Risk management Analysis of some aspects related to the Islamic financial institutions

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Abstract:
In this period which is characterized by the development of the Islamic finance industry Risk management has become a transversal function, Islamic banks share with conventional banks some risks and at the same time they have to face a series of specific risks. Through our study we will present the risks incurred by the IFIS, these risks are more diverse and complex. It is for this that we must identify, measure, and of course the reduce with methods well targeted and well studied.

Key words: risk, IFIS, industry of Islamic finance, banks, Tools

Introduction
The management of risk is present in each financial institution, either classic or Islamic. As you will find in detail on this work, the Islamic finance contains not only the same risks as the conventional finance, but also the risks that are his own, it is the case for example of the risk of reference and the operational risk.

This work presents a study which has been made by the Islamic Development Bank and the aim of which is to know what risk weighs more on the Islamic banks in order to find adequate solutions to mitigate it.

In order to mitigate the risks to the financial institutions, Islamic, several instruments of coverage have been developed for this purpose. They meet the requirements of the Shariah.

On the contrary of the instruments of conventional coverage, as the options, the CDS and the CDO which are characterized by a total disconnection between the real sphere and the financial sphere, the instruments of Islamic coverage adhere to the principle of asset backing.

1- The risks of Islamic finance
A risk manifests itself as soon as there is a situation of uncertainty and that it does not know the outcome of an operation. Traditional financial institutions Islamic and present several types of risks related to the nature of their activities.

However, we can distinguish several classifications of risk:
a first classification distinguishes the risk of case (Business Risk) of financial risk. The first is relative to the activity of the financial institution itself, while the second is linked to the losses on the financial markets caused by the financial variables.

A second classification made the distinction between the systemic risk and the specific risk.

The systemic risk is due to external events of financial institutions, it is associated to the market or to the state of the economy in general. It cannot be reduced only through derivative financial instruments. The specific risk relates to the financial institution in particular and the operations undertaken with its clientele, which fact that this risk can be reduced or even eliminated by the diversification of the portfolio.

Islamic banks are exposed to two types of risk: the risks to conventional banks, such as the liquidity risk, market risk, credit risk. And the risks specific to the Islamic banks because of their atypical structures of assets and liabilities.

In addition to the standard techniques of identification and measurement of risk, there are new techniques of risk management which are adapted to the rules of Islamic financial institutions.
Islamic banks play a double role: they are involved as commercial banks for the customer wanting to have a deposit account. The latter presents no remuneration and the Bank can use the money deposited, on authorization of the client, to grant credit without interest, said Quard Hassan. They also intervene as banks of investment for a clientele accepting to participate in projects. In this case, the bank guarantees neither the principal nor the profit distributed in the form of dividends. It can therefore be said that an Islamic bank to a responsibility that is much more important since it must manage the money of its clientele as a good father of a family not to jeopardize its credibility and the confidence of its customers. Of this fact it will be in the obligation to have a perfect mastery of the risk that it incurs.

1.1 Credit risk:
It appears at the time when the customer cannot face up to its commitments. The Bank advance of funds, if the operation is the subject of the contract Salam, Istisna, either of the goods if the operation is a contract Moudaraba. It exposes and thus to unrealized losses if his client is located in default of payment. For the Musharaka contract, the Bank is also undergoing losses if the Contractor displays of the negative results of the company in question*(fraud, mismanagement, asymmetry of info). The contractor only loses the effort and the time that it has implemented to walk the entity, while the bank loses the funds it mobilized for the start.

1.2 Risk of reference
as it was cited above, among the principles of the Islamic Finance, there is the prohibition of the interest, which we suggests that the Islamic banks are immune to fluctuations in interest rates, whereas it is quite the contrary. To determine the prices of certain products as well as their margins, Islamic banks refer to interest rates, generally the LIBOR*, to which they add a risk premium. The profit margin will therefore be weakened in the case of increase in the rate, and it admits no readjustment since the contracts Mourabaha give birth to fixed incomes. Financial institutions must therefore face the risks emanating from the fluctuations in the rates of interest.

1.3 Operational risk:
This new industry does not have a highly qualified personnel capable of good manage the financial operations Islamic. Of this fact, some institutions call to the offices of Council and formations, and yet this risk continues to exist because the same personal trained lack the experience. The operational risk may also emanate from a malfunction in the process or technology.

1.4 Legal risk
All contracts concluded between the bank and its customer must respect the principles of the Shariah. In fact, the lack of understanding of some of the principles may question the validity of the contract. The typical example of the legal risk is that of the taxation of capital gains that was quoted above.

1.5 Liquidity risk:
It appears when the bank is located in the inability to honor its commitments or raise funds to finance its activity of exploitation. A rational management of liquidity is become sine qua non in order to allow the Bank to continue its activity in normal conditions. The different aspects may be the origin of liquidity risk:
• The non possibility to sell the credits held by the bank of the fact of the prohibition to sell credits by the shariah, which make them less liquid.
• The lack of a currency market Islamic or effective instruments allowing the lifting of funds in a timely manner.
• The risk to conduct substantial withdrawals on current accounts.

1.6 Counterparty Risk:
The contract Mourabaha is the most used by the client, but the clauses it contains is not the unanimous agreement of all schools of thought and jurisconsults, reason for which it presents a much higher risk
that a contract classic with interest. This risk is due to the lack of a uniform contract for all Islamic financial institutions.

The product makes appeal to more of a contract, which is, the transfer of ownership of the assets in question of the Bank toward the client, and this is where the problem arises.

This transfer of ownership is translated by a promise to purchase and not by a contract of sale.

According to the OIC,* this promise to purchase requires the customer to purchase the property, as it may not be if we refers to other schools of thought, and the customer may not buy the property even after having paid the commission of commitment.

It is then in a situation where the Bank has a well which it does not need and she may suffer a loss if it resells the property at a lower price than it has acquired.

Another counterparty risk appears if the customer does not respect its deadlines. The bank cannot impose the interests of delay because it is prohibited by the Shariah, which represents a latent loss to the bank.

2. Study on the Islamic financial institutions

The Islamic Development Bank (IDB) has done a study on the perception of risk by the bankers, she has asked them in a first time, doing a classification according to the type of risk, and in a second time to make a classification of RISK depending on the nature of the product.

The study was started by the choice of a sample in which the IDB has sent questionnaires on the classification of different types of risk.

The questionnaires have a classification which varies from 1 to 5 where the degree 1 represents the least risk and 5 represents a significant risk. (See Table perception of risk)

The purpose of the study is to know the most important risks that incur the Islamic banks in order to measure and manage them in the best conditions.

The results show that the risk of margin is located in the first position (3,07/5) follow-up to the operational risk (2.92). Although the credit risk is the risk the most observed by financial institutions, Islamic banks do not perceive it as being important (2.71).

The positioning of the risk of margin is explained by the fact that in the case of increase in the rate of interest, the margin of the Bank is reduced because it depends on the rate of interest. The contracts of debts can neither be upgraded to the increase or be the subject of transfer by the derivatives of the credits. It is for these reasons that this risk is much more important than the other types of risk and to which the Islamic banks face.

The operational risk is due to the development of the computer system, to the qualification of the staff and the uniformity of the documents.

The risk of under liquidity is also high since the banks do not have several sources to obtain money.

The risk of market depends on the variation of the price of the goods which are negotiated in an organised market. The portfolio of the IFIS does not include the titles of debts, including the obligations which are liquid, which fact that the risk of market cannot depend on that of the law of supply and demand on the titles indexed on of tangible assets.

<table>
<thead>
<tr>
<th>Risk perception: global risks by Islamic financial institutions</th>
<th>number of received response</th>
<th>Average Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit risk.</td>
<td>14</td>
<td>2,71</td>
</tr>
<tr>
<td>Risk of margin.</td>
<td>15</td>
<td>3,07</td>
</tr>
<tr>
<td>Risk of illiquidity.</td>
<td>16</td>
<td>2,81</td>
</tr>
<tr>
<td>market risk.</td>
<td>10</td>
<td>2,5</td>
</tr>
<tr>
<td>operational risk.</td>
<td>10</td>
<td>2,92</td>
</tr>
</tbody>
</table>

The second part of the study of the IDB is to evaluate the various types of risk for each type of contract. (See table below)
Credit risk: the participatory contracts represent a credit risk high compared to the modes of funding to fixed income. 

In effect, the Musharaka represents the credit risk the higher (3.69), followed by the Musharaka degressive (3.33).

In the category of contracts to fixed income, the Istisna and the Salam pose risks relatively high, 3.13 and 3.20 respectively. This is explained by the fact that income and the delivery of the goods are of uncertain elements in this type of operations.

It manifests when the counterparty does not pay what it owes to the bank, 

**Risk perception:** Risks related to different modes of financing

<table>
<thead>
<tr>
<th></th>
<th>CREDIT RISK</th>
<th>MARGIN RISK</th>
<th>Risk of illiquidity.</th>
<th>operational risk.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOURABAHA</td>
<td>2.56 (16)</td>
<td>2.87 (15)</td>
<td>2.67 (15)</td>
<td>2.93 (14)</td>
</tr>
<tr>
<td>MOUDARABA</td>
<td>3.25 (12)</td>
<td>3 (11)</td>
<td>2.46 (13)</td>
<td>3.08 (12)</td>
</tr>
<tr>
<td>MOUCHARAKA</td>
<td>3.94 (13)</td>
<td>3.4 (10)</td>
<td>2.92 (12)</td>
<td>3.18 (11)</td>
</tr>
<tr>
<td>IJARAH</td>
<td>2.64 (14)</td>
<td>2.92 (12)</td>
<td>3.1 (10)</td>
<td>2.9 (7)</td>
</tr>
<tr>
<td>ISTISNAA</td>
<td>3.13 (8)</td>
<td>3.57 (7)</td>
<td>3 (5)</td>
<td>3.25 (4)</td>
</tr>
<tr>
<td>SALAM</td>
<td>3.2 (5)</td>
<td>3.5 (4)</td>
<td>3.2 (5)</td>
<td>3.25 (4)</td>
</tr>
<tr>
<td>DEGRESSIVE MOUCHARAKA</td>
<td>3.33 (6)</td>
<td>3.4 (5)</td>
<td>3.33 (6)</td>
<td>3.4 (5)</td>
</tr>
</tbody>
</table>

**NOTE:** The figures in parentheses indicate the number of institutions that have responded to our questions

**Credit risk:** the lowest risk is associated with the contract Mourabaha, which explains the important outstanding bearing on this type of contract.

**Risk of margin:** we note that the contracts used for a long period represents more of risk, is the istisna which arrives in the first position Follow-up of the Salam with notes respectively 3.57 and 3.50to, follow-up of the Musharaka 3.4 and the Musharaka degressive 3.4. These contracts are intended to give life to projects of large size, committed large sums of money and which require a significant amount of time with regard to their completion. We can cite as an example the realization of a project linked to the real estate or construction of a line of TGV.

The risk of margin is high in long-term contracts because the margin is likely to be reduced in the case of increase in the rate because it is based on the reference rates.

On the other hand, the contracts concluded for the short term pose less risk, it is the case of the Mourabaha (2.87).

**Liquidity risk:** it is limited if the assets are sold in the short term. In effect, the moudaraba and the mourabaha incur less risk, 2.46 and 2.67 respectively.

Operational risk: As previously reported, this risk aspects of legal order. It concerns in particular the clauses forming the contracts and their compliance with the shariah compatible.

He has a strong presence in the contracts with deferred payment. In effect, the bankers consider that the Musharaka contains the highest risk 3.4, follow-up of the istisna 3.29. The reason for this classification is that these contracts are appealing to the highly skilled personnel to implement the
financial packages adequate. A contrario, the other modes of financing commonly used do not incur a high risk (2.93 for the mourabah and 2.9 for the ijarah).

The risks faced by the Islamic financial institutions are measured in the same way as conventional financial institutions, that is to say it uses the same methods of measurement of risk. We can cite as an example the value at risk, the differential analysis and the rate of yield adjusted to the risk (RAROC).

The problem lies in the instruments put in place to manage and cover the risks mentioned. The instruments used in the conventional funds such as the options, the future and the forward are not allowed in the Islamic finance for the following reasons:

- The sale of assets that the investor does not hold at the time of the conclusion of the contract, it is particularly the case in the sale of call.
- Detachment of the titles of the tangible assets and the management of the risk independently of the assets underlying for, such as the credit default swap (CDS). This technique is known as the "commodification of risk".
- has the maturity of derivative products, there is payment in cash of the difference between the strike and the spot and not in tangible assets.

To be consistent with the Islamic principles, the Islamic financial institutions have developed their own instruments of coverage of the risk.

3. The management of the risk

management of the risk of price by the contract value based Salam:

This technique allows you to cover themselves against the fluctuations of the price. In effect, the contract is to fix not the quantity to be delivered to the deadline but rather the future price of the goods. Let us take the example of the oil as goods, the purchaser of the oil pays 10,000 Dhs for an unknown quantity at the outset and that its future value is 11,000. At maturity, the real price will be determined on the basis of the offer is of the request. If in the long term, the barrel is worth 50, the purchaser of the oil will take to the deadline 220 barrels.

The quantity will be amended on the basis of the price of the market. If the latter is lower than the future price fixed at the start, the buyer will benefit from an increase in the amount that compensates for the decrease in the value of the oil, and life versa, the quantity decrease if the market price is higher than that fixed at the time of the conclusion of the contract.

This technique allows to neutralize the risk of price but not the liquidity risk because the instrument may not be sold to another person since the seller does not hold the goods at the time of the signature of the contract.

The liquidity risk can be eliminated by a technique called Salam parallel.

Salam parallel

in a contract Salam, the purchaser of the goods advance funds subject to a commodity in the long term. This same buyer may conclude another contract Salam but in this case as the vendor to deliver to a purchaser of the same goods in the same delivery date, if it is consistent with the characteristics of the Salam parallel. The second contract is called Salam parallel.

Certain rules relating to this instrument must be respected.

In a contract of Salam parallel, the buyer who is in the general case the Bank as it finances the companion in agriculture in the agricultural sector, for example, concludes two different contracts. In one of them, the Bank is the buyer and in the second, it is a sales clerk. Each of these contracts must be independent of the other. They can not be attached in a way that the rights and obligations of a contract depends on the rights and obligations of the contract parallel. Each contract must have its own strength and its performance and should not be subordinated to the other.

For example, if a has purchased B 100 bags of wheat by way of Salam to deliver the 31 December, has can contract a Salam parallel with C and to him deliver bags of wheat of 100 on 31 December. By contracting Salam parallel with C, the delivery of the wheat to C cannot be conditioned for taking delivery of B. Accordingly, even if B has not delivered the wheat, 31 December, has will be found in
the obligation to provide 100 bags of wheat to C because he cannot get rid of its responsibility to deliver wheat to C.

Similarly, if B delivered the defective goods which do not conform to the specifications agreed, has is still obligated to deliver the goods to C according to the characteristics of the contract.

Even if this instrument allows you to cover themselves against the liquidity, it may engage the liability of the Bank in the obliging them to repay the second purchaser or to buy him the goods in causing a loss for it.

Management of credit risk:
This risk can be managed by the use of the system of internal rating (Intern System Rating), which provides a detailed assessment of the risks specific to each type of assets of a bank. Some banks outsource this rating to the specialized agencies in order to master the management of their risks.

This mastery is present in the form of provisions accurate on the losses they may suffer on loans.

In addition, the best performing banks put in place of the ISR developed based on computer models, while the banks the least efficient merely of a classic IRS, also called IRS Foundation.

This system available to the Islamic Banks" makes the regulation of requirements of capital more turned toward the risk, the banks at risk will have most need of own capital, whereas the reverse is true for capital to less risk"*(GDR132p :99)

The approach IRS class exhibitions of banks to credit risk according to the nature of its customers: banks, commercial, public establishment, businesses, etc. It defines the five factors considered as determinants of credit risk. This classification is presented in the following way:

the probability of default of payment: it is the probability that a customer can not cope with its commitments, to payments of deadlines, which represents a potential loss for the banks.

In practice, (see Table S&Amp;P), the rating agency S&Amp;P defines in a table The risk levels of each client as well as their probability of default of payment.

Loss of non-payment: this technique which is part of the methods recommended by the baloises standards for the management of credit risk, it allows to quantify the risk of default of payment for the whole of the portfolio of the Bank.

(http://en.wikipedia.org/wiki/Exposure_at_default)

exposure to the risk of non-payment (EAD?): This method allows you to calculate the amount of the remaining capital due to receive. In other words, "it is the loss of the dollar in the portfolio in the case of a default of payment "* GDR132 P: 101.

The three methods mentioned above constitute a better measure of the credit risk.

Due date of Facility: it is to determine with precision, in the calculation of the exposure of a bank to credit risk, the maturity of each line of credit granted, because the duration of credit to alter the probability of default of payment. Thus, a credit of the long-term this of course a much higher risk that a credit whose maturity is short.

The Granularity: it is the measurement of the concentration of a single borrower within a credit portfolio of the Bank. (GDR p: 102), the more the portfolio is dispersed between borrowers, less are the requirements in terms of coverage of credit risk by the own capital.

Conclusion

After a presence of about four decades in the financial landscape International, the time is in the balance sheet of Islamic finance. The players on the market and any interested person by this mode of management of fortunes are asking questions of the type:

That has been able to achieve the Islamic finance since its creation?

The sophistication of the products and the creation of derivatives have they started the credibility of the IFIS in the area of compliance by report to the Shariaa?

What answer could make the Islamic finance to a world which is ébroue and where the main characteristic is the uncertainty and fear?

Could there be a total recovery by a ethical finance in the broad sense of the world of business?
Islamic finance offers-t-it enough attractions to attract a wider audience? Islamic Finance, since its creation, a-t-it respected its vocation, namely the mutualisation of wealth and the improvement of the daily life of the disadvantaged and the needy?

With regard to the attractiveness of the Islamic Finance, force is to note that despite of the good years, where the real estate bubble was at its height, the IFIS have difficulty to get involved in projects wealth creators and socially useful.

Islamic finance is undoubtedly imposes today as an important component of the world financial and economic, and its statute requires him to act as such, in other words, to act in investor and not in the annuitant.

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