

**Dr. Wael Moustafa Hassan
Mohamed**

Senior Lecturer of Finance and Investment
Faculty of Financial and Administrative
Sciences- Pharos University in Alexandria

**Difference between Conventional
Banks and Islamic Banks in the
Middle East Region: A Risk Man-
agement Approach**

1. Introduction

The financial stability of the global economy and the effectiveness of the monetary policy of any country depends on the integrity of the financial system and in particular the stability of banking systems, as the banking industry is based on the art of risk management in light of what the banking industry of openness to the global financial markets and the prompt development of technological progress, hence the importance of banking risk management is considered as one of the most critical issue in order to maintain the strength and integrity of the banking system and consequently the global economy .

Risk is defined as the potential for loss of financial or personal resources resulting from factors that are not foreseeable in the long or short term. Risk also, is a circumstance or situation in the real world in which there is an adverse situation, and more specifically, risk is a situation in which there is the possibility of a deviation from the desired outcome (Mohamed, 2017).

The process of risk management requires the bank to deeply understand various types of risks and their sources, so that it can be measured, followed and monitored, because in some cases the distinction between risks is not clear enough accordingly it leads to some di-

fficulties to identifying , measuring and controlling banks' risks (Hassan,2011).

2. Research Problem:

Recently, after the global financial crisis, banks have been exposed to different types of risks in the context of financial globalization due to the following factors:

- Increasing competitive pressures, encouraging risk appetite to maximize return on invested capital and maximizing market share;
- The expansion of the banks' extra-budgetary business and their shift from traditional to capital markets, resulting in liquidity crises, other market risks, inflation and price fluctuations;
- The structural changes witnessed by the banking and financial markets in recent years, as a result of liberalization from restrictions on capital movement and the opening up of domestic markets.

There is a consensus of economists and bankers that the cause of the global financial crisis 2008 is the exaggeration of banks in granting credit facilities and bypassing all the credit criteria that should be taken into account when granting credit. Also, banks involved in high risk transactions such as derivatives and securitization to generate high return without taking into consideration the consequences of engaging in high risk

transactions. This is clearly defined as a lack of risk management in banks which lead to financial instability and global financial crisis. While conventional banks suffered from instability and bankruptcy, Islamic banks didn't suffer from such financial instability or bankruptcy. Although Islamic banks suffered from reduction in profitability due to decrease in global trade which negatively affect banks' profitability.

Commercial banks are exposed to different types of risks that affect their performance and their financial stability. Generally, There are five common types of risks that have a significant impact on banks financial health such as Strategic Risk, Credit Risk, Liquidity Risk, Market risk and Operation Risk. Islamic Banks are exposed to different types of risk in addition to the previously mentioned common five risks, These unique types of risks are: Sharia non-compliant risk, Rate of Return Risk, Commodity and Inventory Risk in addition to Equity Investment Risk.

There is a high considerable interest in research on risk analysis and management. This concern has emerged because of a range of complex and advanced developments in financial products provided by commercial banks. The unique risks faced by Islamic Banks need to pay more attention toward risk mitigation and management in the wake of repeated financial crises. Also, the innovation of financial products and the use of financial engineering added new dimensions and types of risks and added a new burden on Islamic banks to develop their products and reduce risks in line with Islamic Shariaa rules. The difference between Islamic banks and traditional banks appears clearly in Risk

and Risk Management due to the distinctive nature of the contractual relationship with Islamic banks clients that depends on profit and loss sharing, Different types of financing and investment activities involve a unique risk along with the common risks facing conventional banks.

This research is an attempt to explore whether there is a significant difference between Conventional Banks and Islamic Banks in the Middle East Region with regard to risk management or not ?.

3. Research Objective

The main objective of this research is to investigate the main difference between Islamic Banks and Conventional Banks with regard to risk management in the Middle East region.

4. Research Question

Based on the above mentioned in the research problem, the research question is as follows:

Is there a significant difference between Conventional Banks and Islamic Banks with regard to risk management practice and its components in the Middle East Region?

5. Importance of Research

The importance of this research from academic point of view is that, this research is an attempt to add the body of knowledge about the difference of risk management practices of Islamic banks and conventional banks in the Middle East.

From Practical point of view, This research is an important attempt to draw a comprehensive overview for risk managers and banks' executives to pro-

professionally know the relative importance of risk management practices in Islamic banks and conventional banks, thus prepare themselves to the sophistication of banking instruments and build appropriate risk management systems to mitigate different types of risk

6. Literature Review

As mentioned above commercial banks are exposed to different types of risks that affect their performance. However, Islamic Banks are facing unique types of risk in addition to the conventional banking risks. In the following section, all these types of risks will be reviewed.

6.1. Strategic Risk

Strategic risk is one of the most significant risks that belong to the current and future threats. This type of risk could have a significant impact on bank's income and its capital as a result of making wrong decisions or misappropriation of decisions. Strategic Risk also is defined as inefficient response-iveness to economic, technological and regulation changes in the banking sector. The Bank's Board of Directors is fully responsible for the strategic risks and management of the Bank which is responsible for ensuring that the bank has appropriate strategic risk management and policies related to business strategies (Mohamed, 2016).

Strategic Risk has been identified as part of overall Business Risk. The main purpose of Strategic Risk Management is to strengthen the bank's earnings resilience and shield it against the volatility of undue earnings that is to support overall risk appetite targets of banks (Duetch Bank Report, 2016). Strategic risks can be classified in terms of three pillars, namely: Positioning, Execution

and Consequences risks (Deloitte, 2017). Accordingly, Strategic risks in banks could be interpreted under these classifications which can help risk managers to formulate institutions' strategies

- **Strategic positioning risks:** Is the deviation from strategic road map of the bank and the strategic objectives may not be achievable.
- **Strategic execution risks:** is inability to achieve the strategic objectives of the bank due to lack of talents, capabilities and infrastructures
- **Strategic consequence risks:** This type of risk results from the bank's strategic choices which lead to unintended consequences

6.2. Credit Risk

Credit risk is defined as the probability of loss due to failure of obligor to paying debts. Credit risk is considered as the most crucial risk for banks due to strong linkage with banks profitability and economic growth (Ekinci, 2017).

This is the main variable affecting the net income and the market value of equity arising from non-performing loans. The more the bank acquires a profitable asset, the greater the risk that the lender will default on repaying the principal and interest according to the specified dates. The risks of credit default is found in the bank's activities, whether in or off balance sheet. Identifying credit risk accurately and developing indicators and data that can be measured helps to manage and control these risks and thus minimize overall banks' risks.

6.3. Liquidity Risk

The risk of failure to match and harmonize cash withdrawals of customers and repayments of the borrower called liquidity risk. The inability of the

bank to liquidate the assets at an acceptable cost affects its profitability; **the following are some causes of liquidity risk:**

- Poor liquidity planning of the bank, leading to inconsistencies between assets and liabilities in terms of maturity.
- Poor distribution of assets on utilization that are difficult to convert into liquid balances.
- The sudden shift of some contingent liabilities into actual commitments.
- The impact of external factors such as economic recession and severe crises in financial markets.

In order to minimize banks' liquidity risk, Banks must maintain liquidity buffer to satisfy short term needs . Ratnovski(2013), argued that that both liquidity buffers and bank transparency are important in bank liquidity risk management. In a liquidity event, a liquidity buffer can satisfy small amounts withdrawals with certainty. However, Transparency permits the bank to refinance huge withdrawals too, but it is not always efficient.

6.4. Market Risk

Market risk is defined as the risk of adversarial deviations of market value transactions caused by market changes during the time required to liquidate or off-set positions and consisting of interest rate, currency, and commodity risks (Ratnovski ,2013).

6.4.1. Interest Rate Risk

Interest rate risk is defined as the probable loss/damage from unfavorable changes in interest rates on a bank's profitability and market value of equity (BCBS, 2016).

According to Hull (2012), the interest rate gap is a regular measure of the exposure to interest rate risk and me-

asures bank's exposure to interest rate by allocating assets, liabilities and off-balance sheet items to time buckets according to their re-pricing characteristics. The net difference in a specific bucket explores the net exposure to changes in interest rates. There are two types of gaps, the fixed interest rate gap which is defined as the difference between fixed rate assets and fixed rate liabilities, the other types is the variable interest rate gap which is the difference between interest sensitive assets and interest sensitive liabilities.

Memmel, et.al.(2016), investigate the relationship between banks' exposure in Germany to interest rate risk, the banks' earning position and the anticipated returns from bearing interest rate risk over the period 2005-2014 and found that, the prominent comovement between a banks' exposure to interest rate risk and the corresponding anticipated return will increase the difference between there-pricing periods on its assets and liabilities if the expected return from bearing interest rate risk increases. This relationship becomes weaker if a bank's earning situation deteriorates.

Gomez M. et.al.(2016), studied American banks' exposure to interest rate risk for banks holding companies over the period from 1986 to 2013, banks' exposure to interest rate risk has been measured through income gap as a difference between asset and liabilities that mature in less than one year. The results confirm that American banks retain significant exposure to interest rate risk which has a significant implications for monetary policy transmission. Also, the increase of short term rate has a direct impact on banks' income via

their income gap and their lending policy.

Claessens, S., et al., (2016) investigate the effect of low interest rate on net income margin (NIM) of 3,418 banks from 47 countries for 2005-2013. The results revealed that, low interest rate lead to weaker net interest margin (NIM) and identifies and opposing impact on banks' profitability. This result is consistent with the findings of Genay and Podjasek (2014), who confirmed that low interest rate has an adverse impact on NIM of American banks. However, (Covas, et. al, 2015) argued that the impact of low interest rate on Net Interest Margin and Banks' Profitability is vary based on Banks' Size as Large banks have advantage of international reach and networks that facilitate international lending and accordingly increasing of their profitability.

6.4.2. Currency Risk

Greuning and Bratanovic (2009), stated that Currency risk leads to contrary or favorable impact on firm's value. It had driven from unexpected variations in exchange rates between a firm's reporting currency and other foreign currencies. It is a risk of variability because of a mismatch between the assets value and the value of capital and liabilities denominated in foreign currency, or due to a mismatch between receivables by foreign currency and payables by foreign currency that are recorded in the reporting currency.

The mismatch also occurs between the two sides of banks' balance sheet. On Asset side (i.e. Interest and loan Principles) and the liability side (i.e. Deposits and borrowings by the banks). Variations in exchange rates may lead to gains or losses to banks operations w-

hen banks have net open and unhedged positions on-or off-balance in a specific foreign currency. An exchange loss recorded in banks financial positions if banks have net long positions in foreign currency which might depreciate against the reporting currency. On the other hand, Banks gain profit from foreign currency appreciation against the reporting currency (Kamau et. al, 2015).

Madura (2014), classifies currency risks into three classifications as follows:

- Transaction Risk : is the effect of currency exchange fluctuation on accounts receivables and account payables
- Translation Risk : This risk identified as the effect of revaluation of foreign currency position into the reporting currency.
- Economic Risk: is the effect of unanticipated variations in exchange rate of the present of expected banks' cash flow that will be generated in the future.

Exchange rate risk doesn't affect only the banks' performance but also has a significant impact on banks' stock return. In this context, Atindéhou and Guyeie (2001) examined the effect of exchange rate fluctuations on banks' stock return in Canada over the period 1988-1995 and the results confirmed that stock returns were sensitive to currency variations. This result is consistent with Andreas (1999) who investigate the effect of exchange rate fluctuation on stock returns of Greek Banking sector and assert that banks' stock return in Greek is sensitive to exchange rate fluctuations.

6.4.3. Commodity Risk

The decline in the prices of basic commodities has a negative effect on the

banks' financial positions. According to (Kinda, et.al, 2016) countries that export basic commodities are very sensitive to decline of commodity prices due the negative impact of low exports' income. Accordingly, the economic activities in those countries are adversely affected which affect the ability of agents to pay their obligations and their debt to commercial banks and consequently reducing banks' profitability.

From another point of view, Reduction in commodity prices will affect the fiscal performance of the governments and put pressure on their budgets to be adapted to the shortfall in exports revenue .Accordingly ,the governments may delay their payment to the contractors which lead to negatively effect on contractors 'ability to repay and fulfill their debts banks (Kinda, et.al.,2016).

Kinda et .al.(2016), Investigate the effect of commodity price shocks and sharp declines in commodity on financial sector instability. Their research used a sample of 71 commodity exporters from emerging and developing countries over the period 1997-2013, and the result revealed that there is a negative impact of commodity prices on financial sector stability. This result confirmed that commodity price shocks are strongly linked to financial sector instability and could be considered as one of the significant factor that affect the financial health of banking sector .

De Bock and Demyanets (2012) studied the determinants of non-performing loans in 25 emerging countries over the period from 1996 to 2010. The results found that GDP growth rates and changes in terms of trade considered as main determinant of non-performing loan. If GDP and terms of trade

affected by commodity price fluctuations , this mean that commodity price shocks have a significant impact on ability to repay loans which increase the percentage of non-performing loans in commercial banks.

6.5.Operation Risk

The operational risk refers to the probability of a significant change in operating expenses more than expected, causing a decrease in income. Thus, operation risk is closely related to the burdens and number of sections, branches and number of employees and because the operating performance depends on the technology used by the bank. The success of control over this risk depends on whether the bank's system of providing products and services is efficient or not. Some banks do not have the efficiency to control the direct costs and processing errors of bank employees (Mohamed, 2016).

Operational risks are the result of human or technical errors or accidents. The risk of direct and indirect loss resulting from internal and external factors. Internal factors are attributable to inadequate equipment, personnel or technical deficiencies. However, while the human risk is due to lack of proficiency, the cause of technical risk may arise due to breakdown in equipment, computers and failure in communication network. The risks of operations may occur as a result of lack of precision in the implementation of operations and exit from the limits set by the policy of the bank (Hassan, 2011).

6.6.Unique Risk of Islamic Banks

Islamic banks are exposed to all mentioned types of risks as conventional

banks in addition to unique types of risks. Table 1.1 provides a summary of additional unique types of risks that Islamic Banks are exposed to.

Table 1.1 Unique risks of Islamic Banks

Type of Risk	Definition
Sharia non-compliance risk	Risk arises from non-complying with the Shariainstructions and principles.
Rate of return risk (instead of Interest Rate risk)	The probableeffect on the returns caused by unanticipatedvariation in the rate of returns.
Commodity and Inventory Risk	Arising from holding items in inventory either for resale under a Murabaha contract or view of leasing under an Ijarah contract.
Equity Investment risk	The risk arising from engaging in a partnership in order to undertaking or participating in a specific financing or ordinary business activity as described in the contract, and in which the provider of finance shares in the business risk. This risk is linked to Mudharabah and Musharakah contracts.

Source : (Hassan ,2011)

5.7.Development of Islamic Banks.

Global Islamic finance is highly concentrated in the Middle East and North Africa (MENA) region, with 77.85% of the assets of financial institutions. Gulf Arab states account for 39.21% of the assets of Islamic financial institutions around the world, while the rest of the MENA region accounts for 38.64% of Islamic financial assets.

In contrast, Asia accounts for 20.8% of Islamic assets, Africa and sub-Saharan Africa at 0.84%, and Europe, America and Australia combined at 4.28%. (The Banker,2013). The Kingdom of Saudi Arabia is one of the largest countries in the global Islamic banking sector, with 16% of global Islamic banking assets followed by Malaysia (8%), UAE (5%), Kuwait (4%) and Qatar (3%). (Ernst & Young,2015).

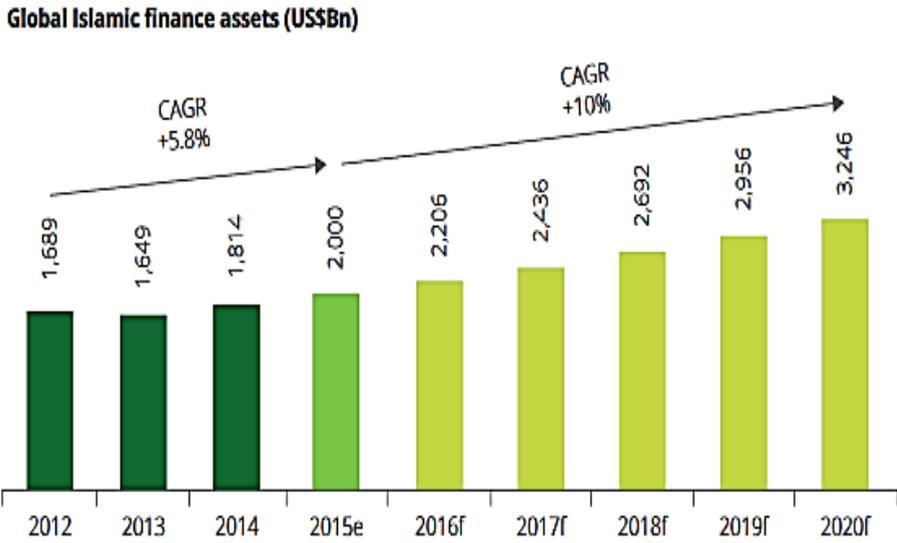


Figure 1.1

Source:ICD Islamic Finance Development Report 2015, Monitor Deloitte Analysis 2016

The expected Compound Annual Growth Rate (CAGR) for the global Islamic Finance assets is 10% till 2020 .This forecasting shows the expected expansion of Islamic banking and finance across the globe which required excellent infrastructure and also require development of new Islamic banking products /instruments to satisfy the expected needs .

7.Risk Management

Risk management is at an attractive point in its evolution. Now Risk Management is considered to be not only essential to the bank’s financial stability and regulatory compliance, but also a fundamental part of formulating banks’ strategies and operational effectiveness (Garside&Mitchell, 2017).

The risk management culture should cover all department and units within the financial institutions so that all employees understand and recognize the

importance of risk management and its influence on enhancing bank’s performance and protecting deposit holders as much as possible. There are four pillar of risk management process these pillars are; identifying, measuring, monitoring and managing various risk exposure .However, these pillars cannot be effective unless there is an appropriate and efficient system to insure their effectiveness(Mohamed,2017).

Khan and Ahmed (2001),suggested a comprehensive framework that could be used as standards of risk management system in the financial institutions. **This framework consists of three stages as follows:**

- First stage is to set up a proper risk management environment and sound policies.
- Second stage is to sustain an appropriate risk measurement, mitigating, and monitoring process,

- Third stage is to maintain a sufficient Internal controls

Based on the above mentioned review about risk management **the first null hypothesis is as follows :**

H01: There is significant difference between Islamic banks and conventional banks with regard to risk management practices .

7.1.Risk Management Process.

Al Tamimi(2007), argued that risk management is a comprehensive process starts understanding risk and risk management then identifying risks associated with banks transactions and operation then assess and analyze different types of risks and finally monitor banks' risks .



Source: Author own figure based on (Al –Tamimi, 2007).

Figure 1.2. Risk Management Process

7.1.1.Understanding Risk:

The first step in risk management process is to well understand the risks associated with all operations in the bank and across all managerial levels. Accordingly, the responsibility of risk management process should be clearly set out and understood to minimize the probability of negative consequences on banks performance. In this context, Mohamed (2017), argued that understanding risk and risk management will lead to increase in awareness concerning the importance of risk management and may protect banks from serious risk factors and significant consequences.

The serious consequences of not understanding banks risk and risk management is very crucial to banks financial stability. In the recent global financial crisis 2007-2008, A lot of invest-

ment brokers sold high risk instruments without understanding the significant risk of these instruments. Most dealers in the financial market transferred risks to each other's and increase the probability of destroying the financial system and destabilize the global financial markets.

Banks should develop and apply a training system to their employees to well understand risks of all banks services. Increasing knowledge about banks risk and risk management will enhance banking process and reduce the probabilities of loss in addition to decreasing the prospect cost of bankruptcy (Hassan, 2011).

Based on the above mentioned review about risk understanding **the second null hypothesis is as follows :**

Ho2: There is a significant difference between Islamic banks and conventional banks with regard to risk understanding.

7.1.2. Risk Identification

One of the most important phase in risk management process is risk identification which is defined as the practices of constructive and recognition of all internal and external threats that would stop over banks from achieving their strategic goals (Mohamed, 2017).

Wyman (2015), argued that risk identification is a practice that accumulates information which is already recognized by individuals across the organization and bundles the different parts of information in a way that generates transparency around the risks, their key drivers and their estimated level. Risk identification must also expand beyond the traditional classifications of credit, market, operational and liquidity risks.

Dinu (2012) stated that risk identification could be achieved through two stages: initial risk identification stage and ongoing risk identification stage. Barton (2002), stated that risk identification procedures includes sorting of risk causes and elements based on impact, decisiveness, and money effect, As such classification contributes in prioritize risks elements according to their significance. Therefore, helping top management to develop risk strategy and support the strategic planning process by highlighting the main risks of the plan and suggest alternative strategic actions that reduce risks.

While risk identification occurs continuously throughout banks, a formal process is required periodically to make sure that the full list of risks facing ba-

nks is up-to-date. The frequency of this formal risk identification process must take into consideration the rate at which risks develop and the frequency of the final processes that benefit from the information. For many banks, the full formal process should be conducted at least annually, and also should be temporarily updated in the interim as the risk that face banks changes due to external, internal and uncontrollable factors (Wyman, 2015).

Based on the above mentioned review about risk identification **the third null hypothesis is as follows :**

Ho3: There is a significant difference between Islamic banks and conventional banks with regard to risk identification.

7.1.3. Risk Assessment and Analysis

Risk assessment is a systematic practice for identifying and assessing potential losses or damages that may affect the achievement of the organization's strategic objectives. Potential damage and losses may happen through internal factors (i.e. employees, operating or organizational structure), or through external factors such as economic events, political events, and legal regulations. Consequently, when these events are likely to occur internally or externally and can interfere and interact with it (Mohamed, 2017).

It is worth noting that risk assessment is another crucial step in the risk management process. It is also important that potential losses and damages should be identified and a mitigation strategy should be developed to protect the organization. While one measure to assess the importance of risk is highly

desirable. However, it is practically difficult. Some risks such as strategic risks and reputational risk may have an impact on the perspective of long-term economic value but not from a short-term accounting perspective. For other types of risk, measuring the magnitude of the risk may be very difficult. Therefore, assessing risk should take into consideration the qualitative perspective (Wyman, 2015).

Based on the above mentioned review about risk assessment **the fourth null hypothesis is as follows :**

Ho4: There is a significant difference between Islamic banks and conventional banks with regard to risk Assessment and Analysis.

6.1.4. Risk Monitoring

Risk monitoring is an essential stage in the whole integrated risk management process. It is defined as an efficient practice that guarantees that there is no violation from actual bank's risk profile comparing to the target and planned one (Mohamed, 2017). Accordingly, risk monitoring assures that the bank is in line with the approved risk strategy by Board of directors. The board of directors is in charge of formulating the overall strategy and the objective of the risk management of the bank. Also, the board should approve and review all policies and procedures regarding risk management process and make sure that the management is taking a serious steps to achieve the main steps in the risk management process effectively which include identify, measure, monitor, and control risk. The board should on regular basis review the risk management process and amend any policy based on the new variables that may appear in

the external environment (Al-Ali & Nasyari, 2014).

The comprehensive framework of risk management process should make sure that there are appropriate risk management review processes, proper limits on risk taking by the bank, sufficient structures of risk measurement, a comprehensive reporting system, and efficient internal control systems. In this matter banks should clearly determine the individuals and/or committees in charge of risk management and well describe the line of authority and responsibility (Khan, 2011).

The internal control system that monitors banks' operation risks includes an appropriate procedure to recognize and assess diverse types of risks and obtaining adequate information to maintain the accuracy of control system. The system should set up procedures and to be reevaluated on regular basis. Based on the evaluation and assessment process the weakness of this system should be treated efficiently.

The internal control should establish risk assessment procedures based on the followings:

- Assessment of external and internal factors that could affect whether strategic objectives are achieved.
- Identification and analysis of risks.
- The systems used to manage and monitor the risks.
- Processes that react and respond to changing risk conditions.
- The competency, knowledge, and skills of personnel responsible for risk assessment.

The control environment should be evaluated and reviewed on regular basis based on the following parameters (Comptroller, 2012).

- The integrity, ethical values, and competence of personnel.
- The organizational structure of the bank.
- Management's philosophy and operating style (i.e., strategic philosophy)
- External influences affecting operations and practices (e.g., independent audits, regulatory environment, and competitive and business markets).
- Methods of assigning authority and responsibility and of organizing and developing people. The attention and direction provided by the board of directors and its committees, especially the audit and risk management committees.

At the monitoring stage banks must have an efficient information system to provide the board of directors and senior management team with all necessary information about risk management process. There are essential steps that should be considered to achieve the objective of risk measurement and monitoring. These steps include setting up standards for classification and appraisal of risks, regular assessment and rating processes consequently, it is very important to establish a consistent risk and audit reports to support the board and executive manager to evaluate the overall process of risk management and enhance the risk management system if there is any weakness or breach. It sh-

ould be efficient procedures to monitor and manage risks the taken by the bank. (Tafri ,et.al,2012).

Based on the above mentioned review about risk monitoring **the fifth null hypothesis is as follows :**

Ho5: There is a significant difference between Islamic banks and conventional banks with regard to risk monitoring.

7.Data Collection

Following the questionnaire developed by Al-Tamimi (2007) the author used it to a cover the followings:

- Risk management practices
- Understanding risk and risk management
- Risk identification
- Risk assessment and analysis;
- Risk monitoring

The questionnaire has been reviewed by two academic professors and two senior bankers from top tier banks. The questionnaire has been distributed to cover Middle East countries: Egypt, Saudi Arabia , Bahrain ,Qatar ,Kuwait and Sudan. The questionnaire consists of thirty five closed ended questions based on an interval scale to measure the degree of agreement by respondents using a seven-point Likert scale.

7.1. Questionnaire Response Rate & Statistical Descriptive

Table 1.2 Breakdown of Questionnaire Response Rate

Country	Distributed	Received	Not Valid	Valid	Response Rate
Bahrain	60	42	4	38	63.33%
Egypt	100	58	5	53	53.00%
Kuwait	65	43	7	36	55.38%
Qatar	50	29	6	23	46.00%
Saudi Arabia	100	61	5	56	56.00%
Sudan	10	4	1	3	30.00%
UAE	80	47	6	41	51.25%
Total	465	284	34	250	53.76%

The main difference between this research and Al-Tamimi (2007), is that this research focus on the Middle East banking region, however Al-Tamimi focus on banks of United Arab of Emirates to study the difference between risk management of Local Banks and Foreign Banks. Both Al-Tamimi (2007) and Hassan (2011) used questionnaire consists of thirty nine close ended questions in addition to open ended questions and rank ordered questions, However this research paper adapted questions to be just thirty five close ended questions without any open ended ques-

tion or rank ordered questions to support the main objective of this research.

Also, the difference between this research and Hassan (2011) research is that the response rate is higher than the response rate of Hassan (2011), accordingly the result of this research could be considered as more reliable. Also the data has been collected after Arab revolutions and Middle East market instability which demonstrates higher level of risks and market instability. However Hassan (2011) collect data before Arab Spring and at this stage the market was more stable.

7.2 Statistical Descriptive of Variables

Table 1.2.1 Descriptive Statistics for Conventional Banks Data

Conventional Banks	Mean	Mode	SD	Chi-Square
Risk Management Practices	6.04	5	0.62	0.00
Understanding Risk and Risk Management	4.21	4	0.71	0.00
Risk Identification	5.77	5	0.82	0.00
Risk Assessment & Analysis	5.84	5	0.65	0.00
Risk Monitoring	6.09	5	0.75	0.00

Table 1.2.2 Descriptive Statistics for Islamic Banks Data

Islamic Banks	Mean	Mode	SD	Chi-Square
Risk Management Practices	4.64	4	1.22	0.00
Understanding Risk and Risk Management	5.81	5	1.31	0.00
Risk Identification	5.32	5	1.46	0.01
Risk Assessment & Analysis	4.52	4	1.35	0.00
Risk Monitoring	6.09	5	0.83	0.00

Table 1.2 revealed the questionnaire response rate which shows the total response rate is 53.67% .Table 1.2.1 and Table 1.2.2 revealed the descriptive statistics for data collected from Islamic and Conventional Bank Chi-square test, a nonparametric test, is used to explore frequency data in order to test whether the data represent good fit or not. At confidence level of 5%, the p-value is less than 0.05 which indicates that for most of risk management practices components there is goodness of fit between data

8. Research's Model

In order to analyze the outcome of the questionnaire, This research used regression model to investigate the predictor factors that have the most impact on risk management practices in Islamic and Conventional banks. Also, ANOVA test used to find out whether there is a significant difference between Islamic Banks and Conventional Bank with regard to risk management practices and its components. **The regression model is as follows :**

RMPs=function(URR, RID, RAA, RMN)

Where,

RMP (Risk Management Practices) is the dependent variable and URR (U-

nderstanding Risk and Risk management), RID (Risk Identification), RAA (Risk Assessment and Analysis) and RMN (Risk Monitoring) are the independent variables. The serious of the independent variables are extracted from the results of the questionnaire.

9. Results & Interpretation

This section presents the results and interpretation concerning reliability and consistency , Multicollinearity, regression analysis and ANOVA .

9.1 Reliability and Consistency

In order to measure the consistency and reliability among the responses against each item in the risk management questionnaire, Cronbach's Alpha test used to examine this fact .The results for the five subsections in the questionnaire as shown in table 6.5 revealed that the Cronbach's alpha is vary between 0.735 and 0.835 which indicate that there is an acceptable level of consistency among responses. Also, the Cronbach's Alpha result for overall questionnaire is 0.893 which indicate that there is a very satisfied level of consistency among responses for overall questionnaire.

Table 1.3 Cronbach's Alpha Results

RMPs	0.832
URM	0.784
RID	0.735
RAA	0.782
RMN	0.835
Overall	0.893

9.2. Multicollinearity

As mentioned, Multicollinearity can generate misleading results when attempting to examine how well individual independent variables could be used as predictors to understand the dependent variable. In general, Multicollinearity could lead to a wide confidence intervals and strange P values for independent variables. Pearson correlation is used to examine whether there is a multicollinearity problem among the explanatory variables or not, .Anderson et

al. (1990) states that any correlation coefficient exceeding (0.7) indicates a potential problem of multicollinearity. Results in table 6.6 revealed that, there is no problem of multicollinearity among these variables. The following table indicates the correlation coefficient between explanatory variable is varying between 0.470 as a maximum correlation coefficient and 0.006 as the lowest correlation coefficient, which still in the acceptable range as indicated by Anderson et al. (1990).

Table 1.4**Correlations Matrix–Risk Management**

RMPs	Pearson Correlation	1.000				
	Sig. (2-tailed)					
URM	Pearson Correlation	0.215	1.000			
	Sig. (2-tailed)	0.001				
RID	Pearson Correlation	0.220	0.152	1.000		
	Sig. (2-tailed)	0.001	0.004			
RAA	Pearson Correlation	0.470	0.076	0.014	1.000	
	Sig. (2-tailed)	0.255	0.421	0.865		
RMN	Pearson Correlation	0.135	0.165	0.155	0.006	1.000
	Sig. (2-tailed)	0.149	0.279	0.093	0.950	

** . Correlation is significant at the 0.01 level (2-tailed) . , * . Correlation is significant at the 0.05 level (2-tailed).

9.3. Regression Analysis

The model summary as show in table 1.5 revealed that the $R^2=0.6493$ which means that all independent variables can explain only 64.93% of the varia-

tion in risk management practices. Accordingly, there are other factors that did not included in this study and may have significant impact in explaining the variation in risk management practices and its effectiveness.

Table 1.5

Model Summary b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	0.7829	0.6493	0.6168	0.5781	34.0673	0.000**

a. Predictors: (Constant), URM, , RID, RAA, RMN

b. Dependent Variable :RMPs

Table 1.6 revealed that, the most significant factor that has influence on the variation of risk management practices is Risk Identification as beta coefficient is 1.837 which mean that there is a positive relationship between risk identification and risk management practices. This results is in line with Basel Committee on Banking Supervision (BCBS, 2011) which recommend that bank identification of risk is a vital process in bank risk management as banks

should identify all types of risks involved in all banks activities and its operations .It also recommended that banks should make sure that risk identification should be done before introducing any new banks activity or product. Efficient risk identification and assessment let the bank to be able to better understand its risk profile and target risk management resources in an effective manner.(BCBS, 2011).

Table 1.6

Coefficients a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Beta	Std. Error	Beta		
1	(Constant)	-2.17719	2.11211		-1.66542	0.000**
	URR	1.73097	1.06653	0.36977	5.62300	0.000**
	RID	1.83782	0.81273	0.52017	3.26130	0.000**
	RAA	0.26798	0.65657	0.04265	3.40815	0.000**
	RMN	0.58411	0.06527	0.48514	3.94880	0.000**

a. Dependent Variable: RMPs **. Significant at the 0.01 level (2-tailed). , *. Significant at the 0.05 level (2-tailed).

The second variable that has significant impact on risk management practices variation is understanding risk and

risk management .The results revealed that there is a positive relationship between understanding risk and risk man-

agement practices. This confirms the fact that as long as the bankers are well understanding the risk inherent in all banking operation and all activities as long as there is an effective risk management practices that mitigate banks' risks. The results are consistent with Olomola (2002) who argued that both borrowers and lenders should well understand their role to comply to loan and credit facility contract as well as the duties and responsibilities. Accordingly, reducing the possibility of arising credit problems and enhance the efficiency of the credit and lending programs rather than directing all loans to the borrowers.

It is worthy mentioned that both Islamic and conventional are facing several types of risks. Accordingly, understanding these types of risks in depth will help banks to mitigate risks and enhance banks' performance. This argument is in line with Griffin et al (2009), who examine the risk management practices of Islamic banks through measuring risk perception of senior manager of twenty eight Islamic banks. The results showed that, Islamic banks are facing to the same types of risk that faced by conventional banks in addition some unique risk. Consequently, understanding all types of risk will help banks to assess and mitigate risk in an effective manner which will result in increasing profitability and stabilizing banking sectors.

The third factor that has a significant impact on explaining the variation of risk management practices is Risk Monitoring. The results in table 1.6 revealed that, there is a positive relationship between risk monitoring and risk management practices. Accordingly, ensuring a proper system of monitoring risk

will enhance risk management practices. This result is consistent with recommendations of Basel Committee on Banking Supervision (BCBS, 2011) which stated that bank should ensure that all monitoring reports are integrated, applicable and in line with all banks business lines and products.

The results also in line with the argument of (Soyemiet *et al*, 2014) who argued that banks should establish an efficient management information system (MIS) to oversee and monitor levels of banking risk and to support a regular review of banks' risk positions. In order to make sure that monitoring reports are effective, it should be accurately built on efficient information and distributed to all decision makers within the bank. These practices will enhance the risk management practices and accordingly will enhance banks performance in terms of return on asset (ROA) and return on equity (ROE). The results are also in line with (Hussain and Al-Ajmi, 2012) and (Abdou, 2014). The fourth factor that has a significant impact on explaining the dependent variable (RMPs) is risk assessment and analysis. Table 1.6 revealed that there is a positive relationship between risk assessment and analysis as an explanatory variable and risk management practices as a dependent variable. The results also revealed that this relationship is significant. This finding is consistent with (Hameeda and Al-Ajmi, 2012) and (Abdou, 2014). The results revealed in table 1.6 shows that there is a partially consistent result with the finding of (Nazit et al, 2012) who investigate the risk management practices of Islamic banks versus conventional banks in Pakistan and found that there is a positive relationship between risk assessment and analysis as

independent variables and risk management practices as a dependent variable, however the result is not significant.

8.4. Risk Management differences between Islamic and Conventional Banks

In order to investigate whether there is a significant difference between Islamic and Conventional banks regard-

ing risk management practices, ANOVA is used to examine and analyze such differences.

8.4.1. Risk Management Practices

The results in table 1.7 revealed that there is a significant difference between Islamic Banks and conventional banks with regard to risk management practices at confidence level 99%.

Table 1.7 ANOVA –Risk Management Practices

RM P		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	5.635	1	5.635	25.108	(0.000)**
	Within Groups	60.258	249	0.242		
	Total	65.893	250			
URM						
	Between Groups	3.845	1	3.845	19.481	0.165
	Within Groups	40.587	249	0.163		
	Total	44.432	250			
RID						
	Between Groups	6.905	1	6.905	36.427	(0.000)**
	Within Groups	69.969	249	0.281		
	Total	76.874	250			
RAA						
	Between Groups	8.075	1	8.075	23.226	(0.000)**
	Within Groups	91.881	249	0.369		
	Total	99.956	250			
RMN						
	Between Groups	8.362	1	8.362	24.693	(0.000)**
	Within Groups	94.869	249	0.381		
	Total	103.231	250			

** . Correlation is significant at the 0.01 level (2-tailed). , * . Correlation is significant at the 0.05 level (2-tailed).

The results is consistent with (Iqbal and Mirakhor, 2007) who argued that risk management practices of Islamic banks are differ from conventional banks as all practices of risk management should be based on real economic activities and it couldn't rely on speculative

transaction or activities such as selling assets not owned or sale of debt or conducting transaction that involve high level of uncertainty . Also, All Islamic risk management instruments and tools must comply to Islamic shariaa rules and must be linked to the real economic

activities. Additionally, all risk management practices should be conducted in an ethical code of conduct. On the other hand, in Conventional Banking system it's allowable to use speculative instrument and use conventional derivatives instrument to hedge against risk which is prohibited form Islamic Shari-aa point of view. The results is also, consistent with finding of several researches (Abdou et.al. 2014, Hassn, 2011 and Hassan, 2009). However, the results of table 1.7 is inconsistent with (Owais et.al 2013) who examined difference between Islamic banks and conventional banks regarding risk management practices and found there is no significant difference between both types of banks in Pakistan.

8.4.2. Risk Understanding

Concerning understanding risk, table 1.7 revealed that there is no significant difference between Islamic banks and conventional bank at 99% and 95% confidence levels .As both types of banks understand risk inherits in their operations and accordingly practice proper methods to mitigate these types of risks. This result is in line with the recommendations of Basel Committee on Banking Supervision (BCBS, 2011), which recommends that failure to understand the risks inherits with banking operation will definitely increase the probability of some risks that may not be recognized in an efficient manner and accordingly will not be controlled effectively. These results raise the importance of establishing culture that let all banks' managerial levels to be aware with and understand the risks that bank face, inherit with their operations and promote ethical attitude and behavior toward dealing with all types of risks.

The results is also in line with the finding of (Nazir et.al 2012), who found that there is no significant difference between Islamic Banks and Conventional bank with regard to understanding risk and risk management in Pakistan . However the results is inconstant with the finding of (Hameeda and Al-Ajmi, 2012), who examine difference of risk management practices between Islamic and conventional banks in Bahrain and found that there is a statically significant difference between Islamic Banks and conventional banks with regard to understanding risk and risk management .

8.4.3. Risk Identification

With regard to Risk Identification, Table 1.7 revealed that there is a significant difference between Islamic Banks and Conventional Banks with regard to risk identification at 99% confidence level. The result is consistent with finding of (Abdou.*et.al* ,2014), who examine whether there is a significant difference between Islamic banks and conventional banks with regard to risk identification . However, The results is inconsistent with the findings of (Hameeda and Al-Ajmi,2012), who examine difference of risk management practices between Islamic and conventional banks in Bahrain and found that there is no statically significant difference between Islamic Banks and conventional banks with regard to risk identification. The results is also inconsistent with finding of (Nazir et.al 2012), who found that there is no significant difference between Islamic banks and conventional bank with regard to risk identification.

It is critical to mention that, Basel Committee on Banking Supervision

(BCBS, 2011) recommend that there are possible tools that should be used by banks in order to be able to identify risk in an efficient manner such as:

- **Self-Risk Assessment:** Banks must prepare a menu of potential risk and assess their banking operation against this menu and find out the proper way to mitigate these types of risks.
- **Mapping Bank Risk:** In this technique, Banks functions and department are mapped and classified by risk inherits in their operation.
- **Indicators of Banks Risks:** Using statistics and financial techniques as indicators to identify banks 'risks position. These indicators should be reviewed on regular basis (i.e. monthly, quarterly, semiannually or annually).

According to the results revealed in table 1.7 which stated that there is a significant difference in tools used by conventional banks and tools used by Islamic banks in identifying banks 'risks. And Based on Basel recommendation it's very important to explore the importance of the effective tools to identify banks' risks for both types and move the next step which is assessing and analyzing each type of well identified risk.

8.4.4. Risk Assessment and Analysis.

Risk assessment is methodological procedures that aim to estimate events (i.e., potential risk and circumstances) which might influence the accomplishment of banks' objectives, positively or negatively. Identification of such events could be done within the external or in the internal environment of banks .Ho-

wever, it's very important to determine the weight and priority per each risk or event that may cause a deviation from banks' goals and delay achieving banks' targets (PricewaterhouseCoopers, 2013).

Table 6.8 revealed that there is a significant difference between Islamic Banks and Conventional banks with regard to risk assessment and analysis at 99% confidence level. This result is confirming the fact that there are some unique risks for Islamic banks. Such unique types of risks should be assessed and analyzed in different way than conventional banks. These unique are Sh-ariaa noncompliance risk which arise from deviation of applying Islamic sh-ariaa rules on banking transaction .Also there are another unique risk for Islamic banks such as Equity/partnership investment risk which arise from partnering the Islamic bank with investors to undertake a specific financing project .Such unique risks require special attention from Islamic banks regarding analysis and assessment of their weight and their influence on banks performance and banks' reputation. On the other hand, the result is inconsistent with (Nazir et.al 2012) who found that there is no significant difference between Islamic banks and conventional banks regarding risk assessment and analysis in Pakistan.

8.4.5. Risk Monitoring

Risk monitoring is consider as one of the most critical step in risk management practices . The results in table 1.7 revealed that there is a significant difference between Islamic banks and conventional banks regarding risk monitoring at 99% confidence level .The

main justification of this result is that that Islamic finance contract and agreements such as Murabaha ,Mudarabah, Salam and Istinsnaa and all other financing contract are not a straightforward contract like conventional banking contract .Such types of contract involve complicated techniques and require more efforts and special methodology to monitor and report risk inherit in such transaction.

On one hand, Islamic banks face specific types of risk called unique risk that should be monitored in different way such as risk of not complying with shariaa rules and risk of partnership with borrowers to finance specific projects. Such risks require different way of monitoring and oversight system that totally different from convention banks. On the other hand conventional banks are allowed to use hedge techniques such as derivatives which inherit complicated types of risks .such types of contract are required different monitoring system than Islamic banks which are not allowed to engage in non shariaa complied contracts .

While the results in consistent with the finding of (Abodu ,2014) who found that there is a significant difference between Islamic banks and conventional banks in Yemen regarding risk monitoring , however the result revealed in table 1.7 is inconsistent with (Nazir et. al 2012) who found that there is no significant difference between Islamic banks and conventional banks regarding risk monitoring in Pakistan.

9. Conclusion

This research investigates the difference between Islamic banks and conventional banks from risk management

approach .Using questionnaire consists of 35 close-end questions that covers seven Middle East countries. The results revealed that there is significant difference between Islamic Banks and Conventional Banks with regard to risk management process. As all practices of risk management in Islamic Banks should be based on real economic activities and it couldn't rely on speculative transaction or activities such as selling assets not owned or sale of debt or conducting transaction that involve high level of uncertainty.

One of the main crucial conclusions of this research is that there is no significant difference between Islamic Banks and Conventional Banks with regard to understanding risk and recognizing the importance of risk management. This result confirmed the importance of understanding risks inherit of banks' transaction will lead to reducing the probability of banks failure. The results of this research also lead to a very critical conclusion that is there is a significant difference between Islamic Banks and Conventional Banks with regard to Risk Identification, Risk assessment and Risk Monitoring due to unique types of risks inherit in Islamic banks operations and Islamic Banks are still new in the banking sector and don't have huge accumulated experience in risk assessment and risk monitoring techniques or may be due to the significant role of Sharia Board which could be act as a self-immunity system and first defense line to assess ,avoid and monitor different types of risks inherit with Islamic banks' operations.

With Regard to suggestions for future research I suggest further researches to be done in the future to examine the effect of applying Basel III and any

additional amendment on the risk management practices of Islamic and conventional banks in the Middle East. Also, I suggest to investigate the difference of risk management practices between Middle East and different region such as Far East region .

To construct a comprehensive framework of risk management process, both Islamic and conventional banks should make sure that there are appropriate risk management review processes, proper limits on risk taking by the bank, sufficient structures of risk measurement, a comprehensive reporting system, and efficient internal control systems. In this matter banks should clearly determine the individuals and/or committees in charge of risk management and well describe the line of authority and responsibility.

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Appendix 1.1

Risk Management Practices Questionnaire

On a scale from 1 to 7, please circle your appropriate answer.

1= Strongly Disagree

4= Neutral

2=Disagree

5= Somewhat Agree

3=Somewhat Disagree

6=Agree

7=Strongly Agree

No.	Question	Scale						
Understanding Risk and Risk Management								
1	There is a common understanding of risk management across the bank.	7	6	5	4	3	2	1
2	The responsibility for risk management is clearly set out and understood throughout the bank	7	6	5	4	3	2	1
3	The accountability for risk management is clearly set out and understood throughout the bank.	7	6	5	4	3	2	1
4	Managing risk is important to the performance and success of the bank.	7	6	5	4	3	2	1
5	It is crucial to apply the most sophisticated techniques in risk management.	7	6	5	4	3	2	1
6	Your bank's objective is to expand the applications of advanced risk management techniques.	7	6	5	4	3	2	1
7	It is important for Your bank to emphasize on the continuous review and evaluation of the techniques used in risk management.	7	6	5	4	3	2	1
8	Applications of risk management techniques reduce costs or expected losses.	7	6	5	4	3	2	1
Risk Identification								
9	The bank carries out a compressive and systematic identification of its risks relating to each of its declared aims and objectives.	7	6	5	4	3	2	1
10	The bank identifies the main potential risks relating to each of its declared aims and objectives.	7	6	5	4	3	2	1
11	The bank finds it difficult to prioritize its main risks.	7	6	5	4	3	2	1

12	Changes in risks are recognized and identified with the bank's roles and responsibilities.	7	6	5	4	3	2	1
13	The bank knows about the strengths and weaknesses of the risk management systems of other banks it works with	7	6	5	4	3	2	1
14	Your bank has developed and applied procedures for the systematic identification of opportunities.	7	6	5	4	3	2	1
Risk Assessment and Analysis								
15	Your bank assesses the likelihood of occurring. risks	7	6	5	4	3	2	1
16	Your bank's risks are assessed by using quantitative analysis methods	7	6	5	4	3	2	1
17	Your bank's risks are assessed by using qualitative analysis methods(e.g. high, moderate, low)	7	6	5	4	3	2	1
18	Your bank analyses and evaluates opportunities it has to achieve objectives.	7	6	5	4	3	2	1
19	Your bank's response to analyzed risks includes an evaluation of the effectiveness of existing controls and risk management responses.	7	6	5	4	3	2	1
20	Your bank's response to analyzed risks includes an assessment of the costs and benefits of addressing risks	7	6	5	4	3	2	1
21	Your bank's response to analyzed risks includes prioritizing of risks and selecting those that need active management	7	6	5	4	3	2	1
22	Your bank's response to analyzed risks includes prioritizing risk treatments where there are resource constraints on risk treatment implementation.	7	6	5	4	3	2	1
Risk Monitoring								
23	Monitoring the effectiveness of risk management is an integral part of routine management reporting	7	6	5	4	3	2	1
24	The level of control by the bank is appropriate for the risks that it faces.	7	6	5	4	3	2	1
25	Reporting and communication processes within your bank support the effective management of risk.	7	6	5	4	3	2	1
26	The bank's response to risk includes an	7	6	5	4	3	2	1

	evaluation of the effectiveness of the existing controls and risk management responses.							
27	The bank's response to risk includes action plans for implementing decisions about identified risks.	7	6	5	4	3	2	1
28	The bank's response to risk includes an assessment of the costs and benefits of addressing risks.	7	6	5	4	3	2	1
Risk Management								
29	The bank's executive management regularly reviews the organization's performance in managing its business risks.	7	6	5	4	3	2	1
30	Your bank has highly effective continuous review/ feedback on risk management strategies and performance.	7	6	5	4	3	2	1
31	The bank's risk management procedures and processes are documented and provide guidance to staff about managing risks.	7	6	5	4	3	2	1
32	Your bank's policy encourages training programs in the area of risk management.	7	6	5	4	3	2	1
33	Your bank emphasizes the recruitment of highly qualified people in risk management.	7	6	5	4	3	2	1
34	Efficient risk management is your bank's objective	7	6	5	4	3	2	1
35	The application of Basel capital Accord by your bank would improve the efficiency of risk management.	7	6	5	4	3	2	1