IJMCER
International Journal of Multidisciplinary and Current Educational Research (IJMCER)
ISSN: 2581-7027 ||Volume|| 2 ||Issue|| 6 ||Pages 56-67||2020||

Risk management in Islamic banking

[1]Al Siddig Talha M Rahma
2.*associated Professor Imam Mohammed ibn Saud Islamic university-KSA*
.1, Assistance professor Majmaah University, college of college of Business Administration- KSA
2.*Durria Hyder Siddeg Musa,*
2, associated Professor Imam Mohammed ibn Saud Islamic university-KSA

ABSTRACT: Islamic finance has started to grow in international finance across the globe, with some concentration in few countriesThe essential feature of Islamic banking is that it is interest-free. As a result of this, the Islamic financial system is primarily equity-based. Islamic banks therefore conduct business on a profit-/ loss-sharing principle. Under this arrangement, the provider of capital and the entrepreneur share in the risks and rewards of a venture To remain competitive, it is important for Islamic banks to find out what their risks are, control them, and monitor them routinely.[ii] The objective of this paper is to overview the guidelines for risk management in Islamic banking. Issues related to the nature of risks arising from the use of funds of Islamic financial institutions and their implications on the banking book of Islamic financial institutions are also to be considered in this paper.

KEY WORDS: Islamic banking, conventional bank, Liquidity risk

I. INTRODUCTION

This paper opted for an exploratory study on the issue of risk management in Islamic banking law. The data is based on secondary sources in terms of qualitative research, but has enabled the study to forward an impressionistic account of the idea of risk management in Islamic banking. On account of this, the article demonstrates knowledge of the latest research-based (empirical) literature on the topic. It is clear that the article present a strong and theoretical framework within which the inquiry is located. The findings of this research have larger import, beyond the specific case or instance under investigation. The objectives or hypotheses of this research are aiming at academia, economists, bankers, financial advisors, etc, in order to enable them to make positive contributions (solutions) at policy level for financial contracts.

EVOLUTION OF ISLAMIC BANKING: Islamic banks were established under heterogeneous social and economic environments. They started as a small rural banking experiment in a remote village in Egypt and has now reached a level where both local and international banks are committed to offering a wide range of Islamic banking practices and services. The practice of Islamic banking spreads from East to West, from Indonesia and Malaysia towards Europe and America. Due to the successes of these operations, Islamic banking became a viable and robust alternative to commercial banking practices.[1] Islamic financial markets are, however, still in the infant stage of development. More work is needed in order to better account, for example, for liquidity risk exposure, and Islamic banks still have to face other challenges.[2]

EVOLVEMENT OF RISK CONCEPT/ INTRODUCTION: Despite the growing interest in Islamic banking and finance, Islamic financial markets are deficient in risk management tools.[3] This may be due to the strong focus 3800 Afr. J. Bus. Manage**.** of Islamic finance on short term finance.[4]But banks solely with Islamic financing have lower credit and liquiddity risk than their conventional counterpart. This situation can be ascribed in part to the profit-sharing principle.[5] Islamic financial instruments are structured to produce a profit instead of a fixed return (on investments). The shareholder of a *Shariah*(Islamic law) fund shares the risk and rewards of the

---

[1]Ruma and Yolla. Challenges in implementing capital adequacy guidelines to Islamic Banks. Journal of Banking Regulation (2007: 46 to59).
[2]Ariss and Sarieddine (2007: 58).
[3] Janice How et al. Islamic Financing and Bank Risks: The Case of Malaysia.
Thunderbird International Business Review, January to February (2005: 7594).
[4] How et al. (2005: 89).
[5] How et al. (2005: 88).

investment. In case of a loss, shareholders will have to bear the loss on a *pro rata* basis, unless it is due to management negligence or misconduct.[6]

The paper tries to avail guidelines for risk management in Islamic banking. Issues related to the nature of risks arising from the use of funds of Islamic financial institutions and their implications on the banking book of Islamic financial institutions are also to be considered.

II. THE MEANING OF RIKS IN ISLAM ECONOMICS

: It will be useful to clarify the meaning of two terms: risk and *gharar* (uncertainty). Obviously, there is no clear distinction between the two. Although some writers translate *gharar* as risk, the term in Arabic that describes the risk best is *khatar*. Risk refers to the events that can be associated with given probability while uncertainty refers to the events for which probability assessment is not possible. The Oxford Dictionary of Economics defines risk as "[the] fact that the results of any action are not certain, but may take more than one value. Risk is usually used to describe the form of uncertainty where, while the actual outcome of an action is not known, it is expected that it will be determined as the result of a random drawing from a set of possible outcomes whose distribution is known."[7] Ibn Taymiyyah (728H-1328G) defined risk (*khatar*) as follows: "Risk falls into two categories: commercial risk, where one would buy a commodity in order to sell it for profit, and rely on Allah for that. This risk is necessary for merchants […] and although one might lose sometimes this is the nature of trade. The other type of risk is that of gambling, which implies eating people's wealth for nothing. This is the type that Allah and His Messenger (pbuh) have prohibited."[8] Looking into the technical meaning of *ghara*r we will see that there is a slight difference between risk and *gharar*. The literal meaning of *gharar* is danger, deception, illusion, and conceit that is derived from the Arabic verb *gharra*, which means to deceive, to delude, and to mislead. In broad terms, it refers to uncertainty, hazard and chance. Ibn Taymiyyah describes *gharar* as things with an unknown fate. Selling such things is *maysir* and gambling.[8] Risk, as understood by today's economic professionals, does not belong to this prohibition as it would render every transaction unlawful. Risk in any transaction may exist due to many reasons. It can be due to natural causes (e.g. good weather conditions or not), time allocation outcome, and market outcome. The existence of all these risks is inevitable to everyday transaction. As such, the existence of risk alone does not render a contract invalid. On the other hand, however, the existence of the elements of *gharar*, is *de facto* rendering a contract invalid.[9]Risk is something that is beyond our control, while *gharar* is within our reach and control.[10]

III. RISK AND ISLAMIC LAW

Islamic bank's activities differ in substance and in form from those of conventional bank's and they therefore face a different risk profile. Islamic banks have to own different assets before they can sell them to clients in need of financing, in order to be compliant with the *Shariah* rule that "one cannot sell what one does not own."[11] This exposes the majority of Islamic banks' transaction to price risk resulting from the acquisition of various assets which in turn introduces a new risk dimension to the banking book of Islamic banks. Islamic banks have been more resilient to the financial crisis than their conventional counterparts, because all transactions have to be backed by a tangible asset, which means that Islamic banks tend to have more collateral than their conventional counterparts.[12] One aspect that is associated with the tremendous growth of the Islamic Banking and Finance is the risk factor where disputes are always anticipated. Whereas Islamic banks, as already mention, are different from conventional banks in their form of financial intermediation, financial instruments, and structure of financial statements. These institutions are nevertheless subject to a similar framework for analyzing their risk and exposures. As these principles and procedures for measuring and controlling risk are similar, so the analytical framework for assessing risk should be similar as well.[13] The practice of bank supervisors continues to evolve. This evolution is necessary in part to meet the challenges of innovation and new developments and in part to accommodate the broader convergence of international supervisory standards and practices. Supervisory tools for assessing a bank's condition are: liquidity, adequacy of capital, quality of the investment portfolio, extent of insider and connected lending, size of exposures and an open foreign exchange positions. These measures,

---

[6] Standard and Poor's. (2010). Islamic Finance Outlook. The McGraw Hill Companies: 37.
[7] Black, J. (Ed.) *Oxford Dictionary of Economics (2nd ed.)* (2003). Asyraf W.D. Dusuki&EdibSmolo*Islamic Hedging: Rationale, Necessity, and Challenges* (2009) at 545. [8]Dusuki (2009) 545.
[8]Dusuki (2009) 545..
[9]Dusuki (2009) 546.
[10]Dusuki (2009) 546..
[11]Ariss&Sarieddine (2007): 52.
[12] Standard & Poor (2010) 40.
[13] H. Van Greuning*The World Bank* (2008) at 72.

however useful, are in themselves not an adequate indication of the risk profile of a bank and the stability of its financial condition, or its prospects.[14]

The central technique for analyzing financial risk is the detailed review of a bank's balance sheet. It underscores the relevant institutional aspects, such as the quality and style of corporate governance and management, the adequacy, completeness, and consistency of a bank's policies and procedures. The composition of a bank's balance sheet is normally a result of risk management decisions.[15] A profit without assuming a certain risk and/ or obligation is non-*halal*, according to the well-known legal maxim "*al-kharaj bi al-daman*," and is deemed tantamount to *riba*. On the other hand, however, excessive risk renders a contract, and therefore the profit resulting from that contract, tantamount to the sale of *gharar*and
as such is prohibited.[16]

IV.KEY RISKS EXISTING WITH IN THE ISLAMIC ECONOMY

A financial institution was for two to three decades, primarily faced with credit and market risks only. Today's financial institution is exposed to a whole array of new risks. Several factors are responsible for this changed set-up. They are: increased market volatility, financial innovations, shift in banking business, increased competition and the regulatory environment.[17]Risks are grouped into four broad categories: financial, business, treasury and governance risks.

Financial risk : Financial risks are the exposures that result in a direct financial loss to the assets or the liabilities of a bank. Islamic financial institutions are also exposed to credit and market risks.[19]**Credit risk:** Under credit risk a counter party will fail to make payments on its obligations in accordance with the agreed terms. Conventional banking business based on lending operations is considered a credit risk business since the bank's ability to minimize credit risk is the source of its profitability. With Islamic banks, lending is replaced with investments and partnerships.[18] But Islamic banks are not exonerated from risks, they have special credit risks, such as murabaha transactions, bay' al-salam or istisna contracts and mudarabah investments. In the case of murabaha, Islamic banks are exposed to credit risks when the banks deliver the asset to the client but do not receive payment from the client in time. In bay' al-salam or istisna contracts, the bank is exposed to the risk of failure to supply on time or to supply not at all. With mudaraba investments, Islamic banks are exposed to an enhanced credit risk on the amounts advanced to the mudarib (agent). The bank is not in a position to know and decide how the activities of the mudaribcan be monitored accurately. The risk is present in markets where information asymmetry is high and there is low transparency in financial disclosure by the mudarib.[19]Credit risk management for Islamic banks is further complicated by the fact that these institutions are prohibited from charging any accrued interest or imposing any penalty. This can be misused by clients who may delay the payment, since they know that the bank will not charge any extra charge or payment. Credit risk can incur bank insolvency, which in turn may adversely affect a bank's growth prospects and its competitive ability.[20] Weak credit risk management practices and poor credit quality continue to be a dominant cause of bank failures and banking crises worldwide.[21] Credit risk is, for example, high under mudaraba and musharaka, because the entrepreneur (obligor) does not provide sufficient information to the financier on the actual profit of the bank. This is known as "capital impairment risk" as the entrepreneur has no contractual obligation towards the financier.[22]Credit risks depend on the type of Islamic financing structure in place. From the financing structures such as murabaha(markup-based), mudaraba, musharaka, ijara and bay'al-salam, murabaha carries the lowest risk. Islam finance is therefore associated with lower credit risk. The assets of Islamic banks are predominantly of a debt nature resulting from sale-based financing while their deposits are on a mudaraba (profit-sharing basis). This enables Islamic banks to shift the risk of debt default to investment depositors. This principle of profit-sharing offers a cushion for bankers at times of recession.[23]

---

[14] Van Greuning (2008) 73.
[15] Van Greuning (2008) 82.
[16]Dusuki (2009) 546.
[17] Iqbal, Zamir&Mirakhor Abbas. 2007. An Introduction to Islamic Finance: Theory and Practice: 227-8 [19] Iqbal &Mirakhor (2007) 229.
[18]Iqbal &Mirakhor (2007) 229-231.
[19]Iqbal &Mirakhor (2007) 231.
[20] How *et al* (2005) 78.
[21]Ariffin (2009) 160.
[22]Ariffin (2009) 155.
[23] How *et al* (2005) 79.

Market risk : Market risk arises from unfavorable price movements
such as yields (rate of return risk), benchmark rates (interest rate risk), foreign exchange risk (FX risk), equity and commodity prices (price risk). Islamic banks are exposed to market risk because of the volatility in the values of tradable, marketable or leasable assets.

Market risk encompasses different risk factors such as mark-up risk, price risk, leased asset value risk and equity investment risk. Under mark-up risk, Islamic banks, *murabaha* and other trade-financing instruments are fixed for the duration of the contract while the benchmark rate may change. With regard to price risk (in the case of *bay' al-salam*) Islamic banks are exposed to commodity price volatility during the period between the delivery of the commodity and the sale of the commodity at prevailing market price. In the case of an operating *ijara*, the bank is exposed to market risk due to a reduction in the residual value of the leased asset at the expiry of the lease term or in the case of early termination due to default, over the life of the contract. With an increasing market for Islamic bonds (*sukuk*), Islamic banks invest a portion of their assets in marketable securities (*sukuk*). However, the prices of such marketable securities are exposed to current yields. Similar to a fixed-income security, the prices go down as yields go up and *vice-versa*. Islamic banks holding such securities will be exposed to volatility in yields, unless they hold the security till maturity. The secondary market for such securities may not be very liquid and therefore Islamic banks are exposed to distorted prices in an illiquid market. Equity investment risk includes partnership-based *mudaraba* and *musharaka* investments. This risk is somewhat unique to Islamic financial institutions, considering that conventional commercial banks do not invest on the basis of equity-based assets. Equity investments can lead to volatility in the financial institution's earnings due to liquidity, credit, and market risks associated with equity holdings.[24]

V. BUSINESS RISKS

Business risks are associated with a bank's business environment, including macro-economic and policy concerns, legal and regulatory factors and the overall financial sector infrastructure such as payment systems and the auditing profession. While Islamic financial institutions are exposed to the regular business environment, for example solvency and financial sector infrastructure risks, they are particularly exposed to one specific business risk, namely the rate of return risk. The rate of return risk stems from the uncertainty in the returns earned by Islamic banks on their assets. This uncertainty can cause a divergence from the expectations investment account holders have on the liabilities side.[25] Conventional commercial banks operate on interestbased fixed income securities on the assets side, there is less uncertainty in the rate of return earned on their investments, while Islamic banks have a mix of mark-up based and equity-based investments, which have a higher uncertainty. Furthermore, the return on deposits in conventional banks is pre-determined, whereas the returns on deposits in Islamic banks are expected but not pre-agreed.[26]Two sub-categories of the rate of return risks are displaced by commercial risk and withdrawal risk. The former is the risk when an Islamic bank is under pressure for paying its investment depositors a rate of return higher than what should be payable under the "actual" terms of the investment contract. To mitigate the displaced commercial risk, Islamic banks may decide to waive their portion of profits in order to retain their deposits and thus dissuade the depositors from withdrawing their funds. With regard to the second, Islamic banks could be exposed to the risk of withdrawals by its depositors as a result of a lower rate of return. Such competition may come from other Islamic banks or
from conventional banks with Islamic windows.[27]

Treasury risks : Treasury risks arise from the management of the financial resources of the financial institutions in terms of cash management, equity management, short-term liquidity management and asset liabilities management. They (treasury risks) are liquidity, assets and liability management and hedging risks.[28] In terms of liquidity risk (as it applies to Islamic banks), a lack of liquidity constrains the financial institutions by illiquid assets and it unable the institution to meets its liabilities and financial obligations. Unlike conventional banks, Islamic banks do not have access to borrow or raise funds at reasonable cost, when needed.
Lack of liquidity adversely affects the bank's ability to manage portfolios. The prohibition by *Shariah*law from borrowing on the basis of interest has restricted Islamic bank's options to efficiently manage their liquidity positions. Access to short-term borrowing, it is vital for meeting a financial institutions short-term cash flow needs. The previous factors have raised Islamic bank's exposure to liquidity risk, and have adversely affected

[24]Iqbal &Mirakhor (2007) 233-4.
[25]Iqbal &Mirakhor (2007) 235-6.
[26]Iqbal &Mirakhor (2007) 236.
[27]Iqbal &Mirakhor (2007) 236-8.
[28]Iqbal &Mirakhor (2007) 238.

their profitability by limiting their ability to invest their capital in long-term and illiquid but more profitable assets.[29]

Assets liabilities management risk results from the difference in maturity terms and the conditions of a bank's portfolio on its assets and liabilities sides. Islamic banks are less exposed to assets and liabilities mismatches. This advantage is rooted in the "pass-through" nature of Islamic banks which act as agents for investors/ depositors and all profits and losses are passed through to the investors/depositors. Depositors in the conventional system have a fixed claim on the returns to the bank's assets as they get paid, a pre-determined interest rate in addition to guaranteed principal irrespective of the bank's profitability on its assets side. Holders of profitsharing investments accounts in the Islamic system share in the bank's profits and losses alongside the shareholders and hence are exposed to the risk of losing all or part of their initial investment. The risk-sharing and passthrough features are not fully followed, which in turn creates unwanted assets and liabilities mismatch risks. The practice of distributions of profits even if there are no or low profits creates distortions and put strains on the equity shareholders (capital providers).[30] Under hedging risk, the bank's overall risk exposure is enhanced by the failure to mitigate and management different types of risks.[31]

Governance risks : Governance risk refers to the risk arising from a failure in governing the institution. Banks are unable to enforce their contracts. Types of governance risks are operational risk, fiduciary risk, transparency risk, *Shariah* risk and reputation risk.[32] Operational risk is the risk of loss resulting from the inadequacy or failure of internal processes. It includes the risk of failure of technology and systems and analytical models. People risk is another type of operational risk arising from incompetence or fraud, which exposes Islamic banks to potential losses.[33] Fiduciary risk is the risk that arises from an institution's failure to perform in accordance with explicit and implicit standards applicable to its fiduciary responsibilities. Fiduciary risk leads to the risk of facing legal recourse action in a situation where the bank breaches its fiduciary responsibility toward depositors and shareholders. Fiduciary risk can lead to dire consequences for a bank. First, it can cause reputation risk creating panic among depositors, who may decide to withdraw their funds. Secondly, legal recourse may lead to charging the bank a penalty or compensation which can result in a financial loss. Thirdly, it can impact negatively on the market price of shareholder's equity. Fourthly, it may lead to insolvency if the bank is unable to meet the demands of the current and investment account holders.[36]

With regard to transparency risk, a lack of transparency creates the risk of incurring losses due to bad decisions based on incomplete or inaccurate information. Islamic banks are exposed to transparency risk due to the practice of non-standard accounting and financial reporting of Islamic financial instruments, which are different from conventional instruments and therefore require different conventions of reporting to truly reflect the financial picture.[34]*Shariah*risk is of two types: the first is due to non-standard practices in respect of different contracts in different jurisdictions and the second is due to failure to comply with *Shariah* rules. Different adoption of *Shariah* rules sometimes result in differences in financial reporting. For instance, while some *Shariah*scholars consider the terms of a *murabaha*or *istisna* contract to be binding on the buyer, others argue that the buyer has the option to decline even after placing an order and paying the commitment fee. The nature of the relationship between the bank and the investors/depositors is not only of an agent and principal, but it is also based on an implicit trust between the two that the agent will respect the desires of the principal to fully comply with the *Shariah*. Breaching the trust and confidence of investors/ depositors can lead to dire consequences, including withdrawal and insolvency risk. The bank should therefore, give high priority to ensuring transparency in compliance with the *Shariah* and take necessary actions to avoid any non-compliance.[35]

Although fiduciary and *Shariah*risks stems from negligence and non-compliance, reputation risk is a reflection of irresponsible behavior by a single institution which can taint the reputation of other Islamic banks in the industry. Negative publicity can have a significant impact on an institution's market share, profitability and liquidity. The Islamic financial services industry is a relatively young industry and a single case of failed institution can have a bad name to all others who may not be engaged

[29]Iqbal &Mirakhor (2007) 240.
[30]Iqbal &Mirakhor (2007): 242.
[31]Iqbal &Mirakhor (2007) 242.
[32]Iqbal &Mirakhor (2007) 243-6.
[33] Iqbal &Mirakhor (2007) 243. An internal control problem cost the Dubai Islamic Bank US$50 million in 1998 when a bank official did not conform to the bank's credit terms. This also resulted in a run on its deposits of US$138 million, representing 7% of the bank's total deposits, in just one day. [36]Iqbal &Mirakhor (2007) 244.
[34]Iqbal &Mirakhor (2007) 244-5.
[35]Iqbal &Mirakhor (2007) 245.

in any such irresponsible behavior.[36]

VI. RISK MANAGEMENT FRAMEWORK

Risk management practices

Good corporate governance : The activities of Islamic banks and banking may affect the welfare of more than 20% of the world's population, mostly concentrated in developing countries, and their corporate governance arrangements matter for economic development. Sound corporate governance can create an enabling environment, which rewards banking efficiency, mitigates financial risks, and increases systemic stability. Good corporate governance tends to lower the cost of capital, as it conveys a sense of lower risk that translates into shareholder's readiness to accept lower returns. Good corporate governance reduces the risks of contagion from financial distress.[37] Corporate governance relates to the manner in which the business of the bank is governed, including setting corporate objectives and the bank's risk profile, aligning corporate activities and behaviors with the expectation that the management will operate in a safe and sound manner, running day-to-day operations within an established risk profile, while protecting the interests of depositors and other stakeholders. While Islamic scholars argue that Islamic corporate governance induces ethical behavior and is immune to the flaws of conventional banking, Islamic banks and banking are no less prone than conventional banks to suffer breaches of fiduciary responsibility or the consequences of asymmetric information.[38]

Bank supervision : On the one hand, in the context of recession, volatile interest rates and inflation during the late 1970's and early 1980's, the management of both assets and liabilities became necessary in order to maintain satisfactory margin performance. Balance-sheet management became more complex as a result of deregulation in the 1980's. On the other hand, in the 1990's an increase in and engagement of liabilities underscored the need for competitive pricing in a manner that maximizes spreads between costs and yields on investment and controls exposure to related risks. Due to the inverse relationship of these two goals, a balancing act between maximizing the spreads and controlling risk exposures has become a focal point in the financial management, regulation and supervision of banks.[39] In the case of Islamic banks, attention must be paid to the contractual role of the bank concerned, when analyzing the risks inherent in the bank's assets and liabilities. Decisions must be made regarding the acceptable degree of risk exposure.

The responsibility of various aspects of risk management must be assigned, the effectiveness of risk management process must be assessed and the execution of responsibilities must be ensured. Effective risk management requires a formal process. In developing economies, especially those in transition, unstable, economically volatile, and shallow market environments significantly expand the range and magnitude of exposure to financial risk. Effective risk management includes: the risk management function should be *on par* with other major functions and be accorded the necessary visibility and leverage within the bank and relevant risk management concerns and parameters for decision making on the operational level should be incorporated for all relevant businesses and functional processes.[40] Traditionally, banks have seen the management of credit risk as their most important task. Awareness has developed of the critical need to manage exposure to other operational and financial risks as well. In order to survive in a market-oriented environment, banks must be able to manage financial risk. Supervisory authorities assess whether the bank is viable, meets its regulatory requirements, and is capable of fulfilling its financial commitments to depositors and other creditors. They also verify whether or not the bank's operations are likely to jeopardize the safety of the banking system as a whole.[41]The bank's risk management processes involves the assessment and management of credit, market and operational risks. The basic principles of the bank's risk management policies are to: ensure risk assessment and monitoring are strictly independent from the business lines; adhere to a strict definition of limits/restrictions on balance sheet items and ensure risks are continually monitored.[45]

---

[36]Iqbal &Mirakhor (2007) 246.
[37] Van Greuning (2008) 31.
[38] Van Greuning (2008) 31.
[39] Van Greuning (2008) 89.
[40] Van Greuning (2008: 66 to 67).
[41] Van Greuning (2008: 68). [45] Prospectus (2009: 70).

The primary role of bank regulators and supervisors is to facilitate the process of risk management and to enhance and monitor the statutory framework in which it is undertaken. Bank supervision is sometimes applied incorrectly as a legal or administrative function focused largely on regulations related to the business of banking. Such regulations are often prescriptive in nature and impose onerous requirements on banks, which seek to circumvent them by developing innovative products.[42]

Central banks have a mission to maintain a stable currency and economy. Three interrelated functions are critical to monetary stability: the implementation of monetary policy, the supervision of banks, and the monitoring of the payment system. All three functions must take place to ensure stability. For this reason banking supervision cannot be divorced from the wider mission of monetary authorities. Although the attention of central banking policy focuses on the macro-economic aspect of general equilibrium and price stability, micro considerations regarding the liquidity and solvency of individual banks are key to attaining stability.[43]

Supervisory authorities: Supervisory authorities assess whether the bank is viable, meets its regulatory requirements, and is capable of fulfilling its financial commitments to depositors and creditors. They also verify whether or not the bank's operations are likely to jeopardize the safety of the banking system as a whole. Financial statements provide a true and fair view of the bank's actual condition. Banks are normally required to undergo an external audit that involves at least year-and financial statements and that is considered satisfactory to supervisory authorities. The financial viability and institutional weaknesses of a bank are also evaluated through financial assessments, extended portfolio reviews, or limited assurance reviews. Such evaluations often occur when a third-party evaluates credit risk that the bank poses, for example in the context of the following:

1. Participation in a credit-line operation of an international lending agency or receipt of a credit line or loan from a foreign bank;
2. Establishment of correspondent banking relationships or access to international markets;
3. Equity investment by an international lending agency, private investors or foreign banks; 4. Inclusion in a bank rehabilitation program.[44]

In addition to effective management and supervision, sound and sustainable macroeconomic policies and a well-developed and consistent legal framework are needed. Adequate financial sector infrastructure, effective market discipline, and sufficient banking sector safety nets are crucial.[45]The goal of financial risk management is to maximize the value of a bank. Since risk is inherent in banking and unavoidable, the task of the risk manager is to manage the different types of risk at acceptable levels and sustainable profitability. Doing so requires the continual identification, quantification, and monitoring of risk exposures, which in turn demands sound policies, adequate organization, efficient processes, skilled analysts, and an elaborate computerized information system. In addition, risk management requires the capacity to anticipate change and to act in such a way that a bank's business can be structured and restructured to profit from the changes or at least to minimize losses. Regulatory authorities should not prescribe how businesses are conducted; instead they should maintain prudent oversight of a bank by evaluating the risk composition of its assets and by insisting that an adequate amount of capital and reserves is available to safeguard solvency.

[42] Van Greuning (2008: 32).
[43] Van Greuning (2008: 70).
[44] Van Greuning (2008) 68.
[45] Van Greuning (2008) 71.

Financial engineering : Financial engineering is critical for Islamic risk management practices. According to Zamir Iqbal and Abbas Mirakhor Islamic financial institutions are operating on traditional instruments, which do not satisfy the needs of the market fully in terms of liquidity as well as risk and portfolio management. With regard to the absence of liquidity, Islamic financial institutions cannot easily expand portfolios across capital markets and are restricted in opportunities for portfolio diversification.[46]Risk can effectively be managed by the application of financial engineering. Financial engineering dictates that firms in the Islamic financial markets will lose their business competitiveness due to its inability to handle variability in cost, revenues and profitability. A firm without active risk management will be perceived as a high risk firm and will be exposed to a higher risk during a system-wide financial crisis.[47]Currency swaps are popular applications of financial engineering. It entails the raising of capital at favorable rates and then the agreement with another party to exchange cash flows according to a pre-determined schedule for cash flows in another currency. A currency swap can help an institution reduce its exposure to a particular currency by allowing it to swap existing assets or liabilities for more desirable ones. With currency swaps, financial institutions can manage currency exposure and also achieve better asset/liability management, which can reduce financial risk

Currency swaps are currently not practiced in Islamic financial markets. To construct a currency swap, which may be acceptable in the Islamic financial market, two methods need to be involve, a partnership with a financial intermediary and an exchange of *sukuk* proceeds.[48] With regard to the former, the financial intermediary becomes a partner in the assets of each financial institution and the cash flows are fully backed by the cash flows on each underlying asset. The financial intermediary backs each agreement with a real asset in addition to underwriting the credit risk. With respect to the latter, Islamic bonds (*sukuk*) are similar to conventional bonds in terms of payoffs, and a currency swap can therefore be con-structed by utilizing the structure of *sukuk*.[49]Considering the importance of financial engineering, Islamic financial institutions should think about making joint efforts to develop the basic infrastructure for introducing new products. A good example of such collective effort could be to sponsor research in the area of the development of analytical models, computer systems and tools to analyze the risk and return on different *Shariah*compatible instruments. Islamic financial institutions can benefit from more experienced western institutions in terms of the engineering and marketing of products to the clients. Conventional banks can work for or with Islamic financial institutions to develop products according to the requirements specified by Islamic financial institutions. Once a financial engineering shop is set, it can be used to develop different products of different risk and return profiles. Islamic institutions must on the basis of this, try to develop synergies and make collaborative efforts with conventional institutions.

[46] Iqbal and Mirakhor (2007: 204).
[47] Iqbal and Mirakhor (2007: 205).
[48] Iqbal and Mirakhor (2007: 215).
[49] Iqbal and Mirakhor (2007: 217).

Islamic financial services board : The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) was the first initiative to address the risks faced by Islamic banks. Followed by Islamic Financial Services Board (IFSB) in 2002; these two entities serve also as a regulatory framework for

Islamic banks.[50] : The general objective of the IFSB is "promoting, spreading and harmonizing best practices in the regulation and supervision of the Islamic financial services industry."[51] The IFSB serves as an international standard setting body of regulatory and supervisory agencies that have an interest in ensuring the reliability and stability of the Islamic financial services industry. It also aims at standardizing Islamic banking practices in identifying risks in *Shariah*-compliant products and services and in assigning risk weights that meet internationally acceptable prudential standards. The IFSB like the AAOIFI serves to complement the Basel Committee on Banking Supervision's guidelines in order to cater to the specificities of Islamic financial institutions. While the AAOIFI focuses on the sources of funds of an Islamic bank, the IFSB goes a step further by considering the uses of funds and assigning appropriate risk weights to each asset item.[52] In the risk-sharing scheme of AAIOFI investment account holders share part of the risk with shareholders. The rationale is that investment depositors can withdraw their funds upon maturity and reduce the sources of funds available to the bank, but the equity base remains unchanged when shareholders "withdraw their funds" by selling their shares to other investors.[53]Proposals for risk management of Islamic banks suggested by Ariss and Sarieddine are: to treat Islamic banks for regulatory purposes as mutual funds; the second proposal is to structure liabilities and assets along different objectives following the risk appetite of account holders; third approach is to involve the structuring of liabilities according to a scheme of subordination of the rights of different categories of accountholders. This would lead to an appropriate categorization of risk on the asset side. According to these proposals, one can account for the risk exposure of Islamic banks and be able to develop a reliable capital adequacy framework.[54] In 2005, the IFSB published a set of best practices guidelines for establishing and implementing effective risk management in Islamic financial institutions. The document represents an important milestone in harmonizing and standardizing the risk exposure of Islamic financial institutions.[55]

VII. RISK MITIGATING FACTORS

Banks must take action to mitigate risks. The division of responsibilities for these actions between the public and the private sectors will depend on the nature of the risk and the capacity of firms individually, to improve their risk preparedness. One important action that might arise from the risk assessment approach is: the further exploration of gabs in understanding the significance of different risks. Actions to address gaps might involve exploration or gathering of new data. Risk can be mitigated by engaging in discussions with market participants and research must be done to improve modeling techniques.Another risk mitigating action, is stress testing. It is difficult for individual firms to judge how financial market liquidity might behave in times of stress, since that requires an understanding of the behavioral response to other firms. A third potential action lies in the field of prudential policy, for example, in the design of standards for capital and liquidity requirements. Typically, these standards are not targeted at specific vulnerabilities, but rather at ensuring that individual firms hold adequate buffers to cushion the effects of a range of potential disturbances. These regulatory rules are the responsibility of the Financial Stability Report, but the bank has a role in advising on regulatory design when this has systemic risk implications. Finally, the mapping of vulnerability channels can help in devising effective crisis management plans. Understanding the potential shape of future crisis can help in the identification of data required to assess the systemic impact of such crisis and in the formulation and testing of procedures for their management.[56]

These four elements; detection of key vulnerabilities, mapping of risk transmission channels, quantification of impact and probability, and identification of priority risk mitigation policies, comprise the new approach to financial stability risk assessment. The hallmarks of this approach are intended to be greater clarity, analytical coherence, and consistency in risk assessment. The discussion is divided into three categories: cross-sectional risk diversification, inter-temporal risk sharing and liquidity risk. The financial system's ability to provide risk diversification services can affect long-run economic growth by altering resource allocation and savings rates. Although savers do not like risk, high-return projects tend to be riskier than low-return projects. Thus, financial markets that make it easier for people to diversify risks tend to induce a portfolio shift toward projects with

[50]Ariss and Sarieddine (2007): 47.
[51]Ariss and Sarieddine (2007: 51).
[52]Ariss and Sarieddine (2007: 51).
[53]Ariss and Sarieddine (2007: 50).
[54]Ariss and Sarieddine (2007: 51).
[55]Ariss and Sarieddine (2007: 53).
[56] A. Haldane *A New Approach to assessing risks to financial stability* (2007) at 7.

higher expected returns.[57]Cross-sectional risk diversification can stimulate innovative activity, but engaging in innovation is risky. The ability to hold a diversified portfolio of innovative projects reduces risk and promotes investment. Thus financial systems that ease risk diversification can accelerate technological change and economic growth.[58]A third type of risk is liquidity risk. Liquidity reflects the cost and speed with which agents can convert financial instruments into purchasing power at agreed prices. Liquidity risk arises due to the uncertainties associated with converting assets into a medium of exchange. Informational asymmetries and transaction costs may inhibit liquidity and intensify liquidity risk. These frictions create incentives for the emergence of financial markets and institutions that augment liquidity. Savers do not like to relinquish control of their savings for long-periods. If the financial system does not augment the liquidity of longterm investments, less investment is likely to occur in the high-return projects. With liquid capital markets, savers can hold liquid assets like equity, bonds, or demand deposits that they can quickly and easily sell if they seek access to their savings. Simultaneously, capital-markets transform these liquid financial instruments into long-term capital investments. Banks can offer liquid deposits to savers and undertake a mixture of liquid, low-return investments to satisfy demands on deposits and illiquid, high-return investments. By providing demand deposits and choosing an appropriate mixture of liquid and illiquid investments, banks provide complete insurance to savers against liquidity risk, while simultaneously, facilitating long-run investments in high-return projects. By eliminating liquidity risk, banks can increase investment in the high-return, illiquid asset and therefore accelerate growth.[59]

Islamic products: *Mudaraba* and *Musharaka* as risk mitigating tools/factors

In tolerating profits as opposed to interest, Islamic finance allows partnership contracts. There are two principal contracts in Islamic finance that employ the principles of profit/loss sharing. These are *mudaraba* and *musharaka*. The *mudaraba* contract is structured between the supplier of capital and the entrepreneur who services it. One party supplies the capital to a second entrepreneurial party (*mudarib*) for the procession of some trade on the condition that the resulting profits are distributed in mutually agreed proportions while all capital loss is borne on the provider of the capital. In the case of loss, the entrepreneur bears the brunt of the opportunity cost of time and labour. It is argued prima facie or on face value that *mudaraba* offers functions comparable to interest. It offers the opportunity of pure finance in the sense that the owner of the capital can invest without having to personally manage the capital investment and without having to be exposed to infinite liabilities. However, *mudaraba*(and *musharaka*) are distinct from interest in that they maintain a fair balance between the owner of the capital and the entrepreneur who implements it.

Distribution of profits is agreed according to a predetermined proportion of the total and each party loses what they put into the investment, be it capital or manpower.[60]A *musharaka* contract is similar to the conventional sense of partnership arrangement where each party contributes capital in their specific capacity and each partner has management rights in proportion to their investment. However, the share of profit for each partner is determined as a proportion of the final total profit rather than a *ratio* of capital invested. In the event of a loss, each partner is obliged to lose only the amount invested in the project.[61]

Mudaraba and musharaka are non-debt creating modes of financing. The principal amount of finance is not guaranteed. Therefore, the entrepreneur is not required to pay back the total amount of financing, nor is he/she required to pay a fixed amount of profit. However, he/she rather agrees to pay a pre-determined proportion of total profits. It is argued that *mudaraba* and *musharaka* are appropriate financial tools for the banking system with two major advantages. Firstly, they are consistent with the bank's roles as financial intermediaries. Secondly, these tools can be employed for different periods of investment and with a diversity of entrepreneurs. However, in practice the *mudaraba* arrangements have a drawback in that moral hazard and asymmetric information become serious in the arrangement. A trustworthy entrepreneur is the cornerstone of the *mudaraba* arrangement. The fact that the bank or investor bears all the loss of the investment in the event of failure may encourage the entrepreneur to behave against the interests of the investor. As a result, investors may be averted from making large investments with a single entrepreneur. The *musharaka* arrangement may help offset these disadvantages of information because of the

[57]Demirgüç-Kunt*Finance, Financial Sector, Policies, and Long-Run Growth* (2008: 7).
[58] Ibid.
[59] Idem at 8.
[60] A. Tariq *Managing Financial Risks of Sukuk Structures* (2004) at 13.
[61] Tariq (2004: 14).

provision for management control to the investors.[62]

VIII. CHALLENGES FOR ISLAMIC FINANCE

A major problem challenging the growth of Islamic banking was the absence of recognized guidelines on prudential, supervisory, accounting, auditing and other corporate regulatory practices. This resulted in ineffective accounting standards and created considerable difficulties when it came to comparing financial statements issued by Islamic financial institutions and those of conventional financial institutions. Despite the fact that most involved in Islamic finance claim the immunity of this sector against the financial crisis, the sources of the current crisis will demonstrate that Islamic finance can potentially encounter with the similar fate (despite its relative stability). The rationalizing of those areas of Islamic law which relate to commerce and other financial activities is not that simple, because Islamic jurisprudence lacks something of the consistency and predictability of a more codified system of laws and edicts. Further complications inevitably arise when it comes to accommodating *Shariah* law to the existing legal system of a particular country, which more often than not is based on an European model, chiefly French or English. Lastly, there are problems relating to proper accounting standards as well as regulatory challenges to ensure proper *halal* banking.[63]

Islamic countries are facing barriers in restructuring its current financial and economic system. A total replacement of the system from conventional to an Islamic system seems impossible, since many Islamic countries prefer a dual financial system due to its competitiveness and effectiveness.[68]Legal challenges exist in Islamic finance. They relate to the management of investment risks, consumer protecttion laws, the lack of legal precedents, situations involving uncertainty, integrating *Shariah* rulings within a conventional framework. In order to provide proper legal foundations for the supervision of Islamic banks, it is necessary that the nature of these banks and their specific operating relationship in relation to a particular country's central bank and other conventional banks, if applicable, be defined in detail by that country's banking laws. Such a legal framework should contain provisions relating to licensing and permissible modes of financing, and state, clearly, legislative powers to address compliance with laws and regulations. Moreover, it should be clearly established that the central bank has the authority and all necessary powers to supervise Islamic banks as well as conventional banks, if applicable.[64]Another challenge for the implementation of *Shariah* and *muamalah* in the world's economic globalization is the commitment from the government as well as the wants of the country's citizens or the community. The wants of the citizens alone are not enough unless accompanied by the commitment of the government who is responsible to carry out the implementation. Policy statements from the government are also needed to move the system to a more remarkable level by providing facilities.[70]Globalization is also likely to narrow differences in the yields of Islamic financial instruments between countries, due to a freer flow of funds. On the other hand, the absence of a truly global Islamic financial system based on *Shariah* principles, means that the continued growth and development of Islamic banking and finance is somewhat haphazard. In this last respect, governments could assume a more active role in promoting the development of Islamic financial systems. In particular, they need to provide the necessary infrastructure that will favour the growth of Islamic banking in their respective countries and this means putting in place a comprehensive, *Shariah*-compliant, legal and regulatory framework. Compliance with *Shariah* principles is not, however, in itself sufficient to guarantee the future success of Islamic banking and finance. In the long run, the sustainability of Islamic banking rests on satisfying the demand for quality in the products and services that Islamic finance can offer. The ultimate challenge for Islamic banking and finance is to provide a comprehensive range of Islamic financial products and services that are not only *Shariah*-compliant, but also innovative and competitive with conventional financial instruments.

IX. CONCLUSION

This paper addressed the objective stated in the abstract. It enabled the reader to know what the risks are for the Islamic economic model. With this knowledge to his/her disposal, the reader will be able to control the risks which hindered the Islamic finance model. As a result thereof, monitoring the Islamic model becomes much easier so that guidelines for risk management can be effective. It must though be *Shariah*-compliant, in order for the profit and loss sharing principle, which underlies the Islamic model, to materialize. Under the profit and loss sharing principle, the Islamic system redistributes the consequences of uncertainty over all parties to a business. Debt-financing of the conventional system, in contrast, relieves the financier from uncertainty by shifting it on the real investor, who then alone bears the entire risk of the enterprise. By spreading the same risk over more heads, the Islamic economic system would promote stability. From the standpoint of financial stability, it appears that the Islamic interest-free system does have merit and deserves more serious attention from academics and

[62] Tariq (2004: 14 to 15).
[63]Venardos (2005: 101 to 102). [68] Tahir (2004: 14).
[64]Venardos (2005: 110 to 111). [70]Venardos (2005) 15.

policymakers alike, especially in view of the recent crisis and rampant bank failures in contemporary economics. On the strength of its stability, Islamic banking is in fact less risky in terms of external shocks, liquidity risks and insolvency risks than conventional banks. These characteristics made Islam banks less vulnerable to risk than conventional banks. Due to its conservative characteristic, Islamic banks have limited access to liquidity, so that it enables investors stable and competitive returns. On these grounds, investors are given a greater incentive to exercise tight oversight over bank management, since they share risks.

REFERENCES

1. Ariss RT, Sarieddine (2007). “Challenges in Implementing Capital Adequacy Guidelines to Islamic Banks,” J. Bank. Regul. 9:56-59.
2. Black J (2003). Oxford Dictionary of Economics (2nd ed.). Oxford: Oxford University Press.
3. Demirgũç-Kunt, Levine R (2008). Finance, Financial Sector, Policies, and Long-Run Growth. Policy Research Working Paper 4469.
4. Dusuki AWD, Smolo E (2009). Islamic Hedging: Rationale, Necessity, and Challenges.
5. Haldane A, Simon H, Silvia P(2007) A New Approach to Assessing Risks to Financial Stability. Bank of England, Threadneedle Street, London.
6. [i] How et al. (2005: 77) cited in Iqbal and Mirakhor, (1999). [ii] How et al (2005: 91).
7. How Janice C, Abdul Karim M, Verhoeven P (2005). Islamic Financing and Bank Risks: The Case of Malaysia. Thunderbird Int. Bus. Rev. 47(1):75-94.
8. Iqbal Z, Mirakhor A (2007). An Introduction to Islamic Finance: Theory and Practice. John Wiley & Sons (Asia), Singapore. Prospectus (2009).
9. Standard, Poor’s (2010). Islamic Finance Outlook. The McGraw Hill Companies.
10. Tariq A (2004). Managing Financial Risks of Sukuk Structures. A Dissertation submitted in partial fulfillment of the degree of Masters of Science at Loughborough University. UK.
11. Venardos AM (2005). Islamic Banking and Finance. Its Development and Future in South East Asia. Singapore: World Scientific Publishing Co. Ltd.
12. Van Greuning H, Zamir I (2008). Risk Analysis for Islamic Banks. The World Bank: Washingtom, D.C.