Managing Risk in the Islamic Finance Sector

By Dr Ziyaad Mohamed, MD, IFISA & Prof Dr Shamsher Mohamed, Professor of Finance, INCEIF

Introduction

The nascent Islamic banking and finance sector is confronted with almost identical risks as the traditional interest-based industry. However, the Shari’ah (Islamic law) parameters for the interest-free industry introduce additional risk elements of compliance (and therefore reputational) risk and limits the use of conventional tools of risk mitigation. This section discusses the suitability of conventional risk management techniques in the Islamic banking and finance sector. The emerging risk management solutions for the sector are highlighted with some derivative options currently practiced in the Islamic finance market.

It is an accepted fact that due to functional similarities between both Islamic and conventional banks, they embrace similar risks. Kahfi (2005) stated that Islamic banks have qualitatively similar credit risk to conventional banks; therefore, the process of calculation for minimum equity requirements for credit risk exposure should not be different from the conventional method. However, Sarker [1999] and Khan & Ahmed [2003] assert that Islamic and conventional banking are different at the product level, requiring different regulations and risk management procedures. The two predominant risk management issues at Islamic financial institutions (IFIs) are the unique risks present, and the impermissibility of conventional risk management solutions.

For example, Islamic banks face reputational risk that arise primarily from operations that are not compliant with the Shari’ah. The products and services offered at IFIs have unique exposures to risk at different phases of application, which renders conventional tools inadequate in providing solutions that are both mitigants and Shari’ah-compliant at the same time. This creates a lack of sufficient risk management tools for IFIs. A typical consumer asset financing technique that applies murabaha (cost plus mark-up) for example, requires the bank to purchase the asset on behalf of the customer before it sells: no sale contract can be entered into between the two parties during the process. Failure to comply will imply excessive or prohibited gharar (uncertainty), making the transaction Shari’ah non-compliant.

Furthermore, risk transformation takes place during various phases of implementation of Islamic finance transactions. For instance, during the initial phase of a murabaha wherein the bank purchases the asset for onward sale to the customer, the bank is exposed to inventory risk. When the customer concludes the purchase of the asset through the murabaha contract, the risk transforms into credit risk due to the possibility of default on instalments. Therefore, Islamic banks are required to utilize different risk mitigants at each phase of the transaction in order to minimize overall risk exposure.

Risk-sharing techniques have long been espoused as the preferable method of transacting and financing in Islamic finance [Mirakhor, 2010]. These techniques provide the advantage of spreading the overall risk exposure, apportioning each party in the transaction to a more equitable risk share. However, the increased use of risk-sharing or equity-based products results in higher costs, thereby creating a competitive disadvantage for Islamic banks. Conventional financing products on the other hand, are primarily designed to transfer risk to the clients. Therefore, we consider the trade-off between the cost of risk-sharing and risk transfer between the two models.

There is currently limited consensus on the permissibility of using conventional derivative tools in managing risk in Islamic financial institutions.

Wajdi (2011) and Razid, Mohamed and Abdur Rahman (2012) assert that hedging in Islamic finance using conventional solutions has conditional permissibility. They analyze hedging instruments based on evidence from the primary sources of Islamic Law (Qur’an and the Sunnah) that are consistent with the objective or Maqasid al Shari’ah provision to protect one’s wealth. However, the condition is based on the fact that these tools are only used to reduce or mitigate risk and not to generate income or speculate for gains. It is emphasized that the substance of the structure of the risk management tools or solutions must not contravene the principles and objectives of Shari’ah.

Probably, a more practical approach in managing risks at IFIs is to consider the issues of urgency, necessity, the available alternatives, the costs of application (both in terms of tools and reputation) and the potential loss to IFIs. This section highlights the pertinent differences between conventional and Islamic risk management solutions. Additionally, we review the concerns raised by Shari’ah scholars on the use of conventional risk management tools. Most scholars discuss the concept of risk management based on information in classical texts and interpret the basic insights from the perspective of modern banking practices. To understand these opinions better, the Islamic perspective of risk is discussed next.
Islamic perspective of Risk

Recent authors have documented that the use of the word ‘risk’ originates from the Arabic naskh which means sustenance. This is because sustenance is understood in Islam as something that carries uncertainty and probability of gain or loss that is not entirely in the control of the recipient. Although the specific measurement of risk in financial contracts as a discipline is contemporary, risk exposure and mitigation forms the fundamental nature of Islamic finance contracts. This is true, even in a classical sense. For example, the Prophet Muhammad (PBUH) forbade the sale of an unborn calf or any asset that is not owned by the seller. The underlying reason (al-mahs) can be inferred based on the uncertainty of delivery that would potentially result in unfairness and conflict. Two Arabic words are often applied to define this high probability of risk: khatar and gharar. Whilst khatar is the modern translation of risk, its origins refer to respect and also recklessness or danger. Gharar on the other hand, refers to any uncertainty, ignorance, deception or speculation that may exist in a transaction. Since all transactions have a certain element of gharar present, impermissible gharar is only that which is excessive or material. This implies that risk that is generally calculable must be managed, mitigated or eliminated.

Managing Risk in the fundamental sources of Islamic law

Prophet Yusuf mitigated the risk of starvation and famine through seven years of reduced consumption and storage. This act highlights two contemporary techniques in risk management: first, the identification of risk which was the probability of calamity and second, risk mitigation through reduced consumption and storage. This example is particularly relevant to Islamic wealth management for a few reasons, as it:

- i. instructs on the relevance of managing wealth in order to ensure sufficient disposable income over the long-term, through sustainable and strategic employment of capital
- ii. inculcates a hedging mindset that strives towards mitigating risks that can destroy or diminish wealth
- iii. ensures that risk-hedged portfolios develop scenario-building techniques around economic, political and/or social risks that might affect wealth preservation and creation
- iv. indicates that when constructing investment portfolios and managing wealth, consideration is given to the probability and extent of risk exposure, in order to employ necessary safeguards and apply strategic diversification.

An example of diversification of risk is provided in the same chapter in the Qur’an, as Prophet Yaqub (Jacob) addresses his sons:

“O my sons, do not enter from one gate but enter from different gates; and I cannot avail you against [the decree of] Allah at all. The decision is only for Allah; upon Him I have relied, and upon Him let those who would rely [indeed] rely.”

Note that reliance on Allah is qualified after effort has been made to avoid the risk. Hence, the outcome of what is not in the control of man – after he has taken all possible precaution – is entrusting it with Allah.

In the secondary source of law, the Sunnah, a hadith (tradition) is reported as follows:

Anas ibn Malik reported: A man said, “O Messenger of Allah, should I tie my camel and trust in Allah, or should I untie her and trust in Allah?” Allah’s Messenger (PBUH) said, “Tie her and trust in Allah.”
Risk at Islamic Financial Institutions (IFIs)

The Islamic finance sector is made up of Islamic banking, *takaful* (Islamic insurance) and Islamic capital markets. Although each sector has its own set of risks, most overlap and they are generally similar to conventional risk exposure. For example, the nature of operational, credit and market risks are similar for both Islamic and conventional banking systems. Hence, we focus on the difference in the tools used by these different systems to mitigate these risks. Furthermore, certain risk mitigating tools used by the conventional industry are considered Shari’ah non-compliant or controversial at best. For example, hedging instruments such as credit default swaps are prohibited in most regions whilst the sale of debt instruments is impermissible only outside Malaysia.

The six key risk categories for IFIs, identified in the guiding principles of the Islamic Financial Services Board (IFSB) statements, include:

| Credit Risk | 4 principles |
| Equity Investment Risk | 3 principles |
| Market Risk | 1 principle |
| Liquidity Risk | 2 principles |
| Rate of Return Risk | 2 principles |
| Operational Risk | 2 principles |

As with conventional banking, probably the most dominant source of risk at Islamic banks is credit risk. The use of Islamic sales contracts [*murabaha*, *istisna* and *salam*] at IFIs, all establish a debt transaction which inevitably means exposure to the risk of default of the debtor. The difference between Islamic and conventional practice involves restrictions on penalties on default, compounding of rates on outstanding amounts and any fees that may increase the debt during the transaction. These all fall within the prohibition of *riba*.

One way of reducing the liquidity and credit risk arising from long-term financing is the conventional practice of the onward selling of debts through securitization. These credit derivative instruments package the separated risk portion of outstanding loans and sell/swap them with investors with matching risk appetites. Securitized loans can even be ‘shorted’ such that insurance companies take a position betting against the repayment of loans. During the sub-prime crisis for example, lenders were not confident of repayment due to liberal lending practices. They sold the credit default risk using swaps, to seek protection against default. The swap-buyer would feel secure that he would be compensated should the debtor default. However, since hedge fund managers responsible for this trade would not sell swaps to single buyers, a number of financial institutions would purchase these derivatives, artificially increasing the value of overall financial assets. According to the Bank of International Settlements[^1], the derivatives market stood at USD600 trillion in the second quarter of 2008, ten times the total world output in the real economy (USD67 trillion). Credit derivatives are generally prohibited in Islamic law due to the high levels of gambling and uncertainty.

Risk management forms a core component in finance sector sustainability and has become more crucial in recent regulatory reporting. Market decline, credit crunches and alarming crashes (aka 2008/2009 global financial crisis) have caused connected countries to suffer severe economic loss, giving rise to more stringent regulations in the aftermath. The most recent international regulatory amendments for example (Basel III), enhance both micro and macro-prudential regulation with the objective of improving bank sector resilience against financial stress shocks. Core banking risks however, have not evolved as quickly as their mitigants. For example, credit risk or the risk that a customer defaults on his loan is mitigated through more rigid credit analysis, collateral and asset encumbrance. Liquidity risk that arises from insufficient capital adequacy for depositor withdrawal or further lending makes use of securitization, derivative and other money-market instruments with ever-increasing complexity. Some of these techniques are discussed with respect to their compatibility in the Islamic finance sector.
Hedging Techniques

The risk of loss can be minimized by controlling or off-setting it with an alternate transfer of risk or hedge. The use of hedging techniques has become more sophisticated over time, often in the realm of accomplished statisticians, actuarial scientists and even quantum physicists that develop intricate risk-based formulae to predict probabilities of occurrence with counter transactions. Differing definitions exist on hedging, summarily accounting for its protective nature in reducing overall loss in an investment or transaction. Therefore, researchers suggest that a form of hedging is simply acquiring an insurance policy to protect the parties in a transaction from any future economic loss.

Hedging techniques are based on the transaction they are designed to protect. For example, forward currency exchange contracts protect a party from an uncertain future currency rate by capping or limiting the loss. Hence, a number of benefits can be attributed to the use of the technique. However, the existence of short-sales, sale of debt and gambling make these instruments doubtful or outright prohibited for use in the Islamic finance sector.

The application of hedging instruments in conventional finance and their Shari’ah issues in using these instruments are discussed next.

A. Forward Exchange Contracts

In a forward currency exchange contract, two parties typically enter into a foreign currency transaction for sale at a future date. The objective is that the buyer is protected from future currency price fluctuations, thereby securing the rate at the date of transaction. The technique mitigates losses that could occur from sharp fluctuations in currency rates, thereby reducing market risk exposure for the buyer. An additional advantage is that parties can forecast cash flows more accurately. However, the transaction is largely speculative and although reducing the uncertainty from fluctuations, it reduces the uncertainty of future price benefits (and converse losses) for at least one party (it is a risk transfer transaction). Therefore, the Islamic position on speculative transactions such as these is that it is impermissible for at least three reasons:

i. Future sales are not permissible in Islam unless conditions of a salam (Islamic forward) are fulfilled.

ii. There is uncertainty or gharar in the future rate although it is speculated at spot.

iii. The prohibition of sale of debt applies since both counter values are deferred (ba‘r at kari bil kari).

This is supported by AADIFI Shari’ah Standard No 1 on currencies, that prohibits any forward transactions or future sales as well.

The problem arises when parties deal internationally, requiring banks to act as intermediaries or even provide the financing. Trade finance deals such as these, utilize murabaha as the primary contract in asset financing, requiring that prices are fixed at the beginning of the transaction. Unfortunately, in the case of import transactions, delivery takes place in the future. If the transaction is in both the domestic and international currency (local currency between customer and bank but foreign currency between bank and supplier), then the customer or the bank might be at a loss, depending on the date of transaction.
For instance, a customer is required to enter into a unilateral promise (wa’d) by way of a purchase order, to buy goods from an Islamic bank on the 1st of June 20XX for 40,000 Malaysian ringgit or USD10,000 according to the spot rate. Since the bank does not own the goods, no sale transaction can be concluded yet. The Islamic bank must purchase the goods in a first sale from the foreign vendor, before selling to the customer. The bank purchases at the spot rate. However, the bank must wait 30 days for shipment and therefore, a second sale will be concluded only upon delivery to the bank: 1st July 20XX. When the goods arrive, the customer is ready to enter into the murabaha agreement but he can only do so at the prevailing forex rate (the new rate on the 1st of July, 20XX). If the local currency has devalued, the customer loses since the bank can demand the new spot rate at the time of delivery. If the customer refuses to pay the new rate presenting the initial purchase order, the bank may argue that no sale was concluded between the bank and the customer at that time. The bank may also state that the customer unilaterally promised to buy at the USD1.6844 rate, creating no obligation on the side of the bank to sell at the same rate.

From a Shari’ah perspective, the bank’s argument would be valid as the price is based on offer and acceptance once delivery is capable, i.e. the bank has acquired full ownership rights to be able to transfer the goods. Hence, the customer would then be forced to pay the new rate. If a forward exchange contract was applied, the customer would thus be protected from these fluctuations.

Of course, alternative practice does exist and the issue may easily be resolved by using a different instrument like a kafalah (guarantee) in the form of a letter of credit. The customer may also be obliged to provide the undertaking (initial promise in the foreign currency itself, avoiding any future uncertainty or conflict.

There is no Shari’ah contention in hedging the transaction in this way. Contemporary practice also includes Islamic foreign exchange forwards that exist as individual transactions. A buyer would provide an undertaking (wa’d) on a dealing date that would indicate a commitment to transact on a future date. Using another instrument – tawarruq (commodity murabaha), both parties secure the commitment to transact at a fixed future rate.

B. Futures Contracts
The use of futures contracts as a risk-hedging instrument is based on an arrangement between parties to transact on a commodity at a future date with a specified price. These contracts are usually based on market-traded commodities like maize, wheat, coffee and metals. In the case of futures purchases, the buying party would take a long position in locking in the spot price in order to hedge its risk against future fluctuations. Conversely, a seller would short a futures contract to close out any future price movements as well. This removes the uncertainty of price in the future. However, the commodity is rarely delivered (on average only 5% is delivered and 95% is cash settled) and only a fractional payment (5% or less) is made at agreement date. Although it is permissible in Islamic law to transact on future delivery (salam), the conditions of legitimacy include that the price is paid in lump sum at agreement. This is because both counter-values cannot be delayed at the same time, or else the transaction would be the prohibited sale of a debt (ba’al kati bil kati). In addition, the genus, quantity and market availability must be determined for salam to be valid.

The Shari’ah Advisory Council of the Securities Commission of Malaysia, in its 13th meeting on 19 March 1998, endorses trading in commodity futures on the condition that the underlying asset is permissible in Shari’ah. Crude Palm Oil (CPO) futures were thus approved for trading. However, stock index futures were not approved based on the disqualified stock within the index.

C. Options Contracts
Futures and forward contracts hedge the risk from changes in price or rate at a future date. However, an additional risk is created by agreeing to a predetermined price: what happens if the parties want to participate in profitable scenarios that take place due to fluctuations during the contract period? In addition, situations might arise that result in significant losses due to contingent claims during the contract period. Option contracts provide a hedge for this form of risk by extending the right to buy or sell to the parties. Option sales involve the payment of a premium for the right to buy or sell (call or put option) an asset at a predetermined exercise price. Since the option is provided on the basis of a promise, it is fundamentally permissible in Shari’ah. In an attempt to provide a permissible solution, ‘Islamic’ options have emerged.

An example is the foreign exchange option structure that is based on a unilateral promise or wa’d. If a customer requires foreign exchange at a predetermined price, the bank enters into an undertaking or wa’d arrangement at start date to provide currency at a pre-agreed rate on a future transaction date. If at maturity, the customer prefers to exchange at the prevailing rate rather than the promised rate, he will release the bank from its promise. The customer pays a fee for the bank’s undertaking, making it almost identical to the conventional option contract. In other examples, a tawarruq sale (form of commodity murabaha) is included in order to create an obligation on both parties. This is because a wa’d is only binding and enforceable in the case of loss.
D. Swaps

Swaps can be defined as a transaction in which two parties agree to exchange streams of payment or cash flows for a predetermined period and according to specific rules. The variety of swaps extend from basic interest-rate swaps to equity and commodity swaps and the more infamous credit default swaps identified as the malefactor in the 2008/2009 global financial crisis. Although swaps can be used for hedging risks, they are also used for speculative profit-making purposes, sometimes leading to disastrous consequences on economic sustainability. They provide the highest leverage of any derivative instrument, resulting in astronomical notional values that have little semblance to real world values.

For example, the ISDA (International Swaps & Derivatives Association) market survey of outstanding derivative instrument value at the end of 2009 totaled USD457 trillion in comparison to its GDP for that year which was approximately USD14.42 trillion. This consisted primarily of interest rate, currency and credit default swaps. Although this value was primarily synthetic, the costs in the aftermath of the crisis were real. In the US alone, lost household wealth was reported at around USD19.2 trillion according to the US Treasury Department, whilst the stock market declined by USD11 trillion.

Conventional swap transactions are structured for the purpose of hedging against rate fluctuations by exchanging cash flows. These rates can take the form of interest rates on loans, currency exchange rates or cash flows from projects. The interest-based swaps are expectedly prohibited and the nature of cash for cash transactions in the same currency that are not at par may also fall into prohibition. Furthermore, forex swaps that involve future delivery at defined rates also fall into prohibition due to the limitation of future sales in Shari’ah.

In the case of a conventional cross-currency swap, hedging on interest rates and forex exposure is utilized. The need for currency hedging arises for example, when a Malaysian Firm A, is expanding to a new country – say Indonesia – and Firm B that is based in Indonesia intends to expand to Malaysia. Firm A will typically have difficulty sourcing finance from Indonesia, as will Firm B in Malaysia. This is because banks are unwilling to lend to international companies with no established credit histories in the bank’s base country. If at all, banks will only be willing to lend at a premium. Hence both firms will source more accessible and cheaper financing in their own countries at much lower rates, then lend to each other. This reduces the overall cost of debt significantly, except for the exposure to foreign exchange risk. Both parties will be paying each other in the domestic currency of the lender, even though the transaction is based on a net return or set-off between the two. The returns represent the premiums charged for the currency swap and are usually low (a few basis points). Since the transaction involves lending at interest rates at all levels, it is not permitted in Islamic law.
However, it is possible that the initial transactions of loan are actually Islamically permissible financing such as *murabaha* or *ijara*. Then it would be possible for each firm to sell off the asset purchased or rented, to the other in a parallel sale or rental, to be paid in the local currency of the seller. In the case of *ijara*, even the foreign currency risk can be hedged by using an Islamic cross currency swap (ICCS).

An ICCS is a bilateral agreement whereby two parties agree to make regular payments to each other in opposing currencies. It is used to protect both parties from currency fluctuations and profit rate volatility. The agreement may also be based on the risk preference of the parties, allowing the exchange of floating rates for fixed rates as well. In order to facilitate a sale transaction that is in compliance with the *Shari‘ah*, a commodity sale takes place at every settlement date, typically in the form of a *tawarruq* transaction.

Therefore, it is possible to hedge against risks of profit rate fluctuations and foreign risk using Islamic swap structuring. Some *Shari‘ah* councils have approved the use of swaps based on adherence to specific conditions. For example, the *Shari‘ah* council of Kuwait Finance House (September, 2004) allowed the rental-rate swap based on a *wa‘d* and *tawarruq*, with the following provisos:

i. the agreements in the structure are real and actual and involve no fictitious contracts

ii. agreements are applied according to their contractual effects. This means that sale contracts must result in full ownership passing to the buyer, with transfer of risk of ownership without any obstacles restricting such an application

iii. the agreements are separate, and

iv. the agreements are not conditional upon one another.

**Emerging Risks**

A recent Bank Governance Leadership Report stated that after primary research with executives in the North American banking industry, core banking risks are managed whilst emerging risks are not accorded sufficient resources. Whilst an overlap of risks exists between both IFIs and conventional banks, the unique nature of Islamic finance business gives rise to unique exposure and limitations in mitigation. Furthermore, a group of emerging risks to Islamic finance require consideration.

For example, the requirement of real asset existence in almost all forms of Islamic finance, exposes the sector to higher levels of commodity risk. This in turn, increases the impact of the procyclicality as higher levels of credit lead to significantly higher levels of default impact on commodity prices in the event of a market downturn. Other risks such as the close resemblance between IFIs and conventional banking exposes the sector to the threat of convergence. With no advantage of difference, the Islamic finance sector may face significant decline. In addition, both the conventional and Islamic sectors are exposed to the threat of disruption. The impact of financial technology on *Shari‘ah*-compliant instruments has received minimal attention, although the impact may be significant. These risks are considered in more detail.

**Procyclicality**

It may be conceded that Islamic banks face less credit risk due to the premise of profit and loss sharing finance (PLS) that tends to spread the risk. However, the use of Islamic salam-based contracts results in debts that require conventional credit analysis. Rather, it is often the nature of the assets financed that influences the risk exposure at IFIs. Since IFIs require that real assets form the underlying reason for seeking finance, the economic life of the asset influences the extent of recourse for the IFI in the case of default.

The IFSB statement on capital adequacy for example, notes that IFIs provide financing that is closely linked to real assets, reducing the effects of credit bubbles and non-performing finance. However, IFIs’ increased exposure to real estate finance is based on underlying assets and not just financial contracts, does expose them to procyclical risk.

Loan loss provisioning at IFIs based on business cycles have also recently been found to be procyclical. Loan loss provisioning at Islamic banks have been found to decrease as economic growth increases, implying conversely that an increase in provisioning might have a detrimental impact on economic growth. This is because an increase in provisioning usually results in tighter credit control and restricted financing from banks, leading to slower economic growth. Mitigation of procyclical trends could be addressed by increasing Islamic bank capitalization. This is because banks with lower capital ratios seem to be most likely to inflate loan loss provisioning.
Threat of Convergence

The Islamic finance sector is based on the premise of Islamic law or Shari'ah. The distinction between Islamic and conventional finance has unwittingly established a unique selling point for Islamic financial services as an alternative ethical and socially responsible option, beyond religious preference. Islamic wealth management for example, offers investment in a stock universe that follows an ethical screening philosophy, by removing 'sin' stocks. However, the launch of the UNPRI initiative in 2006 and the subsequent global move towards socially responsible and impact investing has narrowed the gap between Islamic and the 'new' ethical screening movement.

In Islamic banking as well, benchmarking the profit mark-up with market rates has increased exposure to interest rate risk in the same way as conventional banks. This similarity increases when considering Islamic personal financing products like Bai’ al Inah (credit sales) and Organized Tawarruq (monetized documentary sale).

An emerging risk therefore, is the threat of the Islamic finance convergence with the practices of the conventional finance market. This will reduce the need for alternative finance and stunt growth in the Islamic sector. Mitigating this risk will require the Islamic finance sector to innovate, by developing products that are unique to its precepts and appeal more strongly to customer preference and yet remain competitive with similar conventional products. Real sector development for example, forms a core component of Islamic finance through risk-sharing contracts. This is expected to result in a positive impact on the industry and economy as a whole.

Disruption

The entire financial services sector is facing the risk of disruption. Both institutional Islamic and conventional wealth management have always relied on traditional methodology in delivering financial services. Since 2009, a global wave of technological 'disruption' has revolutionized the transport, hospitality and retail industries. Companies like Amazon, Air Bnb and Uber have initiated lifestyle changes with convenience, speed of delivery and cost-efficiency raising the levels of competition and non-performer exclusion. The financial services industry has been impacted significantly as well. The advent of crowdfunding, peer-to-peer lending and robo-advisory is setting the scene for a financial technology (fintech) wave that is expected to change the landscape of product delivery within the space of a few years. This disruption to the Islamic financial services is especially poignant, as they already face existential threats of convergence, the standard conventional risks (i.e. credit, market, liquidity risk, etc.) and possibly extinction if these new developments are not embraced. Therefore, a better understanding is required of fintech solutions that can impede the progress of the Islamic finance sector. In fact, as conventional banks have determined, the way forward is to embrace the technology and enhance existing product offerings rather than attempt to compete for the same market share using traditional methods. This is expected to hold the entire traditional finance sector in good stead as they adapt to technological innovations and ride the fintech wave.

Summary

Managing risks at IFIs is similar to conventional risk management, except for specific unique risks: displaced commercial risk, Shari'ah non-compliance risk, inventory risk, profit rate risk and equity investment risk. IFI risk management is restricted by the tenets of Islamic law that considers conventional solutions such as typical derivative and risk-hedging instruments as impermissible. However, the sources of Islamic law encourage IFIs to manage risk by establishing sustainable and strategic employment of capital, introduce hedging techniques that do not contravene the Shari'ah parameters, consider scenario-impact studies for better diversification or exit strategies and continuously monitor the extent and probability of risk exposure.