RISK MANAGEMENT AND CORPORATE GOVERNANCE IN THE LEBANESE ISLAMIC BANKING INDUSTRY

Chahine, Salim*; Dagher, Bassem**

Abstract

Despite recent growth in the Islamic banking industry, little is known on the best practices in its risk management. This paper examines the risk management systems of Islamic banks in Lebanon. Using a survey technique, it shows the diversity of risks faced by Islamic banks. It also confirms the importance of good corporate governance as a tool which is associated with the implementation of best practices in risk management.

Keywords: Islamic Banking Industry, Risk Management, Corporate Governance

* *The Olayan School of Business, American University of Beirut, P.O.Box: 11-0236. Beirut-Lebanon. Tel: 961.1.350000 (Ext: 3722).Email: salim.chahine@aub.edu.lb*
** *The Olayan School of Business, American University of Beirut, P.O.Box: 11-0236. Beirut-Lebanon. Tel: 961.1.350000 (Ext: 3722), Email: bassemdagher@gmail.com*

1. Introduction

Islamic financial institutions were established three decades ago as an alternative to conventional financial institutions to provide *Shari'ah* compliant investments, financing, and trading opportunities. Despite its recent growth, the Islamic banking industry remains different from conventional banking, where it is important to consider risk management processes. The importance of the risk management system in the Islamic financial sector has lead international financial authorities that deals with Islamic finance such as the Islamic financial services board (IFSB) to formulate and recommend a set of principles for the best practices of the system. The implementation of these recommendations depends however on the corporate governance mechanisms of Islamic banks.

The Lebanese Islamic banking sector is fairly new (legal establishment in 2004 according to law 575). It has been dominated by just one bank "Al Baraka Bank Lebanon S.A.L" which is part of "Al Baraka Group" for about a decade. In 2005, Credit Libanais created an Islamic division, "Lebanese Islamic Bank". It was followed by "BLOM development", subsidiary of BLOM in 2006 with a capital of $20 million, and the "Arab Finance House S.A.L" with an initial capital of $60 million (Zawya Business Information). The Islamic banking sector in Lebanon is therefore relatively small (4 banks with a total asset around of $350 million) compared to the conventional banking sector (54 banks, total assets approximately $ 74 billion), and its development is likely to depend on the quality of performed risk management processes. The main objective of this study is to assess the status of the risk management system of the Lebanese Islamic banks, and the extent to which this system complies with the principles recommended by the IFSB and the Basel Committee on Banking Supervision. It examines whether the implementation of risk management is related to the level of good governance practices, as proxied by the role played by the board of directors and the Shari'ah board.

According to Airmic (2002), risk management is the process whereby organizations methodically address the risks attached to their activities with the goal of achieving sustained benefit within each activity as well as across the portfolio of all activities. There are major differences between Islamic and conventional banks. First, in Islamic banking, interest, which is called "Riba", is not paid or charged for any transaction or service in order to ensure justice, welfare and non-exploitation of the other party's weaknesses. Second, investments of an Islamic bank must be channeled to Islamic Shari'ah approved (Halal) sectors, by using Islamic structures of finance such as Mudaraba, Musharaka, Bai-Muajjal, Bai-Salam, and Ijara. Third, the investor usually shares the profits or losses arising from the enterprise's business where the money is invested. Forth, the Gharar (Uncertainty, Risk, or Speculation), is prohibited under the Islamic Shari'ah, which forces the contracting parties to have perfect knowledge of the counter values intended to be exchanged as a result of their transactions (Ahmed, 2004).

Islamic banks neither guarantee the capital value of investment nor the return on investment. They mainly pool the funds provided by the depositors and provide depositors with professional investment management. Due to the Profit-Loss Sharing (PLS) scheme, Islamic banks are in a better position than conventional banks in absorbing external shocks. Indeed, they are able to reduce the capital value of investment deposits in the case of loss, thus transferring part of the loss to the investment accounts of the bank. As such, Islamic financial instruments change the nature of traditional risks faced by conventional banks (Islamic Research and Training Institute, 2001), and therefore overweight a number of risks, such as equity investment and rate of return risks.

To examine risk management in the Lebanese Islamic banking industry, a questionnaire made up of 15 questions was prepared, relying mainly on the risk management principles set by the Islamic Financial Supervisory Board (IFSB) and the Basel Committee on Banking Supervision (BCBS). This questionnaire is divided into 2 sections. The first addresses the board of directors' responsibilities with respect to the risk management system and the sensitivity of the bank to the counterparty's general characteristics. The second deals with the six main risks that an Islamic bank may face which are credit, equity investment, market, liquidity, rate of return, and operational risks, in addition to the different tools that the bank uses in order to identify, monitor, control, mitigate, and report these risks.

The remaining part of this paper is structured as follows. Section II presents a literature review. Section III explains the methodology used, and presents a definition of the main Islamic financial instruments. Section IV addresses the results of the survey conducted to evaluate the risk management of the Lebanese Islamic banks, and Section V concludes.

2. Literature review

Due to the profit and loss sharing scheme and the prohibition of interest rates, international authorities, such as the Islamic Financial Services Board (IFSB) and the Basel Committee on Banking Supervision (BCBS), had to establish a frame which clearly defines the kinds of risks faced by Islamic banks. International authorities had also to recommend sound practices of risk management for institutions conducting Islamic financial activities which are considered as part of good corporate governance practices.

1. The types of Risks in Islamic Banks

The Shari'ah principles establish a frame within which Islamic banks conduct their activities. These principles identify the kinds of risks encountered as follows.

1.1. Credit Risk: Credit risk is the risk that the counterparty fails to meet its obligations (IFSB, 2005). For example, in the case of profit sharing modes of financing ("mudaraba" and "musharaka"), the credit risk will be none or partial payment of the bank's share by the counterparty "entrepreneur" when it is due (Islamic development bank, 2001).

2.1. Liquidity Risk: Liquidity risk arises from the imbalance in cash inflows and outflows. "Islamic banks have different obligations such as the requirements to repay current account holders on demand, to provide committed funds in "musharaka" transactions, and to make available cash flows for expenses or profit payment" (IFSB, 2005).

3.1. Market Risk: According to IFSB (2005), market risk is defined as losses in on-and-off balance sheet positions arising from movements in the market prices, i.e. fluctuations in values in tradable, marketable, or leaseable assets such as "sukuk." Market risk may also arise from the movement in the market interest rate, though Islamic banks do not deal with it (Islamic development bank, 2001). Islamic financial institutions use a benchmark rate in order to price the different financial instruments. For example in the case of a "murabaha," the mark-up is determined by adding a premium to an international benchmark rate such as the LIBOR. The premium added will be fixed for the duration of the contract. This means that variations of LIBOR will affect the expected return for Islamic banks.

4.1. Equity Investment Risk: According to IFSB (2005), equity investment risk arises from entering into a partnership for the purpose of undertaking or participating in a particular financing or general business activity as described in the contract in which the financier shares in the business risk. "Mudaraba" and "Murabaha" are examples of Islamic financial tools which may be exposed to equity investment risk.

5.1. Rate of return risk: Rate of return risk is defined as the risk arising from the variability of the rate of return on saving/investment deposits (Islamic development bank, 2001). Lower rates of return may lead to withdrawals by depositors.

6.1. Operational Risk: Operational risk is the risk of loss resulting form inadequate or failed internal processes, systems and people. It may arise particularly from the fact that banks may not have enough qualified professionals to conduct the different operations necessary to offer various Islamic financial services (Islamic development Bank, 2001).

2. Risk management and Corporate Governance in Islamic Banks

Shleifer and Vishny (1997) define corporate governance as "the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment." According to John and Senbet (1998), it is "the mechanisms by which stakeholders of a corporation exercise control over corporate insiders and management such that their interests are protected." There are several issues which are unique to Islamic banks and are part of their corporate governance systems. These can be summarized as the need for shari'ah compliance, accountability to "Almighty God," the presence of a class of stakeholders not found in conventional banks which are the Investment Account Holders (IAH), potential conflicts of interest between shareholders and IAH, and transparency in financial reporting such as the calculation of the Mudarib share (BDL and ESA IFQ, 2007).

Maximizing shareholder value and preserving depositors' interests are the main objectives of corporate governance in the banking sector. An Islamic bank mainly manages the IAHs' money through the utilization of different Islamic financial tools. Consequently, it has the sole authority in assessing the risk of the project and deciding whether to invest/finance. Unlike conventional banks where depositors are paid a guaranteed a fixed interest according to the amount deposited, depositors in Islamic banks bear the risk of losing some or all of their deposits in case the risks related to the project are not properly assessed or managed by the bank. As such, depositors share the profits with the bank, but bear the entire losses of investments. Risk management is thus an important element of corporate governance in the Islamic banks. It is even more important than in conventional banking. Therefore, Islamic banks need a risk management system that enables them to identify, monitor, control and predict the different risks they may face. They also need to have good governance practices, which allow them to effectively implement their risk management system. Hence:

Hypothesis 1: The risk management system of Islamic Banks is positively associated with their good governance practices

3. Methodology

1.3. Research Methodology

To test our two hypotheses, a qualitative research was conducted in the four Islamic banks operating in Lebanon. We used a questionnaire technique composed of a set of 15 questions. Our questionnaire was run through structured interviews which allow us to gather detailed information, to provide insights into declarative knowledge, and to uncover general rules and problem-solving strategies. The interviews were conducted with the heads of the risk management departments of the four Islamic banks in order to ensure the trustworthiness of the survey and the accuracy of collected answers.

The questionnaire was designed based on the risk management principles set by the Islamic Financial Supervisory Board (IFSB) and on those published by the Basel Committee on Banking Supervision (BCBS). It is divided into two sections. The first section addresses the board of directors and the Shariah board responsibilities with respect to the risk management system, while the second addresses the six main risks that an Islamic bank may face which are credit risk, equity investment risk, market risk, liquidity risk, rate of return risk and operational risk. For each type of risk, at least one question was asked in order to determine the different strategies, processes and procedures used by the bank to identify, monitor, control and mitigate that specific risk. [9]

2.3. The Main Financial Instruments

Islamic banks use several financing and investment activities which may be classified as follows:

Murabaha: This is the sale of a commodity at a price which includes a stated profit known to both the vendor and the purchaser. This can be called a cost plus profit contract. The price is usually paid back by the buyer in deferred payments. Under Murabaha, the Islamic bank purchases, in its own name, goods that an importer or a buyer wants, and then sells them to him at an agreed mark-up. This technique is usually used for financing trade, but because the bank takes title to the goods and is therefore engaged in buying and selling, its profit derives from a real service that entails a certain risk, and is thus seen as legitimate. Simply advancing the money to the client at a fixed interest rate would not be legitimate. It is important to note that only a legitimate profit in addition to the actual price is considered lawful under Islamic law. Any excessive addition on account of deferred payments will be disallowed as it would amount to a payment based on the value of money over time i.e. interest.

Mudaraba: This implies a contract between two parties whereby one party, the *rabb al-mal* (beneficial owner or the sleeping partner), entrusts money to the other party called the *mudarib* (managing trustee or the labor partner). The mudarib is to utilize it in an agreed manner and then must return the principal and the pre-agreed share of the profit to the rabb al-mal. The mudarib keeps for himself what remains of such profits. The following characteristics of mudaraba are of significance: the division of profits between the two parties must necessarily be on a proportional basis and cannot be a lump-sum or guaranteed return; the investor is not liable for losses beyond the capital he has contributed; and the mudarib does not share in the losses except for the loss of his time and efforts.

Briefly, an Islamic bank lends money to a client - to finance a factory, for example - in return for which the bank will get a specified percentage of the factory's net profits every year for a designated period. This share of the profits provides for repayment of the principal and a profit for the bank to pass on to its depositors. Should the factory lose money, the bank, its depositors and the borrower all jointly absorb the losses, thereby putting into practice the pivotal Islamic principle that the providers and users of capital should share risks and rewards.

[9] The interviewees were asked to select the appropriate choice(s), if any, to describe the bank's risk management system. If the choices do not match the suggestion proposed by the interviewee, they were required to provide additional details in the last box entitled "Other, specify" at the end of each set of choices. Approximately one hour was needed to complete the questionnaire.

Musharaka: This is a partnership, normally of limited duration, formed to carry out a specific project. It is therefore similar to a western-style joint venture, and is also regarded by some as the purest form of Islamic financial instrument since it conforms to the underlying partnership principles of sharing in, and benefiting from, risk. Participation in a musharaka can be either in a new project, or by providing additional funds for an existing one. Profits are divided on a pre-determined basis, and any losses are shared in proportion to the capital contribution.

Salam: A buyer pays in advance for a specified quantity and quality of a commodity, deliverable on a specific date, at an agreed price. This financing technique, similar to a futures or forward-purchase contract, is particularly applicable to seasonal agricultural purchases, but it can also be used to buy other goods in cases where the seller needs working capital before he can deliver.

Ijara: in simple terms, implies leasing or hiring of a physical asset. It is a popular debt-based product in which the Islamic bank assumes the role of an *ajir* or (lessor) and allows its client to use a particular asset that it owns. The client, or *mustajir* (lessee), is in need of the asset. Through *ijara*, the client receives the benefits associated with ownership of the asset against payment of predetermined rentals. In *ijara*, the bank continues to be the owner throughout the *ijara* period, while the client receives the benefits of ownership or the benefits of using the asset. As such, risks associated with ownership of the asset remain with the bank and the asset reverts to the bank at the end of the *ijara* period.

Ijara mountahia bi tamallouk: In some cases, the *ijara* contract may be followed by a selling contract by which the assets are sold to the lessee at the end of the *Ijara* period for a predetermined price. This process is known by *ijara mountahia bi tamallouk* .

Istisna': An *istisna'* is a contract of manufacture. A seller under an *istisna'* agreement undertakes to develop or manufacture a commodity with clear specifications for an agreed price and delivery after an agreed period of time. The unique feature of *istisna'* is that nothing is exchanged on the spot or at the time of contracting. It is a pure and perhaps the only forward contract where the obligations of both parties relate to the future. The buyer makes its payments in parts over the agreed time period or in full at the end of the time period. In an *istisna'*, the seller and the manufacturer may be different entities. This allows financiers or intermediaries like Islamic banks to engage in *istisna'* by assigning the job of development, manufacture or construction to a third party under a parallel *istisna'* arrangement. *Istisna'* is thus transformed into a financing product. The difference between the price received from the client and the price paid to the manufacturer constitutes profit for the bank. The *Istisna'* facility is suitable for commercial or residential buildings, industries, roads, aircraft and vessels.

4. Empirical Findings

In order to preserve anonymity, empirical investigations present the results related to Islamic banks which are designated by the letters 'A,' 'B,' 'C,' and 'D.' Further we present our population as well as the results related to the board of directors, used as a proxy for good governance practices, and the risk management systems.

1.4. Descriptive Statistics

Table 1 shows the percentage adoption by the different Islamic banks in Lebanon of the different Islamic financial tools. It indicates that Murabaha is the most used financial activity in Lebanese banks, especially Banks A and D, whereas there are no banks which deal with Mudaraba agreements.

[Insert Table 2 About Here]

2.4. The Board of Directors and the Shari'ah rules

In addition to the board of directors, Islamic banks have a Shari'ah board which verifies the compliance of systems and controls with Shari'ah rules and principles.

Question 1 presents the bank's BOD risk management strategy and indicates that the board of directors of the four Islamic banks set limits (restrictions) on the amount to be invested or used to finance a particular business, project or even a particular industry in order to avoid concentration of risk (see Question 1 in the Appendix). [10] In addition, all of the Islamic banks have stated that they hold sufficient capital in order to mitigate risks that may arise from financing and investment activities.

However, two of the Islamic banks ("B" and "D") have mentioned that their BODs ensure that their senior management executes the strategic directions that they have articulated. "B" has considered this a natural issue since the chairman of the board and the general manager are the same person. In contrast, the two other banks ("A" and "C") have stated that their board of directors are incapable of monitoring the implementation of each and every decision made since the board meets only few times per year.

Moreover, Question 2 on the compliance of systems and controls with Shari'ah rules and principles confirms that all of the Islamic banks operating in Lebanon undertake, at least annually, a Sharia'ah compliant review. This is performed either by a separate Shari'ah control department or as a part of the existing internal and external audit function by persons having the requisite knowledge. The objective of this review is to ensure that the Islamic bank's operations, financing, and investment activities are

[10] The Central Bank of Lebanon (BDL) has obliged the Lebanese Islamic banks to limit their financing in a single company to no more than 10 % of the company's capital (BDL Circular No 94).

executed in adherence to the applicable Shar'iah rules and principles and to policies and procedures approved by the bank's Shari'ah board. Banks "A", "B", and "D" have even a separate Shari'ah control department which conducts the Shari'ah compliant review every six to twelve months. The three banks keep track of income not recognized arising from Shari'ah non-compliant transactions and assess the probability of similar cases arising in the future.

As such, Questions 1 and 2 indicate that Banks "B" and "D" exhibit the highest commitment to good governance practices, as proxied by the roles played by the boards of directors.

3.4. The Risk Management

Hereafter, we show the involvement of Islamic banks in each of the risk categories they face.

a- The Credit Risk Management (Questions 3 to 6)

The risk management function is independent from the risk taking activities in the structure of the four surveyed banks. These results reveal that banks are aware of the conflicts that may arise when the two units are the same. In response to our question about the counterparty's characteristics (see Question 3 in the Appendix), all of the banks have confirmed the importance of counterparty characteristics, and the application of the appropriate mechanisms in inspecting the potential counterparty. Consequently, all Lebanese Islamic banks have a risk management structure which is responsible for identifying, mitigating, monitoring and controlling the different risks including credit risk. However, its degree of development and complexity varies from one bank to another. Regarding the BOD's approval and periodic revision of credit risk strategy, all banks have stated that their BOD's approve and at least annually review the credit risk strategy and policies.

Question 4 discusses the credit risk management strategy and shows that banks ("B", "C", and "D") have internal risk rating systems, whereas Bank "A" does not have any appropriate rating system.

Further, all Islamic banks in Lebanon have an independent ongoing assessment system of the bank's credit risk management process. In the measurement and the reporting of credit risk exposures (Question 5 in the Appendix), bank "B" measures credit risk exposure by closely monitoring the frequency of the payments due by the counterparty. Any negligence in two consecutive payments would transfer the counterparty file to the legal department, and the general manager would be notified simultaneously. On the other hand, bank "C" relies on the frequency of the counterparty's cash flow as a main indication for measuring the credit risk exposure. Any abnormal signals are reported to the general manager. External official rating of the counterparty is one of the tools that Bank "D" relies on to measure credit risk exposure. The credit risk reporting process starts in banks "A" and "D" from the risk management department, then moves through the risk committee and finally reaches the general manager.

Finally, Question 6 on the appropriate techniques in mitigating credit risk, shows that all banks have stated that collateral and guarantees are considered to be primary mitigating techniques for credit risk. All banks apply debt-rescheduling or restructuring arrangements, without an increase in the amount of debt since such an increase would violate Shari'ah. Also, they have never used debt collection agencies even though it is recommended by the IFSB. Banks "A" and "C" set mark up rates according to the risk of the counterparty. According to them, the mark up must not exceed certain limits in order for the banks to remain an attractive option for borrowers. On the other hand, banks "B" and "D" consider this to be a non-competitive action that will automatically result in losing the counterparty's business.

As a result, Questions 3 to 6 suggest that while all banks are aware of the importance of counterparty risk, Banks "B", "C", and "D" have the most developed structures in credit risk management.

b- Equity Investment Risk (Questions 7 to 9)

Since the bank is a partner in both "Mudaraba" and "Musharaka" contracts, it must have a proper infrastructure and capacity to monitor the performance and operations of the entity it invests in. Question 7 indicates that only two banks ("C" and "D") believe they have an appropriate infrastructure to monitor the performance and operations. Banks B, C and D prepare a complete file before entering into any equity investment activity which contains all the necessary conditions required to preserve the rights of the bank and to make the investment activity as clear as possible such as objective criteria, tolerance of risk, desired holding period, and expected return for the investment.

Moreover, Banks "B" and "D" closely monitor new risks that result from the development of new or innovative products by the business that the banks invested in. Banks "B", "C" and "D" continuously perform an analysis of the possible factors that may affect the volume and the timing of an entity's cash flow. An investment committee is found in Banks "A", "B" and "C" although the structure of this committee varies from one bank to another.

In order to avoid potential manipulation in the reported earnings of equity partners, Question 8 indicates that Bank "D" is the only bank that engages an independent third party to carry out auditing and valuation of the investment activities. Banks "B" and "C" believe that they are capable of monitoring the reported results and detecting potential manipulations of these results including results of partnership earnings without external assistance since their Murabaha and Mudaraba contracts are performed on a small scale. Banks "B" and "D" are represented with one board member on the BOD of the entity in which they are investing. However, Bank "D" has mentioned that it is not necessary to be represented on the board if it owns less than 15% of the entity's total shares.

Bank "C" does not find it necessary to be represented on the BOD.

Question 9 reviews the exit strategies of equity investments, and indicates that neither the initial public offering nor the obligation of the counterparty to buy the banks' shares at any time is considered to be potential exit strategies by the four Islamic banks. Only Banks "A" and "D" consider private placement to be an appropriate exit strategy. All of the banks have stated that extension and redemption conditions for Mudaraba and Musharaka investments can be selected as an exit strategy if improved business prospects exist. This is justified by the fact that the banks' main objective is to achieve successful investments and to extend any contract where improved business prospects exist.

According to Questions 7 to 9, Banks "C" and "D" have an appropriate infrastructure to monitor the performance and operations.

c- Market Risk Management (Question 10)

For the reporting of the market risk management (Question 10 in the Appendix), banks "A" and "D" have stated that they have a system capable of controlling, monitoring and reporting market risk exposure. However, this system is still in its primary stage of development. Banks "B" and "C" do not have such a system in their risk management processes.

Furthermore, Bank "D" has adopted tools to quantify market risk exposures according to the recommendations by the IFSB. Also, Bank "B" is the only bank which considers market instability before entering in "Salam" and "Ijara" contracts, usually more sensitive than others to market fluctuations. [11]

Consequently, Question 10 suggests that Banks "A" and "D" have a system capable of controlling, monitoring and reporting market risk exposure.

d- Liquidity Risk Management (Questions 11 and 12)

Question 11 presents the results related to the liquidity management framework. It shows that Banks "B" and "D" have indicated the presence of a liquidity management framework that maintains adequate liquidity. Furthermore, Bank "D" has added that it does not use more than 35% of its total deposits in investment or financing activities.

Three banks ("A," "B," and "D") have indicated the presence of a system that monitors and reports liquidity exposures on a daily basis. However, none of these banks performs this process on a live basis. The liquidity management process is reviewed by Banks "B" and "D" every six to twelve months.

The Asset-Liability Management Committee (ALCO) is part of all Islamic banks operating in Lebanon; however, its structure varies from one bank to another. A system for internal controls over the liquidity risk is found only in Bank "B."

Question 12 discusses the contingency plan applied in the case of a liquidity crisis. It indicates that Banks "A" and "D" hold tradable high quality assets, such as "Sukuk" and assets related to the "Mudaraba" contracts, while "B" and "C" do not.

Banks "A," "B" and "D" assess Shari'ah compliant funding found in the market to which they adhere in the case of liquidity shortage. All banks however explained that the Central Bank of Lebanon does not provide liquidity arrangements.

Questions 11 and 12 shows that Banks "B" and "D" have the highest standards to face liquidity risk.

e- Rate of return risk (Question 13)

In managing the rate of return risk (Question 13), Islamic banks may calculate the Profit Equalization Reserve (PER), i.e. "the amount appropriated by banks out of their gross income before allocating the 'mudarib' share in order to maintain a certain level of return on investment for the Investment Account Holders (IAH) and increase owner's equity" (IFSB, 2005). They may also calculate the Investment Risk Reserve (IRR), i.e. "the amount appropriated by the bank out of the income of the IAH, after allocating the 'mudarib' share, in order to cushion the effects of the risk of future investments losses on IAH" (IFSB, 2005).

None of the banks have selected the first choice, i.e. none of them apply the PER arrangement. Regarding the IRR arrangement, it has been adopted only by Bank "D" which allocates the reserve to the IAH only in the case of project default.

Bank "D" is the only bank using tools to manage its rate of return risk.

f- Operational risk (Questions 14 and 15)

Question 14 indicates that the processes which regularly monitor operational risk profiles are found in the risk management systems of banks "B" and "D." However, policies, processes and procedures to control and mitigate operational risk are only found in the risk management system of Bank "D." Banks "A" and "C" are in the process of developing an operational risk framework for future purposes.

All of the Islamic banks operating in Lebanon have contingency and business continuity plans in the case of major crises such as the physical destruction of the bank's premises or the spread of a virus in their computer's system.

Also, Question 15 shows that bank "B" is the only Islamic bank operating in Lebanon whose BOD

[11] In operating Ijara, a lessor is exposed to market risk on the residual value of the leased asset at the term of the lease, or if the lessee terminates the lease earlier, by defaulting. In a "Salam" contract, the bank is exposed to commodity price fluctuations on a long position after entering into a contract and while holding the subject matter until it is disposed of.

ensures that the operational risk management framework, which is not yet reviewed since it is newly developed, is subject to effective and comprehensive internal audits by operationally independent and competent staff. In Bank "D," the responsibility of ensuring that the operational framework is subject to internal audit by competent staff is given to the top management and not to the board of directors.

Bank "D's" BOD approves and periodically reviews the bank's operational risk management framework. Its management also translates the operational risk management framework established by the BOD into specific policies, processes and procedures that are implemented and verified within the different business units.

As such, Banks "B" and "D" have the best structure to face operational risk.

4.4. Good governance practices and Risk management

Table 2 shows the adoption of the Islamic Financial Supervisory Board (IFSB) and the Basel Committee on Banking Supervision (BCBS) recommendations by the Islamic banking industry in Lebanon, especially those related to the BOD's responsibilities in formulating a risk management strategy and the management of the different types of risks.

[Insert Table 2 About Here]

Table 2 indicates that the Islamic banking sector operating in Lebanon adopts 88% of the rules and principles recommended by the IFSB and BCBS and included in the survey regarding the BOD responsibilities with respect to risk management.

With respect to credit risk management, 80% of the rules and principles recommended by the IFSB and BCBS are adopted by the Islamic banking sector as a whole. This is the highest percentage adoption of the rules and principles among all types of risk. It appears that the Islamic banks operating in Lebanon considers the development of a sound credit risk management system a priority. Recommendations by the IFSB and BCBS with respect to a sound practice of liquidity, equity and operational risk management are adopted in equal percentages (approximately 50%) by the Lebanese Islamic banking sector. Furthermore, the rules and principles recommended by IFSB and BCBS with respect to market and rate of return risks, from which most of the multiple choices are derived, are the least adopted by the Islamic banking sector in Lebanon compared to those recommended for the other types of risks.

Further analysis of the degree of adoption of IFSB and BCBS recommendations allows for the following ranking of Islamic banks according to their answers:

- Bank "D" 76 %
- Bank "B" 62 %
- Bank "A" 56 %
- Bank "C" 46 %

Table 3 exhibits the results related to the verification of our hypothesis on the association between good governance practices and the implementation of risk management systems. Panel A shows that Banks "B" and "D" have the best practices in terms of board of directors and Shari'ah board. Panel B also indicates that Bank "D" has a complete set of standards related to the different aspects of risk management, and is followed by Bank "B" with an average set of risk management standards. Panels A and B confirm our testable hypothesis; there is a positive association between good governance practices and the risk management systems in the Lebanese Islamic banking industry.

[Insert Table 3 About Here]

5.4. Bank Characteristics and the adoption of recommendations

Further investigations show no clear relation between the age of the Islamic institutions and the degree of adoption of the IFSB and BCBS recommendations. However, the oldest Islamic bank, bank "D," showed the highest rate of adoption compared to the others. On the other hand, the most recently established bank, bank "B," showed the second highest rate of adoption of these recommendations.

Also, the bank with the highest number of employees and branches has the highest compliance rate. As to the other three banks, no clear relation was found between the size of the banks and their rate of adoption of the various recommendations set by the IFSB and the BCBS.

The study also showed that the Lebanese Islamic banks owned by Arab banks are more developed than the Lebanese Islamic banks (LIB). Two of the four Islamic banks are subsidiaries of Arab Islamic banks (SAIB) while the others are subsidiaries of Lebanese conventional banks. In fact, the results drawn from the survey indicate that the LIB have the same standards as the SAIB regarding the BOD, the credit risk and the equity investment risk requirements. However, when it comes to market, liquidity, rate of return and operational risks, the SAIB enjoy better ratings regarding the adoption and implementation of the associated risks strategies. This difference is due to several reasons. First, the regulatory framework of the Central Bank of Lebanon (BDL) with respect to Islamic banks is still under development and has not tackled all the issues related to Islamic banking. The main reason behind this is the recent establishment of the Islamic banking industry in Lebanon following the law issued by the BDL in 2004. Second, the Arab region has more experience and expertise in Islamic banking because the Islamic banking industry in these countries has been operating for a large period. This allows the SAIB to anticipate the risks associated with their operations and consequently implement strategies in order to mitigate these risks. Finally, Islamic banks adapt more easily in Islamic countries because the culture and religion in these countries constitute an appropriate infrastructure for the development of the Islamic banking industry.

5. Conclusion

The choices found in the questionnaire are based mostly on the recommendations set by the BCBS and the IFSB. The survey showed that the adoption of these recommendations varies from one bank to another. Some banks have stated that the nature of their activities exposes them to some types of risk more than other types. Consequently, developing a risk management framework for the less likely risks is considered as a secondary concern for these banks. There is however a positive relationship between corporate governance and the implementation of a risk management system.

References

1. Association of Insurance and Risk Managers UK 2002, *A risk management standard*, http://www.airmic.com/.
2. Abdul Gafoor, A. 1995, *Interest-free Commercial Banking*. Apptec, ch. 4: Islamic Banking.
3. Ahmed, M. 2004, *Islamic versus traditional banking in arab region: Premises and Promises,* Islamic bank training and research academy.
4. Ariff, M. 1998, *Islamic banking*, Asian-Pacific Economic Literature, vol.2, no.2, pp.46-62.
5. Basel Committee for Banking Supervision 2006, *Enhancing Corporate Governance for Banking Organizations*.
6. Basel Committee for Banking Supervision 2004, *International Convergence of Capital Measurement and Capital Standards*.
7. Basel Committee on Banking Supervision 2000, *Principles for the Management of Credit Risk*.
8. Basel Committee on Banking Supervision 2000, *Sound Practices for Managing Liquidity in Banking Organizations*.
9. Basel Committee on Banking Supervision 2003, *Sound Practices for the Management and Supervision of Operational Risk*.
10. Berle Jr., A. and Means, G. 1932, *The Modern Corporation and Private Property,* Macmillan, New York.
11. Brook, A. 1999, *Repo market crosses line in the sand,* International security lending,
12. Caouette, John B., A. E. I., and Narayanan, P. 1998, *Managing Credit Risk: The Next Great Financial Challenges*. John Wiley and Sons,.
13. Central Bank of Lebanon and Ecole Superieure des Affaires 2007, *Islamic Financial Qualification*.
14. Cumming, C. M. and Hirtle, B. J. 2001, *The challenges of risk management in diversified financial companies*, Federal Reserve Bank of New York Economic Policy Review.
15. Deloitte and Touche 2002, *Generic Risk Management Manual*.
16. El-Gamal, M. A. 2000, *A Basic Guide to Contemporary Islamic Banking and Finance*.
17. Freixas, X. and Rochet, J.-C. 1997, *Microeconomics of Banking,* The MIT Press.
18. Ghannadian, F. and Klein, J. 1991, *A note on interest and banking in Islam*, Saving and Development Quarterly Review, No.4, pp.373-84
19. Goodhart, C., Hartman, P., Llewellyn, D., Rojas-Suarez, L., and Weisbrod, S. 1997, *Financial regulation: Why, how and where now?*
20. Haque, N. and Mirakhor, A. 1986, *Optimal profit-sharing contracts and investment in an interst-free Islamic economy,* Washington, DC.
21. Hassan, M. K. and Zaher, T. S. 2001, *A Comparative Literature Survey of Islamic Finance and Banking,* Blackwell.
22. Hendricks, D. and Hirtle, B. 1997, *Bank capital requirements for market risk: The internal models approach*, Federal Reserve Bank of New York Economic Policy Review.
23. Henry, C. and Wilson, R. 2004, *The Politics of Islamic Finance,* Edinburg University Press, Edinburg.
24. Hoffman, D. G. 2002, *Managing Operational Risk, 20 Firm Wide Best Practice Strategies,* John Wiley and Sons.
25. Islamic Development Bank 2001, *Risk Management: An Analysis of Issues in Islamic Financial Industry*.
26. Iqbal, Z. 1997, *Islamic financial systems*, Finance and Development vol.34, no.2.
27. Islamic Financial Services Board (IFSB) 2005, *Guiding Principles of Risk Management For Institutions (other than Insurance Institutions) Offering Only Islamic Financial Services*.
28. Islamic Financial Services Board (IFSB) 2006, *Guiding Principles on Corporate Governance For Institutions Offering Only Islamic Financial Services (Excluding Islamic Insurance (Takaful) Institutions And Islamic Mutual Funds*.
29. Jensen, M. 1993, *The modern industrial revolution, exit and the failure of internal control system*, Journal of Finance vol.48, pp.831-880.
30. John, K. and Senbet, L. 1998, *Corporate governance and board effectiveness*,
31. Journal of Banking and Finance vol.22, no.4, pp.371-403.
32. Kaen, F. R. 2002, *Risk Management, Corporate Governance and the Public Corporation*, Durham, USA.
33. Karim, R. and Ali, A. 1989, *Determinants of the financial strategy of Islamic banks*, Journal of Business Finance and Accounting vol.16, no.2, pp.193-212.
34. Kazarian, E. G. 1993, *Islamic versus banking financial innovation in Egypt*, West View Press.
35. Keon, N. 1989, *Stock Market Investment*, Berita Publishing.
36. Khan, M. 1986, *Islamic interest-free banking: A theoretical analysis*, International Monetary Fund Staff Papers vol.33, no.1, pp.127.
37. Khan, M. and Mirakhor, A. 1986, *The framework and practice of Islamic banking*, Finance and Development: Washington vol.23, no.3, pp.32.
38. Khan, W. 1983, *Towards an interest-free Islamic economic system: A theoretical analysis of prohibiting debt financing*, Department of Economics, Boston University.
39. Khorshid, A. 2004, *Islamic insurance: A modern approach to Islamic banking,* Routledge publisher.
40. Levine, R. 2004, *The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence*.

41. Macey, J. and O'Hara, M. 2005, *The corporate governance of banks,* Federal Reserve Bank of New York Economic Policy Review 9.
42. Miller, M. 1997, *Is American corporate governance fatally flawed*?, 1997.
43. Nida'ul Islam magazine 1995, *Principles of Islamic banking*.
44. Organization of Economic Cooperation and Development (OECD) 1999, *Principles of Corporate Governance*.
45. Pyle, D. H. 1997, *Risk Management: Theory*, Hass School of Business University of California, Berkely, USA.
46. Rejesh, A. K. and Youssef, T. 2000, *Islamic bank and investment financing,* Journal of Money Credit and Banking.
47. Santomero, A. M. 1997, *Commercial Bank Risk Management: An Analysis of the Process*, Wharton financial Institution Center, Wharton School.
48. Shleifer, A. and Vishny, R. 1997, *A survey of corporate governance*. Journal of Finance vol.52, pp.737-783.
49. Siddiqui, M. 1981, *Muslim Economic Thinking: A Survey of Contemporary Literature*. Islamic Foundation.
50. State Bank of Pakistan, *Risk Management Guidelines for Commercial Banks & DFIs*. Suleiman, N. M. 2000, *Corporate governance in Islamic banks,* http://www.al-bab.com/.
51. The Financial Services Round Table 1999, *Guiding principles in risk management for U.S. commercial banks*, http://www.fsround.org/.
52. Zawaya business information. http://www.zawya.com/.

Appendices

Table 1 – The Utilization of Islamic Financial Tools

	Bank A	Bank B	Bank C	Bank D
Murabaha	90%	70%	50%	95%
Mudaraba				
Musharaka			20%	
Bai' Salam			30%	
Ijara Mountahia bi tamallouk	10%			
Ijara		10%		5%
Istisna'		20%		

Table 2 – The adoption rates of the Islamic Financial Supervisory Board (IFSB) and the Basel Committee on Banking Supervision (BCBS) Recommendations

BODs/ Shari'ah Board	Credit risk	Liquidity risk	Operational risk	Equity Investment risk	Market risk	Rate of return risk
88%	80%	50%	42%	48%	33%	13%

Table 3 – Corporate Governance and Risk Management System in Lebanese Islamic Banks

Bank	A	B	C	D
Panel A- Ranking of the best Corporate Governance Practices				
Board of Directors	0	1	0	1
Shari'ah board	1	1	1	1
Good governance practices	1	2	1	2
Panel B- Ranking of the Risk Management Systems				
Credit Risk Management	0	1	1	1
Equity Risk Management	0	0	1	1
Market Risk Management	1	0	0	1
Liquidity Risk Management	0	1	0	1
Rate of return Risk Management	0	0	0	1
Operational Risk Management	0	1	0	1
Total Risk Management	1	3	2	6

Questionnaire

A - Board of Directors and Shari'ah Board

Q1- What is the bank's BOD risk management strategy?

BOD approves limits on aggregate financing and investment exposures to avoid concentration of risk	4
BOD ensures that the bank holds adequate equity against investment and financing exposures	4
BOD makes sure that the senior management executes the risk management's strategic directions set by the BOD	2
Senior management ensures that the risk-management function is independent from the risk-taking activities and is reporting directly to the BOD or senior management outside the risk-taking unit	4

Q2- What are the bank's systems and controls that ensure compliance with Shari'ah rules and principles?

The bank undertakes at least annually a shari'ah compliant review performed either by a separate shari'ah control department or as a part of the existing internal and external audit function by persons having the required knowledge	4
The bank takes track of income not recognized arising from shari'ah non-compliance and asses the probability of similar cases arising in the future	3

B – Risk Management System

a- Credit Risk

Q3- Is the bank sensitive to the counterparty's characteristics from the following aspects? If yes, how?

Legal (sole proprietorship, joint stock, limited liability)	4
Dimension (small, medium, large)	4
Financial leverage	4
Industry (high tech, low tech, real estates, services …)	4

Q4- What is the bank's strategy for managing credit risk which arises from the different Islamic instruments?

Presence of a risk management structure with an effective oversight on credit risk	4
BOD approves and periodically reviews (at least annually) the bank's credit risk strategy and policies	4
Bank has and utilizes internal risk rating system in managing credit risk	3
Bank has a system of independent ongoing assessment of the bank's credit risk management process, which provides the BOD and senior management with sufficient information to evaluate the performance of account officers and conditions of credit portfolio	4

Q5- How does the Bank choose an appropriate Islamic financial instrument for the counterparty taking into consideration minimization of credit risk?

Selection of the instrument from a previously developed list, which contains all types of applicable and approved transactions and financing	0
Conducting a due diligence	4

Q6- What is the bank's credit risk mitigating techniques appropriate for Islamic financing instruments?

Setting mark up rates according to the risk rating of the counterparties	2
Asking for permissible and enforceable collaterals and guarantees	4
Offering debt-rescheduling or restructuring arrangements (without an increase in the amount of debt)	4
Using a debt-collecting agency	0

b- Equity Investment Risk

Q7- What are the bank's strategies, risk management, and reporting processes related to the equity investment risk, including Mudāraba and Mushāraka ?

Bank has a proper infrastructure and capacity to monitor the performance and operations of the entity in which the bank invest as a partner	2
Bank sets the objectives of, and criteria for investments, using profit sharing instruments, such as tolerance of risk, expected returns, desired holding periods	3
Bank identifies and monitors the transformation of risks at various stages of the investment lifecycle (for example, where the business involves innovative or new products in market place)	2
Bank analyzes and determines possible factors affecting the expected volume and timing of cash flow	3
The bank has an Investment Committee	3

Q8- In the case of equity investment (such as Mudāraba or Mushāraka), what are the measures taken by the bank to avoid potential manipulation of reported results leading to overstatement or understatement of partnership earnings?

Engagement of an independent 3rd party to carry out audit and valuations of investments	1
Members of the board of directors represent the Islamic bank	2
Other	1

Q9- What is the bank's exit strategy (alternative routes and timing to exit) in the case of equity investment?

Bank uses IPO as an exit strategy.	0
Bank uses private placement as an exit strategy.	2
Bank can oblige the counterparty to buy his share (mentioned in the agreement), as an exit strategy	0
Bank's exit strategy includes redemption and extension conditions for Mudaraba and Musharaka investments subject to the approval of the Shari'ah Board, where improved business prospects exist	4

c- Market Risk

Q10- What is the bank's structure/reporting line for market risk management?

Bank has a developed system to control, monitor, and report market risk exposure, and performance to appropriate levels of senior management	2
Bank takes into considerations the market instability before entering into different contracts, such as operating Ijara and Salam which may be affected by the market fluctuation	1
Bank has tools to quantify market risk exposures	1

d- Liquidity Risk

Q11- What is the bank's liquidity management framework?

Bank maintains adequate liquidity and line of credits to meet its obligations, such as requirements for withdrawals, at all times	2
Bank has adequate systems for monitoring on live basis and reporting on daily basis liquidity exposures	3
Bank's liquidity management polices are reviewed periodically	2
The bank has an Asset-Liability Management Committee	4
The bank has an adequate system for internal controls over its liquidity risk management process	1
Other	1

Q12- What is the bank's contingency plan applied in the case of liquidity crises?

The bank holds tradable high quality liquid assets	2
The bank assesses shari'ah compliant funding found in the market including possible cooperation agreements with either other Islamic or conventional banks for accessing temporary funding	3
The bank has detailed information regarding possible liquidity arrangements with the central bank	0

e- Rate of return risk

Q13- How does the bank manage rate of return risk?

The bank applies the Profit Equalization Reserve (PER) arrangement	0
The bank applies the Investment Risk Reserve (IRR) arrangement	1

f- Operational risk

Q14- What is the Bank's operational risk framework?

The bank has a process that regularly monitors operational risk profiles.	2
The bank has policies, processes and procedures to control and/or mitigate material operational risk	1
The bank has in place contingency and business continuity plans, which ensures its ability to operate on an ongoing basis and limit losses in the event of severe business disruption	4

Q15- What are the bank's BOD and senior management responsibilities related to the operational risk?

BOD ensures that the bank's operational risk management framework is subject to effective and comprehensive internal audit by operationally independent and competent staff	1
BOD approves and periodically reviews the bank's operational risk management framework	1
Management translates the operational risk management framework established by the BOD into specific policies processes and procedures that are implemented and verified within the different business units	1