately reflect the populace. Generally, the choice of sampling size should be based on each circumstance and situational premise, considering the range of objectives to be accomplished by the particular research and many other factors of the study design which may not be apparent to the analyst before the start of research.

Case studies of potential problems may include accessible data and information in addition to sensitive data, all of which are results of complicated social and political organisational patterns. Another factor of this study is that it may make the sampling a political problem as well.

The method of simple random sampling (SRS) was utilised in the present study. SRS is proven to be a popular technique for selecting samples. The randomisation of this method implies that each component in the populace has equal opportunity to be chosen for inclusion in the sample. In specific, utilising the fishbowl drawing procedure, the sampling size (n) was chosen.

Sampling size greater than 30 and less than 500 is most suitable for most research, as stated by Rosccoe (1975). However, Lee (1993) stated that the size of the sample must be determined by the amount of feasible answers in the event of delicate and complex research. Bryman (1990) claimed that sample size choices are influenced by numerous factors like cost and time. Furthermore, he strongly felt that there was no simple solution to the sample size issue.

It took six months to collect the surveys, 500 surveys were distributed and only 347 surveys were completed, returned and accepted. Therefore, 69.4% of the total number circulated for the survey had been returned and would be reviewed and evaluated in this research.

The return rate for the data analysis may be regarded as satisfactory, since, in reality, researchers never get answers from 100% of the sample (Smith, 1983). Attaining such a return rate does not really imply that the sample is partial, in the light of the fact that there was no known purpose behind this failure to respond. Additionally, this should give a reasonable characterisation of the total populace, particularly where the vast majority of the participants are well-educated and accomplished.

Since the research is sensitive, it ought to be emphasised that no survey was circulated by email or any other agency; the analyst made sure that all surveys were hand-delivered. During the information gathering period, the requirement for such a circulation scheme and framework had a significant ramification on the time and cost.

The Statistical Package for Social Sciences (SPSS V.18) was used for compiling and processing data. Several statistical tools were employed for data analysis in the quantitative part of this research as follows:

1. Reliability and validity analysis: Cronbach's alpha test was used to evaluate the stability of the questionnaire and reliability of the measures. The higher the Cronbach's alpha value, the greater the consistency of the questionnaire (Cozby, 2001).

2. Descriptive analysis: This involves presenting frequencies and percentages as well as measures of location and variation.

3. Spearman's correlation: This measures the strength and direction between two ordinal variables. It takes values between -1 and 1; the relation becomes stronger when the coefficient is close to 1 or -1. A negative sign denotes that the relation is inverse, and a positive sign denotes that the relation is direct (Corder, 2014).

4. Simple regression: To test if there is a significant effect of one independent variable (simple regression) on a dependent variable, and the direction and magnitude of this effect, a simple regression is performed. The effect is considered to be significant if the p-value is less than 5% (David, 2009).

5. Ordinary Least Squares: OLS is a typical technique used to analyse data and estimate the unknown factors when applying a linear regression. The main aim of this method is to minimise the variations that arise among the observations collected from the dataset. According to many researchers, OLS is categorised as best linear unbiased estimator (BLUE) and is considered to be consistent when the OLS assumptions are met. The OLS estimator requires the explanatory variables to be exogenous and with no multi-collinearity among the independent variables. Moreover, OLS is said to be the optimal linear unbiased estimator when the errors are homoscedastic and serially uncorrelated. Assuming the

above conditions, OLS provides minimum-variance unbiased-mean estimation when the errors have finite variances. Under the additional assumption that the errors are normally distributed, OLS is the maximum likelihood estimator.

5.11 Expert Panel Interview

The expert interview is a method that adapts the concept of indigeneity. According to (Bell and Braymen, 2012), the interview tool is usually used in sociological methods. In the fields of humanities studies, interviews are utilised widely to examine a board scope of topics. We can therefore conclude that is relatively integrative technique, determined on the grounds of research assignments (Ruppert, Law, and Savage, 2013). As a research technique, many researchers have highlighted the benefits and advantages of the interview.

An expert interview involves the interviewee being an expert on the topic of study. In contrast to other participants, this kind of interviewee has a profound understanding of the study subject and a great deal of experience in this field. The aim of having a specialist interviewee is to acquire further and reliable data, influential and authoritative views and expert evaluations in the field of research. The professional interview, therefore, usually involves open-ended questions that allow the experts to state their opinions extensively on the research issue in order to evaluate as well as foresee the potential alternatives. Closed-ended queries and inquiry-based ones are feasible, given the analyst's complete confidence and the study theories being correct.

These professional and specialist interviews are vital compared to other techniques of gathering information. This is because the participants of this research

topic are extremely skilled and well-experienced. This limits and minimises the usage of any further screening inquiries. This sort of overview study and research is distinctively outstanding for acquiring accurate information as the participants' proficiency is remarkable (Dorussen, Lenz, and Blavoukos, 2005).

The expert interview in this research study consists several stages: preparation, planning, interview, transcription of records, data collection, analysis and explanation, and drawing up of the report. Conducting the interview with an expert means that researcher has the required skills to do so. To make the research productive, the questioner ought to be well-informed on the topic and the area of research. It is essential to know the total number of experts needed to perform a reasonable interview and make a good selection of the participants (Yausheva, 2007). This is particularly crucial due to the minimal resources and time allocated for the study phases as it represents itself in this research.

An estimated model of sampling relating to the fundamental study questions must be created before the direct area of studies using thorough and well-structured choices of specialists for the interviews, so that the interviews can be carried out on the basis of the current models. Representativeness of the sample from the participants are performed with the standards and principles of evaluating the capability and proficiency of the specialist as an expert. The expert participants were well-educated, trained and skilled, and in terms of position, lined to the topic of the research and practical work experience in the topic being referred to as well as the quality level of the previous specialist decisions, key figure in the society and government, impartiality of submitted evaluations.

During the interview meeting, the analyst poses the specialist a sequence of questions about the issue as predetermined as an interview scheme, yet as the progress of the discussion goes, the researcher decides whether extra questions are required or one question is sufficient. The researcher concentrates and is observant as the discussion progresses; the researcher should comprehend obviously what the specialist is saying and in what sense and why the experts say it.

An audio tape recorder must be used for the entire discussion (Ruppert, Law, and Savage, 2013), the analyst normally writes down the main and vital data on a notepad. Data from the specialist interviews are reviewed and processed, followed by categorisation, interpretation and analysation. It very well may be reasoned that the researcher can obtain effective outcomes in social studies through the qualitative specialist interviews.

According to Angrosino and Perez (2000), the panel of experts is a group of specialists that are independent from the research team. They should produce a collective opinion on the research topic (López, 2013). In this study, the researcher selected a panel of experts and the participants' contributions analysis was made from recording their opinions, perceptions, and information about their respective academic and practical lives.

The panel consists of three participants. The interviews were moderated by the researcher. The researcher recorded, transcribed and analysed the interviews. Reading and initial processing of the records was made individually by the researcher.

Chapter 6: Interview Analysis

6.1 Introduction

This study, will explore the key problems and challenges that face the development of IBs in Egypt in the light of the extant rules and regulations set by the CBE. The exploratory interviews with IB employees have helped in the development of a set of research hypotheses and an enhanced understanding of IBs in Egypt. There were 30 bank employees interviewed, nine departmental managers and 21 employees from different departments (operations departments, credit departments and legal departments).

The first section of this chapter reveals the criteria for the interviewees' sample. The second section explores their perceptions of the Egyptians IB sector, the challenges that hinder its development and how it is affected by the Central Bank's regulations and the thematic analysis of the interviews. The third and last section consists of a revised conceptual framework that was reached after the interviews were transcribed and analysed.

It was noticeable that there was great agreement among interviewees' responses in most areas, tackled through the interviews. Table 6 shows the banks where the interviews were gathered, Table 7 reveals the roles of the interviewees in the IBs.

Table 6: Banks from where the Interviews were Gathered

Bank	**Code**
IB1	A
IB 2	B
IB 3	C

Table 7: Roles of the Interviewees in the IBs

Interviewee's code	Occupation
A1 B1 C1	Head of the legal department in IB A Head of the legal department in IB B Head of legal the department in IB C
A2 B2 C2	Head of the credit department in IB A Head of the credit department in IB B Head of the credit department in IB C
A3 B3 C3	Head of the operation department in IB A Head of the operation department in IB B Head of the operation department in IB C
A4-A5 B4-B5 C4-C5	Employees in the legal department of IB A Employees in the legal department of IB B Employees in the legal department of IB C
A6-A7-A8 B6-B7-B8 C6-C7	Employees in the credit department in IB A Employees in the credit department in IB B Employees in the credit department in IB C
A9-A10 B9-B10 C8-C9-C10	Employees in the operation department in IB A Employees in the operation department in IB B Employees in the operation department in IB C

6.2 Analysis of the Interviewees' Perceptions of the Egyptian IBs

The open-ended questions were the main tool used in the interviews. These questions related to the level of adoption of IBs in Egypt, the development of IBs in Egypt, obstacles that face IB operations and the role of the CBE in the IB sector.

6.2.1 The Level of Adaptation of IBs in Egypt

Although the first IBs established in Egypt and the whole world was Mit Ghamr Bank in 1963, the IB sector is not as big as expected. The main aim of the first question is to highlight how bank employees perceive that the government had adopted and supported the idea of IB operations in Egypt and the difficulties that the IBs faced/face in accommodating the current government practices.

"What comments would you make about the level of adoption of IBs in Egypt?"

The findings reveal that all interviewees agreed on the important role that IBs could have in addressing the current economic downturn in Egypt. In this respect, interviewee B2 stressed the important role the government represented in the CBE and on media and education channel such as universities, in highlighting the importance of IB operations in Egypt. Interviewee A5 stated, "*IBs find it hard to operate and adopt itself due to the lack of regulations and support from the government*". C2 also emphasised that, "*The rules regarding the credit ceiling and the capital adequacy are totally unfair to IBs, disregarding the differences between IBs operations and conventional banks*". A3 also highlighted that, *"Restricting IBs as conventional banks from freely trading assets is ignoring the idea that IBs products differ from that of conventional banks. IBs should rely on profit and loss sharing rather than debt tools, and this should be considered and revised*".

Interviewee C8 said, "*Although almost 94% of Egyptian citizens are Muslims, IB sector did not grow in the last years as expected*". He believed that this was due to lack of support that sector had from the government. According to interviewee A5, he was astonished as to "*why IB in Egypt is not developing as the case of Malaysia or Indonesia*". Most of the participants emphasised that the performance of IBs in Egypt could be blooming if it was operating in a well-regulated environment that supported its existence. Also, they highlighted that they were limited to offering some and not all the IBs' products. Finally, they all agreed that there were deficiencies in adopting the IB concept in Egypt due to several reasons. First, they saw that IBs worked hard under the current regulations of the central bank due to the lack of regulations set to govern the IBs' operations. Second, IBs lacked expertise in that area due to lack of education and proper training. Finally, they believed that the customer base lacked the awareness of how IBs work and their role in developing the economy.

It can be concluded that the following current central bank regulations have a negative impact on IBs' operations and make it hard for IBs to adopt such an environment. This is because there are no regulations that govern or control the various products offered by IBs in Egypt.

6.2.2 The Role of the Central Bank in Developing the IB Sector in Egypt

The following questions were asked to find to what extent the CBE had impacted the developing IB sector and enhanced its operations. The interviewees were asked the following questions:

"**Do you know if there is a separate unit/division/group within the central bank, to support the development of IBs in Egypt? How does this affect your daily operations**?"

"**What laws have been passed/amended to facilitate the development of IBs in Egypt in the last 5 years? (e.g., land law, tax law, trust law)**."

"**How does the legal framework governing IB products and services differ from that applied to conventional banks?**"

All the interviewees agreed that the implementation and development of IBs cannot succeed unless the government was ready to support the sector. First, they stated that the monetary authorities need to ascertain that their IB development plans have realistic goals. Introducing idealistic banking regulations alone would not be enough. Interviewee B7 pointed out, "*The Egyptian monetary authorities should consider the experience of the other countries such as Malaysia and Indonesia in this respect*". A1 stated, "*Some local Islamic banks have requested the introduction of texts regulating their work in the Banking Law and the Central Bank, but I do not think the Central Bank approves or will approve that". C3 also mentioned that "Compared to the age of the traditional banks established in the market hundreds of years ago, and the accumulation of expertise and experience, Islamic banks that have existed for about 40 years in the market are in addition to the market and play their role to the fullest, and the evidence is that our bank has funds managed by nearly 100 billion pounds, with a growth in the volume of business, and the number of accounts reached about one million and 800 thousand accounts, which is a huge number according to my estimation, compared to the number of accounts in banks, but in practice we find*

negatives and positives trying to accommodate with the current regulations, and certainly from time to time, the performance of the banks must be evaluated and the gaps filled and avoided if any". All the participants agreed that it was important for the IBs to work under a facilitative institutional environment and an efficient regulatory framework. According to them, Egypt unfortunately lacked in both aspects.

They all stated that there was no department in the CBE specialised in monitoring IB operations. Some of them thought that this was frustrating as IBs in Egypt were regulated in the same way as commercial banks, neglecting the differences in their operation and the products offered. All agreed that this was hindering the development of IB sector in Egypt. Interviewee A2 believed that "*Such humble institutional support exposes IBs to systemic risks connected to institutional, legal and regulatory issues*".

According to interviewee A4, "*IB operations differ from conventional banking in many ways. These include the prohibition of transactions based on fixed interest rate, and this requires that banks operate according to different procedures through the use of various financial instruments that are not supported by current regulations*". He stated that "*this affects the bank relation with its customers and affects the bank's credibility*". Interviewee B1 pointed out that, *"The central bank of Egypt is using the fixed discount rate with IBs, this is totally against the main core of IB existence. IBs are not to deal with fixed interest rate*".

All the interviewees stated that there had not been any change in the laws to facilitate the development of IBs in Egypt in the last five years, which to some of them was a bit frustrating; 90% of the participants agreed that IBs in Egypt required the

banking system to be compatible with Islamic law. As in other Muslim countries, they felt that IBs could exist alongside conventional banking.

As of IBs' laws and regulation, the interviewees' answers varied, and different perceptions were voiced. Almost 17% of the sample saw that the current banking regulations were compatible with their operations and only needed slight amendments. They claimed that they could operate in accordance with the current regulations without major changes. On the other hand, around 83% believed that IB operations differed from conventional banking in relation to several key issues, so regulations would have to be issued to supervise their operations.

Participant C4 stated that, "*IBs operations depend on debt-biased structure of assets represented in murabaha contracts rather than real investments represented in mudarabah and musharaka contracts*". According to him and others, this might be due the fear of both liquidity and credit risk. They believed that their operations were not secured enough as there are no regulations regarding some IBs' products. A9 added that, *"There is a fundamental difference between the approach and methods of work of the central bank with traditional banks and the approach and methods of Islamic banks, as this difference affects the activity of Islamic banks, and there are also proposed solutions that can be relied upon to eliminate this disparity, and thus the problem is that the application of traditional tools and methods used by the central bank Control over traditional banks is a hindrance to the work of Islamic banks, which will negatively affect their performance."* C10 added, *"The methods of control imposed by the central bank are still not in line with the nature of their work as the central bank subjects them to the same traditional methods of control, which make them deal with Interest and buy bonds and treasury bills.*A4 also mentioned that "*The central bank doesn't deal with the*

Sharia controls upon which Islamic banks are based. There are a set of controls that the central bank must observe in its relationship with Islamic banks, especially when developing appropriate supervisory methods for the methodology and nature of Islamic banks 'operations. The central bank and Islamic banks alike need to find a common understanding formula so that both of them can play their role to the fullest for the benefit of the country and work to achieve development at all levels".

Briefly, it can be said that current CBE regulations do not encourage investment modes in IBs as different IBs' products are not supported with well-structured regulations. Due to this, the IBs' sector has not developed in the past years.

Additionally, the participants were asked the following:

"**Are there any tax benefits (tax neutrality, incentives, deductions, exemptions) to encourage the development of IBs in Egypt? How does this affect your operations**?"

"**If there are any tax benefits implemented for IBs, please briefly explain the tax benefits for products & services you offer?**"

Regarding these questions, all participants agreed that there were no tax benefits at all to encourage the development of the IB sector in Egypt. On the contrary, they saw that while interest paid is treated as a tax-deductible expense in conventional banks, IBs are subject to double taxation. They have to pay sales taxes for commodities purchased for murabaha contracts and operations taxes, which they believe needs to end soon.

The last questions asked were as follows:

"**Does the central bank have a Sharia governance framework for IBs**? **What are the policies that the CBE can apply to fit the Sharia rules in IBs?**"

Again the answers to both questions were no from all participants. In addition, they believe that this is the real challenge that faces IBs in Egypt. They see that their existence is not recognised or appreciated by the regulators. According to participant A1, "*Sharia supervision is the backbone of IBs. This will enhance the confidence of the public that the IBs' activities are in compliance with Sharia*". According to B2, "*It is natural for the central bank's approach and its supervisory methods used to control traditional banks compatible with the ideology that governs these banks and their methodology of work, and is also consistent with the methods on which they depend in conducting their various activities, but this approach does not agree with the methods on which Islamic banks depend In carrying out its activities".* According to C7, "*The issue is the problem of the relationship between central banks and Islamic banks in terms of approach, methods, and supervisory and financing tools, where the thought and approach applied by Islamic banks differs from the thought and approach that governs the relationship of the central bank with traditional banks, this makes the Islamic banks operations appear to be similar to that of conventional. This really confuses the customers".* Most of the participants believe that IBs lack customers' trust and confidence due to the absence of Sharia compliant rules in the CBE. As noted by participant C8, "*People have doubts regarding our operations as they are not supported by sharia rules or a rigid framework from the central bank of Egypt. We should attract more depositors if we are working under more encouraging environment*".

It can be noted that "*current central bank practices have negative impact on attracting customers which affect IBs' competitiveness and performance*".

6.3 Conceptual Framework

After transcribing all interviews, the researcher used the narrative analysis to identify different codes and themes. Set of codes and themes were derived. For example:

- Interviewee A5 stated that, "*IBs find it hard to operate and adopt itself due to the lack of regulations and support from the government*". The codes generated are: Lack, regulations and IBs hardly operate.
- Interviewee B2 mentioned that, *"The role of the government represented by regulations set by the central bank of Egypt hinders the Islamic banks operations and performance in Egypt"*. The codes generated are regulations, IBs hindered operations, performance.
- Other codes generated from the interview analysis were: credit ceiling, capital adequacy, trading assets and Interest rate

Generating themes: The researcher, after scanning the codes generated, acknowledges a trend among them and creates the themes. Examples of themes are "lack of regulations and IBs performance", "bank size affect the performance", "fixed interest rate affect bank's operations".

Codes are pooled together under one theme, and themes are formed to help in constructing the conceptual framework and the research hypotheses.

The results were consistant with the literature gathered. According to Chapra 1970, Given the Central Bank justification in implementing the legal reserve policy, it was found that they do not match the nature of the funds in Islamic banks because they differ from the nature of deposits in conventional banks. These funds were provided by the depositors to IBs for the purpose of investing them according to the actual results of

the investment and PLS. Hence, there is no obligation on part of the IB to return them in full to the depositors. On the other hand, the IB uses these funds in real investments and does not resort to monetary lending, which means that the ability of IBs to create money and increase monetary supply is very limited when compared to the situation of financing loans in conventional banks. The legal reserve policy leads to the disruption of IB resources and reduces their full monetary investment which adversely affects the return distributed to the owners of investment accounts, resulting in less profits for IBs. This policy also favours conventional banks to Islamic ones. Traditional banks benefit from offering treasury bonds to extend the legal reserve, while IBs do not deal with treasury bills because they are considered to be forbidden Riba.

Moreover, the application of the liquidity policy on IBs lead to the retention of a large proportion of investment customers' deposits in the form of liquid assets, which reduces the investment strength of these deposits, and thus lowers profitability. Hence, the equality between the banks when imposing this ratio places IBs in an unequal and unfair position because if it applies the obligatory liquidity ratio of conventional banks to IBs; the liquidity of these banks is well below the permissible limit between the Central Bank and Islamic banks (Al Hindi, 1986).

The CBE prohibits banks subject to it from dealing in movable or real estate assets via buying, selling or exchanging. The CBE aims to implement this policy, taking into account the prudent requirements. The lending operations in traditional banks are linked to the receipt of deposits, most of which are payable on demand or after a short period of time; therefore, these are short-term deposits with frozen assets that cannot be disposed of in the short term.

If this logic is consistent with the nature of conventional banks, it is not compatible with IBs, whose investment activities differs from the nature of lending in traditional banks. This activity requires IBs to treat fixed and movable assets for use in their investment operations, which often requires the ownership of these assets. Therefore, the treatment of IBs in fixed and movable assets is considered a necessity, an preventing them from doing so impedes their achievement of their investment objectives (Dawaba 2005).

Most Muslim countries have laws that specify the rules and regulations for the IB sector, such as Malaysia. However, for other countries like Egypt, IBs have to adapt to other laws and regulations. In Egypt, there is no separate IB act or any specific laws or regulations that control or supervise the IB sector. The CBE regulations are to control and supervise conventional banks whose products, goals and functions are different from that of IBs. In addition, the CBE does not have any separate department to regulate or supervise the IBs' operation. After looking at the literature and conducting and analysing the interviews, the following conceptual framework can be concluded.

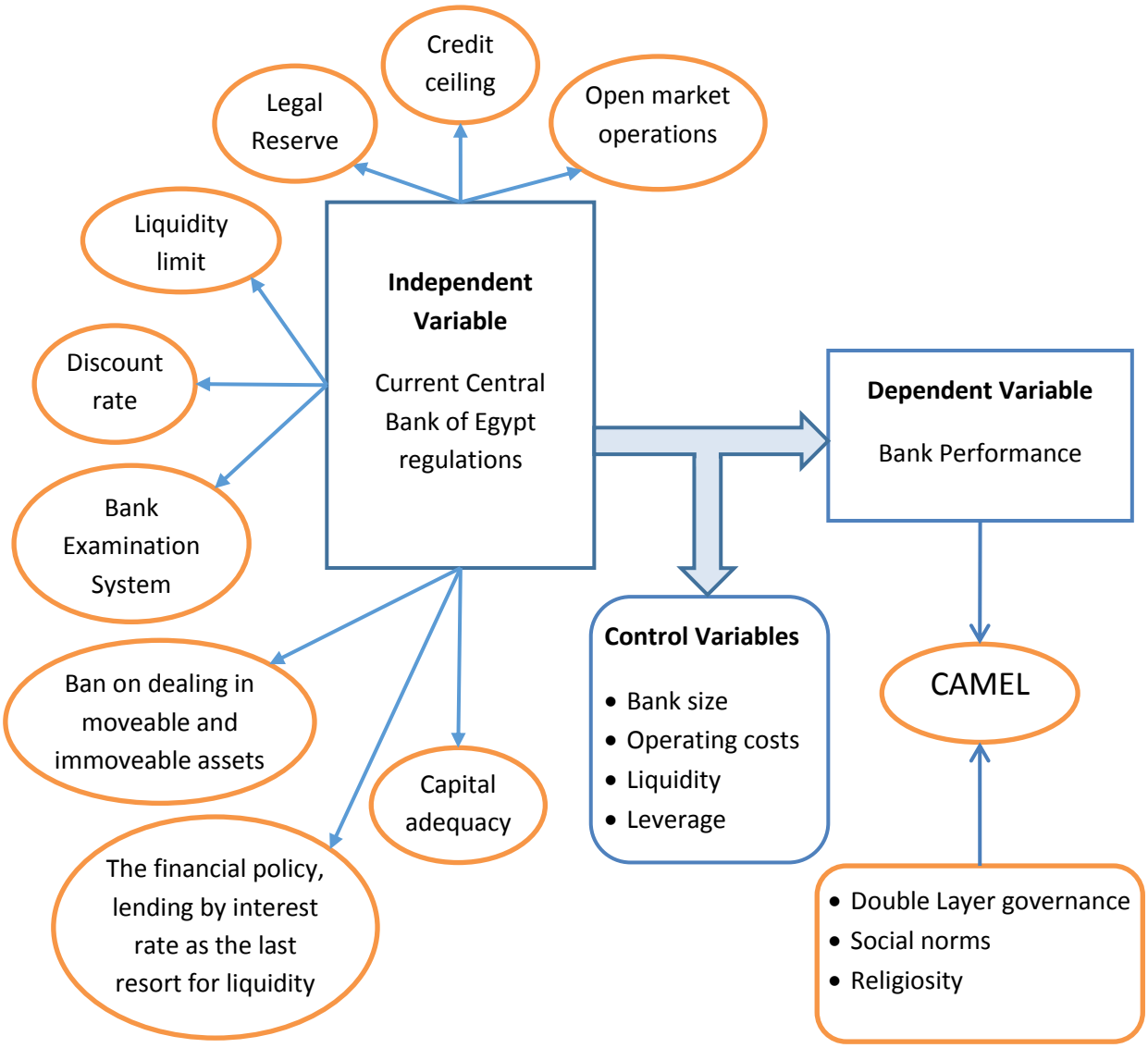
Credit ceiling
Legal Reserve
Open market operations
Liquidity limit
Independent Variable
Current Central Bank of Egypt regulations
Discount rate
Dependent Variable
Bank Performance
Bank Examination System
Control Variables
Bank size
Operating costs
Liquidity
Leverage
CAMEL
Ban on dealing in moveable and immoveable assets
Capital adequacy
The financial policy, lending by interest rate as the last resort for liquidity
Double Layer governance
Social norms
Religiosity

Figure 1

6.4 Hypotheses

- H1: There is a negative relationship between the current legal reserve policy and Islamic bank performance.
- H2: There is a negative relationship between the current bank examination system and Islamic bank performance.
- H3: There is a negative relationship between the credit ceiling and Islamic bank performance.
- H4: There is a negative relationship between the current liquidity limit and Islamic bank performance.
- H5: There is a negative relationship between the current capital adequacy policy and Islamic bank performance.
- H6: There is a negative relationship between the current discount rate and Islamic bank performance.
- H7: There is a negative relationship between the financial policy of lending by interest rate as the last resort for liquidity and Islamic bank performance.
- H8: There is a negative relationship between the ban on dealing in moveable and immoveable assets and Islamic bank performance.
- H9: There is a negative relationship between the current open market operations and Islamic bank performance.

Chapter 7: Secondary Data and Questionnaire Statistical Analysis

7.1 Introduction

This chapter maims to answer the hypotheses of this research which are as follows:

- H1: There is a negative relationship between the current legal reserve policy and Islamic bank performance.
- H2: There is a negative relationship between the current bank examination system and Islamic bank performance.
- H3: There is a negative relationship between the credit ceiling and Islamic bank performance.
- H4: There is a negative relationship between the current liquidity limit and Islamic bank performance.
- H5: There is a negative relationship between the current capital adequacy policy and Islamic bank performance.
- H6: There is a negative relationship between the current discount rate and Islamic bank performance.
- H7: There is a negative relationship between the financial policy of lending by interest rate as the last resort for liquidity and Islamic bank performance.
- H8: There is a negative relationship between the ban on dealing in moveable and immoveable assets and Islamic bank performance.
- H9: There is a negative relationship between the current open market operations and Islamic bank performance.

To answer the above hypotheses, the following statistical methods will be used.

7.2 Methods of Statistical Analysis

The Statistical Package for Social Sciences (SPSS V.18) was used for compiling and processing data. Several statistical tools were employed for data analysis in the quantitative part of this research as follows:

1. Reliability and validity analysis: Cronbach's alpha test was used to evaluate the stability of the questionnaire and reliability of the measures. The higher the Cronbach's alpha value, the greater the consistency of the questionnaire (Cozby, 2001).
2. Descriptive analysis: This involves presenting frequencies and percentages as well as measures of location and variation.
3. Spearman's correlation: This measures the strength and direction between two ordinal variables. It takes values between -1 and 1; the relation becomes stronger when the coefficient is close to 1 or -1. A negative sign denotes that the relation is inverse, and a positive sign denotes that the relation is direct (Corder, 2014).
4. Simple regression: To test if there is a significant effect of one independent variable (simple regression) on a dependent variable, and the direction and magnitude of this effect, a simple regression is performed. The effect is considered to be significant if the p-value is less than 5% (David, 2009).
5. Ordinary Least Squares: OLS is a typical technique used to analyse data and estimate the unknown factors when applying a linear regression. The main aim of this method is to minimise the variations that arise among the observations collected from the dataset. According to many researchers, OLS is categorised as best linear unbiased estimator (BLUE) and is considered to be consistent when the OLS assumptions are met. The OLS estimator requires the explanatory

variables to be exogenous and with no multi-collinearity among the independent variables. Moreover, OLS is said to be the optimal linear unbiased estimator when the errors are homoscedastic and serially uncorrelated. Assuming the above conditions, OLS provides minimum-variance unbiased-mean estimation when the errors have finite variances. Under the additional assumption that the errors are normally distributed, OLS is the maximum likelihood estimator.

However, before running the regression model, the following analysis was conducted:

First, the CAMEL was checked using a regression analysis to see whether they are different for conventional and IBs in Egypt and for IBs in Egypt and other countries (Bahrain, Malyasia, and Indonesia). Second, the questionnaire for the study was analysed. Further, a reliability analysis was performed and the descriptive statistics described before answering the hypotheses.

7.3 Reliability and Validity Analysis.

Table 8: Results of Cronbach's Alpha for the Questionnaire Dimensions

Questions	**Cronbach's Alpha**
Q11	0.627
Q12	0.699
Q13	0.98
Q14	0.839
Q15	0.943
Q16	0.899
Q17	0.760
Q18	0.861
Q19	0.501
Performance	0.696

From the above table, it is clear that the Cronbach's alpha for all dimensions of the questionnaire is greater than 0.5, which indicates that questionnaire is reliable and that the following results are consistent.

7.4 Descriptive Statistics

First, descriptive statistics for CAMEL for both IBs operating in Egypt versus other countries, namely Bahrain, Malaysia and Indonesia, are presented in this section. Then, the descriptive statistics for CAMEL for both Islamic and conventional banks operating in Egypt are presented, followed by the descriptive statistics for the questionnaire.

7.4.1 Descriptive Statistics for CAMEL.

In order to apply the linear regression, five indicators are created, one for each dependent. The created variables are as follows:

a- We rescaled the variables to have values between 0 and 1 using the following formula:

$$\left(X_{new} = \frac{X - X_{min}}{X_{max} - X_{min}}\right),$$

b- Then, we obtained the mean value for the rescaled variables for each dimension.

Table 9: Descriptive Statistics for Egyptian Banks

Dimension	Variable	Min.	Max.	Mean	Std. Dev.
Capital Adequacy	Capital to asset ratio	4.64	13.01	7.41	3.01
	Imp. loans less loan loss allowances/Equity	-14.33	35.20	-0.31	12.48
Asset Quality	Imp. loans/Gross loans	2.97	24.52	9.98	6.76
	Loan loss provision	2.96	17.04	8.91	4.71
Management Quality	Non-interest Exp./Avg. assets	0.77	9.19	2.14	2.15
	Tot Exp./Tot Inc. ratio	15.30	69.94	33.39	14.84
Earning Ability	ROAA	1.02	4.75	1.99	0.94
	ROAE	18.92	54.49	28.69	9.01
	NIM	3.14	6.57	4.85	1.12
Liquidity	Loans/Deps. & ST funding	10.94	62.71	34.38	19.34

	Growth of total customer deposits	8.83	48.67	22.68	11.17
Ownership Structure	Business ownership	42.80%	94.00%	68.63%	21.64%
	Foreign ownership	33.20%	84.90%	59.07%	21.85%
Macroeconomic Indicators	GDP growth	4.18	5.56	4.75	0.59
	Inflation	6.25	22.93	14.83	6.68
	Unemployment rate	8.61	13.05	11.13	1.72

Table 10: Descriptive Statistics for the Other Banks

Dimension	Variable	Min.	Max.	Mean	Std. Dev
Capital Adequacy	Capital to asset ratio	5.87	19.32	9.50	3.38
	Imp. loans less loan loss allowances/Equity	-7.05	104.22	13.53	21.39
Asset Quality	Imp. loans/Gross loans	0.70	16.16	5.25	4.58
	Loan loss provision	0.53	9.85	3.09	2.01
Management Quality	Non-interest Exp./Avg. assets	0.88	5.59	2.49	1.30
	Tot Exp./Tot Inc. ratio	38.45	150.63	63.79	21.057
Earning Ability	ROAA	-0.80	1.36	0.66	0.45
	ROAE	-10.98	14.87	6.99	5.01

	NIM	0.74	7.69	3.60	1.769
Liquidity	Loans/Deps. & ST funding	52.95	94.89	77.77	8.34
	Growth of total customer deposits	-12.38	38.65	7.26	12.82
Ownership Structure	Business ownership	27.00%	100.00%	87.72%	22.54%
	Foreign ownership	0.00%	82.10%	12.11%	25.48%
Macroeconomic Indicators	GDP growth	1.82	5.74	4.23	1.17
	Inflation	-9.37	5.81	1.67	3.45
	Unemployment rate	0.65	4.51	2.76	1.45

Table 11: Comparison between Countries

The analysis of variance (ANOVA) was used to test for any significant differences among the countries.

	Capital	**Asset quality**	**Management quality**	**Earning ability**	**Liquidity**
Egypt	.1536	.4486	.1483	.5665	.4267
Bahrain	.4292	.3362	.2798	.2849	.4786
Malaysia	.1828	.0312	.1579	.2776	.6197
Indonesia	.2372	.1518	.4061	.3878	.5783
p-value of ANOVA	.0000	.0000	.0000	.0000	.0010

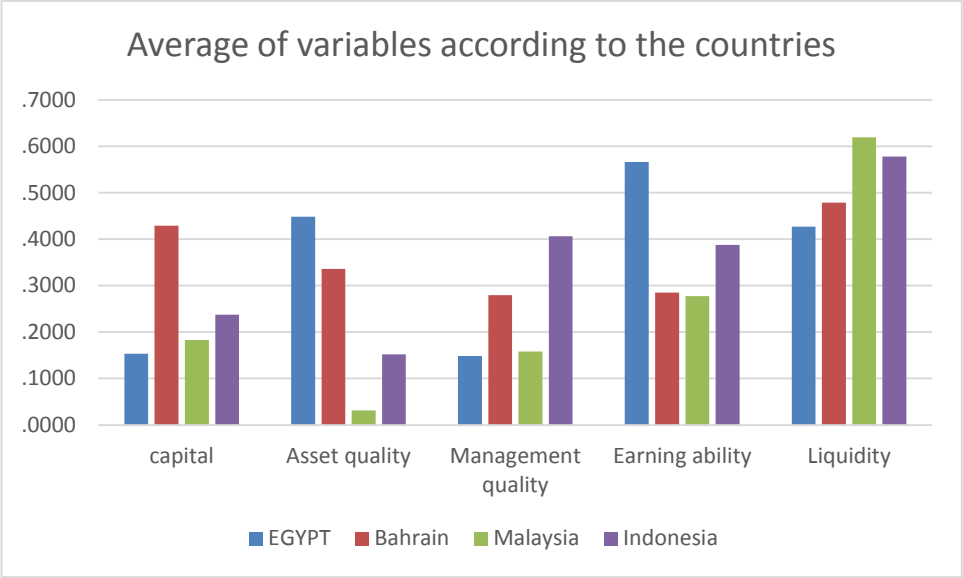

Figure 2

From the above table and the graph, the following becomes clear:

- Egypt has the lowest average of capital adequacy, while the largest one is for Bahrain with a confident 95%, as the p-value of the ANOVA is less than 5%.
- Egypt has the largest average of asset quality, while the lowest one is for Malaysia with a confident 95%, as the p-value of the ANOVA is less than 5%.
- Egypt has the lowest average of management quality, while the largest one is for Indonesia.
- Egypt has the largest average earning ability, while the lowest one is for Malaysia with a confident 95%, as the p-value of the ANOVA is less than 5%.
- Egypt has the lowest average of liquidity, while the largest one is for Malaysia at a confident 95%, as the p-value of the ANOVA is less than 5%.

However, this difference will be checked later for significance. It is obvious that these results contradict many of the results in the literature. According to the results, IBs in Egypt are not operating well as compared to other countries following mixed banking operations (these countries have separate regulations applied to IBs than that of the conventional banks). Egypt's IB performances regarding capital adequacy, quality management and liquidity are lower than their counterparts in the other countries under the study. On the other hand Egypt is better off when it comes to earnings ratios and asset quality.

According to Tamanni (2002), Islamic banking operations have been more profitable than the conventional ones. He also concluded that Islamic banking operations at foreign banks performed considerably well from 1996–2000, during and post the Asian crisis. Kader et al. (2007) examined the performance of UAE IBs for five years and found that IBs in the UAE are different from conventional banks from the perspective of financial performance. The UAE IBs are relatively more profitable, less liquid, less risky and more efficient compared to the UAE conventional banks. Iqbal (2001) considered IBs and conventional banks in the 1990s and concluded that the former are well capitalised, profitable, stable and outperform conventional banks in most areas and years. Due to this, the researcher also compared the performance of IBs and conventional banks in Egypt.

7.4.2 Descriptive Statistics for the Questionnaire

The questionnaire was collected from the employees of IBs, and the following tables present the description of the demographic variables, and the questions of the questionnaire.

Table 12: Educational Qualifications

Education			
		Frequency	**Percent %**
Valid	Postgraduate (Masters or PhD)	110	31.7
	Professional Certification	237	68.3
	Total	347	100.0

From the above table, it is clear that almost 30% of the sample were postgrads, and around 70% of had professional certifications. This indicates that the participants are well-educated and have high qualifications regarding the topic discussed.

Table 13: Years of Work in an Islamic bank

Years			
		Frequency	**Valid Percent%**
Valid	10–14 years	17	4.9
	15–20 years	119	34.3
	More than 20 years	211	60.8
	Total	347	100.0

From the above table it is clear that 60.8% of the sample have worked in IBs for more than 20 years, while 34% of the sample have work for 15–20 years, and 4.9% have work for 10–14 years. Again this indicates that the participants are greatly enjoying their experience in IBs.

Table 14: Primary Roles

Role			
		Frequency	**Valid Percent%**
Valid	Management Board	191	55
	Accountant	71	20.5
	Employee	85	24.5
	Total	347	100.0

From the above table it is clear that 55% of the sample are employed as the management board, while 20.5% are employed as accountants, and 24.5% are employees.

Table 15: Obstacles Employees Perceive in Developing Islamic Banking in Egypt

	Frequency	**Percentage %**
Legal & regulatory	347	100
Sharia	0	0
Tax neutrality & other incentives	0	0
Secondary market	0	0
Shortage of skills and expertise	347	100
Customers' lack of awareness	347	100

From the above table it is clear that the three major obstacles that the employees perceive in developing IBs in Egypt are legal and regulatory, shortage of skills and expertise, and lack of awareness. This agrees with the data gathered from the interviews. The participants mainly stated that CBE regulations do affect IBs' operations and performance.

Table 16: How Islamic Banks Initially Developed in Egypt

	Frequency	**Percentage %**
By modifying the national strategic plan regarding capital market	0	0
By presenting a governmental legislation to form Islamic banks	0	0
Demand and supply of Islamic bank products and services (market forces)	347	100

From the above table, it is clear that employees see that demands and supply of Islamic bank products and services is the best way to initially develop IBs in Egypt.

Table 17: Islamic Banking Products Most Commonly used in the Islamic Bank

	Frequency	Percentage %
Sukuk (Islamic bond)	0	0
Murabaha	347	100
Musharaka	0	0
Mudarabah	0	0
Mutual funds	347	100

From the above table, it is clear that the most commonly used products in IBs are murabaha and mutual funds. IBs in Egypt use limited services as the CBE does not support their operations.

Table 18: Extent of Dependency of Islamic Banks on each of these Deposit Categories (Percentage of Respondents according to the Rate)

Deposits	**Very important**	**Important**	**Average**	**Unimportant**	**Very unimportant**
Short-term deposits (less than 1 year)	55.3%	36.9%	0%	5.8%	2%
Intermediate-term deposits (1-5 years)	33.1%	49.6%	9.5%	4%	3.7%
Long-term deposits (more than 5 years)	0.3%	5.5%	27.4%	40.1%	26.8%

From the above table, it is clear that IBs depend mostly on short term deposits, then intermediate-term deposits, and the least important are long-term deposits. This verifies the idea that IBs in Egypt are not working to their full potentials.

Table 19: Extent of Islamic Banks' Dependency on each of these Investment Categories as a Source of Income (Percentage of Respondents according to the Rate)

Deposits	**Very important**	**Important**	**Average**	**Unimportant**	**Very unimportant**
Short-term investment (less than 1 year)	64%	28.2%	3.7%	4%	0%
Intermediate-term investment (1-5 years)	40.1%	52.5%	3.2%	4.6%	0%
Long-term investment (more than 5 years)	3.5%	4.3%	34%	58.2%	0%

From the above table, it is clear that IBs depend mostly on both short-term investments, and intermediate-term investments, and long-term investments are least important. This supports the idea that IBs in Egypt cannot fully operate due to the lack of support from the CBE.

Table 20: The Relative Importance of the following Factors in Hindering Performance of Islamic Banks (Percentage of Respondents according to the Rate)

Factors	**Very important**	**Important**	**Average**	**Unimportant**	**Very unimportant**
Factors related to customers	92.2%	4.6%	3.2%	0%	0%
Factors related to Central Bank	92.2%	0%	3.2%	4.6%	0%

It is clear that most of the participants were able to perceive the importance of the roles of customers and regulations in the bank's performance. This agrees with both the literature gathered and the data observed from the interviews.

Table 21: According to Customers, the Relative Importance of Each of these Factors in Affecting the Performance of Islamic Banks (Percentage of Respondents according to the Rate)

Factors	Very important	Important	Average	Unimportant	Very unimportant
Lack of confidence in the Islamic bank's mission and investment policies	55.6%	36.6%	3.2%	3.7%	0.9%
Their desire to obtain returns that are competitive with the interest rates of conventional banks	55%	37.2%	1.4%	6.1%	0.3%
Their need for variety of services offered by the Islamic banks	51.6%	40.6%	4 %	3.5%	0.3%

The competition with traditional banks in attracting potential customers	39.8%	52.4%	3.5%	3.5%	0.9%
Their mimicking of the traditional banks in their system of receiving deposits in terms of time period	37.5%	45.8%	12.4%	3.5%	0.9%

From the above table it is clear that respondents see all the above factors are important and very important in affecting the performance of IBs. However, the highest important factor according to the respondents is the lack of confidence about the IB's mission and their investment policies. These results support the interviewees' responses. They claimed that the CBE regulations has affect customers' perceptions of IBs, thus negatively affecting their performance.

Table 22: The Relative Importance for each of these Elements in Determining the Performance of Islamic Banks (Percentage of Respondents according to the Rate)

Determinants	Very important	Important	Average	Unimportant	Very unimportant
Products offered	12.7%	67.4%	12.7%	4.6%	2.6%
Leverage (% of deposits and borrowed money/total assets)	19%	70%	4.9%	4.6%	1.4%
Types of loans	3.7%	4%	39.8%	52.4%	0%
Short-term funding	33.4%	58.8%	1.2%	3.5%	3.2%
Operating costs	42.9%	49.3%	3.5%	4.3%	0%
Cost of raising fund	27.1%	65.1%	2.6%	3.5%	1.7%
Types of security investment	31.4%	57.6%	5.2%	4%	1.7%
Bank size (asset)	46.1%	46.1%	1.7%	4%	2%

Capital management	34.3%	46.4%	12.7%	3.7%	2.9%
Liquidity	49.6%	42.7%	1.7%	4.9%	1.2%
Operating policies	64.8%	27.4%	0.6%	4.6%	2.6%

From the above table it is clear that all determinants are important from the point of view of respondents except types of loans. However, the most important determinant is operating policies. This agrees with the literature gathered in the Egyptian context chapter.

Table 23: Opinions on Islamic Banks

Opinion	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
They provide enough retail products	0%	49%	43.2%	4.6%	3.2%
They operate efficiently and profitably	5.2%	2.6%	62%	30.3%	0%

From the above table, it is clear that 49% of the sample agree that IBs provide enough retail products, while 43.2% neutrally agree. Also, 30.3% of the sample disagree that IBs operate efficiently and profitably, while 62% of the sample neutrally agree.

Table 24: The Effect of Each on Providing Various Islamic Bank Products

Opinion	**Very important**	**Important**	**Average**	**Unimportant**	**Very unimportant**
Bank's policy	23.9%	68%	2.6%	4.3%	1.2%
Customers' needs	18.2%	58.5%	15.6%	5.8%	2%
Central bank's regulations	67.4%	24.8%	1.2%	4.6%	2%

From the above table, it is clear that respondents see that most important factor that affects the provision of various IB products is the CBE, while the least one is customers' needs.

Table 25: Extent to which Banks Apply the following Investment Methods

Investment methods	**80%–100%**	**60%–80%**	**50%–60**	**30%–50%**	**Less than 30%**
Murabaha	76.9%	15.3%	1.7%	4.9%	1.2%
Islamic Bank loans	1.7%	4.3%	1.7%	67.7%	24.5%
El selm	0%	0%	4.9%	15.3%	79.8%

Debit current account	46.1%	46.1%	4.9%	2.9%	0%
El-esstesnaa	0%	2%	5.8%	24.2%	68%
El modarbah	0%	3.2%	4.6%	25.1%	67.1%
Marketable securities	33.1%	59.1%	3.5%	4.3%	0%
Investment fund	33.1%	59.1%	7.8%	0%	0%
El mosharkah	0.6%	4.6%	5.5%	68%	23.1%
Direct investment	3.7%	47%	43.2%	6.1 %	0%
Sokouk	0%	4.3%	3.2%	21.3%	71.2 %

From the above table it is clear that the highest investment method applied by Islamic banks is the Murabaha, while the least one is El-selm. These results explain that IBs cannot offer a wide range of products. This agrees with the assumption that CBE regulations limit the IBs' operations.

Table 26: Acceptable Level of Return on Equity (ROE) for a Bank

acceptable.roe			
		Frequency	**Valid %**
	10–14	28	8.1
	15–19	144	41.5
	20–25	156	45.0
	over 20	19	5.5
	Total	347	100.0

From the above table it is clear that 41.5% of the sample see that the acceptable ROE is from 15–20 and 45% of the sample sees that acceptable ROE is from 20-25.

Table 27: Acceptable Level of Return on Asset (ROA) for a Bank

acceptable.roa			
		Frequency	**Valid %**
	0.5–1%	38	11.7
	2–3%	150	43.2
	4–6%	159	45.8
	7–10%	0	0
	Over 10%	0	0
	Total	347	100.0

From the above table it is clear that 46% of the sample sees that the acceptable ROA is from 2–3% and 45.8% of the sample sees that the acceptable ROA is from 4–6%.

Table 28: Opinion on whether your Bank Achieves the Acceptable Level of ROE and ROA?

Opinion	Strongly agree	agree	Neutral	disagree	Strongly disagree
ROE	4.6%	3.2%	22.5%	49%	20.7%
ROA	3.2%	4.3%	22.8%	49%	20.7%

From the above table, it is clear that most of the sample does not agree that their banks achieve the acceptable level of ROA and ROE. This supports the interviewees' opinions that people working in IBs operating in Egypt find that their banks are not operating at the optimum level.

Table 29: Perception regarding your Bank's General Performance vs. Conventional Banks in Egypt

Opinion	Very strong	Strong	Neutral	Weak	Very weak
Performance	4.6%	3.2%	15.6%	51.6%	25.1%

From the above tables it is clear that most of the sample does not agree that their bank's general performance is good as compared to the conventional banks working in Egypt. This agrees with the data collected from the interviews.

Table 30: Percentage of Respondents according to their Answers

Relative weight for importance of the factors related to the Central Bank, in affecting the performance of Islamic banks.

Factors	Very important	Important	Average	Unimportant	Very unimportant
The policy of legal reserve.	36.6%	55.6%	2%	3.7%	2%
The policy of restriction of the sale of assets.	24.5%	67.7%	0.9%	4.6%	2.3%
The financial policy, which is built on lending by interest rate as the last resort for liquidity	30%	59.1%	3.7%	4.9%	2.3%
Bank examination system	0%	24.5%	68%	5.8%	1.7%

Credit ceiling	55.3%	36.9%	2%	4.3%	1.4%
Discount rate	43.8%	48.4%	2.3%	3.7%	1.7%
Liquidity limit	43.8%	48.4%	1.4%	4.3%	2%
Capital adequacy	43.5%	48.7%	1.2%	4.3%	2.3%
Open market operations	24.5%	55.6%	13.8%	4%	2%

According to the above table it can be concluded that respondents see all the factors related to the CBE as important and very important in affecting the performance of IBs. The highest and least important factors, according to the relative importance, are the credit celling and the bank examination. This complies with the literature gathered in the Egyptian context chapter.

7.5 Correlation Analysis

In this section, the following correlations are applied. To find these correlations, an indicator called CB regulations is created by averaging the answers of questions that measured CB regulations. The following correlations were found.

1. Q15 and Q11
2. Q15 and Q12
3. Q15 and Q14

4. Q15 and Q16

Table 31: Q15, Q11 and 12

		CB. regulations
Short term deposit	Pearson Correlation	.718**
	Sig. (2-tailed)	.000
	N	347
Intermediate deposit	Pearson Correlation	.749**
	Sig. (2-tailed)	.000
	N	347
Long term deposit	Pearson Correlation	-.614-**
	Sig. (2-tailed)	.000
	N	347
Short term inv.	Pearson Correlation	.734**
	Sig. (2-tailed)	.000
	N	347
Intermediate term inv.	Pearson Correlation	.692**
	Sig. (2-tailed)	.000
	N	347
Long term inv.	Pearson	-.687-**

	Correlation	
	Sig. (2-tailed)	.000
	N	347
**Correlation is significant at the 0.01 level (2-tailed).		

From the above table it is clear that CBE regulations are significantly and positively correlated with each of short and intermediate deposits and investments, while being negatively correlated with long-term deposits and investments at 95% confidence. This complies with the fact that IBs' operations are not efficient.

Table 32: Q15 and Q14

		CB. regulations
factors.customers	Pearson Correlation	.914**
	Sig. (2-tailed)	.000
	N	347
factors.cent.bank	Pearson Correlation	.914**
	Sig. (2-tailed)	.000
	N	347
customers.confidence	Pearson Correlation	.649**
	Sig. (2-tailed)	.000
	N	347
customers.competitive.int.rate	Pearson Correlation	.809**
	Sig. (2-tailed)	.000
	N	347
customers.services.variaty	Pearson Correlation	.719**
	Sig. (2-tailed)	.000
	N	347
customers.competitio	Pearson	.791**

n.trad.bank	Correlation	
	Sig. (2-tailed)	.000
	N	347
customers.mimicking	Pearson Correlation	.587**
	Sig. (2-tailed)	.000
	N	347

From the above table it is clear that CB regulations are significantly highly positively correlated with each of factors related to customers at 95% confidence. We can conclude that customers are not assertive with IBs' operations. They perceive IBs as conventional banks working in disguise and don't trust that IBs apply Sharia in their operations – part of this goes into how the CBE regulates IBs' operations.

Table 33: Q15 and Q16

		CB regulations
performance.products .offered	Pearson Correlation	.740**
	Sig. (2-tailed)	.000
	N	347
performance.leverage	Pearson Correlation	.759**
	Sig. (2-tailed)	.000
	N	347
performance.types.of. loans	Pearson Correlation	-.762-**
	Sig. (2-tailed)	.000
	N	347
performance.short.ter m.funding	Pearson Correlation	.734**
	Sig. (2-tailed)	.000
	N	347
performance.operatin g.cost	Pearson Correlation	.696**
	Sig. (2-tailed)	.000
	N	347
performance.cost.of.r	Pearson	.749**

aising.fund	Correlation	
	Sig. (2-tailed)	.000
	N	347
performance.type.of.security.inv	Pearson Correlation	.707**
	Sig. (2-tailed)	.000
	N	347
performance.Bank size(asset)	Pearson Correlation	.828**
	Sig. (2-tailed)	.000
	N	347
performance.cap.mgt	Pearson Correlation	.670**
	Sig. (2-tailed)	.000
	N	347
performance.liquidity	Pearson Correlation	.697**
	Sig. (2-tailed)	.000
	N	347
performance.op.policy	Pearson Correlation	.796**
	Sig. (2-tailed)	.000
	N	347

From the above table it is clear that CBE regulations significantly and highly positively correlated with each of factors determining the performance of IBs, except for types of loans which negatively correlated with a 95% confidence. This complies with data gathered from the interviews and the Egyptian context chapter.

7.6 Model 1

In this section, we compare the performance of IBs operating in Egypt against Islamic banking operating in other countries, namely Bahrain, Malaysia and Indonesia. The performance is measured using the five categories of CAMEL – capital adequacy, asset quality, management quality, earning ability and liquidity. The control variables used in this model are ownership structures, measured by both business ownership and foreign ownership and macroeconomic indicators measured by GDP growth, inflation and unemployment rates. Note that Egypt is a dummy variable, taking 1 for Egyptian banks and 0 for non-Egyptian banks.

7.6.1 Model for Capital Adequacy

Table 34: Model Summary

	R square	**Durbin-Watson**
Model	0.701	1.842

From the previous table we can see that the model explains 70.1% of the variability of the response data around its mean as the R square value is 0.701, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 35: Coefficients

Model	B	Std. Error	t	Sig.	VIF
Constant	0.757	0.057	13.229	0.000	-
Egypt	-0.029	0.096	-0.305	0.761	13.546
Business ownership	-0.004	0.001	-6.902	0.000	1.514
Foreign ownership	-0.001	0.000	-2.054	0.045	1.751
GDP growth	-0.015	0.014	-1.039	0.304	1.800
Inflation	-0.001	0.003	-0.360	0.720	2.991
Unemployment rate	0.013	0.010	-1.397	0.168	10.939

From the previous table we can see that

a- Business ownership has a significant negative effect on capital adequacy, and this effect = -0.004, with 95% confidence as the sig. values are less than 0.05.

b- Foreign ownership has a significant negative effect on capital adequacy, and this effect = -0.001 95% confidence as the sig. values are less than 0.05.

c- The following variables (Egypt – unemployment rate) are highly correlated with the other variables as the VIF values for these variables are > 10, so Egypt is modelled in the following model separately.

Table 36: Model Summary

	R square	Durbin-Watson
Model	0.138	2.155

From the previous table we can see that the model explains 13.8% of variability of the response data around its mean as the R square value is 0.138, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 37: Coefficients

Model	B	Std. Error	t	Sig.	VIF
Constant	0.283	0.021	13.293	0.000	-
Egypt	-0.130	0.043	-3.041	0.004	1.000

From the previous table we can see that the average of capital adequacy for Egyptian banks is less than that for non-Egyptian banks by 0.13 at 95% confidence, as the sig. value is < 0.05. Hence we can conclude our first model:

CA= 0.757 - 0.029EG - 0.004BO - 0.001FO - 0.015GDP - 0.001I + 0.013 UnE

Where CA is the capital adequacy

Eg is Egypt

BO is the business ownership

FO is the foreign ownership

GDP is the gross domestic product

I is the inflation

And UnE is the unemployment rate

7.6.2 Model for Asset Quality

Table 38: Model Summary

	R square	Durbin-Watson
Model	0.481	1.688

From the previous table we can see that the model explains 48.1% of the variability of the response data around its mean as the R square value is 0.481, and there is no positive auto-correlation as the Durbin-Watson value is near to 2.

Table 39: Coefficients

Model	B	Std. Error	t	Sig.	VIF
Constant	0.633	0.104	6.092	0.000	-
Egypt	0.253	0.057	4.440	0.000	1.332
Business ownership	0.003	0.001	2.431	0.018	1.438
GDP growth	0.054	0.023	2.332	0.023	1.319

From the previous table we can see that the average of assets quality for the Egyptian banks is greater than the non-Egyptian banks as the sig. value is < 0.05. Also, business ownership and GDP growth also have a significant effect on asset quality as the sig. values are < 0.05, while the other variables have no significant effect as described in the table below.

Table 40:

Excluded Variables[a]								
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
	Foreign ownership	-.055[d]	-.431	.668	-.058	.582	1.718	.501
	Inflation	.096[d]	.584	.562	.078	.347	2.882	.338
	Unemployment rate	-.196[d]	-.628	.532	-.084	.096	10.422	.096

Hence, the following model can be concluded:

AQ= 0.633 + 0.253EG + 0.003BO + 0.054GDP, where AQ is the asset quality

7.6.3 Model for Management Quality

Table 41: Model Summary

	R square	Durbin-Watson
Model	0.238	1.552

From the previous table we can see that the model explains 23.8% of the variability of the response data around its mean as the R square value is 0.238, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 42: Coefficients

Model	B	Std. Error	t	Sig.	VIF
Constant	0.258	0.022	11.700	0.000	-
Egypt	-0.233	0.053	-4.216	0.000	1.704
Foreign ownership	0.002	0.001	2.646	0.011	1.704

From the previous table we can see that the average management quality for the Egyptian banks is less than the non-Egyptian banks as the sig. value is < 0.05. Foreign ownership also has a significant effect on management quality as the sig. values are < 0.05, while the other variables have no significant effect as described in the table below.

Table 43:

Excluded Variables								
Model		**Beta In**	**t**	**Sig.**	**Partial Correlation**	**Collinearity Statistics**		
						Tolerance	**VIF**	**Minimum Tolerance**
2	Business ownership	.140[c]	1.137	.260	.150	.875	1.143	.536
	GDP growth	-.022[c]	-.184	.855	-.025	.947	1.056	.580
	inflation	-.081[c]	-.424	.673	-.057	.369	2.710	.307
	unemployment rate	.407[c]	1.334	.188	.175	.142	7.047	.140

For management quality we can deduce he following model:

MQ= 0.258 – 0.233EG + 0.002FO, where MQ is the management quality

7.6.4 Model for Earning Ability

Table 44: Model Summary

	R square	**Durbin-Watson**
Model	0.610	2.152

From the previous table we can see that the model explains 61% of the variability of the response data around its mean as the R square value is 0.610, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 45: Coefficients

Model	B	Std. Error	t	Sig.	VIF
Constant	0.240	0.054	4.440	0.000	-
Egypt	0.331	0.039	8.494	0.000	1.724
Foreign ownership	0.002	0.001	3.735	0.000	1.717
GDP growth	0.024	0.012	1.930	0.049	1.056

From the previous table we can see that the average earning ability for the Egyptian banks is greater than the non-Egyptian banks as the sig. value is < 0.05. Foreign ownership and GDP growth also have a significant effect on earning ability as the sig. values are < 0.05, while the other variables have no significant effect, as described in the table below.

Table 46:

Excluded Variables[a]								
Model		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
2	Business ownership	.034[c]	.369	.714	.049	.875	1.143	.536
	inflation	.104[c]	.734	.466	.098	.369	2.710	.307
	unemployment rate	.424[c]	1.910	.061	.247	.142	7.047	.140

We can assume the following:

EA= 0.240 + 0.331EG + 0.002FO + 0.024 GDP, where EA is the earning ability.

7.6.5 Model for Liquidity

Table 47: Model Summary

	R square	Durbin-Watson
Model	0.430	2.413

From the previous table we can see that the model explains 43% of the variability of the response data around its mean as the R square value is 0.430, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 48: Coefficients

Model	B	Std. Error	t	Sig.	VIF
Constant	0.237	0.078	3.035	0.004	-
Egypt	-0.075	0.132	-0.572	0.570	13.546
Business ownership	0.003	0.001	3.824	0.000	1.514
Foreign ownership	-0.001	0.001	-1.222	0.227	1.751
GDP growth	0.010	0.019	0.523	0.603	1.800
Inflation	-0.002	0.004	-0.407	0.686	2.991
Unemployment rate	0.007	0.013	0.498	0.621	10.939

From the previous table we can see that business ownership has a significant effect on liquidity as the sig. value is < 0.05. The following variables (Egypt – Unemployment rate) are highly correlated with the other variables as the VIF values for these variables are > 10.

Table 49: Model Summary

	R square	Durbin-Watson
Model	0.146	0.977

From the previous table we can see that the model explains 14.6% of the variability of the response data around its mean as the R square value is 0.146, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 50: Coefficients

Model	B	Std. Error	t	Sig.	VIF
Constant	0.559	0.021	26.690	0.000	-
Egypt	-0.132	0.042	-3.155	0.003	1.000

From the previous table we can see that there average of the liquidity for the Egyptian banks is less than the non-Egyptian banks as the sig. value is < 0.05. So we can conclude that:

L= 0.237 - 0.075EG + 0.003BO - 0.001FO + 0.010 GDP - 0.002I + 0.007UnE, where L is liquidity.

This section clearly indicates that regarding capital adequacy, management quality and liquidity, IBs operating in Egypt are way behind its counterparts operating in other countries with a mixed banking system but set different regulations for governing IBs and conventional banks separately.

The results found contradicts the literature as it was observed that IBs performance is remarkeable in terms of capitalisation and liquidity. (Alqahtani et al., 2017). Another study concluded that IBs had a solid position on their performance. They performed well with respect to capital adequacy, asset quality, management quality, earning capacity and liquidity conditions (Ahsan 2016). Both ROA and efficiency measurements of IBs improved more than conventional banks. This indicates that the Islamic Banking Act improved the performance of IBs regarding both ROA and efficiency (Anwar 2016).

Hassan et al. (2017) studied IBs in Pakistan from 2011 to 2015. It was noticed that pure IBs' capital adequacy ratios, assets quality, management quality, cash ratio and ROE are more compatible as compared to Islamic windows in conventional banks. Suresh (2016) compared and assessed the performance of both Islamic and conventional banks operating in Bahrain using the CAMEL ranking approach from 2007 to 2014. The study has indicated that IBs are more efficient and profitable.

According to Akber and Dey (2020), IBs excelled in the capital adequacy and liquidity position. They used the CAMEL to examine the performances and compared the performance of five Islamic and five conventional banks.

7.7 Model 2

7.7.1 Creating Indicators

Here, the performance of Islamic and conventional banks operating in Egypt are compared using CAMEL. The control variables used in this model are age, size and ownership structure (business ownership and foreign ownership). In order to apply the linear regression, five indicators were created, one for each dependent. The dummy variable takes a value of 0 for conventional banks and 1 for IBs.

7.7.2 Model for Capital Adequacy

Table 51: Model Summary

	R square	**Durbin-Watson**
Model	.605	1.891

From the previous table we can see that the model explains 60.5% of the variability of the response data around its mean as the R square value is 0.605, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 52: Coefficients

Model	B	Std. Error	T	sig	VIF
(Constant)	.088	.522	1.336	.041	
Islamic bank	-.769	.818	-.463	.046	5.771
Business ownership	-.193	.120	-1.614	.116	5.942
Foreign ownership	.229	.110	2.087	.044	4.279
Age	-.289	.392	-.738	.466	7.044
size	-.368	.530	-1.548	.131	2.220

From the previous table we can see the following:

d- Foreign ownership has a significant positive effect on capital adequacy, and this effect = 0.229 at 95% confidence as the sig. values are less than 0.05.

e- The average capital adequacy for IBs is lesser than conventional banks at a confidence of 95%, as the sig. value is less than 0.05.

Hence we can conclude the following model:

CA= 0.088 - 0.769 IB – 0.193 BO + 0.229 FO – 0.289 A – 0.368 S

Where CA is the Capital adequacy

IB is Islamic banks operating in Egypt

BO is the business ownership

FO is the foreign ownership

A is the bank age

S is the bank size

7.7.3. Model for Asset Quality

Table 53: Model Summary

	R Square	Durbin-Watson
Model	0.531	1.703

From the previous table we can see that the model explains 53.1% of the variability of the response data around its mean as the R square value is 0.531, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 54: Coefficients

	B	Std. Error	T	Sig.	VIF
(Constant)	46.378	15.496	2.993	.005	
Business ownership	-.296	.073	-4.071	.000	5.942
foreign ownership	.226	.067	3.395	.002	4.279

Age	-1.078	.238	-4.532	.000	7.044
size	.953	.929	1.025	.312	2.220
Islamic banks	.692	2.318	.298	.767	5.771

From the previous table we can see that the average of the assets quality model for IBs is not significantly different from conventional banks, at a confidence of 95%, as the sig. value is > 0.05. Also, business ownership, foreign ownership and age have significant effects on asset quality as the sig. values are < 0.05, while the other variables have no significant effect, as described in the table below.

The following model can be concluded:

AQ= 46.378 + 0.692 IB - 0.296BO + 0.226FO - 1.078 A + 0 .953 S, where AQ is the asset quality.

7.7.3. Model for Management Quality

Table 55: Model Summary

	R Square	Durbin-Watson
Model	.677	2.327

From the previous table we can see that the model explains 67.7% of the variability of the response data around its mean as the R square value is 0.677, and there is no auto-correlation as the Durbin-Watson value is near to 2.

Table 56: Coefficients

	B	Std. Error	T	Sig,	VIF
(Constant)	6.010	23.420	.257	.000	
Business ownership	.582	.110	5.301	.000	5.942
foreign ownership	-.544	.101	-5.404	.000	4.279
Age	1.882	.359	5.237	.000	7.044
size	-7.850	1.404	-5.590	.000	2.220
Islamic banks	-1.473	3.504	-.421	.001	5.771

From the previous table we can see that the average of the model for management quality for IBs is significantly less than that for conventional ones, at a

95% confidence, as the sig. value is < 0.05. Also, all the control variables are significant as the sig. values are < 0.05.

The model concluded is:

MQ= 6.010 – 1.473 IB + 0.582 BO - 0.544 FO + 1.882 A - 7 .850 S, where MQ is the management quality.

7.7.4. Model for Earning Ability

Table 57: Model Summary

	R Square	**Durbin-Watson**
Model	.614	1.630

From the previous table we can see that the model explains 61.4% of the variability of the response data around its mean as the R square value is 0.614, and there is no autocorrelation as the Durbin-Watson value is near to 2.

Table 58: Coefficients

	B	**Std. Error**	**T**	**Sig.**	**VIF**
(Constant)	11.436	19.900	.575	.569	
Business ownership	-.070	.093	-.746	.461	5.942
foreign ownership	.062	.086	.719	.477	4.279
Age	-.659	.305	-2.159	.038	7.044
Size	3.130	1.193	2.623	.013	2.220
Islamic banks	-1.805	2.977	-.406	.048	5.771

From the previous table we can see that the average of model for earning ability for IBs is significantly different than that for conventional ones, at a confidence of 95%, as the sig. value is < 0.05. Similarly applicable for age and size as well for the sig. values are < 0.05, while the other variables have no significant effect.

The following model can be deduced:

EA= 11.436 – 1.805 IB – 0.070 BO + 0.062 FO – 0.659 A +3.130 S, where EA is the earning ability

7.7.5. Model for Liquidity

Table 59: Model Summary

	Adjusted R Square	**Durbin-Watson**
Model	.583	1.686

From the previous table we can see that the model explains 58.3% of the variability of the response data around its mean as the R square value is 0.583, and there is no autocorrelation as the Durbin-Watson value is near to 2.

Table 60: Coefficients

	B	**Std. Error**	**T**	**Sig.**	**VIF**
(Constant)	-89.059	51.929	-1.715	.095	
Business ownership	1.102	.243	4.530	.000	5.942
foreign ownership	-.925	.223	-4.142	.000	4.279
Age	3.319	.797	4.165	.000	7.044
size	-2.943	3.114	-.945	.351	2.220
Islamic bank	-1.805	7.769	-.232	.038	5.771

From the previous table we can see that the average of model for liquidity for IBs is significantly negatively different than conventional banks at a confidence of 95%, as the sig. value is < 0.05. Similar to this were, age, business ownership and foreign ownership as the sig. values are < 0.05, while the other variables have no significant effect. The following model can be concluded:

L= -89.059 – 1.805 IB +1.102 BO - 0.925 FO + 3.319 A – 2.943 S, where L is the liquidity

According to the above models, conventional banks are more efficient than IBs, whether in exploiting the available resources or in mixing these resources optimally. The reason why conventional banks outperform IBs in Egypt can be traced back to a bunch of reasons: the regulations imposed by the CBE that don't comply with IBs' operations, the existence of a sharia supervisory which leads to the double layer governance, and customers' lack of knowledge about IBs' operations. The literature supports these findings. Abdelsalam et al. (2016) tested how organisational religiosity affects the earnings quality of banks operating in the Middle East and North African region. The study deduced that the earning quality in IBs was less than that of the conventional banks, due to the fact that they used more conservative accounting policies.

Overall, the performance of IBs is lower than conventional banks in Egypt. As mentioned before, this contradicts many studies that have been conducted before. That is why this research tries to find out whether this is related to the current CBE regulations. IBs in Egypt didn't receive any encouragement from the government, and were also in a conflicting position, forced to compete in the same market with

conventional banks. This makes this research a prominent step to answer many questions regarding the present situations of the Islamic banking system in Egypt.

The relative importance of the modest number of IBs in the structure of the Egyptian banking sector is a good indicator of its numerical proportion in the face of the total number of banks in the Egyptian banking system. The relationship between the CBE and IBs in Egypt have also been identified as well as the validity of the regulatory and financing tools of the CBE applied to these banks. The lack of distinction of the CBE regulations between the two kinds of banks in Egypt, even though there exist separate regulations for public sector banks is noteworthy.

It was also found that the supervisory and financing tools applied by the CBE for IBs do not agree with their current status and nature of the work. Among these are the legal reserve policy, cash liquidity, credit ceiling, discount rate, open market, capital adequacy standard, and prohibition on the dealing of fixed assets, data, and inspection and LOLR, which is an impediment to its activities and investment objectives.

Islamic banking faces a challenging environment, perhaps the most important of which is defining their relationship with central banks, especially since no one can play the LOLR role for it is inconsistent with Islamic Sharia. To protect the emerging Islamic banking from the risks, there must be coordinated efforts between the specialists in organising and arranging the field of business development, and quality control and measurement in order for this emerging sector to be successful.

The issue is represented in the problem of the relationship between central banks and IBs in terms of approach, methods, supervisory and financing tools, where the thought and approach applied by IBs differ from what governs the relationship of the

central bank with traditional banks, which raises the question, do the same tools that the central bank follows in controlling conventional banks apply to IBs?

The answer to this question is the basis of this research, given that there is a fundamental difference between the approach and methods of work of the central bank with traditional banks and the approach and methods of IBs, as this difference affects the activity of these banks. There are also suggested solutions for eliminating this disparity. Thus, the application of traditional tools and methods used by the central bank to control traditional banks is a hindrance to the work of IBs, thereby negatively affecting their performance, which is the essence of the problem addressed by the present research.

7.8 Regression for Answering Hypotheses

In this part, the relation between the dependent and independent variables are presented.

Table 61: Results of the Regression Analysis

Model Summary[b]					
Model		**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
	1	.712	.507	.488	1.97517

Table 62: ANOVA[b]

ANOVA[b]						
Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	1335.364	13	102.720	26.330	.000[a]

	Residual	1299.126	333	3.901		
	Total	2634.490	346			

a. Predictors: (Constant), performance.overhead.cost, cb.legal.reserve, cb.open.mkt.operations, cb.bank.ex.sys, performance.liq.mgt, performance.leverage, cb.credit.ceiling, cb.fin.policy, cb.disc.rate, performance.asset.quality, cb.sale.of.asset, cb.liq.limit, cb.cap.adeq

b. Dependent variable: Performance

Table 63: Coefficient a and VIF

Coefficients[a]

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	19.165	.799		23.980	.000		
	cb.legal.reserve	-1.137-	.311	-.339-	-3.656-	.000	.173	5.795
	cb.sale.of.asset	.183	.338	.053	.542	.588	.154	6.505
	cb.fin.policy	-.013-	.239	-.004-	-.054-	.957	.268	3.727
	cb.bank.ex.sys	-.517-	.300	-.111-	-1.724-	.086	.358	2.789
	cb.credit.ceiling	-.320-	.332	-.098-	-.965-	.335	.143	6.973
	cb.disc.rate	-.273-	.460	-.082-	-.594-	.553	.078	12.849
	cb.liq.limit	-.409-	.539	-.127-	-.758-	.449	.053	18.872
	cb.cap.adeq	.104	.544	.033	.192	.848	.050	19.882
	cb.open.mkt.operations	.032	.222	.010	.146	.884	.316	3.169
	performance.leverage	-.035-	.244	-.009-	-.143-	.886	.342	2.924
	performance.Bank sizeasset.	.039	.281	.012	.140	.888	.195	5.135
	performance.liquidity	-.681-	.203	-.206-	-3.355-	.001	.393	2.542
	performance.operating.cost	-.053-	.242	-.014-	-.217-	.828	.354	2.828

a. Dependent Variable: performance

From the above tables it is clear that VIF for each of discount rate, liquidity limit, and capital adequacy is greater than 10, so we removed them and reran the model after adding the control variables, and the results are shown below.

Table 64: Present the Results of the Regression Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.708	.501	.487	1.97727

Table 65: Anova[b]

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1320.869	10	132.087	33.785	.000[a]
	Residual	1313.621	336	3.910		
	Total	2634.490	346			

a. Predictors: (Constant), cb.open.mkt.operations, cb.bank.ex.sys, cb.legal.reserve, performance.overhead.cost, performance.liq.mgt, performance.leverage, cb.credit.ceiling, cb.fin.policy, performance.asset.quality, cb.sale.of.asset

b. Dependent variable: performance

Table 66: Coefficients[a]

Coefficients[a]

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	19.282	.778		24.786	.000		
	cb.legal.reserve	-1.265-	.282	-.377-	-4.491-	.000	.211	4.738
	cb.sale.of.asset	.327	.309	.095	1.058	.291	.184	5.427
	cb.fin.policy	.031	.233	.010	.132	.895	.284	3.519
	cb.bank.ex.sys	-.683-	.285	-.146-	-2.395-	.017	.398	2.515
	cb.credit.ceiling	-.701-	.236	-.215-	-2.967-	.003	.283	3.540
	performance.leverage	-.185-	.229	-.050-	-.807-	.420	.389	2.569
	performance.Bank size	.077	.274	.024	.280	.780	.206	4.856
	performance.liquidity	-.693-	.203	-.210-	-3.423-	.001	.396	2.524
	performance.operating.cost	.018	.238	.005	.074	.941	.367	2.723
	cb.open.mkt.operations	-.075-	.213	-.023-	-.354-	.723	.343	2.915

a. Dependent variable: Performance

From the above 3 models we can conclude the following:

- VIF for these independent variables are less than 10 so we accept that there is no multi-collinearity.
- The overall model is significant at 95% confidence, as p-value for f-test is less than 0.05, and it described around 49% of the variation in performance (value of adjuster R2).
- All independent variables have significant effect on performance at 95% confidence, except sale for assets, market open operations and financial policies have no significant effect on performance.

Hence, we can conclude the following model:

"P = 19.282 - 1.265LR + 0.327SOA + 0.031FP - 0.683BES - 0.701CC - 0.075OMO - 0.185L + 0.077BS - 0.693LM + 0.018OC"

Where, P is the banks' Performance

LR is the Legal Reserve

SOA is the Sale of Asset

FP is the Financial Policy

BES is the Bank Examination System

CC is the Credit Ceiling

OMO is the Open Market Operations

L is the Leverage

BS is the Bank Size

LM is the Liquidity Management

OC is the Operating Costs

According to the above model, the following hypotheses are to be accepted:

- There is a negative relationship between the current legal reserve policy and IB performance.
- There is a negative relationship between the credit ceiling and IB performance.
- There is a negative relationship between the current bank examination system and IB performance.

Some other issues as a result of the CBE guidelines are as follows:

- Given the CBE justification in implementing the legal reserve policy, it was found that they do not match the nature of funds in IBs because they differ from the nature of deposits in conventional banks. These funds were provided by the depositors to the IB for the purposes of investing them according to the actual results of the investment and on a PLS system. Hence, there is no obligation on the IB to return them in full to the depositors. On the other hand, the IB uses these funds in real investments and does not resort to monetary lending, which means that the ability of Islamic banks to create money and increase monetary supply is very limited when compared to the situation of financing loans in conventional banks. The legal reserve policy leads to the disruption of part of IBs' resources and reduces their investments of full money, which adversely

affects the return distributed to the owners of the investment accounts, hence showing a lower profit for IBs than what it should be (Chapra, 1970). This policy also favours conventional banks to IBs. Traditional banks benefit from offering treasury bonds to extend the legal reserve, while IBs do not deal with treasury bills because they are considered to be forbidden Riba.

- The CBE has a set maximum limit for one customer and its associated parties not to exceed 30% of the bank's capital base. In principle, the policy of credit ceilings if they are regulatory for the credit process are seriously considered, in order to achieve economic stability and diversification of the risks. The origin is not an issue for IBs, but must be a policy exception to the original and take into account the nature of Islamic banks based on investment and not trading in debt and money like conventional banks. As for the restrictions on mortgage financing, contribution to companies, and leasing finance, these restrictions in their current situation are not compatible with IBs and represent an impediment to their investment activities. These activities are considered a major factor in the employment of these banks for their money through real investment operations benefit the national economy. If it is necessary to put in place regulatory provisions for the purpose of influencing specific sectors of the national economy or diversifying the risks, these restrictions should have a higher ceiling than what is prescribed for traditional banks and allow IBs to finance leasing themselves without limiting the contribution to companies specialised in this activity.

- This role of the CBE represents an important tool of supervision of banks to ensure the safety of its financial position, and to preserve the funds of

depositors. This role requires the CBE to be aware of the nature and the functioning of IBs, and the CBE should be concerned with the Sharia supervision of the Islamic banking business as much as with normal banking supervision, through the establishment of a legitimate inspection department of legal and banking experts to ensure the integrity and legitimacy in the work of IBs (stated in law 88 of 2003).

The research rejects the remaining hypotheses:

- There is a negative relationship between the current liquidity limit and IB performance.
- There is a negative relationship between the current capital adequacy policy and IB performance.
- There is a negative relationship between the current discount rate and IB performance.
- There is a negative relationship between the financial policy, i.e., lending by interest rate as the last resort for liquidity and IB performance.
- There is a negative relationship between the ban on dealing in moveable and immoveable assets and IB performance.
- There is a negative relationship between the current Open market operations and IB performance.

According to the literature, the supervisory and financing tools applied by the CBE do not agree with the current status and nature of work of IBs. Among the issues

are the legal reserve policy, cash liquidity, credit ceiling, discount rate, open market, capital adequacy standard, and the prohibition of dealing in fixed assets, data inspection, and lending by interest rate as the last resort – an impediment to its activities and investment objectives. But the results contradict these points. These contradictions maybe due to the multi-collinearity that was found among the variables, and the fact that some highly significant variables weakened the effect of other variables.

Chapter 8: Expert Panel

Through this study, the key problems and challenges for the development of IBs in Egypt, in the light of the extant rules and regulations set by the CBE, were explored. An interview with an expert panel of IB employees helped support the results obtained from the data gathered through the interviews and surveys. Three experts were interviewed; the first participant is part of the top-level management of an IB in Egypt, the second participant works at the CBE, and the third is an academic expert on IBs.

The first section of this chapter consists of the report submitted to the expert panel and the questions they answered. The second section explores their opinions about the report, and the third and last section consists of the conclusion.

A great agreement among interviewees' responses was noticed in most areas tackled by the interviews.

8.1 The Report

The following statement summarises the needed amendments to all CBE regulations (both accepted and rejected by the study) as needed, to be applied to control and supervise IBs' operations.

The relative importance of IBs in the structure of the Egyptian banking sector, although modest, is a good indicator of the number of IBs in the Egyptian banking system as a whole. The relationship between the CBE and the IBs in Egypt has been identified. The validity of the regulatory and financing instruments of the CBE that are applied to these banks were also recognised.

The relationship between the CBE and IBs in Egypt is governed by Law No. 88. The provisions of this law did not distinguish between Islamic banks and conventional banks. However, simultaneously, the law lays down a section for public-sector banks while ignoring Islamic banks. It was also found that the regulatory and financing tools applied by the CBE do not agree with the current status of IBs' operations. Among these are the legal reserve policy, cash liquidity, discount rate, open market, capital adequacy standard, the prohibition of dealing in fixed assets, regular inspection, and LOLR, which is an impediment to their activities and investment objectives. In this context, it is recommended that the CBE take into consideration the nature and functioning of IBs, and issue legislations to regulate its work, in accordance with their nature and the Sharia rules.

The legal reserve policy is to be applied to current deposits and not investment deposits. The CBE should take into account the nature of the relationship between the IBs and the holders of the investment deposits, governed by the mudarabah contract, alongside the importance of establishing and activating an insurance deposit fund stipulated in the Central Bank Law and Banking System No. 88 of 2003. This can help avoid the interest rate mechanism.

As for the liquidity ratio, the CBE should consider the nature of investment deposits and of the investments of these funds, the nature of the elements of liquid assets available to IBs, commercial papers and negotiable securities regulated by Sharia controls as well as other liquid elements. The CBE should not impose a financial fine when an Islamic bank violates the liquidity ratio. It could remedy this by obligating the violating bank to deposit balances with the CBE, without a fixed interest rate and in accordance with the period determined by them.

The CBE should also change its policies regarding the consolidation of the interest rate concept as a legal mechanism in the banking system that protects and consolidates it. It also makes it a measure and an indicator of its accounts, even though it is considered forbidden Riba for IBs. The CBE charges many bank violations with financial penalties calculated on the basis of the discount rate.

The CBE should also issue government-regulated securities that are Riba free. These securities should be based on participatory financing and PLS so that IBs can benefit from open market operations.

If the IBs' commitment to the capital adequacy criterion is legitimate, because it strengthens the financial position of the bank, the CBE should take into account the nature of the IBs' operations when calculating the components of this standard, whether in terms of subsidised loans or commercial securities that are interest free and in accordance with Sharia rules.

As for the credit ceiling policy, if the CBE systematically uses the credit process to achieve economic stability and diversify the risks, then it will be acceptable. This policy should be an exception when it comes to IBs and be based on Islamic investment, not a trade in debt and money as in conventional banks. Allowing IBs to engage in financing and leasing on their own without limiting them to specialised companies for this activity is important.

It also appears that the CBE should allow IBs to deal with fixed and movable assets. The investment activities of these banks often require the possession of these assets for use in their investment operations, which is necessary.

The CBE obtains periodic data from banks, whether Islamic or conventional, as this is its supervisory work. However, the CBE should take into account the specificity of the IB in terms of the nature of the periodic data as well as the separation between the financial centres of IBs and other conventional banks in its periodic reports.

The supervisors of Islamic banks from the CBE should be fully aware of the nature and functioning of IBs. The CEB must establish a legal inspection department from legal and banking experts to ensure that the integrity of the legal aspects in the work of Islamic banks are in accordance with the Islamic Sharia.

The CBE should also provide the means to allow Islamic banks to benefit from the central bank's function as LOLR, without resorting to interest by lending the Islamic Bank when it needs liquidity – a loan without interest (Qard Hassan), in exchange for borrowing from IBs with the same value and duration later without interest.

According to the study, the following hypotheses were accepted:

- There is a negative relationship between the current legal reserve policy and Islamic bank performance.
- There is a negative relationship between the credit ceiling and Islamic bank performance.
- There is a negative relationship between the current bank examination system and Islamic bank performance.

The research also rejected the remaining hypotheses:

- There is a negative relationship between the current liquidity limit and Islamic bank performance.
- There is a negative relationship between the current capital adequacy policy and Islamic bank performance.
- There is a negative relationship between the current discount rate and Islamic bank performance.
- There is a negative relationship between the financial policy of lending by interest rate as the last resort for liquidity and Islamic bank performance.
- There is a negative relationship between the ban on dealing in moveable and immoveable assets and Islamic bank performance.
- There is a negative relationship between the current open market operations and Islamic bank performance.

According to the literature, it was found that the supervisory and financing tools applied by the CBE on the IBs do not agree with their current status and nature of work. Among these are the legal reserve policy, cash liquidity, credit ceiling, discount rate, open market, capital adequacy standard, and the prohibition of dealing in fixed assets, data inspection, and lending by interest rate as the last resort – which is an impediment to its activities and investment objectives. However the results contradict these points, which may be due to the multi-collinearity that was found among the variables and the fact that some highly significant variables weakened the effect of other variables.

After reading this statement, please answer the following questions:

1. To what extent to you agree with the above statement?

2. Do you think the proposed changes are appropriate? Would you please illustrate?

3. Do you have any further comments or suggestions to be added? How do you think the above amendments could be enhanced?

4. To what extent do you think that the performance of IBs in Egypt would change if the CBE were to apply these amendments?

8.2 The Participants' Opinions

Regarding the first question, the first and third participants totally agreed with the proposed amendments included in the report, while the second participant said, "*I agree to your report to a certain extent, not fully".*

For the second question, the first and third participants stated that all the included amendments are attainable and will have a positive impact on IBs' performance. The first one said, *"That the Islamic banks have addressed the Central Bank on changing the Banking Law in relation to the supervision of Islamic banking activities to help them, providing banking products in accordance with the Islamic Sharia. To achieve the principles of disclosure, transparency and market discipline and to meet the requirements of Basel III."* He added that, *"The Central Bank needs to amend Article (5) of Article (60) of Law No. (88) for the year 2003, which prohibits banks from dealing in real estate or movable assets by buying, selling or barter. This as to be adjusted Islamic banks as part of their work is buying and selling assets, therefore they must be allowed to deal in real estate and movable assets".* The third participant

stated, *"Keeping in mind that the central bank is committed to international agreements such as the Basel, these agreements impose some laws".*

Regarding the legal reserve, the third participant suggested that the CBE could apply the following to the IBs: *"It could apply full reserve ratio to current accounts as in conventional banks. It could exempt investment deposits from applying to them reserve ratio. It can also relate the cash reserve ratio in a reduced manner to savings deposits and other public investment and the degree of reduction increases as liquidity problems arise"*

The first participant said, "*Both Islamic banks and conventional banks have deposits with the central bank of Egypt. The central bank pays interest to conventional banks, while Islamic banks have to sacrifice this income*". The third participant stated, "*When the central bank does his role as lender of the last resort, he grants the loan on interest basis. There have not been many reported cases where Islamic banks had liquidity problems. However, it occurred that an IB needed to borrow money from the CBE. The central bank refused to lend the IB without imposing interest rate. So, the IB borrowed the money from the central bank with interest. The IB had to obtain a Fatawa from its religious board to consider this as darurah (urgent need)*". Furthermore, he added, *"This give a competitive advantage to conventional bank*s *over IBs, thus affect its performance. The CBE could offer IBs interest free loans when needed and IBs are not to receive interest on the deposits kept with the CBE"*.

The second participant said, *"In Egypt, IBs cannot participate in open market operations because of the interest imposed on the securities being bought and sold. This is against the core of IBs' operations. Thus, Islamic banks are constrained by the fact*

that financial assets which could be liquidated quickly are unavailable". He suggested that, *"The CBE can offer alternatives applicable to IBs nature. This could be in the form of Participation Certificates, Investment Certificates, Muqaradah Bonds. This will help in developing secondary market for Islamic banks that provides financial assets for IBs which could be liquidated quickly when necessary".*

He also stated, *"The CBE needs to have a special department to monitor IBs' operations. This department should understand the nature of IBs and control the banks accordingly. For example, when IBs uses mudarabah or musharakah financing whose nature is unlike interest based financing. Mudarabah and musharakah are considered to be ongoing activities and the participation of Islamic banks goes as long as the project operates"*. He highlighted that, *"The Islamic bank needs to have separate approval for each stage of the same musharakah operation. This happens because there is little understanding of the different financing techniques used by Islamic banks"*. Therefore, he suggested, *"The CBE should help in developing the Islamic banking sector in Egypt. The CBE should develop different regulation to IBs and to offer them some facilities consistent with their interest free nature."*

Regarding the third question, the first participant's response was as follows: "*No more to be added, but the fact that there are sections operating in Islamic banks that are not influenced by the laws of the Central Bank, such as the Department of Documentary credits. It offers good and speedy service. As of this, Islamic banks may have a competitive edge. Simply because it attracts customers who want to work in accordance with sharia. We can say that there is no difference in the service or the cost provided by IBs versus conventional banks, the only difference in favour of conventional*

banks is when the client needs to discount the LC future value which conventional banks allow to make with a discount rate while the IB will not make it".

The second one said, *"I recommend to make a separate department in the CB to supervise the IB and the department should be aware of Sharia and the nature of IBs, also that CB allow the IB to finance the customers who are financially troubled"*. Also, the third participant added that, *"I recommend that CB exempt the IB from the procedures of financially troubled customers as the rules oblige the IB to make a block form for any staggered customer after 90 days and to start legal actions against him and after 180 days and the IB should transfer it to bad debt. Meanwhile the relation between the IB and its customer should be built on giving extension for the staggered customer as the Islamic Sharia encourage that"*.

Regarding the third and last question, the three of them agreed that by changing the current regulations, the IBs' performance will positively change and their operations will work more smoothly.

Chapter 9: Conclusion and Recommendations

9.1 Introduction

This chapter presents the research's contribution to literature and practice. It also provides potential opportunities and recommendations for future research in addition to the limitations of this study and the conclusion.

9.2 Overview of the Research Study

The research aim was to develop a regression model to identify aspects of the CBE's regulations that have the most impact on IB performance and, therefore, are in most need of modification.

The research targeted the following hypotheses:

H1: There is a negative relationship between the current legal reserve policy and Islamic bank performance.

H2: There is a negative relationship between the current bank examination system and Islamic bank performance.

H3: There is a negative relationship between the credit ceiling and Islamic bank performance.

H4: There is a negative relationship between the current liquidity limit and Islamic bank performance.

H5: There is a negative relationship between the current capital adequacy policy and Islamic bank performance.

H6: There is a negative relationship between the current discount rate and Islamic bank performance.

H7: There is a negative relationship between the financial policy of lending by interest rate as the last resort for liquidity and Islamic bank performance.

H8: There is a negative relationship between the ban on dealing in moveable and immoveable assets and Islamic bank performance.

H9: There is a negative relationship between the current open market operations and Islamic bank performance.

However, before running the regression model, the following analysis was performed: First, CAMEL ratios were checked to test for any differences between the conventional banks and IBs operating in Egypt and between IBs operating in Egypt and other countries (Bahrain, Malysia and Indonesia) using regression analysis. Then, the questionnaire of the study was analysed. A reliability analysis was performed and the descriptive statistics presented before answering the hypotheses.

In Egypt, central banks use the same regulations for both conventional and IBs. According to the relative importance and the regression models, it can be concluded that the performance of IBs is less due to the absence of the above-mentioned factors, so the following hypotheses were accepted:

H1: There is a negative relationship between the current legal reserve policy and Islamic bank performance.

H2: There is a negative relationship between the current bank examination system and Islamic bank performance.

H3: There is a negative relationship between the credit ceiling and Islamic bank performance.

After interviewing the expert panel, it can be argued that all hypotheses were accepted. All the points mentioned in the expert panel report were important with regard to the performance of IBs. Therefore, it could be concluded that the CBE should amend the current legal reserve policy, current bank examination system, credit ceiling set for IBs and current open market operations, followed by the current liquidity limit, current capital adequacy policy, current discount rate. The CBE should also lift the ban on dealing with moveable and immoveable assets and the financial policy of lending by interest rate as the last resort for liquidity.

Given the CBE justification in implementing the legal reserve policy, it was found that they do not match the nature of funds in IBs because they differ from the nature of deposits in conventional banks. These funds were provided by the depositors to the IB for the purposes of investing them according to the actual results of the investment and on a PLS system. Hence, there is no obligation on the IB to return them in full to the depositors. On the other hand, the IB uses these funds in real investments and does not resort to monetary lending, which means that the ability of Islamic banks to create money and increase monetary supply is very limited when compared to the situation of financing loans in conventional banks. The legal reserve policy leads to the disruption of part of IBs' resources and reduces their investments of full money, which adversely affects the return distributed to the owners of the investment accounts, hence showing a lower profit for IBs than what it should be (Chapra, 1970).

This policy also favours conventional banks to IBs. Traditional banks benefit from offering treasury bonds to extend the legal reserve, while IBs do not deal with treasury bills because they are considered to be forbidden Riba. The CBE has a set maximum limit for one customer and its associated parties not to exceed 30% of the bank's capital base. In principle, the policy of credit ceilings if they are regulatory for the credit process are seriously considered, in order to achieve economic stability and diversification of the risks. The origin is not an issue for IBs, but must be a policy exception to the original and take into account the nature of Islamic banks based on investment and not trading in debt and money like conventional banks. As for the restrictions on mortgage financing, contribution to companies, and leasing finance, these restrictions in their current situation are not compatible with IBs and represent an impediment to their investment activities.

These activities are considered a major factor in the employment of these banks for their money through real investment operations benefit the national economy. If it is necessary to put in place regulatory provisions for the purpose of influencing specific sectors of the national economy or diversifying the risks, these restrictions should have a higher ceiling than what is prescribed for traditional banks and allow IBs to finance leasing themselves without limiting the contribution to companies specialised in this activity.

This role of the CBE represents an important tool of supervision of banks to ensure the safety of its financial position, and to preserve the funds of depositors. This role requires the CBE to be aware of the nature and the functioning of IBs, and the CBE should be concerned with the Sharia supervision of the Islamic banking business as much as with normal banking supervision, through the establishment of a legitimate

inspection department of legal and banking experts to ensure the integrity and legitimacy in the work of IBs (stated in law 88 of 2003).

According to the literature, the supervisory and financing tools applied by the CBE do not agree with the current status and nature of work of IBs. Among the issues are the legal reserve policy, cash liquidity, credit ceiling, discount rate, open market, capital adequacy standard, and the prohibition of dealing in fixed assets, data inspection, and lending by interest rate as the last resort – an impediment to its activities and investment objectives. But the results contradict these points. These contradictions maybe due to the multi-collinearity that was found among the variables, and the fact that some highly significant variables weakened the effect of other variables.

The results found was in accordance to the data gathered form the inerviews. According to the results generated from the questionnaire and the secondary data, conventional banks seemed to be more efficient than IBs, whether in exploiting the available resources or in mixing these resources optimally. The reason why conventional banks outperform IBs in Egypt can be traced back to a bunch of reasons: the regulations imposed by the CBE that don't comply with IBs' operations, the existence of a sharia supervisory which leads to the double layer governance, and customers' lack of knowledge about IBs' operations. The literature supports these findings. Abdelsalam et al. (2016) tested how organisational religiosity affects the earnings quality of banks operating in the Middle East and North African region. The study deduced that the earning quality in IBs was less than that of the conventional banks, due to the fact that they used more conservative accounting policies.

Overall, the performance of IBs is lower than conventional banks in Egypt. As mentioned before, this contradicts many studies that have been conducted before. IBs in Egypt were in a conflicting position, forced to compete in the same market with conventional banks. This makes this research a prominent step to answer many questions regarding the present situations of the Islamic banking system in Egypt.

The relative importance of the modest number of IBs in the structure of the Egyptian banking sector is a good indicator of its numerical proportion in the face of the total number of banks in the Egyptian banking system. The relationship between the CBE and IBs in Egypt have also been identified as well as the validity of the regulatory and financing tools of the CBE applied to these banks. The lack of distinction of the CBE regulations between the two kinds of banks in Egypt, even though there exist separate regulations for public sector banks is noteworthy.

It was also found that the supervisory and financing tools applied by the CBE for IBs do not agree with their current status and nature of the work. Among these are the legal reserve policy, cash liquidity, credit ceiling, discount rate, open market, capital adequacy standard, and prohibition on the dealing of fixed assets, data, and inspection and LOLR, which is an impediment to its activities and investment objectives.

Islamic banking faces a challenging environment, perhaps the most important of which is defining their relationship with central banks, especially since no one can play the LOLR role for it is inconsistent with Islamic Sharia. To protect the emerging Islamic banking from the risks, there must be coordinated efforts between the specialists in organising and arranging the field of business development, and quality control and measurement in order for this emerging sector to be successful.

There is a fundamental difference between the approach and methods of work of the central bank with traditional banks and the approach and methods of IBs, as this difference affects the activity of these banks. There are also suggested solutions for eliminating this disparity. Thus, the application of traditional tools and methods used by the central bank to control traditional banks is a hindrance to the work of IBs, thereby negatively affecting their performance, which is the essence of the problem addressed by the present research.

9.3 Contribution to Literature

The literature review showed that a number of studies were conducted in different countries on the determinants of profitability in IBs. As far as the researcher's knowledge, a few related studies have been commenced to measure the effect of central bank regulations on IBs' performance in Egypt or any other country. Thus, the main purpose of this research was to fill the literature gap in this area.

Additionally, the aim of this research is to make a contribution to the Islamic banking literature. Although there is now considerable literature on the effects of different variables on the performance of IBs, there are few studies on the effect of central bank regulations, especially in Egypt. Egypt was the first country to implement the Islamic banking system; yet few studies have considered the CBE's measures to develop IBs in Egypt.

The conceptual framework employed in this research was distinctively different from that of traditional research studies conducted in the field of Islamic banking and finance. From a conceptual point of view, determining the different CBE regulations and their effect on the performance of IBs measured by CAMEL in comparison to

conventional banks genuinely adds to the existing literature as well as empirical research in Islamic banking in general and in Egypt in particular. Eventually, this research may inspire further investigation on the role of the CBE in developing the performance of IBs in Egypt.

9.4 Recommendations

Based on an analysis of the existing banking supervision with regard to the research hypotheses, it was found that the current banking supervision regulations do not align with the IB operations. The analysis showed that there is a real need for the CBE to reformulate its relationship with IBs, implementing measures that are different from those applied for conventional banks, because of the difference in nature between the two banking systems.

The CBE should review and study carefully the current banking legislation to minimise the problems faced by IBs. A special section of the banking legislation should be introduced to supervise and regulate IBs differently from conventional banks, showing their objectives, special characteristics, special nature, their financial investments and the different products they can offer.

This research shows that the creation of a separate department in the CBE specialised in the supervision, inspection and follow-up on IBs and similar economic institutions is imperative. Employees in this department should be competent HR professionals, well trained with a wide knowledge of and background on Sharia and the nature and operation of IBs, so that inspection and follow-up are conducted smoothly and beneficially to all parties.

Reviewing the Reserve Policy, it could be applied to current accounts and fully exclude long-term investments. For general or savings deposits, which can be withdrawn from them, reserve ratio could be applied but at reduced rates.

Both depositors (owners of capital) and investors (banks) should finance a central fund managed by the CBE to protect investment deposits on a co-operative basis; this would help cover the probability of loss due to any expected violation or malpractice. The calculation of the liquidity ratio has to be consistent with the nature of both assets and liabilities used by IBs. It should also be adequate to IBs' functions and operations.

The CBE should contact other governmental parties such as the Ministry of Finance to amend part of their laws and regulations (especially taxes and registration laws) when dealing with IBs. For example, IBs must pay registration fees twice when purchasing real estate or transferring property ownership to its customers. Conventional banks do not face the same problem as they do not apply such procedures.

There also has to be a reconsideration of the LOLR function. This core function is completely disrupted when dealing with IBs, because IBs cannot borrow with interest. Hence, a suitable tool must be developed to address this serious disruption. It is proposed that the CBE fund any emergency liquidity crises faced by IBs using mudarabah. It can allocate a percentage cash reserve corresponding to investment accounts to meet such emergency liquidity requirements.

In light of this practical study as well as results from the literature, the researcher recommends the following:

1. Develop new financing and investment products for Islamic banking in line with Islamic Sharia to meet the needs of customers.
2. Seek to reduce the risks of speculation and musharakah by issuing some laws that would be regulated by the Central Bank of Egypt.
3. Work to raise the efficiency of bank employees and their skills in applying various investment methods.
4. Educate IB stakeholders on the various Islamic investment methods.
5. Reconsider the modalities of central banks' dealings with IBs, particularly with regard to drawing up credit policies and forming financing and investment portfolios.
6. Facilitate CBE-issued benchmark indicators for the Islamic banking industry.

Other proposals that could add to the smooth operation of IBs in Egypt are as follows:

1. Graduate Scholarship Program: The Graduate Scholarship Program would provide graduates with training in Islamic finance with practical experience in Islamic financial institutions. Each year graduates are to be selected to enrol in a diploma program for Banking and Financial Studies. Participants could learn: (1) Islamic commercial jurisprudence, (2) Islamic banking, (3) Treasury services and Islamic capital markets, (4) Islamic accounting, (5) Islamic insurance and (6) Banking services law and Islamic financial contracts.
2. The Sharia Supervisor Development Program: This aims to provide basic training in Islamic and conventional finance and banking for the internal Sharia controllers in Islamic financial institutions and to fill any knowledge gaps they may have. This program can (1) Improve the understanding of the financial

statements of Islamic financial institutions; (2) teach risk management in Islamic financial institutions; (3) provide Sharia review and corporate governance in Islamic financial institutions; and (4) conduct the Sharia audit and compliance with Islamic financial institutions.

3. Roundtable Discussions: With regard to topics of great importance to the Islamic banking industry, round table discussions should be periodically held so that industry professionals, representatives from the regulatory body and Sharia scholars can meet for in-depth discussions. These discussions can be followed by concrete actions by the CBE or IBs.
4. Training: Programs concerning 'Islamic banking ethics for bankers' can help enhance the ethical foundations of Islamic banking.
5. Corporate governance workshop: A workshop on corporate governance for CEOs and the boards of directors of Islamic financial institutions can be provided. In view of the new corporate governance charter issued by the Central Bank, there is an urgent need to improve the corporate governance standards of Islamic financial institutions.

We can summarise the above section as follows: It is important to expand the channels of dialogue between officials from both sides, i.e., IBs and CBE by events, such as holding forums and holding local and international seminars. This would narrow the gap in thinking between the experts and remove any ambiguity and clarify many of the special and distinct concepts of the nature of IBs' work.

It is also necessary for CBE to develop supervisory methods that take into account the nature of Islamic banking, which is based on the Sharia law, to create alternatives that help confront the problems facing these banks. Finally, it is imperative

to work out qualitative programs to familiarise clients and investors with the nature of IBs' work and the Sharia controls for their transactions as well as to demonstrate their economic importance at the level of the individual and the economy as a whole. Thus, all parties in the deal should be completely certain of the legitimacy of Islamic banking.

9.5 Contribution to Practice

This research can help researchers, policymakers, governments and regulators better comprehend the role of Islamic banking and finance and its actual conduct and behaviour in Egypt in comparison to conventional banks.

This study involved a detailed investigation of the determinants of IBs' performance in relation to the current central bank regulations in Egypt. Given this context, the study also provides some suggestions for the CBE to facilitate the development of the Islamic banking sector in Egypt.

Performance evaluations of Islamic and conventional banks are essential for the regulatory purposes, considering the rising competition and the continuous innovation in providing financial services. Thus, this study can help IBs assess the outcomes of their performance and the impact of the current CBE regulations.

Further, the results of this study show that the performance of conventional banks, in general, is better than that of IBs. This evidences the need for IBs to search for new tools and approaches to boost their performance such that they keep pace with conventional banks and, consequently, increase their performance.

Furthermore, bank regulators and policymakers can use this study to monitor the banks' performance to identify banks experiencing severe problems to ensure the safety and soundness of the Islamic banking system and maintain public confidence. The

results of this research suggest that policymakers in Egypt, an Islamic country, should focus more on formulating sound and appropriate policies that enable the IBs to differentiate their services from conventional banks' services and, thus, contribute more to economic growth.

In addition, there is a legal challenge in Egypt concerning Islamic banking and finance. The legal aspects in Islamic finance represent an important bridge between the governing Sharia and the actual practice of Islamic finance. The legal system is supposed to regulate the Islamic banking business, besides imposing control and supervision on the affairs of the IBs. This will eventually help in development and introduction of new financial products to cope with the rapid development of Islamic banking and finance worldwide.

Despite the rapid pace of interest and growth in Islamic banking worldwide, this industry in Egypt is still governed by a regulatory and supervisory framework developed and designed specifically for conventional finance. The industry in Egypt still operates in an environment where legal and tax rules, financial infrastructure and access to financial resources and central bank liquidity do not appropriately consider the special nature of Islamic finance. Hence, this study emphasises the urge to create a regulatory and supervisory framework that considers the unique nature of Islamic banking through the establishment of specialised Islamic standard-setting bodies.

The most important finding of this research is that IBs' operations differ from those of conventional banks. This signifies that many of the tools and techniques developed to regulate conventional banking are not suitable for the Islamic banking system. Furthermore, future research is essential to discover alternative methods that

could be applied to Islamic banking to enhance their performance and increase their likeliness for more customers in the Egyptian market.

It is worth noting that the results of this study, though applied on an Islamic country, can be used as a basis for comparison in non-Muslim countries. Although Egypt is classified as a Muslim country, there is no special regulative framework to govern and manage IBs, which is also the case in many non-Muslim countries, making these results valid for comparison and generalisation.

Finally, this research reveals that banks' performance vary according to the nature of their operations whether they are Islamic or conventional. Hence, this study contributes towards paving the way for further empirical studies to investigate the effect of central banks' regulations on the nature of banks' operations, whether they be Islamic or conventional, and how that affects their performance.

9.6 Limitations

Any research study will encounter some limitations that may weaken the validity of the results. Yet, if the researcher is able to identify these limitations, their adverse effects can be minimised.

As with most of the empirical studies, the present study has certain limitations that should be taken into consideration. These limitations represent constraints on the findings of this study and the generalisation of its results.

First, the sample size in some areas of this study may be judged to be small. This is because this study assessed the performance of the only three IBs that work in Egypt from 2015 to 2019. Future studies should use a larger sample by considering a longer

operational period or obtaining access to the financial statements of Islamic windows in conventional banks; unfortunately, the researcher could not access this data.

Second, the study used some of the CAMEL ratios to measure banking performance. More ratios could be used to form a complete image of the effect on performance.

Third, the study totally depended on financial measures to evaluate the performance of Islamic and conventional banks. Many other measures could be used to assess the performance of banks. Other non-financial measures could be used to perform a qualitative analysis and ultimately yield further results for a more comprehensive conclusion about the performance of banks.

fourth, it is worth noting that the factors related to the political and security instabilities in Egypt, starting from the January 25th revolution in 2011, were major impediments to this research. The conditions and circumstances at the time negatively affected the continuation and timely completion of this research. This period was characterised by many sit-ins, upheavals and strikes that hindered the progress of the research.

fifth, it should be mentioned that Egypt is a distinct case compared to other Muslim countries when it comes to Islamic banking and finance. According to Warde (2000), Egypt is one of the few Muslim countries where the top religious establishment did accept the interest concept in the banking system. The Egyptian government used its different institutions including Al-Azahar and Dar al-Iftaa. This attitude of the Egyptian government towards any Islamic financial institution is due to its suspicion that the

Islamic financial institution is linked to Islamic groups especially after the crisis with Islamic money management companies in the 1980s.

Finally, the practices of Egyptian IBs show a deviation from their Islamic and developmental principles. Such divergence could be justified by the restrictions imposed by the governmental policies and regulations, which resulted in a degree of similarity between the operations of Islamic and conventional banks to maximise their profitability level.

9.7 Future Research

Future research is necessary to remedy shortcomings and build on the findings of the present research as well as to generalise the results by investigating their consistency and reliability.

It is recommended that future researches ensure a wider scope of study. As this research is confined only to the three IBs working in Egypt, it would be prudent to carry out the same research by adding, to the existing sample, the Islamic windows working as branches of conventional banks in Egypt; this increased sample size would add to the inferring strength of the research.

Another possible extension to this study is the inclusion of more dependent and independent variables. Dependent variables representing the performance measures could include variables other than the ones used in this study, such as economic and market-based performance measures. Economic measures of performance include the economic value added (EVA) and risk-adjusted return on capital (RAROC), and the market-based performance measures include the total share return (TSR) and the price–earnings ratio (P/E).

Due to the domination of Islam in Egypt, religion is considered one of the main aspects that call for future research, particularly its role in influencing the behaviour of Islamic and conventional banks' customers, which will ultimately affect those banks profitability.

The present study revealed that, in general, the performance of conventional banks is significantly better than IBs. Consequently, further research is needed to explore other reasons behind the wide gap in their performance. Such research will call for the inclusion of the effect of customers' perceptions and the skill of the IBs employees.

Any limitation of the current research may be considered a potential area for future research. The political turbulence and its effect on the economic and financial conditions in Egypt could be investigated to analyse the response of the IBs to those conditions and its effects on their performance in comparison to conventional banks, especially after the revolution in 2011.

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Appendix

Appendix 1: Questionnaire

Ethics Committee Application Reference Number: **2015S0060**

The aim of this research is to develop a model of the impact of the current Central Bank regulations on the performance of Islamic banks in Egypt and to identify enhancements to the regulations which would improve the performance.

You fit the inclusion criteria for participants in this survey as a manager/senior employee in an Egyptian Islamic bank. Your knowledge and experience of the daily challenges that you face due to the current Central bank regulations will assist me in exploring these challenges and how they impact on the performance of Islamic banks.

Your completion and submission of the form will be taken as voluntary informed consent.

I am not expecting any risks for participants, as the information needed from you is not sensitive and it will not affect your position. Moreover, you have all the right to withdraw from the study at any point in time if you do not feel comfortable.

All the information gathered from you will be stored securely on a password-protected flash memory stick. This will be kept in a safe place and your data will be anonymized using a code so the information you provide cannot be traced back to you.

Many thanks in anticipation of your participation in this study.

For further information, you can contact me

Aliaa Tammam

Teaching assistant

Arab Academy for Science and Technology

Telephone number: 01001214101

e-mail: aliaa_tammam@yahoo.com

1. Educational qualification:

Bachelor Degree	
Postgraduate	

(Master or PhD)	
Professional Certification	
Others	

2. How long have you worked with an Islamic bank?

1-4 years	
5-9 years	
10-14 years	
15-20 years	
More than 20 years	

3. Which one of the following describes your primary role?

Management Board	
Accountant	
Shariah Supervisory Board	
Employee	

4. What type of financial system does Egypt have?

Only conventional financial system	
Only Islamic financial system	
Both Islamic and conventional systems	

5. Does Egypt have any plans to develop Islamic bank sector?

Yes	
No	

If 'Yes', what is the status of the developmental plans in the next 5 years?

Development is progressing in accordance with the plans	
Development has not been progressing in accordance with the plans	
Unable to make any development	

6. Does the Central Bank of Egypt has a separate department, which focuses on the development of the Islamic bank sector?

Yes	
No	

7. What are the three most major obstacles you perceive in developing Islamic banking in Egypt?

Legal & Regulatory	
Shariah	
Tax neutrality & other incentives	
Secondary Market	
Shortage of skills and expertise	
Lack of awareness	
Others (please specify):	

8. How were Islamic banks initially developed in Egypt?

By modifying the national strategic plan regarding capital market	
By presenting a governmental legislation to form Islamic bank	
Demand and supply of Islamic bank products & services (market forces)	
Others (please specify):	

9. Do the legal framework governing Islamic banks products and services differ from that of conventional banks?

Yes	
No	

If the answer is "Yes", please briefly explain:

10. Which of the following Islamic banking products are most commonly used in the bank for which you work?

Sukuk (Islamic Bond)	
Murabha	
Musharaka	
Mudarabaa	
Mutual funds	
Others (please specify): …… ……	

11. To what extent do Islamic banks depend on each of the following deposit categories

Deposits	Very important	Important	Average	Unimportant	Unimportant at all
Short-term deposits (less than 1 year)					
Intermediate-term deposits (1-5 years)					
Long-term deposits (more than 5 years)					

12. Islamic banks depend on each of the following types of investments as a source of income?

Investments	Very important	Important	Average	Unimportant	Unimportant at all
Short-term investments (less than 1 year)					

Intermediate-term investments (1-5 years)					
Long-term investments (more than 5 years)					

13. What is the relative importance of each of the following factors in hindering performance of Islamic banks?

Factors	Very important	Important	Average	Unimportant	Unimportant at all
Factors related to customers					
Factors related to Central Bank					

14. According to factors related to customers, what is the relative importance of each of the following factors in affecting the performance of Islamic banks?

Factors	Very important	Important	Average	Unimportant	Unimportant at all
Lack of confidence about the Islamic bank's mission and their in investment policies					
Their desire to obtain return that is competitive with the interest rate offered by conventional banks					
Their need for variety of services offered by the Islamic banks					

The competition with traditional banks and in attracting potential customers					
Their mimicking of the traditional banks in their system of receiving deposits in terms of time period					

15. According to factors related to the Central Bank, what is the relative importance of each of the following factors in affecting the performance of Islamic banks?

Factors	Very important	Important	Average	Unimportant	Unimportant at all
The policy of legal reserve.					
The policy of restriction of the sale of assets.					
The financial policy, which is built on lending by interest rate as the last resort for liquidity					
Bank examination system					
Credit ceiling					
Discount rate					
Liquidity limit					
Capital adequacy					
Open Market operations					

16. What is the relative importance for each of the following in determining the performance of Islamic banks?

Determinants	Very important	Important	Average	Unimportant	Unimportant at all
Products offered					
Leverage (% of deposits and borrowed money/ total assets)					
Types of loans					
Short-term funding					
Operating costs					
Cost of raising fund					
Types of security investment					
Bank size(Asset)					
Capital management					
Liquidity					
Operating policies					
Others:					

17. In your opinion, Islamic Banks:

Opinion	Strongly	Agree	neutral	disagree	Strongly

	agree				disagree
Provide enough retail products					
Operate efficiently and profitably					

18. What is the effect of each of the following on providing various Islamic banks products:

Opinion	Very important	Important	Average	Unimportant	Unimportant at all
Bank's policy					
Customers' needs					
Central bank's regulations					

19. To what extent do your banks apply the following investment methods?

Investment methods	80%-100%	60%-80%	50%-60	30%-50%	Less than 30%
Morabaha					
Islamic Bank loans					
El selm					
Debit current account					
El-esstesnaa					
El modarbah					
Marketable securities					
Investment fund					
El mosharkah					
Direct investment					

Sokouk					
Others:					

20. What do you think is an acceptable level of return on equity (ROE) for a bank?

5-9 %	
10-14 %	
15-19 %	
20-25 %	
Over 25%	

21. What do you think is an acceptable level of return on asset (ROA) for a bank?

0.5-1 %	
2-3 %	
4-6 %	
7-10 %	
Over 10%	

22. In your opinion, do you think that your bank achieves the acceptable level of ROE and ROA?

Opinion	Strongly agree	agree	neutral	disagree	Strongly disagree
ROE					
ROA					

23. How to you perceive your bank's general performance as compared to the conventional banks working in Egypt?

Opinion	Very strong	Strong	Neutral	Weak	Very weak
Performance					

الاستبيان:

وتحديد مصر في الاسلاميه أداءالبنوك علي المركزي للبنك الحالية االقوانين لتاثير نموذج وضع هو البحث هذا من الهدف
الأداء تحسين شانها من التي الانظمه في التحسينات.
كمدير/موظف في الاستقصائية الدراسة هذه في للمشاركين الادراج معايير تناسب أنت
لوائح و قوانين بسبب تواجهها التي اليومية التحديات في وخبرتك معرفتك .المصري الإسلامي البنك
الاسلاميه أداءالبنوك علي تاثيرها وكيفيه التحديات هذه استكشاف في ستساعدني الحالية المركزي البنك.
مستنيرة طوعية موافقه بمثابه للنموذج وتقديمك إتمامك اعتبار سيتم.
لن وانها حساسة ليست منك المطلوبة المعلومات ان كما ، للمشاركين مخاطر اي أتوقع لا انا
بالراحة تشعر لا كنت إذا اي وقت في الدراسة من الانسحاب في الحق كل لديك ، ذلك علي وعلاوة .موقفكم علي تؤثر.
محمية فلاش ذاكره علي أمن بشكل منك جمعها تم التي المعلومات جميع تخزين سيتم
باستخدام بك الخاصة البيانات إخفاء سيتم أمن و مكان في بها الاحتفاظ سيتم .مرور بكلمه
تقدمها التي المعلومات تتبع يمكن لا بحيث رمز .
الدراسة هذه في لمشاركتكم تحسبا جزيلا شكرا.
بي الاتصال يمكنك ، المعلومات من لمزيد

علياء تمام

مدرس مساعد بالاكاديمية العربية للعلوم والتكنواوجيا

ت: ٠١٠٠١٢١٤١٠١

بريد الكتروني:aliaa_tammam@yahoo.com

1. المؤهل الدراسي

درجه البكالوريوس	
الدراسات العليا (ماجستير أو دكتوراه)	
شهادة مهنية	
اخرى	

2. منذ متى وأنت تعمل مع بنك إسلامي؟

١-٤ سنين	
٥-٩ سنين	
١٠-١٤ سنين	

١٥-٢٠ سنين	
اكثر من ٢٠ سنه	

3. اي واحد مما يلي يصف دورك الأساسي في البنك ؟

مجلس الاداره	
محاسب	
هيئه الرقابة الشرعية	
موظف	

4. ما هو نوع النظام المالي الذي تملكه مصر؟

النظام المالي التقليدي فقط	
النظام المالي الإسلامي فقط	
الانظمه الاسلاميه والتقليدية	

5. هل لدي مصر اي خطط لتطوير قطاع البنوك الاسلاميه

نعم	
لا	

إذا كانت "نعم" ، ما هي حاله الخطط التنموية في السنوات الخمس القادمة ؟

تتقدم التنمية وفقا لخطط	
لم تحرز التنمية تقدما وفقا لخطط	
غير قادر علي اجراء اي تطوير	

6. هل لدي البنك المركزي المصري أداره مستقله تركز علي تطوير قطاع البنوك الاسلاميه

نعم	
لا	

7. ما هي العقبات الثلاث الرئيسية التي تتصورها في تطوير المصارف الاسلاميه في مصر؟

القانونية والتنظيمية	
الشريعه	
الحياد الضريبي والحوافز الأخرى	
السوق الثانوي	
نقص المهارات والخبرات	
نقص الوعي	
اخرى	

8. كيف تم تطوير البنوك الاسلاميه في البداية في مصر؟

عن طريق تعديل الخطة الاستراتيجية الوطنية المتعلقة بسوق راس المال	
من خلال تقديم تشريع حكومي لتشكيل البنك الإسلامي	
عن طريق قوة الطلب والعرض على منتجات وخدمات البنك الإسلامي (قوي السوق)	
اخرى	

9. هل الإطار القانوني الذي يحكم منتجات وخدمات البنوك الاسلاميه يختلف عن البنوك التقليدية؟

نعم	
لا	

إذا كان الجواب "نعم" ، يرجى التوضيح بإيجاز:

10. من وجهة نظرك اي من المنتجات المصرفية الاسلاميه التالية هي الأكثر استخداما في البنك الذي تعمل فيه

الصكوك (السندات الاسلاميه)	
المرابحة	
المشاركة	
المضاربة	
صناديق الاستثمار	
اخرى	

11. إلى اي مدي تعتمد البنوك الاسلاميه علي كل فئة من فئات الإيداع التالية

الودائع	مهم جدا	مهم	متوسط	غير مهم	غير مهم علي الإطلاق
الودائع القصيرة الأجل (اقل من سنه واحده)					
الودائع المتوسطة الأجل (١-٥ سنه)					
الودائع الطويلة الأجل (أكثر من ٥ سنوات)					

12. تعتمد البنوك الاسلاميه علي كل نوع من أنواع الاستثمارات التالية كمصدر للدخل

الاستثمارات	مهم جدا	مهم	متوسط	غير مهم	غير مهم على الاطلاق
الاستثمارات القصيرة الأجل (اقل من سنه واحده)					
الاستثمارات المتوسطة الأجل (١-٥ سنه)					
الاستثمارات الطويلة الأجل (أكثر من ٥ سنوات)					

13. ما هي الاهميه النسبية لكل من العوامل التالية في عرقله أداء البنوك الاسلاميه

العوامل	مهم جدا	مهم	متوسط	غير مهم	غير مهم على الاطلاق
العوامل المتعلقة بالعملاء					
العوامل المتعلقة بالبنك المركزي					

14. وفقا للعوامل المتعلقة بالعملاء ، ما هي الاهميه النسبية لكل من العوامل التالية في التاثير علي أداء البنوك الاسلاميه؟

العوامل	مهم جدا	مهم	متوسط	غير مهم	غير مهم على الاطلاق
عدم الثقة بمهمة البنك الإسلامي وسياساته الاستثمارية					
رغبتهم في الحصول علي عائد منافسم مع سعر الفائدة التي تقدمها البنوك التقليدية					
حاجتهم لمجموعه متنوعة من الخدمات التي تقدمها البنوك الاسلاميه					
المنافسة مع البنوك التقليدية وفي جذب العملاء المحتملين					
محاكاة المصارف التقليدية في نظامها لتلقي الودائع من حيث الفترة الزمنيه					

15. وفقا للعوامل المتعلقة بالبنك المركزي ، ما هي الاهميه النسبية لكل من العوامل التالية في التاثير علي أداء البنوك الاسلاميه؟

العوامل	مهم جدا	مهم	متوسط	غير مهم	غير مهم على الاطلاق
سياسة الاحتياط القانوني.					
سياسة تقييد بيع الأصول.					
السياسة المالية المبنية علي الإقراض بسعر الفائدة كملاذ أخير للسيولة					
نظام الفحص البنكي					
السقف الائتماني					
معدل الخصم					
حد السيولة					
كفاية راس المال					
عمليات السوق المفتوحة					

16. ما هي الاهميه النسبية لكل من الإجراءات التالية في تحديد أداء البنوك الاسلاميه؟

الاجراءات	مهم جدا	مهم	متوسط	غير مهم	غير مهم على الاطلاق
المنتجات المعروضة					
الرافعة المالية (% من الودائع والأموال المقترضة/إجمالي الأصول)					
أنواع القروض					
التمويل القصير الأجل					
التكاليف					
تكلفه جمع الأموال					
أنواع الاستثمار الأمني					
حجم البنك (الأصول)					
أداره راس المال					
أداره السيولة					
سياسات التشغيل					
اخرى					

17. في رايك ، البنوك الاسلاميه:

رايك	موافق جدا	موافق	محايد	غير موافق	غير موافق اطلاقا
توفير ما يكفي من منتجات التجزئة					
العمل بكفاءة وبشكل مربح					

18. ما هو تاثير كل من التالي علي توفير مختلف المنتجات المصرفية الاسلاميه:

رايك	مهم جدا	مهم	متوسط	غير مهم	غير مهم على الاطلاق
سياسة البنك					
احتياجات العملاء					
أنظمه البنك المركزي					

19. إلى اي مدي تطبق بنوككم طرق الاستثمار التالية ؟

طرق الاستثمار	80%-100%	60%-80%	50%-60	30%-50%	Less than 30%
المرابحة					
قروض البنك الإسلامي					
السلم					
حساب جاري مدين					
الاستصناع					
المضاربة					
أوراق مالية قابله للتسويق					
صندوق الاستثمار					
المشاركة					
الاستثمار المباشر					
صكوك					
اخرى					

20. ما رايك هو مستوي مقبول من العائد علي راس المال(ROE) للبنك

5-9 %	
10-14 %	
15-19 %	
20-25 %	
Over 25%	

21. ما رايك في مستوي مقبول من العائد علي الأصول (ROA؟ للبنك)

0.5-1 %	
2-3 %	
4-6 %	
7-10 %	
Over 10%	

22. و من العائد ROEفي رايك ، هل تعتقد ان البنك الخاص بك يحقق المستوي المقبول من العائد علي راس المال(ROA علي الأصول) للبنك)

الراي	موافق جدا	موافق	محايد	غير موافق	غير موافق مطلقا
العائد علي راس المال(ROE)					
العائد علي الأصول (ROA)					

23. كيف تتصور الأداء العام للبنك الذي تعمل به بالمقارنة مع البنوك التقليدية العاملة في مصر؟

لراي ا	قوي جدا	قوي	متوسط	ضعيف	ضعيف جدا
اداء البنك					

Appendix 2: Interview

Ethics Committee Application Reference Number: 2015S0022

Participant information sheet

The Role of Central Bank Regulations in Enhancing Islamic Bank Performance in Egypt

Project summary:

The aim of this research is to develop a model of the impact of the current regulations on the performance of Islamic banks in Egypt and identify enhancements to the regulations which would improve the performance.

Why have you been asked to participate?

You considered fitting the sample as you work in Islamic banks of Egypt. Your knowledge and experience of the daily challenges that you face due to the current Central bank regulations will assist me in exploring these challenges and how they impact the Islamic bank's performance.

Project Risks:

I am not expecting any risks, as the information needed from you is not sensitive data and it will not affect your position. Moreover, you have all the right to withdraw from the study at any point in time if you do not feel comfortable.

How your privacy will be protected?

All the information gathered from you will be stored securely in a password protected flash memory stick. This will be destroyed after the study is completed. Your data will be announomized using a code so the info you provide cannot be traced to you.

For further information, you can contact me

Aliaa Tammam

Teacher assistant

Arab Academy for Science and technology

Telephone number: 01001214101

e-mail: aliaa_tammam@yahoo.com

Exemplar Consent Form

(Form to be on headed paper)

PARTICIPANT CONSENT FORM

Reference Number: 2015S0022

Participant name or Study ID Number:

Title of Project:

Name of Researcher:

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at an time, without giving any reason. ☐

3. I agree to take part in the above study. ☐

4. I agree to the interview being audio recorded ☐

5. I agree to the use of anonymised quotes in publications ☐

_____ _____

Signature of Participant

Date

_____ _____

Name of person taking consent Date

_____

Signature of person taking consent

** When completed, 1 copy for participant & 1 copy for researcher site file*

1. What comments would you make about the level of adoption of Islamic banking in Egypt?
2. Do you know if there is a separate unit/division/group within the central bank, to support the development he development of Islamic banking in Egypt? How does this affect your daily operations?
3. What are the three (3) major obstacles you have experienced in relation to Islamic banking?
4. How does the legal framework governing Islamic banking products and services differs from that applied to conventional banks?
5. What laws have been passed/amended to facilitate the development of Islamic banking in Egypt in the last 5 years? (e.g. land law, tax law, trust law).

6. Are there any tax benefits (tax neutrality, incentives, deductions, exemptions) to encourage the development of Islamic banking in Egypt? How this affect your operations?

7. If there any tax benefits for Islamic banking implemented, please briefly explain the tax benefits for products & services you offer?

8. Does the central bank have a Shariah governance framework for Islamic banking?

9. What are the policies that the central bank apply to fit Shariah rules in Islamic banking?

Appendix 3: Expert Panel

PARTICIPANT CONSENT FORM

Reference Number: **2015S0079**

Participant name or Study ID Number:

Title of Project: The Role of Central Bank Regulations in Enhancing Islamic Bank Performance in Egypt

Name of Researcher: Aliaa Tammam

Participant to complete this section:

Please initial each box.

1. I confirm that I have read and understand the participant information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. ☐

3. I agree to being interviewed in the above study. ☐

6. I agree to the interview being audio recorded. ☐

7. I agree to the use of anonymised quotes from my interview being used in publications based on analysis of my interview. ☐

_____ _____

Signature of Participant

Date

_____ _____

Name of person taking consent Date

_____

Signature of person taking consent

** When completed, 1 copy for participant & 1 copy for researcher site file*

Ethics Committee Application Reference Number: **2015S0079**

Participant information sheet

The Role of Central Bank Regulations in Enhancing Islamic Bank Performance in Egypt

Project summary:

The aim of this research is to develop a model of the impact of the current regulations on the performance of Islamic banks in Egypt and identify enhancements to the regulations, which would improve Islamic Bank performance in Egypt.

Why have you been asked to participate?

You fit the characteristics of the requisite sample for this study as you are an expert on Islamic banking in Egypt. Your knowledge and experience in the Islamic banking field and the current Central bank regulations will help in supporting the results concluded from the research.

Project Risks:

I am not expecting any risks, as the information needed from you is not sensitive data and it will not affect your position. Moreover, you have all the right to withdraw from the study at any point in time if you do not feel comfortable.

How your privacy will be protected?

All the information gathered from you will be stored securely on a password-protected flash memory stick. Your data will be anonymized using a code so the information you provide cannot be traced to you.

F you require any further information, please contact me:

Aliaa Tammam

Teaching assistant

Arab Academy for Science and Technology

Telephone number: 01001214101

e-mail: aliaa_tammam@yahoo.com

Ethics Committee Application Reference Number: **2015S0079**

The following statement summarises the needed amendments to all CBE regulations (both accepted and rejected by the study) as needed, to be applied to control and supervise IBs' operations.

The relative importance of IBs in the structure of the Egyptian banking sector, although modest, is a good indicator of the number of IBs in the Egyptian banking system as a whole. The relationship between the CBE and the IBs in Egypt has been identified. The validity of the regulatory and financing instruments of the CBE that are applied to these banks were also recognised.

The relationship between the CBE and IBs in Egypt is governed by Law No. 88. The provisions of this law did not distinguish between Islamic banks and conventional banks. However, simultaneously, the law lays down a section for public-sector banks while ignoring Islamic banks. It was also found that the regulatory and financing tools applied by the CBE do not agree with the current status of IBs' operations. Among these are the legal reserve policy, cash

liquidity, discount rate, open market, capital adequacy standard, the prohibition of dealing in fixed assets, regular inspection, and LOLR, which is an impediment to their activities and investment objectives. In this context, it is recommended that the CBE take into consideration the nature and functioning of IBs, and issue legislations to regulate its work, in accordance with their nature and the Sharia rules.

The legal reserve policy is to be applied to current deposits and not investment deposits. The CBE should take into account the nature of the relationship between the IBs and the holders of the investment deposits, governed by the mudarabah contract, alongside the importance of establishing and activating an insurance deposit fund stipulated in the Central Bank Law and Banking System No. 88 of 2003. This can help avoid the interest rate mechanism.

As for the liquidity ratio, the CBE should consider the nature of investment deposits and of the investments of these funds, the nature of the elements of liquid assets available to IBs, commercial papers and negotiable securities regulated by Sharia controls as well as other liquid elements. The CBE should not impose a financial fine when an Islamic bank violates the liquidity ratio. It could remedy this by obligating the violating bank to deposit balances with the CBE, without a fixed interest rate and in accordance with the period determined by them.

The CBE should also change its policies regarding the consolidation of the interest rate concept as a legal mechanism in the banking system that protects and consolidates it. It also makes it a measure and an indicator of its accounts, even though it is considered forbidden Riba for IBs. The CBE charges many bank violations with financial penalties calculated on the basis of the discount rate.

The CBE should also issue government-regulated securities that are Riba free. These securities should be based on participatory financing and PLS so that IBs can benefit from open market operations.

If the IBs' commitment to the capital adequacy criterion is legitimate, because it strengthens the financial position of the bank, the CBE should take into account the nature of the IBs' operations when calculating the components of this standard, whether in terms of subsidised loans or commercial securities that are interest free and in accordance with Sharia rules.

As for the credit ceiling policy, if the CBE systematically uses the credit process to achieve economic stability and diversify the risks, then it will be acceptable. This policy should be an exception when it comes to IBs and be based on Islamic investment, not a trade in debt and money as in conventional banks. Allowing IBs to engage in financing and leasing on their own without limiting them to specialised companies for this activity is important.

It also appears that the CBE should allow IBs to deal with fixed and movable assets. The investment activities of these banks often require the possession of these assets for use in their investment operations, which is necessary.

The CBE obtains periodic data from banks, whether Islamic or conventional, as this is its supervisory work. However, the CBE should take into account the specificity of the IB in terms

of the nature of the periodic data as well as the separation between the financial centres of IBs and other conventional banks in its periodic reports.

The supervisors of Islamic banks from the CBE should be fully aware of the nature and functioning of IBs. The CEB must establish a legal inspection department from legal and banking experts to ensure that the integrity of the legal aspects in the work of Islamic banks are in accordance with the Islamic Sharia.

The CBE should also provide the means to allow Islamic banks to benefit from the central bank's function as LOLR, without resorting to interest by lending the Islamic Bank when it needs liquidity – a loan without interest (Qard Hassan), in exchange for borrowing from IBs with the same value and duration later without interest.

According to the study, the following hypotheses were accepted:

- There is a negative relationship between the current legal reserve policy and Islamic bank performance.
- There is a negative relationship between the credit ceiling and Islamic bank performance.
- There is a negative relationship between the current bank examination system and Islamic bank performance.

The research also rejected the remaining hypotheses:

- There is a negative relationship between the current liquidity limit and Islamic bank performance.
- There is a negative relationship between the current capital adequacy policy and Islamic bank performance.
- There is a negative relationship between the current discount rate and Islamic bank performance.
- There is a negative relationship between the financial policy of lending by interest rate as the last resort for liquidity and Islamic bank performance.
- There is a negative relationship between the ban on dealing in moveable and immoveable assets and Islamic bank performance.
- There is a negative relationship between the current open market operations and Islamic bank performance.

According to the literature, it was found that the supervisory and financing tools applied by the CBE on the IBs do not agree with their current status and nature of work. Among these are the legal reserve policy, cash liquidity, credit ceiling, discount rate, open market, capital adequacy standard, and the prohibition of dealing in fixed assets, data inspection, and lending by

interest rate as the last resort – which is an impediment to its activities and investment objectives. However the results contradict these points, which may be due to the multi-collinearity that was found among the variables and the fact that some highly significant variables weakened the effect of other variables.

After reading this statement, please answer the following questions:

1. To what extent to you agree with the above statement?
2. Do you think the proposed changes are appropriate? Would you please illustrate?
3. Do you have any further comments or suggestions to be added? How do you think the above amendments could be enhanced?
4. To what extent do you think that the performance of IBs in Egypt would change if the CBE were to apply these amendments?

Appendix 4: Correlations

		cb.legal. reserve	cb.sale. of.asset	cb.fin. policy	cb.bank. ex.sys	cb.credit. ceiling	cb.disc .rate	cb.liq .limit	cb.cap .adeq	cb.open. mkt .operations	performance
cb.legal.reserve	Pearson Correlation	1	.828**	.719**	.410**	.518**	.527**	.558**	.576**	.489**	-.600-**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	347	347	347	347	347	347	347	347	347	347
cb.sale.of.asset	Pearson Correlation	.828**	1	.718**	.537**	.676**	.556**	.598**	.585**	.520**	-.593-**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	347	347	347	347	347	347	347	347	347	347
cb.fin.policy	Pearson Correlation	.719**	.718**	1	.559**	.705**	.613**	.634**	.621**	.452**	-.576-**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	347	347	347	347	347	347	347	347	347	347
cb.bank.ex.sys	Pearson Correlation	.410**	.537**	.559**	1	.616**	.607**	.613**	.606**	.360**	-.494-**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	347	347	347	347	347	347	347	347	347	347

cb.credit.ceiling	Pearson Correlation	.518**	.676**	.705**	.616**	1	.836**	.852**	.854**	.612**	-.574-**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	347	347	347	347	347	347	347	347	347	347
cb.disc.rate	Pearson Correlation	.527**	.556**	.613**	.607**	.836**	1	.948**	.943**	.645**	-.588-**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	347	347	347	347	347	347	347	347	347	347
cb.liq.limit	Pearson Correlation	.558**	.598**	.634**	.613**	.852**	.948**	1	.963**	.678**	-.602-**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	347	347	347	347	347	347	347	347	347	347
cb.cap.adeq	Pearson Correlation	.576**	.585**	.621**	.606**	.854**	.943**	.963**	1	.694**	-.602-**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	347	347	347	347	347	347	347	347	347	347
cb.open.mkt.operations	Pearson Correlation	.489**	.520**	.452**	.360**	.612**	.645**	.678**	.694**	1	-.477-**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	347	347	347	347	347	347	347	347	347	347

performance	Pearson Correlation	-.600**	-.593**	-.576**	-.494**	-.574**	-.588**	-.602**	-.602**	-.477**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	347	347	347	347	347	347	347	347	347	347

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