

INNOVATION AND RISK MANAGEMENT IN ISLAMIC FINANCE: SHARI'AH CONSIDERATIONS

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Introduction

The beginning of the millennium witnesses fast development in Islamic finance products. Professional bankers and Shari'ah specialists have been breathlessly racing to invent new Islamic financial products that mimic or replace every single interest-based contract that comes in the conventional market in a rushing attempt to fill in all gaps and satisfy every financing need that may be thought of.

While this is not an un-healthy sign as it indicates vividness and growth in the Islamic financial market and thinking, it is necessary to investigate the means and processes of risk mitigation that the Islamic financing paradigm offers to help this ever growing movement of financial products creation.

The present paper aims at studying the risk management arrangements and tools in Islamic finance as may be derived from the Shari'ah axioms and rulings, especially in relation to new products. It will deal with the issues of third party guarantee, principal insurance and return broadening and fixation in Islamic finance and suggest methodology of integrating risk mitigation within new Islamic financing products.

The paper consists of two sections. In Section One I will discuss the foundation of Islamic financial products and the risks involved. I will argue that risks of Islamic financial products are an immediate outcome of the nature of the Islamic finance contracts, these, in turn are based on the prohibition of Riba and its implications. I will therefore study the General characteristics of financial products in Shari'ah, the rationale of the prohibition of Riba and the objectives "the Maqasid" of this prohibition; I will also discuss the characteristics of the Alternative financing contracts and the kind of Risk profile of classical financial Contracts. Section Two will discuss Risk Mitigation methodologies in Islamic Financial products especially those that exist in the classical Shari'ah literature and their application in hybrid Islamic financial products.

Section One

Risks in Islamic financial products

In a recent book on Risk Management in Islamic Banks,¹ Khan and Ahmad argued that Islamic banks not only face the type of risks that conventional banks face but they are also confronted with “new and unique risks as a result of their unique asset and liability structures.” According to Khan and Ahmad, this new type of risks is an immediate outcome of their compliance with the Shari’ah requirement. They added that even in regard to common or conventional risks, the nature of risks that Islamic banks face is different from those counterpart risks faced by conventional banks. The obvious implication of this argument is that Islamic banks need variant “risk identification processes” and different risk management approaches and techniques and require different kind of supervision as well. Similar argument appeared a few years earlier in an IMF publication by Luca Errico and Mitra Farahbaksh.² Although they conceded that capital minimum requirement should take into consideration assets composition, i.e., the PLS investments versus non-PLS investment,³ they argued that the capital minimum requirement needed to for risks coverage should be higher in Islamic banks that in conventional banks because their PLS assets are not collateralized.

The main focus of these two writings is on Islamic banks especially from the point of view of supervisory authorities and minimum capital requirement. Islamic financial products pose a different kind of risk challenges that focus of the risk to investor and undertakers. Undertaker risk relates essentially to covering the issued product and the experience in the Middle East, South East Asia and Pakistan indicates that there is a strong appetite for Islamic products to the extent that each issue is always over-subscribed and purchaser hold on to them that little room is left for a secondary market. Investors’ risks is a matter of worry for beneficiaries of new Islamic financial products and Islamic bankers and public issuers look for means of mitigating these risks in anticipation that demand will sometime decline and new motivation must be offered to investors. To understand the nature and relative significance of risk in Islamic financial product we need to look at the main characteristics of financial contracts as given in the Shari’ah and then study the risk profile of each of these contract/products.

General characteristics of financial products in Shari’ah

¹ IRTI publication 2003.

² Luca Errico and Mitra Farahbaksh, “Islamic Banking: issues in Prudential Regulation and Supervision,” IMF Working Paper No. WP/98/30, 1998.

³ Ibid., p 17.

Islamic financial products are contracts that abide by the axioms and rulings of Shari'ah. The main principles that govern financial contracts in the Islamic law are two folds: 1) general principles of contracting that include civil aptitude, consent and legal permissibility. These are common between all legal system and societies, although there are variations in their minute details. For instance while the Islamic law defines the civil aptitude for financial contracts as age 18 in addition to sanity, some states or countries carry the age limit to 21. 2) However the second group of principles is important. It covers a specific Islamic view point and includes: moral commitment or ethical foundation, Shari'ah permissibility, balance and realism or validity.

To be acceptable from a Shari'ah point of view, a finance product must be **morally sound**. This is a general human standard that is adopted by the Shari'ah. It means that an Islamic financing institution can't use its resources to support drugs, alcohol, gambling, porno industry, environmentally harmful products, and/or any other production or distribution of any material or service that does not have a humanly acceptable ethical foundation. In this regards, Islamic financing is very similar to what is known as ethical investment. Yet, the following points will show that Islamic financing is, in fact, more demanding than ethical investment.

The principle of **Shari'ah permissibility** refers to matters that the Islamic law requires. These include pork and other swine products and other meat whose animals are not slaughtered in a manner that satisfies the Shari'ah requirements. It also includes the prohibition of interest that will be discussed later.

The principle of **balance** requires that the obligations of each party be equivalent to the obligations of the other, so that there is no excessive loading on either party. This principle rules out excessive overcharge and it stands against the charge of interest too. As we will discuss it later, interest is an obligation on one party against a presumed opportunity cost of the other. These obligations are obviously unbalanced!

Lastly, the principle of realism or validity means that all financing contracts must be **founded on real, in contrast to presumed or deemed, transactions or exchanges**. This principle rules out any contract that is based on pure assumptions. Interest itself is one example, both in its very existence and in its rates, all are assumptive as we will discuss in more detail later. Another example is trading indices such as DJII or NASDAQ, because an index is a mere mental calculation that does not represent any real ownership. On the other hand, one can own and trade units in an indexed fund because the fund owns shares in companies that are represented in the index.

Why interest is prohibited?

Islam, like other monotheistic religions, condemns and prohibits Riba. The prohibition of Riba in Islam is given in strong and clear-cut terms. The Qur'an

Says “But God has permitted sale and forbidden the Riba;” (2: 275) and, “God destroys/eliminates the Riba;” (2: 276) and, “O ye who believe, fear God and quit what remains of the Riba if ye are indeed believers; but if ye do it not, take notice of war from God and His Messenger” (278-9). No other sin is prohibited in the Qur’an with a notice of war from God and His Messenger!

The Traditions of the Prophet Muhammad contains several statements that condemn Riba and consider its practices as one of the gravest sins that invoke a curse or wrath from God. In one of the Sayings, the Prophet mentions that: “The Wrath of God is on the taker of Riba, its giver, its writer and its two witnesses.

Definition of Riba

Riba is an Arabic word that means increment/increase. But the Qur’an did not mean any increment as it refers to an increment in a specific transaction that was common and known among the Arabs and other nations at the time of revelation. This is why the reference in the Qur’an came to “the” Riba. This transaction was done in either of two ways: 1) deferment of an already due debt to a new maturity provided the amount of debt is increased; and, 2) giving a loan that is due with an increment after a given period of time. The Qur’an itself implies this definition as it states: “But if ye repent ye shall have your principal, doing no injustice and no injustice is done against you” (2: 279). This part of Verse 2: 279 has two important indications: 1) it defines Riba as any increment above the principal of a debt or a loan; and 2) it describes such an increment as unjust.

To be exact, **Riba is defined**, in regard to financial transactions, **as any contractual increment in a loan or debt due to the time element. This is exactly what we know today as interest.** Obviously, the Shari’ah does not recognize a counterpart for this increment. Consequently, once a debt is created (notice that a loan creates a debt) any increment in the debt is Interest and it is the Prohibited Riba according to the Islamic religion.

To understand why interest is prohibited we need to revisit the basic concept of debts. What is a debt? A debt is an inter-personal relation that is a liability on one party and an abstract asset to the other. By its nature and in real life a debt is not liable to increase or decrease unless we make assumptions by creating a debt market and valuating or assessing debts in relation to time. Additionally the amount of an increment in a debt is also assumptive; it depends on the conditions and externalities in the imaginary market that we create for debts. Of course, this may sound astonishing to many of us who are accustomed to talking and hearing about debts’ markets and interest all their lives! Are debts able to increase or decrease? And how can this takes place except in our imagination that we illusion it to be true and real? Of course once a market is created for any thing, be it a thin air, there will be a demand and supply for it on speculative grounds, exactly as people exchange indices, in a fantasy-created pure speculation-based index market, although indices are neither real assets

nor goods or services! We must remember that the Shari'ah recognizes real things and real growth whether by the nature of a real asset or by the effect of market forces on real assets, goods, or services.

Additionally, all real things/assets that may grow may also lose substance or value and the owners of such things/assets are exposed to losses exactly by virtue of the same argument that justifies their entitlement to increments. But a debt, among all assets, is not liable to decrease and does not expose its owner to such kind of losses. brush aside the issue of default because every debt can be secured by all kinds of guarantees and collaterals. Additionally, the nature of default risk is different from the risk of increase and/or decrease that result from the interaction of market forces. A default risk is of the kind of a faulty product or a product that does not maintain its normal characteristics. A defaulted debt is like delivering rotten apple in a sale contract that is very different from the price risk that affects the owner of the apple. This is why the default risk is compensated by a risk premium over and above interest that is called "the price of money.

We will leave the issue of Riba at this point to look into the alternative financing contracts and we will revisit it when we will discuss the characteristics of the alternative financing contracts.

Alternative financing contracts and their characteristics

Notwithstanding the several attempts to encode the Shari'ah, the fact is that its bulk remains not coded in the form of articles of law but its rulings are found in the writings of Shari'ah specialists through the centuries as Islam does not establish a religious hierarchy that is authorized to give the law. We will study the Shari'ah alternative financing contracts in an attempt to understand their essential characteristics and find out more about the Islamic financing principles and rationale of the prohibition of interest. It has become known over the last four decades of theorization and practice that the Shari'ah financing contracts are of three major kinds: Sharing-based, sale based and lease based.

On the other hand, from a historical point of view Islamic financing products can be classified in two categories: 1) classical contracts that existed throughout centuries and are derived from the practice of the Prophet's community in Madinah; and 2) hybrid contracts that are developed over the past half a century and are practiced in contemporary Islamic finance and banking.

Classical Financing Contracts

Classical writings on Shari'ah, some of which date back to twelve centuries ago mentioned three essential sharing-based financing contracts, namely, equity sharing (Musharakah), equity sharing with a sleeping partner (Mudarabah) and crop-sharing (Muzara'ah). They also mentioned three sale-based financing contracts: deferred payment sale (al bay' al 'ajil), forward sale

with cash advance (Salam) and manufacturing financing sale ('Istisna'). Lastly classical writings also mentioned leasing (Ijarah) as a form of financial contracting.

Although this paper does not intend to go through the by-now well known descriptions and conditions of each of these contracts, one stop is necessary at the deferred payment sale at a higher than the cash price because it gives a demarcation of interest vis-à-vis financing sale.

The permissibility of deferred payment financing sale is mentioned in no less than the Qur'an itself. Verse 2: 275 begins: ". . . They [Riba takers] say: 'Sale is just like Riba,' but God has permitted sale and forbidden Riba."

Claiming that sale is just like interest lending is logically incorrect and exposes the claimant to be ridiculed and accused of foolishness, insanity or loss of rationale because cash sale is very remote from interest lending and has no similarity to it. What is, obviously, similar to interest lending is deferred payment sale at a price that is higher than the cash price. Here the similarity is obvious.⁴ Interestingly, the Qur'an did not ridicule this claim or accused it of irrationality; this is in spite of the fact that in many instances/occasions the Qur'an invokes the rationality argument by statements such as: "will they not understand?" "you may understand," "Do you not understand?" "in order that you may rationalize" all such phrases came in Chapter 2 itself; and "have you no rationale?" "if you have reason," "don't you reason," "so that they may have mind to rationalize with!" and many like Verses throughout the entire Holy Book. This implicitly means that some similarity is acknowledged but yet the Qur'an quickly directs the attention to the permissibility of the sale that is similar to interest lending and the prohibition of the latter; as if it says; while certain similarity is acknowledged there are differences that warrant the permissibility of deferred payment sale-based financing and the prohibition of interest/lending-based financing. This is why the overwhelming majority of scholars argue that the permitted sale in this Verse is deferred payment financing sale. This is also supported by bringing in a Verse (2: 282) about debts confirmation and documentation immediately after the Verses that deal with the prohibition of interest and permissibility of deferred-payment sale financing (2: 275-281) because deferring the payment creates debts that need to be documented.

The unavoidable immediate implication of the Verse 2: 275 is that debt-creating **financing is permissible and recognized in Shari'ah**. While the verse condemns interest-based lending and prohibits any increment on it, thus rendering loan giving a non-profitable activity and shifting it from business arena to personal spheres; it approves a kind of sale that fulfills the same objectives including giving a reward for the time value of the sold commodity (rather than money lent). In other words, this Verse establishes a very important rule that:

⁴ Some may argue that even cash sale is similar to interest lending from the point of view that profit is an increment like interest. This kind of similarity seems very simplistic because of two reasons: 1) sale may involve a loss too but lending does not; and 2) profit is commodity/market-based while interest is time-based. And I may add that those who argue for such a similarity do not deny that the permissibility in the verse refers to both cash sale and deferred-payment sale.

Debt-creating financing is an acceptable and rewarding business activity at the same time that it prohibits Riba (interest).

The similarities between deferred payment sale at a higher than the cash price and interest lending are apparent and include: 1) the purchaser gets the asset/goods at the time of the contract and pays later; 2) the amount she may end up paying is about the same; 3) the seller gets compensated for the time span between the contract and the maturity of the debt; and, 4) a debt is created. But the dissimilarities are not so clear and the Verse did not elaborate on them.

Objectives of the prohibition of interest

I argue that understanding the differences between interest lending and debt-creating sale financing is extremely essential to comprehend the objectives of the prohibition of Riba (interest) because it deals with the crucial point of the distinction between seemingly similar contracts.

The basic difference between interest financing and Islamic financing is that interest financing is done in a loan contract that postulates that a debt may be assigned increment while in reality a debt can't produce any increment. This is the ideological basis for the prohibition that is consistent with the characteristic of realism in Shari'ah. The implications of accepting a debt to have increment are: 1) you need another unrealistic assumption about the valuation of the increment, the rate of interest. This has been done by creating an artificial market for exchanging debts that is built in fact on pure speculation and purely speculative market is, unlike markets of assets, goods and services, very volatile by their nature; 2) once you allow debts to have an increment you will have to allow it to be rescheduled with increment and you will have to allow discounting with a reduction; both these two transactions do not create or add value in the economy; and, 3) you will have to allow other transactions on debts, pure, including exchanging them through inter-bank transactions and a whole set of pure financial or monetary transactions that do not essentially add value but only transfer wealth from one person to another. The Shari'ah takes a close look at these transactions and finds them done in isolation from real production and exchange; they do not affect inventories on the shelves or goods and services reaching consumers; they only enrich some individuals and impoverish others; they are like a zero-sum game; and finally 4) withholding financing from activities other than producing or exchanging goods and services or in other words, preventing financing that is provided solely on the credit worthiness of the user of funds regardless of the purpose of their use.

Accordingly we can establish the objective of Shari'ah from the prohibition of interest as follows:

- 1) Affirming the Shari'ah characteristic of realism and maintaining its internal consistency in not allowing any transaction that is not a real life activity.
- 2) Disallowing debts trading and exchanging and similar unrealistic purely speculative transactions that are not based on real production or exchange

such creating unreal assets like index units properties because these activities do not create value and only transfer wealth between individuals and redirecting the human and other resources used in trading debts toward real production of goods and services.

- 3) Preventing debt discounting and rescheduling for increment because these are non-productive activities and only transfer wealth from one person to another. The alternative the Shari'ah provides for rescheduling is interestingly mentioned in the Qur'an within the same sequence of Verses that is: giving time to pay or even forsaking the principal of the debt itself. On the other hand, the Shari'ah permits discounting for early payment provided it does not become a business practice (not in the contract and only between the two parties).
- 4) Preventing the use of business finances for what can be tagged as 'Abath عيث and sending personal finance to where it belong as a personal service based on direct contact and involvement between the finance provider and user. The answer to the question "who will give you a loan?" becomes "your mother or a person who knows and loves you" This does not mean that a personal loan is not useful; it rather means that it must remain personal and not changed into business. Giving a loan is even rewardable by God as known in the Shari'ah.
- 5) Re-channeling all business financing toward the production and exchange of goods and services or toward value creation and closing all the uses of finance that unnecessarily inflate the quantity financing in a society relative to production and exchange.

Finally, it should be noted that the prohibition of Riba (interest) never meant to be a prohibition of rewarding financing in general and debt-creating financing in specific.

Hybrid Islamic financing contracts

The industry of financial intermediation is new to the Islamic Shari'ah. It has been developed in the Western countries over the past four centuries or so. Recognition of financial intermediation as an independent industry is vital to understanding the hybrid financial contract and those scholars and researchers who fail to recognize this industry still argue for preferences of sharing over other modes of financing instead of taking such preference to be decided by the basis of market circumstances and forces. When a merchant sells at deferred price or lease an asset she is providing financing to the purchaser or the lessee. But if a corporation specializes in getting the savings of those who have them and channeling them to businesses that need them for investment, that is a specialized industry of financial intermediation. In other words, financial intermediation is a specialty of those who recruit deposits and provide funding while merchants and producers provide commercial credit from their own

resources while dealing with the daily decisions of a production line or buying and selling of goods and services.

The role of Islamic financial engineering over the last four decades has been to develop contracts that fit this new industry and its success/failure can be assessed on the basis of the extent to which new contracts maintain the main characteristics implied by the prohibition of Riba and preserve the objectives of this prohibition.

There are numerous Islamic financial products in the market and they are increasing by the day. New products are always developed through a process of combining existing contracts and arrangements. We have essentially **nine** main hybrid Islamic financing contracts practiced in Islamic banks today: Murabahah to the purchase orderer, installment sale, Mudarabah investment deposit, current account deposit, three-party Istisna', leasing to the purchase orderer, compound Salam, Buy Back and Tawarruq. Although assessing how close/far each of these contract to be consistent with the objectives of the prohibition of interest is outside the limit of the present paper, it must be said that some of the applications of new hybrids amounts to pure interest-based rescheduling of debts and are consequently in violation of the basic objectives of the prohibition of Riba.

Risk profile of classical financial Contracts

Without having to re-iterate the description and characteristics of the Islamic financial contracts, as they have become a public knowledge for all people in the field, their risk profile can be described as being based on the axiom of realism. What goes on in real life is what is accepted in Shari'ah without any additives or assumptions. In other words, the nature of these contracts defines their risk profile. The fundamental financing elements in the Islamic financial contracts are:

1. **There must asset basis to justify earning:** Assets are either handed over to a manager (entrepreneur) or returned for leasing or obtained for resale.
2. **The asset base of financing must be the kind that produces increments** either by its very nature (e.g., fruits or usufruct) or by the effect of real market forces (e.g., goods and services).⁵

⁵ How about money, can it be a principal in a sharing finance? One may quickly say no because money does not grow. The classical Islamic literature on finance contracts recognizes this apparent fact but adds that money can be exchanged for other goods, assets and factors of production; it can, therefore, be used as a principal in sharing finance provided that the first step of using it (the step of buying goods and factors of production) is founded on the basis of agency contract. In other words, by virtue of the agency contract, that is implicit in all sharing-based finances, money becomes amenable to grow and hence can be used as a principal in sharing finance.

Debt is another real, though intangible, asset that cannot be used as a principal in sharing because it is not amenable to growth. It is not treated like money, in the Shari'ah literature,

3. **The investor (property provider) earns by virtue of ownership** of an asset that grows. This is apparent in sale and lease financing and implied in the agency content of sharing.
4. **Moral and Shari'ah screening** is essential for Shari'ah compatible investment and all financial contracts.

These characteristics have their own risk profile. The basic point that Islamic products are essentially based on real market transactions, i.e., assets, goods and/or services requires that we deal with the real risk of owning goods, services and productive assets. Hence, we have a combination of **price risk** and an **opportunity cost risk**, the latter is usually expressed as interest rate risk. As the Islamic finance accounts for only a small fraction of the interest-dominated conventional finance market, Islamic finance products and dealers are price takers, not price setters, in this market. The **credit risk or risk of default** always exists whenever a contract creates a debt and the **moral hazard** risk crops up in any inter-personal relationship.

Section Two

Risk Mitigation in Islamic Financial products

In this section, I will discuss a few arrangements of risk mitigation that are intrinsic to the classical Shari'ah literature and go on to imply that these arrangements provide a variety of potential applications that may reduce the need to using risk mitigation tools that raise Shari'ah's clouds that are dared sometimes by some products thrown in what is called "the Islamic capital market." Before I conclude this Section I should also discuss the importance of compliance with the three pillars of the Basel II Accord for investors with Islamic banks.

To minimize the investors' risk in new Islamic financial products, especially Sukuk and corporate investments, a handful of arrangements can be used, namely: revenue sharing, service and usufruct-based finance, principal insurance, collaterals, third party guarantee and reverse and line-or-credit Murabahah.

Revenue sharing and Revenue Sharing Sukuk

The idea of revenue sharing is based on applying the Muzara'ah methodology to fund provision in Mudharabah. While Mudharabah assigns a share of net profit to the fund provider (Rabb al Mal), revenue sharing financing

because it is not readily available for purchasing good and factors of production as it takes time and effort to collect it. It requires an explicit and separate agency contract that may involve fees and other charges. But once it is collected a sharing-based financial relationship may be contracted

assigns a share of the gross revenue to the provider of assets that are used in the production process. Revenue sharing financing is thus a combination of Wakalah to purchase or build fixed assets and a Muzarah based partnership between assets owner and assets operator.

In a Sukuk-type application, a trust (that represents the pool of investors) provides funds on Wakalah basis to an SPV that constructs (through an Istisna' contract that may be concluded with the operator itself) the required airport, toll road or corporate factory and hands it over to the operator (the management) on revenue sharing. The airport is thus owned by the trust and investors receive a percentage of the total revenues of the airport. Revenue sharing may be applied to financing infrastructures as well as to corporate productive projects.

This arrangement allows investors to get a practically guaranteed positive (above zero) returns because total revenues are always positive. Consequently compared to Mudharabah, revenue sharing provides returns to investors even when the operator/management is loosing. An element that reduces the need to worry about investors' return or to seek approaches to guarantee returns that may be dubious from Shari'ah point of view such as issuing debt-based tradable Sukuk. On the other hand, revenue sharing arrangements do not provide protection against variations in the return of the investors so it is still classified in the area of sharing tools like Mudharabah and Musharakah. Stability of projects and strength of their feasibility studies will be crucial for assuring smaller variations in return.

However, similar to Mudharabah and Musharakah, revenue sharing arrangements can be supplemented by either one of the two following structures or by both of them together: 1) a condition that imposes a cap on the net profit of the operator/management or on the return to investors whereby surpluses above the cap are either rendered to the other party or scaled at different proportion; and, 2) creating a fund, contributed to by deductions from investors' distributions and any concerned third party, for equalizing the investor's return over distribution periods.

Service and usufruct-based finance

In an economy of ever increasing inflation and rising cost of labor (improving level of living), service and usufruct based financing and Sukuk provide a good shelter against erosion of returns. The reason is: payment of returns is in kind, i.e., in terms of either service units or units of usufructs. This is another Shari'ah compatible hedge against inflation without resorting to doubtful vehicles that may involve a form or another of indirect interest.

Principal insurance and collaterals

The Shari'ah rule on collateral taking is well known. It applies to debts. This means that any debt-creating finance or debt-representing Sukuk may be supported by collaterals. Collaterals provide a tool to guarantee not only the debt

of a principal but also the debt of rentals as well as the in-kind debt of services and usufructs. Consequently, while services and usufruct financing hedge against inflation they can also be supported by collaterals that guarantee, in fact, both principal and return. This is simply because services and usufructs financing are based on the sale contract.

Third party guarantee: deposit guarantee

Third party guarantee can be offered by any entity/person that has interest in the financing without being a party to it. It may cover the principal as well as the return. For instance a government, based on its own resources may offer a third party guarantee for financier who provide funds, on Mudharabah or Musharakah basis, to certain strategic or infant industries so that a minimum return is guaranteed to investors in addition to guaranteeing their principals. The only requirement is that the guarantor must be financially and legally independent from the managing partner because Mudharabah and Musharakah are Amanah hand contract that can only be charged in case of neglect, abuse or violation of the contract conditions but can't be charged for commercial losses. Consequently, we can always create an interested outsider-to-the-contract guarantor who can provide a third party guarantee such as an SPV that is not owned by the managing partner.

The practice of a third party guarantee is applied to Islamic bank investment deposits when the government provides such a guarantee with no charge to the depository banks or at least for the contributions of the government or central banks to a public deposit guarantee corporation as it is done in Sudan. However, the same principle is also invoked by deposit guarantee funds nourished by deductions from Arbab al Mall's profits before their distribution. Such funds can also be created for Sukuk and the guarantee can be extended to cover the principal; and a return on it.

Reverse Murabahah and Murabahah line of credit

The way of applying reversed Murabahah is simple. Islamic finance providers needs for funding rely on their own resources and on deposits that are either on loan basis or Mudharabah basis. More funds can be obtained on the basis of reversed Murabahah in which the Islamic bank is the purchase orderer. Obviously applying reverse Murabahah to the purchases of the bank for its own use will limit financing through this methodology to a small amount. But if we apply it to the purchases of the Islamic bank that are part of its own Murabahah financing it may extend to be a source of funding for a major part of its operation.

This extension can be done by adding a line of credit and a wakalah contract whereby for every Murabahah financing the Islamic bank can transact a reverse Murabahah for purchasing goods and services it provides to its customers. Hence, reverse Murabahah arrangement can be used with the central

bank, as a final resort funds provider. It can also be used with large corporation deposits and as an alternative for inter-bank transactions-cum-financing.

The only condition that is needed for this transaction is that it must be true. In other words, there must be real goods/services that will be purchased by the Islamic bank for the purpose of selling them to its customers. Otherwise, it will be a form of Tawarruq or Buy-back ('Inah). This condition can be satisfied by always linking the reversed-Murabahah to the Islamic bank's provision of Murabahah contracts to its customers.

Bundles/packages financing: applying the majority rule

The simple form of a bundle is common stocks. They represent a group of assets, tangible and intangible, including cash and receivables. Yet, they can be traded at a market price that may be different from the face value because of the rule of majority. Consequently, the recognized ruling of Shari'ah is that common stocks may not be traded at a market price if the majority of the companies assets are in receivables and cash although this is a theoretical case or at least very rare in real life as long as we include the market capitalization as an intangible asset.

Creating bundles of goods, services, receivables and may be cash and securitizing them is not restricted to common stocks, it can be done by Islamic banks and other financing and refinancing institutions. The IDB has been doing the same in transferring contracts to the Islamic Unit Investment Fund for two decades and it's been used as a means to discounting (securitizing) its investments at the IUIF.

Bundling lays the ground for a series of financial products that can respond to all personal financing needs and consequently rendered baseless the argument for "a genuine need" for Tawarruq. If there is a need for a certain form of "personal financing" it can be satisfied by means that do not allow themselves to be abused as what actually happens in the case of Tawarruq that is often used to overcome the barriers placed by the prohibition of interest on rescheduling for increment and on abusing the financing for "Abath" or objectives that can't otherwise be financed according to the Shari'ah criteria.

Hedging through options (not trading options)

Finally, hedging existing positions may be differentiated from trading options.

While buying options for the purpose of price speculation may be argued as fictitious and profiteering without owning a real asset that may have an independent demand and supply for its own intrinsic utility/productivity, covering an existing position through buying or selling an option may be looked at as a means to reduce potential variations in prices and then tame price speculation.

Accordingly, one way hedging through options can be found useful and permissible, a matter that can also be used in Islamic financial innovation.

Before concluding this section it should be noted that the rules stipulated in the Basel II accord provide a reasonably adequate basis for reducing credit risk, market risks and default and moral hazard risks and Islamic banks should really look at the Basel II requirement in a positive manner.

Conclusion

A word is needed for conclusion: We have within the limits of Shari'ah a variety of means that makes the risk management in innovative Islamic financial engineering a challenging arena that does not leave room to resort to dubious and counterproductive tools of financing that very often contradict the essence and basic objectives "Maqasid" of the prohibition of interest and other regulations of Islamic financing.