An analysis of the normative parameters of reward and risk in Islamic finance

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Abstract

Purpose – This study aims to define the parameters of the reward-risk principle in Islamic finance as established in the literature and discuss propositions that are presented on how such a principle is to be applied to Islamic banking products.

Design/methodology/approach – A descriptive approach is used to explore the normative parameters and criticisms of the application of reward-risk in Islamic finance.

Findings – The study finds that the principle of reward-risk is embodied in the multi-component concept of ‘iwadh (counter value) which must be evident in market transactions that involve commercial exchanges. The components include risk, costs, effort, value-adding and capital, all of which apply uniquely to different contractual forms of financing.

Research limitations/implications – The study uses academic literature and industry documents with modest contact with prominent practitioners and their general feedback on prevalent Islamic finance industry practices.

Practical implications – This study expositions the variety of approaches in applying the reward-risk principle and sheds light on the primary elements of the principle which will facilitate its greater consideration by the Islamic finance industry.

Originality/value – This study is a meaningful attempt at conveniently summing up and applying the parameters that are considered when discussing the scope of the reward-risk principle in Islamic finance.

Keywords Islamic banking products, AITAB, MMP, MPO, Reward-risk parameters

Paper type Research paper

Introduction

Islamic finance (IF) is practiced today by financial intermediaries, which circulate funds from providers to users of funds. Islamic financial institutions (IFIs) use the contracts developed in fiqh (Islamic jurisprudence) literature to devise products that can be used to circulate funds in a way that is Sharī‘ah compliant (in abidance by Islamic law). Some
examples of these contracts are the typical sale contract, which entails the transfer of ownership and the lease contract, which gives another party the right to benefit from the leased asset. Besides these contracts, there are principles that must be observed. They include the prohibition of gharrar (extreme uncertainty); the prohibition of maysir (gambling-like speculative activities); and the prohibition of riba (usury), which takes different forms such as interest on a loan. Another of these principles is matching reward with risk. In other words, the benefits that accrue to each party in a transaction must also reflect a level of risk that is assumed by that party. This principle is referred to as “reward-risk” in this study.

The words “reward” and “risk” are clear interpretations of what the Prophet (peace be upon him) said and what jurists understood from hadiths (sayings of the Prophet) that pertain to such matters. These include the terms used in hadith:

«الخراج بالضمان».«

“Reward (kharaj) goes with liability (daman)” (al-Tirmidhi, 1975, hadith no. 1286).

Liability entails risk while the reward is understood to mean income. Each term, reward and risk, will be defined individually later. Until recently, IF textbooks such as that by Abojeib et al. (2018) have highlighted the profit-and-loss sharing (PLS) principle as the distinguishing feature between Islamic and conventional arrangements. This principle dictates that profit and capital loss in a partnership be shared among the partners. PLS is one embodiment of the reward-risk principle and is a testament to its importance, which necessitates revisiting the juristic interpretations of hadith texts that institute this principle.

In discussing risk, conventional economists do not agree on one definition and have instead advanced various definitions of risk, some of which have more practical implications than others. According to Holton (2004), both subjective and objective theories of probabilities have been advanced in defining probability and risk. For example, Knight defines risk as an objective probability in that it is measurable yet one is ignorant of it Holton (2004). Keynes requires that two propositions of probability be presented to determine risk, notably an objectivist and a logical proposition, as two individuals would arrive at the same risk calculation if presented with the same propositions of probability (Holton, 2004). After analyzing several ideas on risk by prominent economists, Holton (2004) goes on to identify two important elements of risk, namely, exposure and uncertainty. IF experts have also attempted to define risk. For example, al-Suwailem (2006, p. 56) defines it as “the probability of loss.” From this definition, it is clear that risk is undesirable. Askari et al. (2012, p. 69) define it as the “possible occurrence of an event that leads to a loss.” They further add that such risk is reduced by transferring it or sharing it. This further distinguishes it from gharar, which refers to taking an excessive amount of risk (al-Suwailem, 2006; Askari et al., 2012).

The concept of risk in IF will be elaborated later. Regarding the concept of kharaj (reward) in the previously mentioned hadith (al-Tirmidhi, 1975, hadith no. 1286), it refers specifically to an incident where a man purchased a hired worker (servant) but then returned him to the seller after discovering a flaw in him that had not been disclosed at the time of purchase. The owner complained to the Prophet (peace be upon him) that the buyer had used the servant’s labor during that period but had not compensated the original owner for it. The Prophet (peace be upon him) ruled that the buyer was not required to pay any compensation because he was liable for the servant during the period he had used his labor. In light of this context, kharaj refers to any dakhil (income) or ghullah (usufruct) and is specifically tied to the ownership from which such income is derived (al-Khattab, 1932).
Some IF literature defines kharāj as all sorts of income that are distributed to transactors (Awidha, 2010). Some specific examples include the sale price and profit in a sale contract, the rental payment in a lease contract, the profit in partnership-based contracts such as mudarabah (profit-sharing) and musharakhah (profit-and-loss sharing) and fees in agency contracts. What constitutes kharāj is not a subject of unanimity and has largely been left undefined in fiqh and IF literature. This is, perhaps, owing to the evolving nature of Islamic financial arrangements. In an Islamic financial lease product today, for example, the Islamic bank (IB) would earn an income that is made up of the financing amount and profit, which are paid in rental installments. Attempting to fix the types of kharāj may work to defeat the purpose of the malleability of Sharīʿah (Islamic law) and its principles of muʿāmalāt (transactions).

Another important introductory concept related to reward-risk is ʿiward, which is best translated as fair counter-value or compensation. Further developed by some IF experts, ʿiward traces its roots to a concept in the Ḥanafī School, as elaborated by the jurist al-Kāsānī (1986), of legitimate return on invested equity capital. It is necessary to expound on the components of ʿiward as they represent one view of how reward-risk in IF should take form. Reward-risk parameters will be discussed and applied to the fiqh contracts used today for purposes of clarification. The categories of sale, lease and partnership contracts will be the primary focus. Other categories such as qard (loan) and wakālah (agency) are out of the scope of this study although they are not excluded from the implications of the reward-risk principle.

This study aims to define the parameters of the reward-risk principle in IF literature and how such a principle is to be applied to Islamic banking products. The results do not represent the researcher’s opinion but are simply the product of inductive analysis. The study uses academic and industry literature with some feedback from practitioners on the actual practice for purposes of an objective demonstration of the practice. Furthermore, the study alludes to the variety of approaches in applying the reward-risk principle and sheds light on the parameters of the principle in hopes of increasing awareness of this theory, which is discussed but has not yet taken full shape. This study expects to present a unique and arguably unprecedented attempt at comprehensively summing up and applying the parameters of the reward-risk principle in their current form.

The study first conducts a review of the literature on the reward-risk principle and its application in the different fiqh contracts, both in their traditional fiqh and modern IF manifestations. Criticisms of the modern IB financing practice are also abbreviated therein. The study then presents the researcher’s findings, outlining the proposed parameters of the reward-risk principle and discussing the finer elements that relate to each parameter of the principle. The last section summarizes the findings and proposes recommendations for future research.

**Reward and risk parameters in the Islamic finance literature**

The principle of reward-risk stems from the hadith of al-kharāj bi al-damān (reward is justified through liability) (al-Tirmidhī, 1975, hadith no. 1286). This liability has been interpreted to mean liability for risk/loss or liability for sound disposition of the asset such that if the asset in a sale contract is safely disposed of by the seller to the buyer, the former deserves the income from the transaction (Mahmud, 2019). The context of the hadith has already been discussed. Another narration conveying a similar meaning states that the Prophet (peace be upon him) prohibited that one earns a profit from something for which he bears no liability (Mālik, 1985, hadith no. 251).
IF thought has not diverged much from the established classical fiqh stance toward the reward-risk principle. Al-Ṣadr (1981) viewed reward being matched with risk in the likes of muḍārabah and mushārakah in the form of sharing of profits and assuming risk. That is why an ajīr (fixed-wage hired labor) receives limited but guaranteed wages whereas a muḍarib (managerial labor) is not guaranteed a return but stands to benefit a lot more from a successful venture than an ajīr. That is because the muḍarib shares the profits of the muḍārabah (which refers to a venture involving two parties, a financier and a managerial laborer). Choudhury (1986) confirms that the dominant form of financing in Islamic countries was based on the principle of profit-and-risk sharing. Kahf and Khan (1992) confirm that al-kharāj bi al-damān is an important axiom of IF. Like them, Chapra (1992) reiterates the same idea under the subtopic of equitable distribution and lists several parameters of the reward-risk principle. Equitable distribution through the reward-risk application would prevent wealth from being concentrated in the hands of a few and, in turn, achieve the ideals of the revelation (Iqbal, 1997, 1999). This is in reference to the Qurʾānic verse: “[...] so that it (wealth) may not circulate only among the rich among you” (59:7). Put simply, the reward-risk principle ensures that, regardless of the contractual methods used, commercial exchanges achieve an equitable balance of income and risk. In the context of IF today, IBs earn income from financing and they bear the risk of that financing.

The focus of Islamic economics experts when discussing reward-risk is the domain of wealth distribution and Sharīʿah injunctions that pertain to it. Distribution refers to the division of products among participating factors such as land, labor and so forth (Abojeib et al., 2018). The primary theme in distribution that ties it to IF is equitability. Hence, the primary concern in Islamic economics is in regulating the distribution and ensuring it is equitable, with the Qurʾānic verse: “[...] so that it (wealth) may not circulate only among the rich among you” (59:7). Put simply, the reward-risk principle ensures that, regardless of the contractual methods used, commercial exchanges achieve an equitable balance of income and risk. In the context of IF today, IBs earn income from financing and they bear the risk of that financing.

Rosly (2001) and Abdullah (2015, 2016) are prominent exponents of the concept of iwaḍ, which for them stands at the center of the IF normative theory of profits. Hence, if income is earned by transacting parties, the requirements of iwaḍ must be properly observed for the financing to be equitable. ‘Iwaḍ is further composed of ghurum (risk), ribh (earnings), ‘amal (effort) as an addition of value and damān. In classical fiqh literature, ‘iwaḍ is a prevalent theme in equity-based financing (al-Kasani, 1986). Ribā is prohibited because the lender is entitled to a guaranteed return above the principal and the guaranteed principal sum in full. This negates any risk being taken for the return earned. The mentioned components of iwaḍ have been generalized to include some sale-based arrangements. The basis for those who do this is that the Qurʾān distinguishes between an invalid ribaʿī (usurious) sale and a valid sale (Qurʾān, 2:275) chiefly on the basis of the risk involved in the latter. A slightly different set of elements comprise iwaḍ in partnerships, namely, māl (capital), ‘amal and damān, with profit-sharing being the goal of partnerships. The rabb al-māl (capital provider) advances capital to the muḍarib (manager) who manages it. The rabb al-māl bears the risk of loss associated with the investment of the capital (Rosly, 2001).

The specific elements of transactional dealings to which the reward-risk principle applies (within the context of the contracts chosen in this study) include, namely, asset price for sale contracts, rental rates in lease contracts and profit rates in partnerships which are determined by the profitability of the ventures. Similarly, the risk pertains to ownership risk in sale/lease contracts and loss of capital/effort in partnership contracts.
In sale contracts, market price risk may affect profit or loss; the reward is the income from reselling the asset, but an asset may prove unsaleable due to lack of demand (Awidha, 2010). These are expressed as the benefits and risks of ownership (Kahf and Khan, 1992; Hussain et al., 2016), where the possibility of profiting from a resale is met with the risk of not being able to resell the asset or reselling it at a loss or even having the asset destroyed. This distinguishes sale from ribā in that the latter is a risk-free “profit” (return) whereas the former is profit associated with ownership and market risk.

In leases, the rewards and risks take different forms, the most important of which are the ability to lease the assets at a good lease rate (reward) and the risk of wear and tear or of the destruction of leased assets due to force majeure (overwhelming circumstances) (Hussain et al., 2016). The lease payments earned are due to the ownership risk borne by the lessor (Rosly, 2001). 'Ijarah (lease) is basically a sale contract, but it is done on a temporary basis and for a fraction of the price (Ibn Qudāmah, 1968; al-Ashqar, 1998; Kamali, 2007). For this reason, future lease rates should, in principle, not be fixed but rather be subjected to market conditions. However, due to the gharar (uncertainty) element contained in such a stipulation, Shari‘ah texts require that lease rates be defined in value (Ibn Qudāmah, 1968; Al-Zuḥailiy, 1984) (Setting a floating lease benchmark as the basis for lease rate determination is acceptable, as the value of the index is defined at any given point in time, which eliminates gharar and reflects real sector lease rates (Hussain et al., 2016). Alternately, Kahf (2020a) compares the fixed-wage of an ajīr (who leases his labor) with the varying profits of a muḍārib in that both do virtually the same things but differ in risk appetite. The Shari‘ah approves of both approaches of the income distribution. Reward-risk in lease contracts can take the form of the accrual of any benefits – other than those stipulated for the lessee – from the leased asset to the original owner (lessor). This is because it is a transfer of temporary right to usufruct and not the transfer of ownership; ownership remains with the lessor, which necessitates bearing the risk of loss of the leased asset (Shariff and Rahman, 2003). An implication of this, for example, is that the destruction of the asset due to the lessee’s negligence does not affect the lessor’s entitlement to rental payments (Ibn Qudāmah, 1968).

In muḍārabah partnerships, the profit is the return on equity while the risk relates to the capital loss of the rabb al-māl and the efforts of the muḍārib. In mushārakah, the reward is the partners’ profit on capital and the risk is the partners’ potential loss of capital (Ibn Qudāmah, 1968; Hamoud, 1982; Khan, 1987; al-Sālīsī, 1995; Ibn ‘Abd al-Barr, 2000; Rosly, 2001; Ibn Rushd, 2004; Awidha, 2010; Askari et al., 2012). In parallel (two-tier) muḍārabah, the IB acts as a muḍārib initially receiving funds from depositors (as rabb al-māl) and then invests the capital into other projects/ventures as a new rabb al-māl, a novelty in contemporary IF which is alien to the classical fiqh literature (Kahf and Khan, 1992). It has, however, caused controversy over the method of application of reward-risk: who bears the risk of capital loss? Hamoud (1982), for example, allows guarantees by the IB because the IB itself is entitled to a profit (as rabb al-māl in the second tier of the muḍārabah) and so, must guarantee the capital. That capital, in turn, is the entitlement of the initial rabb al-māl (the depositors). This has been refuted by some scholars like Awidha (2010), who have discussed Hamoud’s proposition and pointed out its faults. On the same grounds, al-Šadr (1981) views that the initial muḍārib (IB) is not entitled to a share of the profits unless there is a real effort on its behalf in managing the funds of the rabb al-māl (depositors).

An identifiable gap in the literature exists with regard to a concise analysis and summary of the parameters of reward-risk in light of modern Islamic financial intermediation. This paper seeks to address that gap.
Methodology
This study adopts a descriptive approach to explain the concept and application of reward-risk to IB financing products. An inductive analysis of the different opinions presented by IF experts and researchers form the basis for discussing and defining the currently established normative parameters of reward-risk. Critical observations regarding prominent Malaysian IB financing products, through document analysis and practitioners’ input and their reward-risk features, are also made.

Defining the parameters of reward-risk
The results reveal that market and ownership risk, transactional costs, effort or added value and risk of capital loss are all important parameters that define the reward-risk principle. Each parameter will be discussed individually.

Risk (ghurm)
Having defined risk earlier, it is necessary to systematically present it as a parameter of the reward-risk principle. In the medieval context during which fiqh developed, merchant-style financial dealings, rather than financial intermediation, were the norm. This meant that a trader bought goods which he sold for profit. Inherent in this process is the exposure to loss of the asset and the risk of selling it at a loss in the market. The well-established near-consensus in IF discourse is that the risk referred to here is based on the principle of īstīmarā’iyāt al-milk (ownership risk) (Kahf and Khan, 1992; Awidha, 2010; Dusuki, 2016). According to earlier and later Islamic economists, owning an asset or share capital in a venture means that, to profit, one must resell it or use it to produce goods/services for sale, which naturally exposes one to market risk; this, in turn, justifies fair return: āwād (al-Ṣadr, 1981; Kahf, 2002; Abdullah, 2015, 2016). By inference, ownership risk and market risk are inextricable risks in the context of the reward-risk principle. The following discussion sheds light on these two forms of risk.

Market risk refers to the “change in the financial position due to changes in the value of underlying components on which that position depends” (Muhammad et al., 2015, p. 308) or the “risk associated with a change in the market value of held assets” (El-Hawary et al., 2007, p. 797). The free market, through its demand and supply mechanism, is the fair determinant for prices which, by logic, are important determinants of returns and profits (al-Ṣadr, 1981; Awidha, 2010; Abojeib et al., 2018). The possession of an asset, whether physical or financial, entails that benefiting from it will require using it. This may expose it to the possibility of damage or loss, such as when the asset is leased. When individual wishes to dispose of the asset, they will likely sell it at the prevailing market price. This illustrates the risk of owning any asset and of wishing to either earn from it by using it for production or leasing it or selling it off. The questions that then arise are: how does ownership risk and market risk uniquely affect the different contractual forms? Furthermore, why are not other risks as relevant in discussing reward-risk? Finally, how do costs of ownership relate to risk?

Ownership risk and market risk are normative forms of risk pertaining to the reward-risk principle. This means that these two risks seem to embody the ideal of risk-taking to justify a return. This is clarified through a demonstration of their application to IB financing products, although the reward-risk application has theoretically been extended to a variety of other fiqh contracts. The primary contractual categories using IB financing products are sale, lease and partnership contracts. Reward-risk applies slightly differently to each, but the forms of risk that apply are either one or both of ownership and market risks. The third type, capital loss risk, is discussed under the section of māl due to its unique nature.
In *bay'* (sale) structures, market price affects the resale value of the assets (Rosly, 2001). In the case of IF today, the resale of an asset-based on a sale contract, be it *bay*’ bi *thaman ajil* (BBA – deferred payment sale) or *murābahah* (mark-up sale) or *salam* (forward commodity sale), entails market risk (Khan, 1994). The BBA and *murābahah* contracts are mark-up modes which were, and still are, used excessively in Islamic banking and finance (Khan, 1994; Suzuki and Miah, 2018) and entail the sale of an asset already in the possession of the seller. Hence, the sale price, whatever it is, can only be determined after the buyer agrees to buy the asset, in turn, exposing the seller to market risk (Rosly, 2001). Alternately, the seller may not find a buyer for a period in which market values of the asset change and when a buyer comes along, the agreed purchase price may be different from the cost of the asset (either less or more, entailing a loss or profit). The analogy drawn here is that the IB is the seller and the customer is the buyer. The market risk here should be duly borne by the IB.

Financial engineering has allowed for the development of the likes of the *murābahah* to the purchase orderer (MPO) which essentially eliminates any market risk in that the IB will only purchase the asset to resell it at a higher value if the buyer undertakes, in a binding manner (legally enforceable), to purchase the asset from the IB (Awidha, 2010). *Murābahah* initially did not entail profit-free profit in *fiqh* discourse (Abdullah, 2016). Similarly, ʿ*inah* (deferred payment sale followed by a spot payment repurchase of the same asset) mitigates market risks (Abdullah, 2015). By inference, tawarruq (like ʿ*inah* but includes a third party) does so and the two sale transactions are affected simultaneously which leaves no room for exposure to market forces (Khan, 2009; Dusuki, 2010). While such financially-engineered arrangements do mitigate market risk, they do not necessarily do so in regard to ownership risk, as the financier bears the ownership risk in mark-up modes, up and until the asset is sold to the customer (Hamoud, 1982; Khan, 1994; Kahf, 2006). Ownership risk will be discussed shortly. Figure 1 illustrates the structures of an MPO, *al-ijārah thumma al-bay’* (AITAB) and *mushārakah mutanāqisah* partnership (MMP).

In lease-based arrangements, such as property, equipment and vehicle finance, the value of the lease is determined by the cumulative rental rate (sum of all rental payments). Hence, a lease asset’s usefulness to the lessor is subject to the prevailing lease prices in the market. Alternately, prospective lessees vie in bargaining for below-market rental rates subjecting the lessor to market price risk, and all the while the lessor is exposed to ownership risk. In more complex lease-based arrangements such as the Islamic financial lease like AITAB (an Islamic financial lease used in Malaysia as detailed in Figure 1), market risk is technically irrelevant. The claim is that the lessor (IB) should normally be exposed to prevailing market rental rates. The claim further purports that the IB’s return on the leased asset should be – all else equal – positively influenced by higher rental rates. Instead, the IB would not necessarily fix the rates but guarantee itself a certain income so as to recuperate the purchase costs of the leased asset plus the desired profit throughout the lease; or through the lease and subsequent sale of the asset. The issue of variable rental rates being subject to market rates is arguable, but what is not arguable is the fact that market risk becomes almost irrelevant in an AITAB. Thus, it is observed that the mitigation of market risk, which is achieved through the guise of credit guarantee (through *a wa’d* or undertaking that requires all rental payments be made by the lessee) and long lock-in periods, is what renders the Islamic financial lease incoherent with the reward-risk principle. Figure 1 also illustrates the reward-risk elements of an AITAB.

Partnership-based arrangements, mainly *mudārakah* and *mushārakah*, entail the sharing of profits and losses. The IB advances capital to the customer, be it to finance an asset or a venture. Jurists have established that the profits are the returns on capital invested while the losses include losses on capital invested, and of effort and managerial labor by the
Figure 1.
Reward-risk illustrations of MPO, AITAB and MMP

(continued)
The customer and the IB enter into a *mushārakah* agreement in which the first contributes a down payment to the asset seller and the IB buys the asset by contributing the rest of the cost (subject of financing). An undertaking is also made by the customer to lease the asset from the IB for use by the customer.

Lease payments are made periodically to the IB for the usufruct of the asset and the purchase of the IB’s share by the customer.

The *mushārakah* ends (is wound up) when the customer has completely paid for the asset’s value (or financing plus profit), in which case full ownership would be the customer’s.

**Sharikah al-*ta'āl* (partnership) model**

*Step 2* represents the *mushārakah* returns whose profits are distributed based on a profit-sharing ratio (PSR). Defaults in *Step 2* mean that the IB and the customer as partners bear the losses equally after the asset is sold in auction. Costs including tax, insurance and maintenance are borne equitably. *Step 3*, in substance, represents an ownership transfer which would have been preceded by the risk of loss due to changing market prices. The practice does not reflect this as costs are fully recuperated by the IB through the binding undertaking by the customer to purchase all of the IB’s shares in the asset and indemnify the IB against any shortfalls in recovering its capital and costs in cases of default and foreclosure.

**Sharikah al-*milāk* (co-ownership) model**

*Sharikah al-*milāk* does not specifically concern a PSR or PLS meaning that in *Step 2*, the IB may acquire all of the returns relating to the asset if it and the customer mutually agree to do so – while gradually selling its share to the customer at the same time. In *Step 3*, the IB may require the customer to purchase all of the shares or foreclose the asset in case of default to recover the value of its financing and related costs since no explicit prohibition of *sharikah al-*milāk* exists to prevent this.

Source: Author’s own
partners. In *muḍarabah*, capital is given by the IB (*rabb al-māl*) to the customer (*muḍārīb*) as venture finance. In *mushārakah*, the IB and customer share in the venture by both contributing capital into it or in owning an asset. In both cases, the basic rule is that the IB and customer share the profits. If a capital loss results, it is borne solely by the IB in the *muḍarabah*, whereas it is shared between the IB and customer in the *mushārakah*. As partnership contracts pertain to the parameter of *māl* (capital), their unique nature will be further elaborated when discussing the *māl* parameter.

Al-Ṣadr (1981) stipulated that a *muḍārīb* (A) cannot invest the capital vested to it by the *rabb al-māl* with another *muḍārīb* (B) by an arrangement in which no effort or labor is exerted. This is because the first *muḍārīb* (A) would earn a profit that is not matched with the risk of loss of effort as no effort was put forth, to begin with. What is relevant here is that the risk of loss of capital entitles the *rabb al-māl* to a return while the risk of wasted efforts or labor is what entitles the *muḍārīb* to a share in the profits. A *wakil* (agent) may be delegated instead of a *muḍārīb*, in which case the former receives an *uṭrah* (fee) for its efforts while the *muwakkil* (principal) still bears the full risk of losing its capital and is entitled to whatever remains after the agent receives its fees. This is a form of investment called *wakālah* finance, which is not practiced as a direct financing product but merely used as a supplementary contract in IB financing facilities.

More complex partnership structures include the MMP offered by IBs for asset financing. Market risk is not so relevant in the MMP structure, as one of the partners – the one providing the majority of the financing – ensures that it will recuperate the full costs of the financed asset along with desired profits from the initial down payment and fixed or floating rental rates. This is done through the guise of credit guarantee mechanisms such as *wa’d*, which requires the purchase of all of the IB’s shares in the asset by the customer. This renders market risk completely irrelevant as the value of the financing for the financier does not change with changing asset values or market rental rates. This is why a Shari‘ah committee member of a Malaysian-owned IB cited by Zabri and Mohammed (2018) views MMP in practice as more of a sale-based arrangement with fixed returns. The same individual states that the MMP may also have an economic output similar to that of an AITAB, raising questions as to the embodiment of PLS in MMP products. Figure 1 further illustrates this.

Ownership risk should apply differently to the different contractual categories discussed, as they are fundamentally different. Sale contracts entail the sale of an asset already in the possession of the seller while lease contracts entail the rental of an asset that may or may not be in the possession of the lessor. Partnerships may have capital in the form of money, in which case ownership risk is not directly relevant. It is then observed that ownership risk is what eventually exposes the asset owner to market risk. Without ownership risk, the asset owner cannot bear market risk, as, according to the Prophetic narration, one is not allowed to sell that which he does not own (al-Tirmidhī, 1975, ḥadīth no. 1232). This is relevant, as more complex forms of the aforementioned arrangements like the MPO claim to feature ownership risk but mitigate all market risk, which raises doubts about the structuring of such forms of financing and their consideration for reward-risk. The reader shall be reminded here that to make sure that the proceeds of the financing are distributed equitably, risk must match reward. It has also been shown that the AITAB and MMP products do not regard market risk at all, meaning that the lessor and the partner have ownership yet are exposed to no market risk.

In conclusion, *ghurm* is risk and can take various forms, from market or ownership risk to loss of expended effort. Modern IB financing products have not properly observed these risks. The reason must be either that the proposed parameters of reward-risk are unrealistic
Other risks

The main premise for the lack of extensive concern with other risks when dealing with the reward-risk parameters is that such risks may be permissibly or forcefully mitigated (as part and parcel of achieving justice), such as credit risk and certain fiduciary risk, respectively. Alternately, these other risks may be inherent in the transaction and so cannot possibly be eliminated fully, such as business risk. Or it may be that such risks do not directly affect the reward-risk principle:

- **Credit risk:** It is well-established in the *fiqh* literature that credit risk can be mitigated through *hajjalah* (guarantees) or *rahn* (collateral), be it credit arising out of a sale, lease or some other contractual forms (Al-Zu’aily, 1984). Other similar risks faced by IFIs in financing activities include counterparty and default risks, which have similar implications.

- **Business risk:** It is inherent and internal to every business, including IF business and cannot possibly be averted fully, but it is rather managed. However, one of the most important components of business risk is market and ownership risk, meaning that business risk is a result of the aggregation of such risks – a broader category that concerns institutions rather than individual transactors as was the context in which *fiqh* developed (Awidha, 2010; Dusuki, 2016). Muhammad *et al.* (2015) affirm that such risks in IF are shared by financiers and financing recipients (customers) as in the case of *mudarabah* and *musharakah* financing, at least theoretically. In the case of riba-based financing, such risks are generally borne by (transferred to) the borrowing customers and not the lenders (Dusuki, 2016).

- **Fiduciary risk:** In the form of negligence or breach of terms, it is mitigable by the nature of Sharī‘ah contracts through the imposition of *damanāt* (indemnities) and *ta‘wişāt* (compensations). The fiduciary risk may take the form of market risk when investment account holders (IAH) do not receive the expected market return, as investment accounts are a *mudarabah*-type investment by the customer (*rabb al-mal*) in which the IB is the *mudarib* managing the funds (Dusuki, 2016). It may, in this regard, be mitigated when a loss is due to negligence (*ihmal*) by the *mudarib*. Other risks interact with fiduciary risk; for example, Sharī‘ah non-compliance risk, as it is related to complying with Islamic requirements for IFIs to conduct their business in the best interest of their stakeholders through the facilities of a Sharī‘ah advisory board (Archer and Karim, 2007).

- **Other risks:** Sharī‘ah non-compliance risk does not have a direct bearing on the reward-risk equation as it pertains to distribution. Mark-up and price risks share features of market risk (Archer and Karim, 2007). Equity investment risk is a product of a series of the aforementioned risks, especially market risk, as the equity investments of banks on their trade books, for example, depending on market prices. Equity investment risk is also present in investment banking and private equity businesses of IBs which means that their value is influenced by market factors, among other things (Dusuki, 2016). Operational risk, according to Dusuki (2016), maybe accepted or avoided. In other words, it may be managed by the skill of the *mudarib*. Various other risks exist; the foregoing discussion is for illustrative purposes and is not an exhaustive discussion of risk.
To sum up the parameter of risk, the current claim is that achieving justice in financial dealings involving Islamic contracts of market exchange is done through equitably apportioning reward and risk. The focus is set on market and ownership risk where other risks may or may not be directly relevant. Capital loss risk is related to the mal parameter, which shall be discussed shortly.

Damān and risk
Damān is an Arabic word that refers to liability or guarantee (Abū Hārith, 2003). It appears in the hadith and the maxim derived from it: al-kharāj bi al-damān. In another tradition, yudman, another derivative of the same root, is used: ribḥu mā lā yudman (the profit of that for which no liability is assumed). In either case, al-Zarqa (1989) ties it to the liability of loss which entitles the owner to kharāj, which he defines as any product of the asset that is separate from the asset.

For the purpose of this study, the latter meaning is the one intended; that is, the possibility of having to guarantee the loss or damage of capital, be it physical or financial. If it is owned by the party responsible for damān, then such a party is required to bear the risk of losing its capital. Put differently, as the jurist Abū al-Fadl (1937) argues, damān follows (is bound to) ownership. In fact, jurists in general establish that damān in this case refers to bearing the risk of loss of capital, be it physical or financial (Al-Zuhaily, 1984; Abū Hārith, 2003). Al-Ṣadr (1981) uses the terms damān and mukhāṭarah (risk) interchangeably but emphasizes that the focus is on the ownership itself that entitles the owner to an income and not the risk. What has been discussed under the topic of risk is then a discussion of damān itself, and it does not appear that damān requires further elaboration.

Costs and reward-risk
In financing assets, whether through the participatory (equity) approach or through the pure financial intermediation approach, costs related to an asset or venture financing are an important consideration as overburdening one party with certain costs could throw the reward-risk equation off balance. In the case of production, Shahātah (2020) makes the argument that anything unrelated to the production of the asset, such as the personal expenses of the producer, is not included in its costs. This is only fair as a potential buyer pays for the asset and its related costs, and is not responsible for the finances of the producer. The discussion of acquiring or producing an asset and its related acquisition costs is relevant to costs in financing assets, as the financing transaction should be independent of the financing entity. The personal finances of the financier should not influence the financing transaction between the financier and the recipient of financing (Shahātah, 2020). This has real implications on distributing costs, risks and rewards that relate to IB financing activities.

Jurists have elaborated on the topic of contractual expenses and who should bear which expenses. Examples of that are cited in Al-Zuhaily (2006), but not in the context of financing by financial intermediaries, as the latter is alien to the juristic literature (Kahf, 2006). Chapra (1985) claims that financiers may charge only out-of-pocket expenses to their customers unless PLS modes are used, as PLS modes require that expenses be subtracted from the capital of the mushāarakah. That is not the case, however, with non-financing activities where the IB may charge customers both out-of-pocket expenses and opportunity costs – such as in remittance services. The rationale behind this is that in the former case, the IB and customer stand to profit and should, thus, bear the costs equitably. In the latter case, it is the customers only that benefit from these services and should, thus, bear the expenses related to them. Put another way, realistically, the IB must ultimately earn a return in excess of the
expenses from offering such services or else it would not offer them. According to Chapra’s opinion, out-of-pocket expenses may include costs of acquiring assets, as in MPO or insuring and maintaining the asset, as in AITAB. In the scope of sale and lease financing methods, ownership is relevant as is evident from the literature review. Expenses related to ownership are borne by the owner, such as insurance for delivery of the asset from the third party to the IB in an MPO and such as insurance costs of the asset being leased in an AITAB. This is because, in both cases, the asset is considered to be under the ownership of the financier (Chapra, 1985; IIFA, 2000; Kamali, 2007; Awidha, 2010; BNM, 2010; AAOIFI, 2017).

In partnership modes of financing, the mutual nature of the contract entails the sharing of costs, as they are the main impediment to realizing profits. This is done by subtracting them from total returns to arrive at the profit that will be distributed to the partners and managers. In ascertaining which costs relate to the income and which do not, al-Shāʿir (2010) establishes that jurists left their determination to the custom of traders at the time. Ascertaining such expenses was relatively easy and small in scope in earlier times, but today’s setting in IB has changed drastically. As a practitioner and a member of the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), al-Shāʿir (2010) affirms that different IFIs have factored in different expenses in calculating net profits to be distributed to IAHs. He gives examples of the kinds of expenses that are subtracted from total income and those that are subtracted specifically from the IAHs’ share of profits. Although it is not the purpose of this section to criticize industry practice, al-Shāʿir does convey his concern regarding the fairness of the practice and its integrity. Other criticisms of cost distribution in partnership-based IB financing are that the financier in an MMP may impose on the customer taxes and other expenses that should ideally be shared between them (Meera and Razak, 2005). However, the difference between the MMP and muḍārabah-based investment accounts is that the asset being financed in the MMP is co-owned by the IB and the customer, and hence causes greater problems in apportioning responsibility for expenses (Meera and Razak, 2005, 2009; Azma et al., 2014; Zabri and Mohammed, 2018).

Still, other views exist to challenge these, such as the fact that jurists have more often than not resorted to ‘urf (industry convention) in determining the fair distribution of costs. They argue that the same would apply in the determination of asset cost in MPO (Eid, 2011) and who bears maintenance and insurance costs in AITAB. Kahf (2020b) affirms that they are ownership-related expenses, but they may be charged to the customer. Besides major ownership-related expenses such as insurance, no definitive principle or consensus opinion exists for the division of costs. In principle, costs reduce total income from a transaction and so directly affect kharāj. Equitability in apportioning them seems to be best determined by inferring from the previously cited sources, namely, by what industry convention deems fit, as long as fairness is upheld.

Work, effort and adding value

The next parameter of reward-risk is adding value, which refers to the economic value added through IF transactions. IB financing transactions involve property in the form of physical capital (assets) or monetary capital (equity). If relevant risks are present in the financing transaction, it is considered value-adding. It is claimed that this is because bearing risk is the way to add value to the economy. Relevant risks include ownership risk, market risk and capital loss risk (which shall be discussed later under the parameter of māl). The following is a presentation of relevant scholarly opinions on the parameter of effort and added value.
In the fiqh tradition, ʿamal (labor/work) that entails exertion is an established economic factor that entitles the āmil (laborer/worker) to fair compensation (al-Kāsānī, 1986). Al-Ṣadr (1981) opined that a muḍārib may not advance the capital given to him by the rabb al-māl to another muḍārib on the basis that the latter muḍārib earns a percentage less than that which the former muḍārib earns. Put simply, entrepreneur A advances venture capital to entrepreneur B and earns a profit from it that is not justified as A did not exert any effort to realize added value. Al-Ṣadr likened this to A (e.g. the IB) taking the difference of profits received from B (recipient of financing) and those distributed to the initial rabb al-māl (IAHs) without the real effort involved on the part of A. This is clear evidence that the earliest contemporary Islamic economics did indeed observe ʿamal as a fair requirement for compensating labor factors of production (which some require that IFIs replicate). In the case of ʿamal done by the ajr (hired labor), it is to be fairly compensated if it is completed, even if there is a disagreement between the contracting parties or a nullification of the labor contract. Payment shall be according to the prevalent rates, although there are some disagreements among jurists on the detailed rulings (Al-Zuhaily, 1984; al-Quradaghi, 1988).

The preceding opinions are generalized to include the effort of all sorts and not just muḍārabah and labor contracts. Abdullah (2015) views that ʿamal, which is synonymous with kasb (earning), entitles one to counter-value. This is synonymous, according to some literature, with the addition of value (Rosly, 2001; Rosly and Sanusi, 2001). This concept of adding value, which ties transactions to the real economy, is prevalent in IF literature and further associated with reward-risk (Rosly, 2001; Rosly and Sanusi, 2001; Kahf, 2006; Asutay, 2008). These opinions converge on the importance of effort in IF transactions.

Two important points can be inferred from this brief discussion regarding this parameter of reward-risk. First, work or effort is a factor, which should be rewarded with wages or some other form of compensation, and secondly, it should be done fairly so as to realize fairness and justice. Al-Quradaghi (1988) establishes that the objective of ʿiwaḍ al-mīthl (standard compensation) is the realization of justice. This is extended to include the compensation of work and effort through ajr al-mīthl (standard wage/fee). An analogy is drawn between this and other cases such as muḍārabah where the muḍārib is compensated according to the profit share for his efforts and risk-taking. This is extended to other forms of risk-taking including ownership and the taking of market risk. This is evident in IB financing products, which do not directly involve physical effort but involve effort in risky forms of financing services rendered by the IFI such as sale- and lease-based financing. The issue lies with the substance of these products and whether they ultimately expose the IB to ownership and market risks. This contrasts with conventional economists’ opinions on added value. For example, a number of conventional economics researchers hold that the very activity of intermediation and bringing sellers, buyers and financiers together is the essence of the value added by banks and other financial intermediaries (Wang, 2011; Alon et al., 2011).

There still does not seem to be a single unified definition of added value among IF researchers. Hence, the following is an attempt to connect the dots from the preceding discussion:

- **Rosly (2001)** links added value to the effort.
- **Kahf (2006)** views added value in contrast with pure wealth transfer (such as through riba-based finance). Other prominent IF experts such as Khan (1994) also emphasize this point.
- The common denominator of Rosly (2001) and Kahf’s (2006) propositions seems to be the presence of effort and risk.
• Suharto (2014) cites effort as a factor in trade (bayʿ) in which risk, and not just time value, entitles the seller to a profit on the sale. If the risk is present, the seller is entitled to a mark-up profit because he sold the asset on a deferred payment basis (extending credit to the buyer).

• Furthermore, there is an emphasis on risk-taking ventures such as mudāraban and their link to added value by both prominent and lesser-known IF researchers (Rosly, 2001; Rosly and Sanusi, 2001; Kahf, 2002; Asutay, 2008; Gulzar and Masih, 2015; Hussain et al., 2016).

Relating this discussion back to the parameter that is to be established for reward-risk, it can be noted that:

• ‘Amal is directly related to adding value.

• Adding value through risk-taking entitles the risk-taking party to fair earnings or reward. In a sale or lease, this takes the form of ownership and market risks. In mudāraban and mushārakah, it takes the form of loss of effort and capital loss risk. This can be extended to any other exchange-type fiqh contract.

• Risk is inherent in any commercial activity that adds value, thus entitling the bearer of risk to income.

• An example of this is embodied in the essential Shariʿah prohibition of ribā, in that the lender does not risk its capital and effortlessly ensures a profitable return adding no value as a financier in the transaction. This is contrasted with the other forms of contracts such as sale, lease and mudāraban, which involve a degree of risk.

Mal (capital)
In IF, the idea of capital is derived from the Islamic economics understanding of māl. Capital can take physical or monetary form. It can also take the form of credit such as in salam (forward) and istiṣnaʿ (construction) sales or equity, such as in mudāraban. Various fiqh works and compendiums like those developed by the Ministry of Awqaf and Islamic Affairs (1983) and Al-Zuhaify (1984) cite the juristic rule that the entitlement to profit by the profiting party requires the party to either expend effort, assume damān or commit māl. This is traced back to a Hanafi principle articulated by al-Kāsānī (1986) and others. It is important to note, however, that when capital is considered a factor which entitles its owner to a return, it is not because of the money itself, but rather the money which, through turnover, is turned into goods and services. The goods and services are further sold for a counter-value which may result in a profit (capital gain) or loss (capital loss). Put more simply, the owner of capital is the owner of the goods and services being bought and sold using that capital (al-Ṣadr, 1981; Kahf, 2002). It is understood from this point that the risk of using capital affects the owners of capital directly. This is what is referred to as capital loss risk. IBs, as the owners of capital, are subject to this risk to justify their income if equity-based methods that use capital are used for financing.

This contrasts with ribā-based lending, which is capital in the form of monetary credit advanced to another party. The capital is still owned by the lender and is guaranteed by the borrower, along with the mandatory interest payments. This implies that the risk of lending does not affect the lender directly, but rather impacts the borrower who is obliged to repay the debt regardless of his business’s outcome. Lending at interest affects the lender indirectly through credit risk and opportunity cost that is lost in case the lender fails to
recuperate the value of his loan. IF takes *ribā*-based lending and transforms it into equity-based financing – at least in theory, as it is not necessarily used in practice. Other forms of financing such as sale- and lease-based financing also fulfill the objective of justice and provide an alternate to *ribā*-based lending through observing the appropriate ownership risk and cost requirements discussed earlier.

In defining this parameter of reward-risk, an IFI provides financing to earn a return that will differ in nature based on the type of contract being used. Risk must be borne by the financier, be it in the form of ownership risk of physical assets or equity risk in the form of *māl* invested into the venture of a customer (Kahf, 2002). This is not to say that risk is sought after in IF (Kahf, 2006; al-Suwailem, 2006), but rather it is a way to compensate the owner of the capital. Otherwise, the other party would have to bear the risk while paying a price for financing, which is a form of *ribā*. Risk is then evidence of ownership of *māl*, which is a means of earning a profit on such *māl*. In MMP, the case is a bit different, as the asset of the *mushārakah* is considered to share capital and in the case of a liquidation event, the asset is turned into monetary capital to be distributed among the partners, the IB and the customer. In this case, the rule is that the IB equitably shares the risk involved in the possible loss of capital with the customer, based on the share of each party. This is one proposition, with the other being that MMP is *shirkat al-milk* (co-ownership), whose parameters are not strictly defined by scholars.

Another important distinction is that profit on *māl* is justified if capital loss risk genuinely exists. Profit on a loan is *ribā*, as there is no capital loss risk on a loan – it is guaranteed. In both cases, capital is advanced as a form of financing, but the distinguishing factor is the risk, which renders the profit legitimate or not. This is difficult to demonstrate in IB financing today as IBs simply do not use equity capital for financing due to the high equity and capital loss risks involved.

Table 1 summarizes the preceding discussion and demonstrates an example of each parameter of reward and risk.

**Conclusion and recommendations**

In summary, reward-risk in IF is undoubtedly an important concept that has garnered much concern and criticism. It is claimed that the proposed parameters of reward-risk will achieve justice. They include consideration of market, ownership and capital loss risks, contractual costs and effort that adds value. There are alternate propositions that do not strictly uphold these parameters but also achieve justice.

The study discovers that *ghurum*, being the first parameter of reward-risk, can take various forms, from market or ownership risk to loss of expended effort. However, there are other risks that are inherent to exchange or market transactions that directly affect IFIs, and IB financing facilities in particular, but which are not considered to fall within the scope of the reward-risk principle.

*Ḍamān* is directly linked to risk, as it refers to bearing the risk of loss of capital, be it physical or financial and, as the terms *ḍamān* and *mukhājarah* (risk) have been used interchangeably by scholars. Costs reduce the income of the relevant party in a transaction and so directly affect *kharāj* (reward). Some have argued that apportioning costs must observe a fixed set of rules, but others argue that it may be dictated by industry convention as long as fairness is upheld. The concept of adding value means adding value to the economy, which is achieved by expending effort through some sort of risk-taking. This is a distinguishing feature of IF that differentiates it from the risk-free or effortless nature of interest-based lending in conventional finance. Ownership of *māl* is also a parameter which
is evidenced by the presence of capital loss risk in equity-based financing transactions; otherwise, they would not be different from a risk-free ribā loan.

Each of the parameters contains a set of conditions to be considered when using IF to ensure the financing transaction is fair and just. As is evident from the research, industry practice has consistently avoided the proper observance of these parameters while advocates of the proper application of reward-risk have been ardent in reinstating the importance of them and the necessity of adhering to their specific forms. This raises the question of whether it is allowed for such parameters to be adapted to the innovative and
flexible nature of IF transactions, especially in financing activities, as advanced by some of the competing opinions that have been presented in this study.

In that light, it is recommended that the following areas and propositions be looked into further and given serious consideration in future research:

- A novel model of Islamic financial intermediation based on a positive analysis of the greater global financial landscape is required. This may help define an alternate pragmatic set of parameters for reward-risk.
- There needs to be a greater presence of maqāṣid-based reasoning which refers to scholarly conclusions and judgments based on the objectives of the Sharī‘ah and which allows for multi-dimensional reward-risk considerations for Islamic financing products.
- Relevant to the previous point, a more sophisticated framework of reward-risk needs to be laid down which is well-grounded in normative principles but adaptive to reality.
- Critical approaches to the existing classical fiqh and contemporary literature are required to maintain the relevance of the Sharī‘ah to the ever-evolving nature of finance and other aspects of life.
- A critical approach to the nominate contractual forms is called for to determine their malleability – which principles stand and which do not – in developing hybrid and composite Sharī‘ah contracts essential for today’s complicated and diverse financial and capital mobility needs.

References
AAOIFI (2017), Sharī‘ah Standards, Accounting and Auditing Organization for Islamic Financial Institutions, Manama.
Abdullah, A. (2015), Fundamentals of Islamic Economics, International Council of Islamic Finance Educators, Kuala Lumpur.
Abdullah, A. (2016), “Examining US approvals of Islamic financing products and the Islamic theory of lawful profit”, International Journal of Islamic and Middle Eastern Finance and Management, Vol. 9 No. 4, pp. 532-550.
Abujeib, M., Haneef, M.A.M. and Mohammed, M.O. (Eds) (2018), Islamic Economics: Principles and Analysis, International Sharī‘ah Research Academy for Islamic Finance, Kuala Lumpur.
Abū Al-Faḍl M., (1937), Al-Iḥtiyār li Ta‘lil al-Mukhtar, Maṭba‘a’at al-Halab, Cairo.
Abū Ḥarīth M.S. (2003), Mausūt an al-Qawā'id al-Fiqhīyyah, Mu ’assasat al-Risālah, Beirut.
Al-Ashqar, M.S. (1998), “Al-Dāwābit al-lātī tahkumu ‘aqd ʿiḥān al-aʿyān al-mu‘ajjarah”, in Ashqar, M.S., Shabir, M.S., Majid, M.A.R. and Umar S.A. (Eds), Buhṣūth Fiqhīyyah fi Qadayā Iqtiṣādiyyah Muʾāṣirah, Dār al-Nafāʾis, Amman, pp. 300-324.
Al-Kāsānī, A. (1980), Badū ’i’ al-Ṣanāʾi’ī’ fi Tartīb al-Sharāʾi’, Dār al-Kutub al-‘Ilmiyyah.
Al-Khaṭṭābī, A.S.M. (1932), Mu’ālim al-Sunan, al-Maṭba‘a’ah al-‘Ilmiyyah, Aleppo.
Alon, T., Fernald, J., Indlaar, R. and Wang, J.C. (2011), “What is the value of bank output?”, FRBSF Economic Letter, Federal Reserve Bank of San Francisco, available at: www.frbsf.org/economic-research/publications/economic-letter/2011/may/value-bank-output/ (accessed 12 June 2019).
Al-Quradghī, A.M. (1988), “Nakazriyyat ‘iwaḍ al-mithl wa atharuhā ‘alā al-ḥuqūq”, Hawlîyyat Kulliyat al-Sharī‘ah wa al-Dīrāsāt al-‘Ilmiyyah, Vol. 1 No. 6, pp. 391-440.
Al-Ṣadr, M.B. (1981), Iqtiṣādunā, Dār al-Ta‘āruf li al-Maṭba‘āt, Beirut.
Al-Sültos, A.A. (1995), “Hal yajuzu taḥdīd rabb al-māl fī sharikah al-mudārakah bi miqdār mu’ayyin min al-māl”, Majallat Majma’ al-Fiqh al-İslāmî, Vol. 9 No. 1, pp. 143-229.

Al-Shā’ir, S. (2010), “Ihtisab al-riba’ fī al-mudārakah wa al-mushārakah fī hal ḥaṭl amwāl al-mudārakah wa al-mushārakah”, paper presented at AAOIFI conference on Sharī‘ah Board of Islamic Financial Institutions, 26-27 May 2010, Bahrain, available at: www.intithal.com/uploaded/media/research/733%20-%20حساب-الربح-في-المصارحة-والمشاركة-في-حال-حفظ-أموال-المصارحة-والمشاركة.pdf (accessed 20 June 2019).

Al-Suwailem, S. (2006), “Hedging in Islamic finance”, Occasional Paper No. 10, Islamic Development Bank, Islamic Research and Training Institute, available at: www.academia.edu/1131359/Hedging_in_Islamic_finance (accessed 29 May 2019).

Al-Tirmidhî, M.B.I. (1975), Sunan al-Tirmidhî, Matba’a at Muṣṭafā al-Bâbî al-Ḥalabî wa Awlādūh, Cairo, Vol. 3.

Al-Zarqâ’, A.M. (1989), Sharh al-Qawa’il id’ al-Fiqhyyah, Dār al-Qalam, Damascus.

Al-Zuḥailī, W. (1984), al-Fiqh al-İslāmî wa Adillatuḥ, Dār al-Fikr, Damascus, Vols 4/5.

Al-Zuḥailī, M.M. (2006), Al-Qawā’il id al-Fiqhyyah wa Taḥqīqatuḥa fī al-Madhāhib al-Arba’ah, Dār al-Fikr, Damascus.

Archer, S. and Karim, R.A.A. (Eds) (2007), Islamic Finance: The Regulatory Challenge, Vol. 394, John Wiley and Sons.

Askari, H., Iqbal, Z., Krichene, N. and Mirakhor, A. (2012), Risk Sharing in Finance: The Islamic Finance Alternative, John Wiley.

Asutay, M. (2008), “Islamic banking and finance: social failure”, New Horizon, Vol. 169, pp. 1-3.

Awidhya, A.A. (2010), Naẓarīyyat al-Mukhbatara fī al-Iqtiṣād al-İslāmī, International Institute of Islamic Thought (IIFT), Herndon and London.

Azma, N., Rahman, M. and Albaity, M. (2014), “Issues and prospects of Islamic hire purchase financing: Malaysian evidence”, Journal of Management Research, Vol. 6 No. 1, pp. 12-24.

BNM (2010), Shariah Resolutions in Islamic Finance, Bank Negara Malaysia, Kuala Lumpur.

Chapra, M.U. (1985), Towards a Just Monetary System, The Islamic Foundation, Leicester.

Chapra, M.U. (1992), “Islamic and the economic challenge”, (No. 17), International Institute of Islamic Thought (IIFT), available at: http://ierc.sbu.ac.ir/File/Article/Islam%20and%20the%20Economic%20Challenge_93524.pdf (accessed 20 April 2019).

Choudhury, M.A. (1986), Contributions to Islamic Economic Theory: A Study in Social Economics, Palgrave Macmillan UK, London.

Dusuki, A.W. (2010), “Can Bursa Malaysia’s Suq Al-Sila’ (commodity murabahah house) resolve the controversy over tawarruq?”, Research Paper, No. 10/20, International Sharī‘ah Research Academy for Islamic Finance, Kuala Lumpur.

Dusuki, A.W. (Ed.), (2016), Islamic Financial System: Principles and Operations, International Sharī‘ah Research Academy for Islamic Finance, Kuala Lumpur.

Eid, A.A. (2011), Naẓarīyyat al-Ribā’ wa Taḥqīqatuḥa fī Mu’amalat al-Maṣharīf al-İslāmīyyah: Dirāsah Muqārahah, Dār al-Fiqr al-Jāmī‘ī, Alexandria.

El-Hawary, D., Grais, W. and Iqbal, Z. (2007), “Diversity in the regulation of Islamic financial institutions”, The Quarterly Review of Economics and Finance, Vol. 46 No. 5, pp. 778-800.

Gulzar, R. and Masih, M. (2015), “Islamic banking: 40 years later, still interest-based? Evidence from Malaysia”, available at: https://mpra.ub.uni-muenchen.de/65840/1/MPRA_paper_65840.pdf (accessed 24 June 2019).

Hamoud, S.H. (1982), Taḥcūr al-ʿA’māl al-Masraḍiyah bi mā Yaṭṭafq Ma’ a al-Sharī‘ah al-İslāmīyyah, Matba’a at al-Sharq wa Maktabatuhū, Amman.

Holton, G.A. (2004), “Defining risk”, Financial Analysts Journal, Vol. 60 No. 6, pp. 19-25.
Hussain, M., Shahmoradi, A. and Turk, R. (2016), “An overview of Islamic finance”, Journal of International Commerce, Economics and Policy, Vol. 7 No. 1, p. 1650003.

Ibn ’abd Al-Barr, Y.I.A. (2000), Al-listidhbār, Dār al-Kutub al- ‘Ilmiyyah, Beirut.

Ibn Qudāmah, M.A. (1968), Al-Mughni, Cairo Library (Press), Cairo.

Ibn Rushd, M.I.A. (2004), ḅidāyat al-Muʿtahid wa Niḥāyat al-Muqtaṣid, Dār Al-Hadith, Cairo.

IIFA (2000), “Qarār bi sha’na al-ijārah al-muntahiyah bi al-mālik”, available at: www.iifa-ai.org/2061.html (accessed 28 March 2019).

Iqbal, Z. (1997), “Islamic financial systems”, Finance and Development, Vol. 34, pp. 42-45.

Iqbal, Z. (1999), “Financial engineering in Islamic finance”, Thunderbird International Business Review, Vol. 41 Nos 4/5, pp. 541-559.

Kahf, M. (2002), “Strategic trends in the Islamic banking and finance movement”, paper presented at Harvard Forum on Islamic Finance and Banking, 6-7 April, Harvard University, MA, available at: https://tinyurl.com/y4ba3mta (accessed 19 June 2019).

Kahf, M. (2006), “Maqasid al Shari’ah in the prohibition of riba and their implications for modern Islamic finance”, paper presented at IIUM International Conference on Maqasid al-Shari’ah, 9-10 August, Kuala Lumpur, available at: https://tinyurl.com/yyqadb57 (accessed 20 April 2019).

Kahf, M. (2020a), “Realism in Islamic economics”, available at: http://monzer.kahf.com/papers/english/Realism.pdf (accessed 8 April 2019).

Kahf, M. (2020b), “Arab Gambian Islamic bank liquidity management fund for Islamic banks”, available at: http://monzer.kahf.com/papers/english/Liquidity_Management.pdf (accessed 20 June 2019).

Kahf, M. and Khan, T. (1992), “Principles of Islamic financing”, Research Paper No. 16, Islamic Research and Training Institute, Jeddah.

Kamali, M.H. (2007), “A shari’ah analysis of issues in Islamic leasing”, Journal of King Abdulaziz University: Islamic Economics, Vol. 20 No. 1, pp. 3-22.

Khan, M.F. (1994), “Comparative economics of some Islamic financing techniques”, Islamic Economic Studies, Vol. 2 No. 1, pp. 35-68.

Khan, S.H. (2009), “Why tawarruq needs to go”, Islamic Finance News, 4 September, pp. 17-22, available at: www.assaif.org/content/download/9962/53909/file/Study%20-%20Why%20Tawarruq%20Needs%20To%20Go.pdf (accessed 11 June 2019).

Khan, S.R. (1987), Profit-and-Loss Sharing: An Islamic Experiment in Finance and Banking, Oxford University Press, New York, NY, NJ.

Mahmud, Y.S. (2019), “Ribḥu mà lā yuḍmān”, majallat al-Iqtīṣād al-Islāmī, available at: https://tinyurl.com/rwf9pxz (accessed 14 July 2019).

Mālik, B.A. (1985), Muwatṭa’ al-Imām Mālik, Dār Iḥyā’ al-Turāth al-‘Arabī, Beirut.

Meera, A.K.M. and Razak, D.A. (2005), “Islamic home financing through mushārakah mutanāqisah and al-bay’ bithaman āqil contracts: a comparative analysis”, Review of Islamic Economics, Vol. 9 No. 2, pp. 5-30.

Meera, M.K.A. and Abdul Razak, D.A. (2009), “Home financing through the mushārakah mutanāqisah contracts: some practical issues”, Journal of King Abdulaziz University-Islamic Economics, Vol. 22 No. 1, pp. 121-143.

Muhammad, M., Sairally, S.B. and Habib, F. (Eds) (2015), Islamic Capital Markets: Principles and Practices, International Shari’ah Research Academy for Islamic Finance, Kuala Lumpur.

Rosly, S.A. (2001), “I’idaw as a requirement of lawful sale: a critical analysis”, International Journal of Economics, Management and Accounting, Vol. 9 No. 2, pp. 187-201.

Rosly, S.A. and Sanusi, M. (2001), “Some issues of bay’ al-‘inah in Malaysian Islamic financial markets”, Arab Law Quarterly, Vol. 16 No. 3, pp. 263-280.
Shahātah, H. (2020), "Al-manhaj al-Islāmī li tahdīd wa ḍabt wa tarshīd takāfī al-intāj", available at: www.darelmashora.com/Default.aspx?DepartmentID=26 (accessed 19 June 2019).

Shariff, R.A.M. and Rahman, A.R.A. (2003), “An exploratory study of ijarah accounting practices in Malaysian financial institutions”, International Journal of Islamic Financial Services, Vol. 5 No. 3, pp. 1-15.

Suharto, U. (2014), “Analysis of the concept of Islamic choice (ikhtiyar) on opportunity cost and time value of money in Islamic economics and finance”, International Journal of Economics, Management and Accounting, Vol. 22 No. 2, pp. 1-20.

Suzuki, Y. and Miah, M.D. (2018), Dilemmas and Challenges in Islamic Finance, Routledge, London.

Wang, J.C. (2011), “What is the value added of banks?”, available at: https://voxeu.org/article/what-value-added-banks (accessed 12 June 2019).

Zabri, M.Z. and Mohammed, M.O. (2018), “Qualitative validation of a financially affordable Islamic home financing model”, ISRA International Journal of Islamic Finance, Vol. 10 No. 2, pp. 143-161.

Further reading
Ministry of Awqaf and Islamic Affairs (2006), Al-Mawsūʿah al-Fiqhiyyah al-Kuwaytiyyah, Dār al-Salāsīl, Kuwait.

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