

Risk Management in Islamic Banks: A Case Study of the Faisal Islamic Bank of Egypt

Mohamed Saad Ahmed Hussien

Abstract—This paper discusses the risk management in Islamic banks and aims to determine the difference in the practices and methods of risk management in those banks compared to the conventional banks, and to make a case study of the biggest Islamic bank in Egypt (Faisal Islamic Bank of Egypt) to identify the most important financial risks faced and how to manage those risks. It was found that Islamic banks face two types of risks. The first type is similar to the risks in conventional banks; the second type is the additional risks which facing the Islamic banks only as a result of some Islamic modes of financing. With regard to the risk management, Islamic banks such as conventional banks applied the regulatory rules issued by the Central Banks and the Basel Committee; Islamic banks also applied the instructions and procedures issued by the Islamic Financial Services Board (IFSB). Also, Islamic banks are similar to the conventional banks in the practices and methods which they use to manage the risks. And there are some factors that may affect the risk management in Islamic banks, such as the size of the bank and the efficiency of the administration and the staff of the bank.

Keywords—Conventional banks, Faisal Islamic Bank of Egypt, Islamic banks, risk management.

I. INTRODUCTION

FINANCIAL institutions, in general, and banks, in particular, play an important role in the economic activity of any country. Weakness in banks represents a threat to the financial stability in country. The role of banks overtakes the framework of money and credit relations. Banks provide many financial services. It is hard to imagine normal, rational organization of economic activity without the banking system. For this reason, the institutions of banking supervision are now trying to improve and strengthen the financial health of the banking system. And therefore, all parties should be interested in the successful management by banks today and in the ability to meet future challenges. [1]

Conventional or Islamic banks are exposed to many risks, especially in light of developments in the field of financial transactions. Numerous studies and professional publications have addressed the concept of danger or possible exposure risk; according to [2], the risk is the possibility of the loss, and its determination is based on the information that could allow one to perform some estimates of the probability of its consequences.

According to Institute of Risk Management [3], risk can be defined as the combination of the probability of an event and its consequences. And risk management is an important part of

any organization's strategic management. "It is the process whereby organizations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities" [3].

Reference [4] defines risk management as a process, effected by an organization's board of directors, management, and other personnel, applied in strategy setting and through the organization, designed to identify, assess, and report on the potential opportunities and threats, and manage risks that may affect the achievement of the objectives of the organization.

Reference [5] found that risk management and profitability have positive relation; the banks who manage risk their financial position are stronger than others; most financial institutions fail in managing risk and they are insolvent; risk management is a very crucial factor in the improvement of the financial position of banks like conventional and Islamic banks.

II. PREVIOUS STUDIES

A. Conventional Banks

Many of the studies dealt with the types of risks faced by banks, and how to manage those risks. According to [6], the most important types of risks include credit risk, interest rate risk, liquidity risk and operational risk. Credit risk arises when a bank cannot recover his money from investments or loans. Interest rate risk arises when the market value of a bank asset, loan or security drops when interest rates increase. The solvency of the bank may be threatened if the bank cannot perfect its promise to pay a fixed amount to depositors because the reduction in the value of the assets which occur as a result of increase in interest rate. Liquidity risks arise when the bank is unable to meet the needs of borrowers and demands of depositors by turning assets into cash or borrow funds when needed with minimal loss. And the operational risk arises out of failure to control operating expenses, especially non-interest expenses such as wages and salaries.

According to [7], [8], the Basel framework categorized risks into three major types; credit risk, market risk and operational risks. Reference [8] defines credit risk as a risk of default in payment by the customer; it can be reduced by securing a guarantee, pledge or collateral from customers. And market risk is the risk that the value of an investment will decrease because of the movement of market factors. Market risk for banks can be related to unfavorable price movement related to return rate, foreign exchange rate, interest rate, equity instruments, and commodity prices. Operational risks are the loss due to any confusion in the firm's operational processes.

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The Basel II defines the operational risk as “the risk of direct or indirect loss resulting from inadequate or failed internal processes, people, and systems or from external events” [7]. Operational risks cover all organizational malfunctioning and can cause consequences highly important and, sometimes, fatal to banks.

Numerous studies on banks agreed on the importance of risk management in banks. Reference [9] point out that risk management is a very serious process for banks. The informational and systematic risk management support significantly differs related to the degree of bank development. Because, first, the bank risks (credit, market, and operational) differ in their nature and require particular data for their evaluation, and second, risk management information support depends on the bank's analytical system. Reference [10] sees that all banks face risk in their transactions, so it is necessary to ensure suitable risk management process in a bank in order to avoid any negative effects for a bank and its assets and liabilities. The risk should be first identified and then measured, regulated and managed. All these steps must be done with the supervision of the competent authority.

Reference [11] also sees that risk management becomes one of the main functions of any banking services, and it is not just used for the decrease of the probability of losses but it also covers the increase in the probability of occurring good things.

1. Risk origination within the bank: Credit risk, market risk, operational risk.
2. Risk identification: Identify risks, understand, and analyze risks.
3. Risk assessment and measurement: Assess the risk impact and measure the risk impact.
4. Risk control: Recommendations for risk control, risk mitigation through control techniques and deputation of competent officers to deal with the risks.
5. Risk monitoring: Supervise the risks, reporting on progress, and compliance with regulations follow-up.
6. Risk-return trade-off: Balancing of risk against return.

The Egyptian central bank [12] cared for risk management in the banks and prepared guidelines to manage and control risks in accordance with the proposals of the Basel Committee as:

- The bank must have a suitable system for manage and control risks.
- The bank must design a set of early warning indicators.
- The bank must ensure that the staff in the unit of risk management has a full understanding of the risks that the bank is facing.

B. Islamic Banks

Many studies such as [13]-[18] refer to the high prevalence of Islamic banks in many countries of the world such as, Pakistan, which established interest-free banking, Pakistan was the first country to do so in 1980. After this private venture, more private interest-free banks were founded in different parts of the world. Also in Malaysia, there are a lot of Islamic banks. Indonesia does not differ much from Malaysia, the Islamic banks in Indonesia began to emerge in the early

nineties, and spread and developed significantly in recent years.

Reference [13] highlighted that Organization of the Islamic Conference (OIC), which was established in 1970, played an important role in the emergence of a lot of Islamic banks through their participation in Islamic financial planning. The result was the establishment of the Islamic Development Bank (IDB) in 1975, in the same year, the Dubai Islamic Bank, Faisal Bank in Egypt in 1976 and in Sudan in 1977. The spread of Islamic banks continued dramatically in many countries of the world, whether through the presence of Islamic banks or Islamic branches of conventional banks for transactions in these countries.

According to the Global Islamic Finance Report [19], the past two decades have witnessed a substantial increase in the number of Islamic banks and financial institutions in many countries of the world. It has to be noted that the prospects for growth and expansion in both Muslim and non-Muslim countries are strong. Saudi Arabia and Malaysia remain central to the growth story of Islamic banks and financial institutions on a global level; they are the two leading players in the global Islamic financial services industry. According to the report, there is an Islamic financial institution in non-Muslim countries such as Britain, Germany, and others. Islamic banks are spread in many Arab countries such as the UAE, Kuwait, Bahrain, Jordan, Qatar, Egypt, and others, also a lot of conventional banks establish branches of Islamic transactions.

According to [14], the most effective factor making Islamic banking attractive to customers is loyalty to the rules of Shariah. The convenience of opening accounts or the quality of the services offered does not have much impact on the consumer's decision of choosing an Islamic banking system; but, for the Elshariah-based activities of the Islamic banking system and their trustworthy commitment to the customer make the Islamic banks attractive to Muslims. Dealing with the Islamic banks is not limited only to Muslims but non-Muslims also deal with those banks.

Reference [20] indicates that the development of Islamic banking and finance has become the major agenda of the world in terms of its important impact on the economic growth. Based on this, there is the need for some reforms in the principles adopted, the management body and the products being approved by the Shariah Advisory Council. This will help in the process of standardization of the products and services which will positively position the Islamic banking and finance sector in the frontline of the modern economic system.

With regard to the risks faced by Islamic banks, some studies have agreed, such as, [16]-[18], [21], that there are two kinds of risks in Islamic banks. The first type is some of the risks facing both Islamic and conventional banks, such as credit risk, liquidity risk, market risk and operational risks. The second type is some risks Islamic banks facing only as a result of some Islamic modes of financing.

- The first type is shared by Islamic banks with conventional banks. Previous studies [17], [18], [21] have

shown as:

- 1- *Credit risk* may occur in some Islamic modes of finance that depend on the participation in the profits such as Musharakah and Mudarabah. Reference [22] was conducted on 99 Islamic banks and 110 conventional banks in 28 countries. It indicates that the credit risk in the conventional banks is higher than in Islamic banks. This risk has a high impact on the exposure to the financial crises.
 - 2- *Liquidity risk* may be more severe in Islamic banks compared with conventional banks, because Islamic banks cannot borrow money with the interest rate to meet the liquidity requirements due to the prohibition of borrowing benefits. Islamic banks have some investment formulas makes them more vulnerable to liquidity risks, such as musharakah and salam financing. Reference [23] shows that there are factors which have a positive impact on the liquidity risks of Islamic banks. Such as return on equity, capital adequacy ratio, the inflation rate. And there are factors which have a negative impact on the liquidity risks of Islamic banks. Such as NonPerforming Loan, returns on assets and GDP growth.
 - 3- *Market risk* occurs in Islamic banks like conventional banks as a result of adverse changes in market prices. This risk increases in Islamic banks in the case of Islamic modes of finance like Istisna'a and salam.
 - 4- *Operating risks*: Some studies, such as [24], consider that those risks are higher in Islamic banks compared to conventional banks; because Islamic banks face additional operational risks such as lack of full adherence to Shariah, disagreement on how to apply certain transactions as a result of various fatwas. These risks may also appear as a result of non-availability of trained human resources to do the Islamic financial operations or lack of appropriate information technology systems for banking and Islamic modes of finance.
- The second type is the risks facing the Islamic banks only as a result of some Islamic modes of financing. Reference [21] has shown as:
1. *Murabahah Financing* often arises because of unsettled nature of the contract of Murabahah, which could cause litigation problems. Another possible problem in a sale contract like Murabahah is late payments by the counterparty as Islamic banks cannot, in principle, charge anything in excess of the agreed upon price. Nonpayment of dues in the particular time by the counterparty implies a loss to banks.
 2. *Salam Financing*: There are at least two risks in Salam, first, the counterparty risks which can range from failure to supply goods on time, and failure to supply the same quality of good as contractually agreed. Since Salam is an agricultural based contract, the counterparty risks may be due to factors beyond the normal credit quality of the client. The second risk is that all Salam contracts end up in physical deliveries and ownership of commodities, the goods need to be stored, and thus additional costs and risks facing the bank who owns the goods according to

the contract. This costs and risks are unique to Islamic banks.

3. *Istisna Financing*: The counterparty risks faced by the bank from the supplier's side are similar to the risks mentioned under Salam, such as contract failure regarding quality and time of delivery, and the default risk on the buyer's side.
4. *Musharakah and Mudarabah Financing*: The credit risk is expected to be high under these modes because of the fact that there is no guarantee requirement, there is a probability of the moral hazard and adverse selection. Banks' existing competencies in project evaluation and related techniques are limited. Institutional arrangements such as tax treatment, accounting and auditing systems, regulatory framework are all not in favor of a larger use of these modes by Islamic banks.

A study [18] agreeing with previous studies indicates that the Islamic banks face three major types of risks; foreign exchange risk, credit risks, and operational risks. Foreign exchange risk is the most common among Islamic banks, but it is not the most important in terms of the impact on the achievement of targets. Credit risk is the most important type of risk and the most negative effects in the case of non-face. Studies [25] and [15] suggest that liquidity risk is the most important among the risks faced by Islamic banks. A study [25] noted that Liquidity risk management is more difficult for Islamic banks compared with conventional banks. This is because most of the traditional tools can be used to manage liquidity risk based on interest rates, and therefore this tools violating Sharia cannot be used in Islamic banks. Making those banks is in need of innovative tools to manage liquidity risk. A study [15] points out the increasing importance of liquidity risk in Islamic banks, in particular, after the occurrence of the global financial crisis. Because of the special nature of the financial services provided by the banks, which may lead to the occurrence of additional liquidity risks, these risks occur because of the inability of the bank to meet its financial obligations as they fall due. Also, these risks appear when depositors recover their deposits at the same time or in large amounts, in terms of assets, banks are Faces liquidity risks if the demand in loans increases.

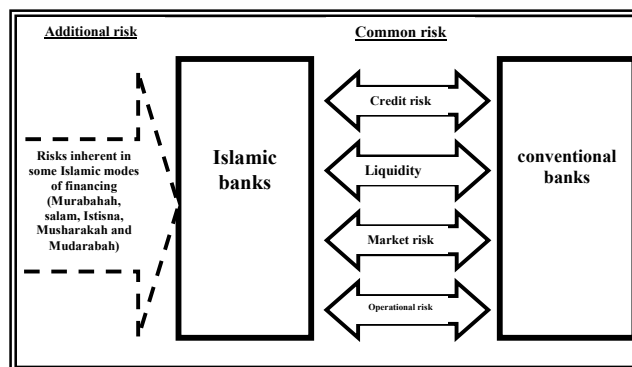


Fig. 1 Risks facing the Islamic and conventional banks

Risks facing the Islamic and conventional banks are shown

in Fig. 1. With respect to risk management in Islamic banks, IFSB [26] issued guiding principles for risk management in Islamic financial institutions. The board pointed out that these guiding principles cover specific aspects of risks in the Islamic financial services as:

- **Credit Risk:** Islamic banks must have a strategy for financing, using various instruments in compliance with Shariah, appropriate methodologies for measuring and reporting the credit risk exposures arising under each Islamic financing instrument. Islamic banks must compliant credit risk mitigating techniques appropriate for each Islamic financing instrument.
- **Equity Investment Risk:** Islamic banks must have appropriate strategies, risk management procedures, and preparation of reports with regard to the Equity Investment Risk characteristics, including Musharakah and Mudarabah investments. Islamic banks shall ensure that their valuation methodologies are suitable and consistent, and must estimate the potential effects of their methods on profit calculation and allocation.
- **Market Risk:** Islamic banks must have an appropriate framework for risk management procedures (including reporting) including those that do not have a ready market and/or are exposed to high price volatility.
- **Liquidity Risk:** Islamic banks must have an appropriate framework for liquidity risk management procedures (including reporting) taking into consideration the probability of exposure to liquidity risk relating to each class of current accounts and unrestricted investment accounts.
- **Operational Risk:** Adequate systems and controls must be placed including Sharia Board/Advisor, to ensure compliance with Shariah principles and rules. Islamic banks must have an appropriate mechanism to safeguard the interests of all fund providers.

C. The Difference between Risk Management in Islamic and Conventional Banks in Some Countries

Several studies such as, [18], [21], [27]-[29], highlighted the risk management for Islamic banks in different countries and the differences between them and conventional banks. The study [21] was field study on 17 Islamic banks in 10 countries (including Bahrain, Egypt, Malaysia and the United Arab Emirates). The study suggests that Risk Management for Islamic banks include three basic components. First, banks must establish appropriate risk management environment and sound policies and procedures. Second, banks must have regular management information systems for measuring, monitoring, controlling and reporting different risk exposures. And third, banks should have internal controls to ensure compliance with all policies. The study arranged the types of risks facing the Islamic banks.

Some studies, such as [30]-[32], focused on risk management and Islamic banks in the countries of Middle East. A study [32] found that Islamic banks in Middle and the Far East countries are less vulnerable, more stable and able to cope with the financial crisis compared to conventional banks.

The study [30] sees that the most important risks to Islamic banks in the Middle East are the liquidity risk, followed by credit risk. The Islamic banks in the Middle East are aware of the importance of risk management and use many effective strategies. They are similar to conventional banks in the methods used to manage risks, especially credit risk. Study [31] points out that the importance of disclosure of Islamic banks for risk management information, where according to the survey, more than half of the Islamic banks in the Middle East discloses risk management information in accordance with the requirements of the IFSB, which is an indication of awareness of those banks and the importance of risk management operations.

The study [28] aimed to determine the extent to which Islamic banks manage risks. The study found that Islamic banks manage risks through identifying and understanding the possible risks which may affect the goals of the Bank, analysis risks, determine how to manage those risks, and control and follow-up to the risks to avoid their recurrence in the future. Some participants in the study said that previous operations are the same as those in conventional banks, in line with the Basel Committee's instructions. Other participants see that there is little difference between the risk management in the conventional and Islamic banks, both of which are applied to the Central Bank instructions, but Islamic banks also apply the recommendations of the IFSB as a result of some Islamic banking transactions that non-existent in conventional banks, such as Murabaha, Mudaraba, and Musharakah.

References [33], [34] describe risk management in Islamic and conventional banks in Bahrain. Reference [33] points out that Islamic and conventional banks in Bahrain recognize the importance of risk management and its role in improving the performance of the bank. A lot of banks in Bahrain have risk management strategies. These strategies include several steps: Risk identification, assessment, and risk analysis, and risk management. With regard to the most important risks facing the Islamic and conventional banks in Bahrain, the credit risk is the most important, followed by liquidity risk and then operational risk, but the level of those risks was higher in Islamic banks compared to conventional banks, particularly, liquidity risk. Reference [34] focused on determining the effectiveness of the liquidity risk management of Islamic banks in Bahrain. The study concluded that the employees of those banks have the awareness of the importance of risk management and see that the Islamic banks are well-managed risks.

Reference [35] aims to investigate the extent to which Yemen's Islamic banks are applying Risk Management Practices, and to compare and distinguish between the Risk Management Practices used in Islamic and Conventional banks. Semi-structured interviews were conducted to identify risk management practices in banks. Semi-structured interviews were conducted to identify risk management practices in banks. The results revealed that there are significant differences between Islamic and Conventional banks in terms of their understanding of risk, risk identification and analysis. However, there are no major

differences found between Conventional and Islamic banks in terms of risk management practices, where almost all banks used similar methods to manage the risks. Risk management may be affected by some of the factors associated with the bank, such as the extent of the bank's staff expertise with regard to risk management.

Reference [36] highlighted the risk management in Islamic and conventional banks in the United Arab Emirates. With regard to risk management, the study showed that both types of banks, in general, are using the same methods and techniques for risk management. The study found that Islamic banks are using some of the most sophisticated ways to manage credit risk compared to conventional banks. Reference [37] carried out a comparison between the performance of conventional and Islamic banks in the UAE in terms of profitability, liquidity and credit risk. And it concluded that conventional banks are superior to Islamic banks in credit risk management.

Reference [29] focused on risk management practices in Islamic banks in Malaysia and advocates the importance of risk management in Islamic banks, as is the case in conventional banks; it may be more difficult because Islamic banks face some additional risks not found in conventional banks. The study found that most of the Islamic banks in Malaysia identify and prepare reports on credit risk, market risk, and operational risks. The findings show that Islamic banks are perceived to use less technically advanced risk measurement techniques such as credit ratings, gap analysis, duration analysis, and earnings at risk. The main explanation is that Islamic banks are still new and do not have sufficient resources and systems in place to employ more technical advanced techniques.

Studies [38], [39] carried out on risk management in Islamic and conventional banks in Pakistan. A study [38] points out the growth in Islamic banking in Pakistan in recent years. Despite the decline in this ratio compared to conventional banks, the increase in Islamic banks from year to year gives an indication of the Islamic banks grow future, and takes over a larger share of the banking market in Pakistan. With regard to risk management, [39] noted that there are some differences in the risks between Islamic and conventional banks. But, there is a great similarity in risk management practices in both types of banks. A study [38] compared the performance of the Islamic banks and traditional in Pakistan. The study found that the performance of conventional banks is the best in terms of measures of profitability and liquidity, while the performance of Islamic banks is the best in terms of credit risk management.

Study [40], consistent with the previous study, shows that the Islamic banks in Pakistan have a general understanding of risk management practices. Nevertheless, there is still a need to develop risk management practices of Islamic banks. A study [41] points out that there are some factors that affect the establishment of Islamic banks' risk management practices in Pakistan, and most important of these factors, the size of the Islamic Bank, is associated positively with the bank's risk management and, in particular, credit and liquidity risks.

A study [18] aimed to identify risk management practices in Islamic banks in Brunei. The study found that the Islamic banks in Brunei are facing three types of risks, foreign exchange risk, credit risk and operating risk. Islamic banks in Brunei are reasonably efficient in risk assessing and analysis, risk management, and risk identification. Also, the results show some evidence of efficiency in credit risk management within the Islamic banking in Brunei.

With regard to Bangladesh, [42] showed that Islamic banks have emerged in Bangladesh, beginning from 1983, and continued to spread since then. Islamic banks in Bangladesh offer the same services like traditional banks, and offer additional services based on Murabaha, Mudaraba, Musharakah, and other Islamic transactions. With respect to the risks faced by Islamic banks, [27] noted that the most important risks faced by banks in Bangladesh are credit risk, liquidity risk, and interest rate risk. The study indicated that banks are taking action to manage those risks. The study compared the risk management in Islamic and conventional banks in Bangladesh and found that conventional banks are more aware of the risk management, and use sophisticated methods in doing that, while Islamic banks rely on traditional methods to identify and manage risks. The study shows that the reason for this is the lack of qualified staff and managers in the Islamic banks.

III. A CASE STUDY OF THE FAISAL ISLAMIC BANK OF EGYPT

Faisal Bank is the biggest Islamic bank in Egypt, [43] shows that the number of Bank's branches reached 31 branches all over the country. And the total volume of its business (as represented by the total assets) is equivalent to 55.79 billion pounds at the end of 2015.

A. Financial Risk Management

According to [43], Faisal bank, as a result of its activities, is facing various financial risks. As the base of financial activity is to accept risks, all of the potential risks must be analyzed, evaluated and managed. Faisal bank plans to achieve a suitable balance between the risks and return and to reduce the potential negative effects on the bank's financial performance. The types of risks Faisal bank is facing are a credit risk, market risk, liquidity risk and operational risks. The risk management policies aimed at determining, analyze the risks, and set limits to the risks and control them through effective methods and updated systems. The bank reviews periodically policies and procedures of risk management and improves them to reflect the major changes in markets, services, and products.

Risk Department manages those risks on the basis of policies approved by Board of Directors. The risk department identifies, evaluates and controls the financial risks cooperation with the bank's various operating departments, the Board of Directors prepares written policies for risk management, also provides written policies for specific risk areas, such as liquidity risk, return rate risk, foreign exchange rate risk, and equity instruments risk. Then, the risk department is responsible for the periodical review of risk

management procedures and control environment.

B. Credit Risk

According to [43], Faisal bank is exposed to credit risk which is considered one of the most important risks to the bank. The credit risk is considered one of the most important risks to the bank. This risk basically appears in lending and investment activities. This risk is also found in off-balance sheet financial instruments such as lending commitments. Managing and controlling the process on credit risk is centralized at credit risk team management at credit risk department which prepares reports Submit to the Board of Directors, top management, and head units on the bank.

In order to measure credit risk which related to finances and facilities to customers; the following three factors must be considered:

- Probability of default by a customer or third party in fulfilling contractual obligations.
- The current status and possible future progress indicating exposure at default.
- Loss gave a default.

These factors are inherent in the daily business of the Bank that reflects expected loss required by Basel Committee.

The bank manages and controls credit risk at the level of the borrower, groups of borrowers, industries, and countries. The bank controls acceptable credit risk levels using limits for the risk exposure for each debtor, a group of debtors, and at the level of economic activities and geographical sectors. Risks should be monitored and should be repeatedly audited. Credit risk limits should be adopted quarterly at the level of the debtor/the group, the product, the sector, and the country by the board of directors. Actual amounts should be daily compared with the limits.

TABLE I
MAXIMUM LIMIT FOR CREDIT RISK BEFORE COLLATERALS

years	2011	2012	2013	2014	2015
Balance sheet	16.145.204	15.658.961	10.519.818	26.454.012	30.814.508
Items exposed to credit risk					
Off-balance sheet	143.430	131.709	426.035	486.994	273.587
sheet Items exposed to credit risk					

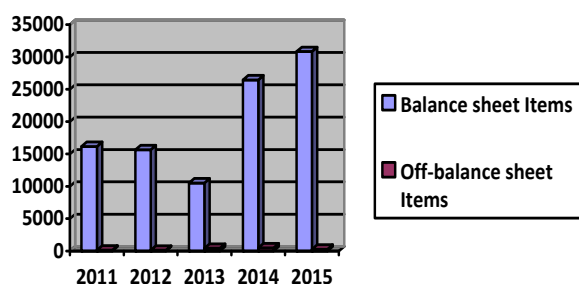


Fig. 2 Balance sheet Items and Off-balance Sheet Items exposed to credit risk

Table I shows maximum limit for credit risk before

collaterals during the last five years (thousand Egyptian pounds). It is clear from Table I and Fig. 2 that 2015 is the highest in terms of items exposed to credit risk, which calls for the Bank to take the necessary actions to manage credit risk.

C. Market Risk

According to [43], Faisal bank is exposed to market risks of fluctuation in the fair value or future cash flows due to change in the market rates. Market risks arise from open positions of return rates, currency, equity instruments; those are exposed to public and special movements of the market as well as sensitivity levels to market rates or prices such as return rates, exchange rates, and equity instruments.

- Foreign currency risk: The bank is exposed to the risk of fluctuations in foreign currency exchange rates and its impact on the financial position and cash flows. The Board of Directors has set limits by total value for foreign currencies for each position at the end of the day and during the day in which they are timely monitored.
- Return rate risk: The board of directors sets limits to the difference level of return rate re-pricing that the Bank could apply.

Table II shows Total Value at Risk according to the risk type (thousand Egyptian pounds). Table II and Fig. 3 show the Foreign exchange risk, the return rate risk, and the Equity instruments risk which was higher in 2011 compared to other years. Also total value at risk was higher in 2015 compared to previous years, which requires the bank to study the subject to determine the causes.

TABLE II
TOTAL VALUE AT RISK

years	2011	2012	2013	2014	2015
Foreign exchange risk	1.194.160	866.078	902.747	1.102.242	1.073.051
Return rate risk	3.634.134	6.101.093	7.516.619	7.078.459	9.554.411
Equity instruments risk	7.329.771	6.575.420	6.187.804	5.901.916	6.279.262
Total value at risk	12.158.065	13.542.591	14.607.170	14.082.617	16.906.724

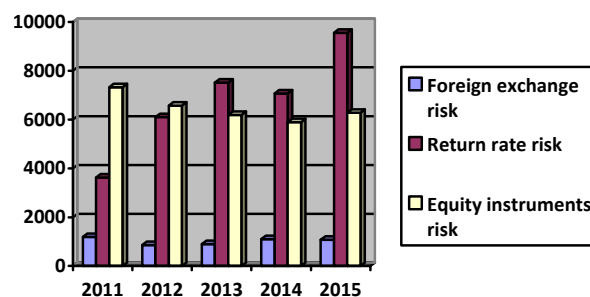


Fig. 3 Foreign exchange risk, Return rate risk, Equity instruments risk

D. Liquidity Risk

Liquidity risk appears when the bank is facing difficulties in meeting its financial commitments when they fall due and

replace funds when they are withdrawn. The consequences may be the failure to meet obligations to repay depositors and fulfill finance commitments.

According to [43], the bank's liquidity risk management, as carried out by the Bank Financial Department includes:

- Daily funding is managed by monitoring future cash flows to ensure that all requirements can be met. This includes replenishment of funds as they due or to be borrowed by customers. The Bank maintains an active presence in the global money markets in order to achieve that goal.
- The Bank maintains a portfolio of highly marketable assets that can be easily liquidated in the event of any unexpected interruption of cash flows.

For the purpose of controlling and reporting, cash flows are measured and expected for the next day, week and month respectively, as these are key periods for liquidity management. The starting point for those expectations is an analysis of the contractual maturities of financial liabilities and expected collection dates of the financial assets.

Local investment department also monitors unmatched medium-term assets, the level, and type of the unused part of the finance commitments, the usage of overdraft facilities and the impact of contingent liabilities like letters of credit and guarantee.

Table III shows the liquidity ratio of the bank during the previous five years. Table III shows the liquidity ratio over the past five years, in 2013 the liquidity was the best, there has been a decrease in the liquidity ratio in the last two years 2014 and 2015, which requires the bank to find reasons for it.

TABLE III
LIQUIDITY RATIO

years	2011	2012	2013	2014	2015
Cash and cash equivalent balance	5.586.381	8.037.378	14.548.591	12.605.121	11.542.576
Total financial liabilities	33.022.812	38.401.409	42.036.210	46.358.372	51.144.525
liquidity ratio	16.9%	20.9%	34.6%	27.2%	22.5%

E. Capital Management

According to [43], Faisal bank is managing capital as:

- To comply with capital legal requirements in the Arab Republic of Egypt, and in other states in which the Bank branches are operating.
- To safeguard the Bank's ability to continue as a going concern so that it can continue to provide returns for shareholders and other parties dealing with the Bank.
- To maintain a strong capital base that supports the growth of its business.

Capital adequacy and the use of regulatory capital are monitored daily by the bank's management according to the regulatory authority's requirements (CBE). Employing techniques based on Basel Banking Supervisory Committee guidelines. The required data, as well as deposits at the CBE, are submitted on a quarterly basis.

The CBE requires the Bank to:

- Retain the amount of EGP 500 million as a minimum for Issued and paid up capital.
- Maintain a ratio of 10% or more between items of both capital and risk-weighted assets and contingent liabilities.

Bank branches operating outside A.R.E. are subject to supervisory rules regulating banking business in the hosting states. In this regard, the dominator of capital adequacy ratio includes the two following tiers [43]:

- Tier 1 is the principal capital that contains paid up capital (after deducting the book value of the treasury stocks).
- Tier 2 is the subordinated capital that contains an equivalent of the risk provision according to the CBE.

The assets are adjusted with a risk-weights range between 0 and 100% classified according to the nature of debit party for each asset to reflect related finance and investment risks, taking into consideration cash guarantees. The same treatment is used for the off-balance sheet amounts after performing the adjustments in order to reflect the contingent nature and the expected losses of these amounts. Table IV summarizes capital adequacy ratios at the end of the previous five years.

TABLE IV
CAPITAL ADEQUACY RATIOS

years	2011	2012	2013	2014	2015
Capital Base	1.808.748	1.982.720	2.561.654	2.850.249	3.033.839
Total assets and contingent liabilities adjusted with risks weights	10.201.391	13.110.604	14.420.767	17.383.468	19.177.357
capital adequacy ratios	17.73%	15.12%	17.76%	16.40%	15.82%

IV. CONCLUSION

Conventional and Islamic banks are facing a lot of risks. Many of the studies dealt with the risks of both types of banks. Focusing on the Islamic Banks, they face two types of risks; the first type is shared by Islamic banks with conventional banks, such as credit, liquidity, market and operational risks. The second type is the risks facing the Islamic banks only, risks inherent in some Islamic modes of financing, such as Murabaha, Salam, Musharakah, and Mudarabah.

Risk management is very important process in both of Conventional and Islamic banks, especially after the global financial crisis which showed a lot of weaknesses in risk management in banks. It is to be noted that Islamic banks are similar with conventional banks in the application of the instructions issued by the Central Bank in accordance with the Basel Committee. Risk management in Islamic banks is more important and may also be more difficult.

It emerges from previous studies in different countries that Islamic banks are similar to conventional banks in the practices and methods of risk management. Despite the similarity of risk management in both types of banks, the significance of the risks to both types of banks may vary,

liquidity risk may be the most important in Islamic banks, while credit risk may be the most important in conventional banks.

Faisal Islamic Bank of Egypt, the largest Islamic bank in Egypt, and one of the most important Islamic banks in the world, is exposed to various financial risks, such as credit risk, market risk, liquidity risk and other operational risks. Those risks are managed by risk department in the light of policies approved by board of directors. The risk management policies have been laid down to determine and analyze the risks, set limits to the risk and control them through reliable methods and updated systems. And the bank is committed to the regulatory rules issued by the Central Bank of Egypt and the Basel Committee.

Finally, we can say that the Islamic bank is still in the stage of growth. These banks must give more attention to develop practices and methods of risk management.

REFERENCES

- [1] Dorogovs, P., Solovjova, I. & Romanovs, A. New tendencies of management and control of operational risk in financial institutions. *Procedia - Social and Behavioral Sciences*, 2013, 99, pp. 911 – 918.
- [2] Dinu, A. M. Risk in financial transactions and financial risk management *Procedia. Social and Behavioral Sciences*, 2014, 116, pp. 2458 – 2461.
- [3] Institute of risk management (IRM). Risk management standard, 2002, Available from: https://www.theirm.org/media/886059/ARMS_2002_IRM.pdf. (Accessed: 30th January 2016).
- [4] Fraser, I. & Henry, W. Embedding risk management: structures and approaches. *Managerial Auditing Journal*, 2007, 22 (4), pp. 392-409.
- [5] Nadeem, M. E. & Khalil, B. A Review of Risk Management Theory in Commercial and Islamic Banks. *International Journal of Management & Organizational Studies*, 2014, 3 (4), pp. 34-38.
- [6] Dima, A. & Orzea, I. Risk Management in Banking, 2011, Available from: <http://www.AcademyPublish.org>. pp. 107-122. (Accessed: 30th September 2015).
- [7] Basel Committee. The Basel iii Accord, 2010, Available from: <http://www.basel-iii-accord.com/>. (Accessed: 30th September 2015).
- [8] Abdul Rashid, S. Z., and Abdul Rahman, A. Management Accounting and Risk Management Practices in Financial Institutions. *Journal Technology*, 2009, 51(E), pp. 89–110.
- [9] Poliakov, K. Risks in terms of IT. *CIO*, 2011, № 12. Available from: <http://www.osp.ru/cio/2011/12/13012292>. (Accessed: 20th February 2016).
- [10] Županović, I. Sustainable Risk Management in the Banking Sector. *Journal of Central Banking Theory and Practice*, 2014, 3 (1), pp. 81-100.
- [11] Kanchi, T, M. Manoj Kumar. Risk Management in Banking Sector -An Empirical Study, *International Journal of Marketing, Financial Services & Management Research*, 2013, 2 (2), pp. 145-153.
- [12] The Central Bank of Egypt, the control, and supervision of the application of the decisions of the Basel Committee 2. 2012. Available from: <http://www.cbe.org.eg>. (Accessed: 30th September 2015).
- [13] Malik, M. An Introduction to Islamic Banking (Rise and Development). *Journal of Islamic Banking and Finance*, 2014, 2(1), pp. 261-268.
- [14] Yousuf, S., Islam, A. & Islam, R. Islamic Banking Scenario of Bangladesh. *Journal of Islamic Banking and Finance*, 2014, 2 (1), pp. 23-29.
- [15] Mohammad, S. Liquidity Risk Management in Islamic Banks: A Survey. *Afro-Eurasian Studies*, 2013, 1 (2), pp. 215-230.
- [16] Abedifar, P., Philip, M. & Amine, T. Risk in Islamic Banking, 2012, Available from: <https://hal-unilim.archives-ouvertes.fr/hal-00915115>. (Accessed: 30th January 2016).
- [17] Ahmad, H. Risk Management in Islamic Banks. *ESLSCA Business School*, 2012, Available from <http://mpira.uni-muenchen.de/38706>. (Accessed: 20th February 2016).
- [18] Hassan, A. Risk management practices of Islamic banks of Brunei Darussalam. *The Journal of Risk Finance*, 2009, 10 (1), pp. 23-37.
- [19] Global Islamic Finance Report, GIFR, 2015, Available from http://www.gifr.net/gifr_2015.htm. (Accessed: 30th January 2016).
- [20] Fofana, I. V. Towards A Global Standard of Islamic Banking and Finance Practice: A Review of the Relevant Principles and Products by the Management Body of Islamic Banks. *Journal of Islam, Law, and Judiciary*, 2015, 1 (2), pp. 42-54.
- [21] Khan, T. & Ahmed, H. risk management an analysis of issues in Islamic financial. *Islamic Research and Training Institute*. Jeddah, Saudi Arabia, 2001.
- [22] Ferhi, A. & Chkoundali, R. Credit Risk and Efficiency: Comparative Study between Islamic and Conventional Banks during the Current Crises. *Journal of Behavioural Economics, Finance, Entrepreneurship, Accounting, and Transport*, 2015, 3 (1), pp. 47-56.
- [23] Ghenimi, A. & Omri, M. A. Liquidity Risk Management: A Comparative Study between Islamic and Conventional Banks. *Journal of Business Management and Economics*, 2015, 3 (6), pp. 25-30.
- [24] Beck, T., Demirgüç-Kunt, A. & Merrouche, O. Islamic vs. conventional banking: Business model, efficiency, and stability, Working Paper, 2010, available from <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5446>. (Accessed: 30th January 2016).
- [25] Abdulle, M.M. Liquidity Risk Management: A comparative study between Conventional and Islamic banks of United Kingdom. The British University in Dubai. Faculty of Business, 2013, Available from: <http://bspace.buid.ac.ae/handle/1234/745>. (Accessed: 20th February 2016).
- [26] Islamic Financial Services Board. Guiding Principles of Risk Management for Institutions (other than Insurance Institutions) offering only Islamic Financial Services (IFSB), 2005, Available from: <http://www.ifsb.org/standard/ifsb1.pdf>. (Accessed: 30th January 2016).
- [27] Rahman, M. M., Rahman, A. & Azad, A. K. Risk Management Practices in Islamic and Conventional Banks of Bangladesh: A Comparative Analysis. *Asian Social Science*, 2015, 11(18), pp. 153-163.
- [28] Ali, H. & Naysary, B. Risk Management Practices in Islamic Banks in Kuwait. *Journal of Islamic Banking and Finance*, 2014, 2 (1), pp. 123-148.
- [29] Ariffin, N. & Kassim, S. Risk Management Practices and Financial Performance of Islamic Banks: Malaysian Evidence. 8th International Conference on Islamic Economics and Finance. Qatar National Convention Center – Doha, Qatar 19-21 December 2011. Available from: <http://conference.qfis.edu.qa/app/media/271>. (Accessed: 30th September 2015).
- [30] Mokni, R. S., Echchabi, A., Azouzi, D. & Rachdi, H. Risk management tools practiced in Islamic banks: evidence in MENA region. *Journal of Islamic Accounting and Business Research*. 5 (1), p. 77 – 97.
- [31] Abdul Rahman, R., Kighir, A., Oyefeso, L. O. & Abdel Salam, O. (2013) Risk Management Disclosure Practices of Islamic Banks in the Mena Region: An Empirical Analysis. *Middle-East Journal of Scientific Research*, 2013, 15 (1), pp. 152-160.
- [32] Pappasa, V., Izzeldina, M. & Furtessb, A. Failure Risk in Islamic and Conventional Banks, 2012, Available from: <http://ssrn.com/abstract=2070957>. (Accessed: 30th January 2016).
- [33] Abu Hussain, H. & Al-Ajmi, J. Risk management practices of conventional and Islamic banks in Bahrain. *The Journal of Risk Finance*, 2012, 13 (3), pp. 215 – 239.
- [34] Hidayat, S. E., Al-Khalifa, M. D. & Aryasantana, A. G. A Survey on the Level of Effectiveness of Liquidity Risk. *International Research Journal of Finance and Economics*, 2012, 91, pp. 39-45.
- [35] Hussein, A. A., Rifki, I. & Omar, A. M. Risk Management Practices in the Republic of Yemen: Are Islamic banks different? *Journal of Islamic Economics, Banking, and Finance*, 2014, 10 (3), pp. 46-73
- [36] Masood, O., Al Suwaidi, H. & Thapa, P. D. Credit risk management: a case differentiating Islamic and non-Islamic banks in UAE. *Qualitative Research in Financial Markets*, 2012, 4 (2/3), pp. 197-205.
- [37] El Massah, S. & Al-Sayed, O. Banking Sector Performance: Islamic and Conventional Banks IN THE UAE. *International Journal of Information Technology and Business Management*, 2015, 36 (1), pp. 69-81.
- [38] Hanif, M., Tariq, M., Momeneen, W. & Tahir, A. Comparative Performance Study of Conventional and Islamic Banking in Pakistan. *International Research Journal of Finance and Economics*, 2012, 83, pp. 62-72.
- [39] Nazir, M. S., Daniel, A. & Nawaz, M. M. Risk Management Practices: A Comparison of Conventional and Islamic Banks in Pakistan. *American Journal of Scientific Research*, 2012, 68, pp. 114-122.
- [40] Khalid, S. & Amjad, S. Risk management practices in Islamic banks of

- Pakistan. *The Journal of Risk Finance*, 2012, 13 (2). pp. 148 – 159.
- [41] Ahmed, N., Akhtar, M. F. & Usman, M. Risk Management Practices and Islamic Banks: An Empirical Investigation from Pakistan. *Interdisciplinary Journal of Research in Business*, 2011, 1(6). pp. 50-57.
- [42] Islam, R. & Hossain, T. A Survey of Operations Management Practices in Islamic Banks of Bangladesh. *Malaysian Management Review*, 2012, 47 (1/2). pp. 1-20.
- [43] Faisal Islamic Bank of Egypt, 2015, Available from: <http://www.faisalbank.com.eg>. (Accessed: 20th February 2016).