DERIVATIVES
IN ISLAMIC FINANCE

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1.0 INTRODUCTION

This article discusses the overall concept of financial derivatives. A derivative is defined as ‘a financial instrument whose value depends on the value of other, more basic variables’.

Examples of derivatives include forwards, futures, options and swaps. These can also be combined with one another or with traditional securities and loans, including bonds, in order to create hybrid instruments.

Derivatives are becoming increasingly popular, and they exceed the growth rate of any other type of securities or assets in the global economy. The increasing popularity of derivatives can be attributed to their flexibility or ease of use; they are easier to buy and sell than the underlying commodity or financial asset, such as agricultural commodities, metals, energy, currencies and stock indexes. Derivatives are considered useful alternatives to holding the underlying commodity or financial asset. Also, a relatively small amount of capital is sufficient to trade in derivatives as compared to the amount of money needed to buy an actual commodity or financial asset. Other benefits have also been noted, such as better risk allocation and reduced information asymmetry.

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The noble purpose of derivatives is that they were created to manage risk, to enable hedging, but the irony is that they are also the most popular financial instruments used for speculation, the very opposite of their intended purpose. How rampant is speculative activity in derivative markets?

According to [the] Office of Comptroller of the Currency (OCC), only five commercial banks account for 96% of the total notional amount of derivatives in the commercial banking system in the U.S. Further, only 2.7% of total derivatives are used by end users, i.e. corporations assumed to hedge their risks, while the remaining 97.3% is used by dealers (OCC 2005)…This shows that end users, and thus hedgers, are minorities in the derivatives market. Speculators dominate the market.

In fact, the recent financial crisis has been blamed on the use of derivatives. Further, due to this speculative usage of derivatives, they have been opposed by a number of scholars in Islamic finance.

The main objective of this paper is to review the use and status of derivatives in Islamic finance. This is done by first explaining the basic derivative contracts of forwards, futures, options and swaps. Thereafter, the discussion turns to the use of derivatives with sukūk. The paper then explores the debate between scholars on the admissibility or otherwise of forwards, futures and options in Islamic finance. It then examines contracts in Islamic finance that have derivative-like features and which can be used for the same purposes of hedging as forwards, futures, options and swaps.

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5 Hedging involves taking an opposite position in derivatives in order to balance gains and losses in the underlying asset, especially in relation to the movement of benchmark rates or currency exchange rates.

6 Al-Suwailem, p. 43.

2.0 DEFINITIONS

The forward contract has been recorded as the first derivative instrument to be used, and it is also the simplest in form.\(^8\) In a forward contract, two parties undertake to complete a transaction at a future date but at a price which is determined today. A good example would be a farmer who anticipates his crop (maize) to be harvested in the near future and a consumer who is in need of the maize in the near future as well. Both parties are faced with the possible risk that the price of the maize may decrease or increase respectively. Therefore, to hedge their risk they enter into a forward contract to lock in the price of the maize to be paid and delivered in the future. At this point there is no exchange of money or commodity.

The forward contract poses a number of problems. First is the necessity of multiple coincidences: a party interested in the forward contract must find another with diametrically opposing needs. Second, since the forward price is arrived at by negotiation, one of the parties, who is in a better bargaining position than the other, may be able to impose a price on the other. Third is the counterparty risk, i.e., the risk to one of the parties that the other will default. Thus, the need arose for futures, a derivative which could solve all these problems.\(^9\)

A futures contract is basically a forward contract which is standardized with respect to contract size, maturity, product quality, place of delivery, etc. Futures contracts are traded on exchanges that mediate the transactions of all buyers and sellers. Since many buyers and sellers transact through an exchange, the problem of multiple coincidence will be solved.\(^10\) Further, futures prices are considered to be fairer since the prices are arrived at by the interaction of many buyers and sellers, and therefore, the situation of one party imposing a price upon another is avoided. As for

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\(^9\) Ibid.

\(^10\) Ibid.
counterparty risk, this is solved by the exchange itself being the guarantor for each trade by being the buyer to each seller and the seller to each buyer.\textsuperscript{11}

The exchange, then, has to minimize the risk it bears, which is the potential default risk. This exchange achieves by two processes, one known as ‘margining’ and the other as ‘marking to market’. The exchange requires each party to deposit initial deposits, known as initial margins; when losses occur, it will require the party whose position is losing to pay up as the losses occur. This is known as a margin call. Marking to market means that the gain or loss in each contract position resulting from changes in the price of the futures (or option) contracts at the end of each trading day is added or subtracted from each account balance.\textsuperscript{12} Another unique feature of futures is the ability of the buyers and sellers to reverse out of their positions before delivery or maturity. Therefore, in commodity futures physical delivery hardly ever takes place, as compared to forward contracts where delivery does take place.\textsuperscript{13}

An option entitles the holder the right, but not the obligation, to buy (or sell) the underlying asset at a predetermined exercise price at, or anytime before, maturity. To acquire this right under an option, payment of a premium is required.\textsuperscript{14} There are three basic types of options: a call option, a put option and a double option. A call option provides the holder the right to buy, while a put option provides the holder the right to sell the underlying asset at a predetermined price;\textsuperscript{15} and a double option provides the right either to buy from or sell to the grantor a specified underlying asset during a fixed period at a predetermined price.\textsuperscript{16}

In futures and forwards, unless the holder reverses his position before maturity, there will be an obligation to exercise the contract (pay the predetermined price or deliver the commodity). However, for options no such obligation exists at maturity until the option holder decides to exercise the option. In other words, for an option holder

\textsuperscript{11} Ibid.
\textsuperscript{12} Ibid.
\textsuperscript{14} Hull.
\textsuperscript{15} Ibid.
\textsuperscript{16} M. H. Kamali, "Islamic commercial law: an analysis of options," The American Journal of Islamic Social Sciences 14, no. 3 (1997).
inactivity will just cause the option contract to expire, with the net result that the premium paid will be lost; however, in a futures or forward contract, inactivity will cause the holder to have to pay up or deliver the commodity.\footnote{17}

A swap, on the other hand, is a contractual agreement in which two parties agree to exchange payments over a period of time, based on a notional amount of the underlying asset.\footnote{18} The rate at which the payments would be exchanged would be predetermined, based on either a fixed amount or an amount based on a reference measure.\footnote{19}

### 3.0 BONDS, ŠUKÚK AND DERIVATIVES

In conventional finance, bonds and derivatives are often combined to create exotic financial instruments known as bond derivatives; for instance, bond futures and bond options.

A bond future is a contractual obligation for the contract holder to purchase or sell a bond on a specified date at a predetermined price. A bond future can be bought in a futures exchange market, and the prices and dates are determined at the time the future is purchased. Government bond futures are contracts to buy forward bonds issued by governments.\footnote{20} For example, the website of Euronext.com\footnote{21} provides Japanese Government Bond (JGB) futures contracts as their bond derivatives.

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\footnote{17}{Options are priced according to a number of methods, the discussion of which is beyond the scope of this article. F. Black & Scholes, M., "The pricing of options and corporate liabilities," \textit{Journal of Political Economy} (1973); J. Cox, Ross, S., Rubenstein, M., "Option pricing: a simplified approach," \textit{Journal of Financial Economics} 7, no. (1979).}


\footnote{19}{Bacha.}


\footnote{21}{See http://www.euronext.com/landing/landingInfo-2037-EN.html.}
A bond option is the right to buy or sell a bond at a particular date at a predetermined price. The purchaser of an option is not obliged to buy or sell at the exercise price, and will only do so if it is profitable. The purchaser may allow the option to lapse, in which case he loses only the initial purchase price or premium of the option. Bond options are available in exchange-traded and over-the-counter markets. A major advantage of a bond option is the predetermined price of the underlying bond, which reduces the credit risk associated with fluctuations in the bond price. Thus, bonds frequently co-exist in financial structures with derivatives.

In Islamic finance one of the first known efforts to join a sukūk with a derivative is the sukūk mushārakah with detachable provisional rights to allotment of warrants issued by WCT Engineering in the first quarter of 2008.

A warrant is a derivative instrument that gives the holder the right but not the obligation to purchase securities in a company at a predetermined price within a certain time period. This structure, a sukūk joined with a warrant, has the advantage of enabling the issuer to enter capital markets at lower funding and allows diversification of portfolio for investors through the feature of warrants.

The transactional flow of the sukūk mushārakah with warrants is summarized as follows:

- WCT Engineering Berhad and the sukūk-holders entered into a joint venture according to a mushārakah agreement. The subject of the joint venture was direct participation in the general business of WCT Engineering Berhad. The Primary Subscriber (PS), as the initial sukūk-holder, contributed RM300M (the sukūk-holders’ contribution) to the capital of the mushārakah venture on a staggered basis. The accountability of the issuer to the sukūk-holders was

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23 Ibid.
25 Ibid.
evidenced by issuance of the sukūk mushārakah, which represents undivided beneficial ownership by the sukūk-holders in the joint venture.26

- As a sweetener, WCT Engineering Berhad granted provisional rights to allotment of warrants, which are detached from the sukūk upon issuance. The warrants are offered by the PS to the eligible existing shareholders of WCT Engineering Berhad. The total proceeds arising from the sale of the warrants is channeled by the PS to the joint venture as part of the balance of the Primary Subscriber’s capital contribution.27

- The profits derived from the joint venture are distributed to the issuer and the sukūk-holders based on a pre-agreed profit-sharing ratio, while the profit paid to the sukūk-holders is distributed proportionately based on the nominal value of the sukūk held by each of them. As for the losses, they shall be shared based on, and limited to, each mushārakah partner’s respective capital contribution to the joint venture.28

- Finally, according to a purchase undertaking granted by WCT Engineering Berhad in favour of the sukūk-holders, WCT Engineering Berhad shall undertake to purchase all the outstanding sukūk. Conversely, pursuant to the sale undertaking granted by the sukūk-holders in favour of WCT Engineering Berhad, the sukūk-holders undertake to sell all the outstanding sukūk. At the relevant exercise time and upon the exercise of the purchase or sale undertaking, the joint venture and declaration of trust will be dissolved.29

Since this mushārakah-with-warrants sukūk is one of the first structures to combine a sukūk with a derivative, it goes to show that there is a vast region in finance, namely derivative contracts and other derivative hybrid structures, which exists in conventional finance that has been left untapped in Islamic finance. Why this might

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26 Ibid.
27 Ibid.
28 Ibid.
29 Ibid.
be so brings us to the next crucial segment of this article: how does Islamic finance view conventional derivatives?

4.0 CONVENTIONAL DERIVATIVES AND ISLAMIC FINANCE

There are two main schools of thought regarding the status of derivatives in Islamic finance. The first school strongly believes that conventional derivatives such as forwards, futures and options are impermissible in Islamic finance, and instead, there is a need to find Islamic alternatives that comply with the Sharī‘ah. These alternatives—sometimes referred to as ‘Islamic derivatives’—include instruments such as salam, istiṣnā‘, ‘arbūn, wa‘d and ji‘ālah. The second school of thought, which is the minority view, believes that conventional derivatives are a greatly needed tool to enable Islamic finance to proceed to further heights. They also argue that conventional derivatives are actually not impermissible and should be sanctioned and used in Islamic finance. Elaboration of these differing views follows in the next section.

4.1 Sharī‘ah Objections to Derivatives in Islamic Finance, with Counter-Arguments

Discussion of derivatives and their legality or otherwise in the Sharī‘ah only began from the 1980s when Islamic finance itself began to emerge and develop.

The following are the main Sharī‘ah grounds cited by contemporary scholars in Islamic finance who have objected to derivatives:

1. A futures sale, which comprises deferment of both counter-values, is a sale of one debt for another (bay‘ al-kāli bi al-kāli), which is forbidden.

2. Both counter-values in future sales are nonexistent at the time of the contract, the money and the goods. It is, therefore, not a genuine sale; rather, a mere sale or exchange of promises. A sale can be valid in the Sharī‘ah if either the price or the delivery is postponed, but not both.
3. Options sales are a mere right to buy or sell; charging fees for this is not permissible.

4. For a sale to be valid there must be a transfer of ownership of the item sold; if the seller does not own the item he cannot transfer ownership. The rationale behind the requirement of taking possession is to prevent gharar. This issue is sometimes separated from another legal objection against derivatives, that futures sale fall short of meeting the requirements of qabid or taking possession of the item prior to resale.\(^{30}\) In this article these two issues will be discussed under one heading because both point to the issue of the seller not owning or possessing the goods before resale. Furthermore, other legal opinions have discussed these two issues under one legal objection and not two.\(^{31}\)

5. Futures and option trading involve speculation and verge on maysir (gambling)\(^{32}\) and gharar.

How the scholars came up with these main five objections and the counter-arguments to them are discussed in further detail below.

### 4.1.1 Futures Sales, Being the Deferment of Both Counter-values, Are Sales of One Debt for Another (Bay‘ al-Kālī bi al-Kālī), Which is Forbidden

Islamic scholars have generally found the exchange of a debt for a debt—also known as bay‘ al dayn bi al-dayn or bay‘ al-kālī bi al-kālī—to be prohibited in Islamic law.\(^{33}\) Imām Aḥmad ibn Ḥanbal, founder of the Ḥanbalī School, ruled that common

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\(^{32}\) Gambling is also called qimār in Arabic. The terms qimār and maysir are for all intents and purposes synonymous.

consensus (*ijmā’ al-nās*) has forbidden the sale of debts.\(^{34}\) This is based on a *ḥadīth* which reports: “The Prophet prohibited *bay’ al-kālī bi al-kālī*.\(^{35}\)

An example of an exchange of debt would be where Baker A borrows 50 litres of milk from Farmer B to be returned after six months. Farmer B, in the meantime, sells the milk (owed to him) to Baker C in return for 5 bushels of wheat to be delivered in 2 months. This is an exchange of a debt by Farmer B to Baker C and is prohibited. The underlying reason is that there would be *gharar* due to the uncertainty whether there would be actual delivery.\(^{36}\)

This general prohibition has been applied to futures because the parties can offset their transactions by selling the ‘debts’ owed to them to other parties before the delivery of the underlying asset. The contention is that this feature amounts to sale of a debt and is, therefore, prohibited.\(^{37}\)

For example, A buys 1000 bushels of wheat to be delivered in 6 months at the price of RM10,000. Both the price and the delivery are deferred except for the small margin amount that has to be paid by A. After 3 months A sells the 1000 bushels of wheat at RM12,000; both counter-values to be delivered in three months. The wheat has yet to be received by A, and it is a debt owed to A that he is selling. This has been declared to be prohibited because it is the selling of a debt for a debt, i.e. the RM12,000 payable in 3 months.

Kamali argued against this objection.\(^{38}\) He rejects the claim of common consensus prohibiting the exchange of debts because the ‘legal schools have recorded divergent rulings’ as to the definition of *bay’ al-kālī bi al-kālī*. Moreover, the *ḥadīth* ‘only appears in some collections,’\(^{39}\) and many prominent scholars consider it to be

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34 Kamali, "Islamic commercial law: an analysis of futures."
36 Al-Zahaylī.
38 Kamali, "Islamic commercial law: an analysis of futures."
39 Al-Bayhaqī, *al-Sunan al-kubrā*, ed. Muḥammad ʿAbdul-Qādir ʿAṭā, (Makkah: Maktabat Dār al-Bāz, 1994), 5:290. It was also attributed to *Masnad al-Bazzār* and *al-Mustadrak* of al-
unreliable.\textsuperscript{40} Kamali further argues that there is no clear prohibition of the exchange of debts, with a number of scholars actually allowing it, and, therefore, in the absence of a clear prohibition on the sale of a debt the principle of permissibility must prevail, provided it is devoid of ribā and gharar.

Kamali turns to futures trading itself and states that the nature of the futures contract makes it a contract between the purchaser (or seller) and the clearing house only. There is no third party involved in the transaction; therefore, there are no uncertainties over clearance and delivery. ‘In other words, the price was a debt on the clearing house, which is the principle party in the transaction…it acts in the capacity of a fully committed guarantor.’\textsuperscript{41} Therefore, futures contracts involve the fulfillment of obligations and the repayment of debt by the debtor, which are allowed in Islamic law.

The argument set forth by Kamali appears to be a valid and effective response to this objection against futures because of the nature of futures transactions. It is a fact that the clearing house acts as the seller for each buyer and the buyer for each seller in all futures transactions. Each transaction is guaranteed. There is no direct interaction of one trader with another trader. There is, therefore, no exchange of a debt for a debt, as each transaction ends with the exchange of buying or selling the futures contract.

\textbf{4.1.2 Both Counter-values in Futures and Options Sales are Nonexistent or Deferred at the Time of the Contract}

In Islamically permitted contracts only one of the counter-values of the contract is allowed to be deferred and nonexistent (for example, the salam contract). Where both the counter-values are deferred and nonexistent at the time of the contract, as is in the case of futures and options, Sharī‘ah objections to the permissibility of derivatives arise.

\textsuperscript{41} Ibid., pp. 212-214.
Ibid., p. 213.
Article 197 of the Mejelle, the Ottoman Civil Code (elaborated between 1869 and 1875 and based on Ḥanafī fiqh), provides that ‘the thing sold must be in existence’ and Art. 205 further provides that: ‘the sale of a thing which is not in existence is void’.

Mahmassani has stated that contracts to sell future things, except for the salam and istīṣnā‘ contracts, are invalid in the Sharī‘ah because such things are nonexistent. In the case of salam or even istīṣnā‘, only one of the goods is deferred at the time of the sale. This is allowed in the Sharī‘ah. However, the nonexistence of both counter-values of the contract in both futures and options amounts to unwarranted risk-taking and gharar that creates massive uncertainty over the prospects of fulfillment.

This opinion is also held by the Organisation of the Islamic Conference (OIC) Islamic Fiqh Academy. The Islamic Fiqh Academy, in its Resolution No. 63 (7/1) regarding financial markets, described various forms of commodity sales, stating:

Method Three: The contract provides for the delivery of described merchandise (as a pending obligation) at some future date, with payment of its price on delivery. It also stipulates that it shall end with the actual delivery and receipt of the merchandise. This contract is not permissible because of the deferment of both elements of the exchange. It may be amended to meet the well-known conditions of salam (advance payment). If that is done, it shall be permissible.

This decision met with agreement from other major deliverers of fatwās, for instance: ‘The European Council for Fatwa and Research confirmed Decision 63 (7/1) taken by the OIC Islamic Fiqh Academy concerning options trading and Dealing in Commodities, Currencies and Indices in Organized Markets.’ Usmani also found

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futures transactions impermissible because, according to the Sharī‘ah, the sale or purchase cannot be effected for a future date.\textsuperscript{45}

These opinions are based on a number of hadīths and the opinions of classical fiqh jurists of the Shāfi‘ī, Ḥanbalī and Ḥanafī Schools. According to al-Zuhaylī, the ‘top scholars of all schools of jurisprudence have agreed that the sale of non-existent objects and objects that may cease to exist’ is not valid;\textsuperscript{46} for example, ‘the sale of fruits and plants before they appear…sale of pearls in shells, milk in the udder, wool on the back of sheep, and a book before it is printed’.\textsuperscript{47} The following represent a sampling of hadīths prohibiting the sale of non-existent goods:

1. Jābir narrated that the Messenger of Allah (peace be upon him) forbade the sale of fruits until they ripen.\textsuperscript{48}

2. Abu al-Bakhtārī reported that he asked Ibn ‘Abbās about selling dates. He replied, “The Prophet (peace be upon him) forbade the sale of dates until they become fit for eating and can be weighed.” A man asked: “What does ‘to be weighed’ [mean exactly]?” Another man sitting beside Ibn ‘Abbās replied, “Until they can be estimated.”\textsuperscript{49}

3. Ibn ‘Abbās reported: “The Messenger of Allah (peace be upon him) prohibited the sale of fruit before its quality is known, the sale of wool on the back of sheep, and the sale of milk in the udder.”\textsuperscript{50}

The reason for ruling these contracts on non-existent assets to be invalid is due to indeterminacy (jahālah) and the existence of gharar. There is ignorance and uncertainty regarding the quality and quantity of the non-existent asset, which results


\textsuperscript{46} Al-Zuhaylī, p. 74.

\textsuperscript{47} Ibid., pp. 74-75.


\textsuperscript{49} Bukhari; \textit{Sahih Muslim}, no. 916.

\textsuperscript{50} Al-Ṭabarānī, quoted in al-Zuhaylī, p. 75.
in excessive risk;\textsuperscript{51} for example, in the case of sale of wool on the back of sheep, the uncertainty is because the wool is continuing to grow, making demarcation difficult.\textsuperscript{52}

However, Imām Malik considered it lawful to sell for a specified number of days the milk from the udders of a herd of sheep whose milk is homogeneous and productivity is known. On the other hand, he considered the sale of one sheep’s milk from the udder to be unlawful.\textsuperscript{53} This opinion illustrates that where jahālah and gharar are minimized sale of nonexistent items may be allowed.

Ibn al-Qayyim and his teacher Ibn Taymiyyah, of the Ḥanbalī School, permitted the sale of items that do not exit at the time of the contract if their future existence is known according to custom. Their reasoning was based on the fact that there is no clear-cut prohibition in the Qurʾān or Sunnah, and the ḥadīths that do prohibit sales of nonexistent goods describe situations of excessive risk and uncertainty in which the object may not be deliverable. They find that the sale of a nonexistent object is forbidden if there is ignorance about its future existence. The prohibition is based on excessive risk and uncertainty (gharar), not on the lack of existence.\textsuperscript{54}

Zahraa and Mahmor\textsuperscript{55} opine that although

\begin{quote}
a substantial majority of Muslim scholars stipulate that the subject matter must be in existence at the time the sale is concluded as an essential ingredient of the validity of the sale...the nonexistence of the subject matter does not necessarily invalidate the sale...[T]he absence of uncertainty and doubt regarding the qualitative and quantitative description of the subject matter as well as the safe availability, rather than existence of the subject matter, is the prime concern for the validity of the contract of sale.\textsuperscript{56}
\end{quote}

\textsuperscript{51} Ibid.
\textsuperscript{52} Ibid.
\textsuperscript{53} As for wool on the back of sheep, Imām Malik also ruled it to be valid since it is observable and deliverable. Ibid.
\textsuperscript{54} Ibid.
\textsuperscript{55} Mahdi Zahraa and Shafaai M. Mahmor, "The validity of contracts when the goods are not yet in existence in Islamic Law of sale of goods," \textit{Arab Law Quarterly} 17, no. 4 (2002).
\textsuperscript{56} Ibid. p. 397.
A similar approach is taken by Kahf. He does agree with the OIC Islamic Fiqh Academy decision that the classical *fiqh* position prohibiting delay of both items in a sale contract would make futures impermissible. However, he adds a practical reservation to the decision in relation to real-life contracts, stating:

> Businesses require planning in advance, and all parties have to contract their products and their inputs in advance, regardless of the idea of financing (remember that *salam* is only a financing contract). The simplest example is the letter of credit. It always includes sale with postponement of both delivery and price and they are both effected in a future date at the same time. I believe that the evidence from the Sunnah against postponement of the two items is very weak, and there is no claimed ‘*ijma’* on this issue, [which] I find one of the necessities of life, to the extent that it is impossible that our complete Sharī'ah would make it unlawful. Yet this is not to say that futures are permissible because I think only genuine trade with postponement of the two exchanged items (price and goods) is permissible, not the speculative practice on price change only, as it is normally in commodity futures.

Therefore, Kahf is of the opinion that deferment of the two counter-values should be permissible due to the necessities of life. However due to the speculatory nature of futures they should not be allowed.

Kamali opines that nonexistence of the counter-values in a futures or options contract will not amount to *gharar* because of the guarantee function of the clearing house, which exists for the purpose of preventing uncertainty and *gharar* over the fulfillment of the contract. “This is an unprecedented *gharar* prevention measure in the history of commerce in that the guarantee function we have here leaves nothing to chance, to the vagaries of climate, politics, or of the market-place.”

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58 No page number can be provided for this quote because the legal opinion (fatwa) is taken from a web page: http://www.islamonline.net/servlet/Satellite?pagename=IslamOnline-English-Ask_Scholar%2FFatwaE%2FFatwaEAskTheScholar&cid=111950354954
59 Kahf.
61 Ibid., p. 532.
Finally, when the Malaysian Securities Commission Sharī‘ah Advisory Council, at its eleventh meeting on 26 November, 1997, resolved that a futures contract on crude palm oil is permissible, it discussed the issue of buying a non-existent asset (bay‘ ma‘dûm) and clarified that the prohibition of bay‘ ma‘dûm was actually due to the presence of the element of uncertainty regarding the handover of the goods sold. Bay‘ ma‘dûm is prohibited because of the element of gharar rather than the element of nonexistence.  

Therefore, the nonexistence of the underlying asset may invalidate a contract. However, on further analysis, it is not the nonexistence of the asset per se, but rather, the existence of gharar that makes the contract invalid. If gharar can be removed, then the nonexistence of the subject matter at the time of the contract should not invalidate the contract.

4.1.3 Options Are a Mere Right to Buy or Sell; Charging of Fees for This is Not Permissible

In an option contract, payment of a premium is required to secure the right to buy (or sell) the underlying asset at a predetermined exercise price.

According to Usmani, an option is a promise, and such a promise is itself permissible and ‘normally binding on the promisor’. However, the fact that option transactions bear fees on the promises makes them invalid under the Sharī‘ah. This ruling, he opines, applies to all kinds of options, no matter whether they are call options or put options.

This view is based on the fact that options are rights and not tangible assets and, therefore, cannot be the subject matter of sale and purchase, as stated by the Organisation of the Islamic Conference (OIC) Islamic Fiqh Academy in Resolution No. 63/1/7 from its seventh session in 1412 AH (9-14 May 1992): ‘Option contracts as currently applied in the world financial markets are a new type of contract which

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63 Usmani, p. 10.
does not come under any one of the Sharī‘ah-nominated contracts. Since the object of
the contract is neither a sum of money nor a utility or a financial right which may be
waived, then the contract is not permissible in the Sharī‘ah.’ This decision of the OIC
Fiqh Academy was confirmed by the European Council for Fatwa and Research.

The same stance was taken by Delorenzo, who avers that the sale of options are
prohibited for the reason that they involve the sale to another party of nothing more
than a right to buy.64

Islamic law recognizes trading of intangibles such as service and usufruct (manfa‘ah);
however, a right given under an option may not be the same thing as usufruct. The
rights under an option do not have a tangible or material quality. They are similar to a
preemptive right, such as the rights of custody and guardianship, which are allowed in
the Sharī‘ah, but it does not allow to them to be sold for monetary compensation.65

Kamali disagrees that compensation is impermissible. He affirms that the concept of
options is valid under the Sharī‘ah under the concept of ikhtiyārāt, the origin of which
is traceable in the Sunnah, and it has been further developed through initiative and
ijtihād in the juristic writings of the ‘ulamā (scholars learned in Islamic law).66 On
the issue of options being a mere right and therefore not being amenable to sale and
purchase, Kamali considers the right given under an option to be of the same type of
intangibles as service and usufruct (manfa‘ah). He observes that, while the Shāfi‘ī and
Ḥanbalī schools included usufruct under the definition of property and the Ḥanafīs
and Mālikīs initially did not, Ḥanafī and Mālikī jurists of later periods generally came
around to the Shāfi‘ī and Ḥanbalī view and did include usufruct in the definition of
property.

He continues his argument on whether compensation is allowed under the Sharī‘ah by
stating that the typical ikhtiyār that the Sunnah validates is the option of stipulation
(khiyār al-sharf), which grants the buyer the option, within a time frame, to either

64 Yusuf Talal DeLorenzo, "Covered options, scholars’ answers" http://muslim-
65 Muhammad Ali Elgari, "Towards an Islamic stock market," Islamic Economic Studies 1, no. 1
66 Kamali, "Islamic commercial law: an analysis of options," p. 27.
ratify the contract or revoke it. Under such options, Kamali maintains that the Sunnah entitles the parties the freedom to insert stipulations that meet their legitimate needs and may be of benefit to them. Nevertheless, the liberty that is granted here is subject to the general condition that contractual stipulations may not overrule the clear injunctions of the Shari‘ah on halal and haram. Provided that this limitation is observed, in principle, there is no restriction on the nature and type of stipulation that the parties may wish to insert into a contract.67

Based on this argument of freedom to contract, Kamali holds that the freedom to insert stipulations in contracts is inclusive of a request for monetary compensation ‘or a fee for granting an option or a privilege. If the seller is entitled to stipulate for a security or a pawn, then it is a mere expansion of the same logic that he may charge the buyer and impose a fee or compensation in respect of such options and stipulations that are to the latter’s advantage.”68 Kamali concludes thereby that the imposition of a fee for the right granted by options is valid under the Shari‘ah.

Kamali’s stance is vigorously disputed by Obaidullah. Obaidullah does not dispute the validity of a sale with a condition where the condition is stipulation of an option (khiyār al-shart).69 Obaidullah even states that the contractual price is valid if it includes any compensation for the benefit provided by the seller if it places the seller at a disadvantage. However, in conventional options trading would imply separation of the compensation component and its up-front payment to the option writer or seller under a separate contract….A promise or obligation cannot be the object of sale, according to an overwhelming majority of scholars….In classical Shari‘ah law, before damān (guarantee) can operate one needs to show some illicit act (ta‘addi) or negligence (tafrīf) by the party required to compensate….Kamali also fails to cite a single reference of the great fuqahā (an expert in fiqh) of the past on the use of damān in the bay‘ wa sharṭ framework.”70

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67 Ibid., p. 29.
68 Ibid., p. 30.
70 Ibid., p. 80.
In other words, some disadvantage must have been occasioned before payment of compensation is allowed.

The only issue here is whether a right given in an option is valid as the subject matter of a sale and purchase agreement. The Islamic Fiqh Academy,\textsuperscript{71} Elgari,\textsuperscript{72} and Obaidullah argue that a ‘right’, being intangible, is not property.\textsuperscript{73} However, if services and usufruct are considered property and therefore allowed to be subject matter of a sale, why should a right provided under an option not be so considered? The limitation of commercially valid rights to services and usufruct seems artificial; especially when an option is used for hedging, providing the buyer the right to prevent losses. Kamali’s view appears to be more sound.\textsuperscript{74} Furthermore, the argument that the seller has to occasion a disadvantage for compensation to be given does apply in options. Since the options buyer is not obliged to buy or sell the underlying commodity, he may let the option lapse, in which case his greatest loss would be the premium; however, the seller’s gain would be the premium alone while the losses could be unlimited, depending on the price movement of the underlying asset. The seller or writer of the option thus takes a more disadvantageous position and, therefore, asking compensation should be allowed under the circumstances.

### 4.1.4 Futures Sales Fall Short of Meeting the Requirements of Taking Possession of the Item Prior to Resale

The majority of buyers and sellers in futures and options transactions reverse out of their position before delivery or maturity. This means that physical delivery hardly ever takes place in futures and options; for example, 99\% of all futures contracts are settled before maturity.\textsuperscript{75} This feature of derivative trading, i.e. sale before delivery is made or selling something one does not possess, has been subject to intense criticism by Islamic scholars.

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\textsuperscript{71} OIC Fiqh Academy.  
\textsuperscript{72} Elgari.  
\textsuperscript{73} Obaidullah, "Financial engineering with Islamic options."  
\textsuperscript{74} Kamali, "Islamic commercial law: an analysis of options."  
\textsuperscript{75} Al-Suwailim, p. 43.
A. Khan states that only 1% of the contracts in a futures market actually mature into physical delivery. Therefore, commodities are nonexistent, there is no physical transfer or delivery, and successive sales are made without anyone actually possessing the commodity. He concludes, therefore, that all transactions in the chain are unlawful. A primary objection to this feature is that a number of intermediaries make money without adding any form of utility to the commodity; i.e., they earn money without giving anything in recompense. Actual physical delivery of the commodity is good because it creates jobs from storage, transport and packaging.

The Islamic Fiqh Academy, in Resolution No. 63 (7/1) of its seventh session in 1412 AH (9-14 May, 1992) described the fourth method of commodity sale thus:

The contract provides for the delivery of described merchandise (as a pending obligation) at some future date, with payment of its price on delivery. The contract, however, does not stipulate that it shall end with the actual delivery and receipt of the merchandise, and thus it may be terminated by an opposite contract. This type of contract is the most prevalent in the commodity markets. It is not at all permissible. Moreover, it is not permissible to sell a commodity purchased with advance payment by salam unless the merchandise has already been received.

As mentioned earlier, this decision of the OIC Fiqh Academy was confirmed by the European Council for Fatwa and Research.

A similar opinion was delivered by the Islamic Fiqh Academy (India), Ninth Seminar (year was not given), when discussing buying and selling before getting possession. Although the Indian Academy did not specifically name futures and options contract in particular, they did opine that a 'selling deal before getting possession' is prohibited because there is always a risk of rescission. That would mean that if the sold-off property does not come under the real possession of the first buyer it is possible that it...

77 Ibid., p. 99.
may not come under his ownership at all, and hence, he might not be able to hand it over to a second buyer.\textsuperscript{79}

Usmani contends that in most futures transactions neither delivery of the commodities nor their possession is intended. In most cases the transaction ends with a settlement of difference of price only, which is not allowed in the Sharī‘ah.\textsuperscript{80}

Naughton & Naughton\textsuperscript{81} and Chapra\textsuperscript{82} opine that short selling (the sale of securities that the seller does not own at the time of the sale or does not intend to deliver) serves no proper economic function. Thus, the public interest would be better served by prohibiting short sales and requiring a 100% margin.

The same stance is taken by Elgari,\textsuperscript{83} who states that a commodity bought under a forward or future contract must be delivered before being disposed of by sale; i.e. the buyer must wait until delivery to be able to resell it. “Commodities in organised futures markets are bought and sold several times before actual delivery; otherwise the market will fail to provide liquidity, which is an essential part of the mechanism. But from a Sharī‘ah perspective, even in standard sale contracts, it is not permitted that the buyer sells before actual receipt of the purchased item.”\textsuperscript{84}

\textsuperscript{79} Islamic Fiqh Academy (India), "Ninth Seminar: buying and selling before getting possession" http://ifa-india.org/english/decision_Possession.html (accessed May 11, 2006).
\textsuperscript{80} Usmani.
\textsuperscript{84} Ibid., p. 16.
These legal opinions are based on a number of hadiths; for example:

1. Ḥakīm b. Hizām relates that he asked the Prophet (peace be upon him): “A man comes to me and asks me to sell him something that I do not have. Should I sell it to him and then go and acquire it for him from the marketplace?” The Prophet (peace be upon him) replied: “Do not sell what you do not have.” [Sunan al-Tirmidhī (1232), Sunan Abu Dawud (3503), Sunan al-Nasāʾī (4611), and Sunan Ibn Mājah (2187)].

2. Ibn ‘Abbās narrated that the Messenger of Allah (peace be upon him) said: “He who purchases food should not sell until he takes possession of it.” Ibn ‘Abbās said, “Every sale is subject to this condition.”

3. Abū Hurayrah asked Marwān, “Have you legalised usury?” Marwān said, “No.” Abū Hurayrah said, “You have legalised selling promissory notes, whereas the Messenger of Allah (peace be upon him) forbade selling foodstuffs unless received by the seller.” Marwān then addressed the people and forbade selling such notes. Sulaymān said, “I saw the guards taking them out of people’s hands.”

Scholars differ regarding the meaning of what actually should not be sold before receiving possession.

The Ḣanbalīs essentially limit the rule to foodstuffs subject to the prohibition of ribā in barter; i.e., it is not lawful to sell food prior to its receipt if it is measured by

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85 Kamali, "Islamic commercial law: an analysis of futures." He separated his analysis and discussion of the first hadith (do not sell what is not with you, pp. 205-208) from the rest. The latter three hadiths he explained under the requirement of qabāl or possession (pp. 208-211). However, other scholars have made no distinction between these two groups of hadiths. (See, for example, al-Zuhaylī, pp. 74-76.) This author takes the latter approach, i.e. all the hadiths will be discussed under one category because both groups point to the issue of the seller not owning or possessing the goods before resale. Further, the legal opinions reviewed in the section above have discussed these two issues under one legal objection, not two.


87 Sahih Muslim, no. 909.

88 Ibid., no. 910.
volume, weight or number. The Mālikīs limit the rule to any food, whether or not it is of a genus subject to ribā. The Ḥanafīs prohibit resale of any movable object prior to receiving it; while the Shāfīʿīs apply the rule without any exclusions; i.e., it is not permissible to sell any item, movable or immovable, when the seller’s ownership is not complete.\(^{89}\)

Al-Suwailem prefers Ibn Taymiyyah’s opinion.\(^{90}\) According to Ibn Taymiyyah, the meaning of ‘what you do not have’ is what you are unsure that you will be able to acquire. It may be that the product being sold is not readily available in the marketplace or may only be available at a price higher than the one it is being sold for. In such circumstances, either the buyer or seller will be injured by the sale.\(^{91}\)

Therefore, according to this opinion, if the product being sold is not in the possession of the seller, then he may not sell it right away. What he should do is request his customer to give him some time to verify the availability and price of the product, and if he wants to purchase it afterwards, he can do so. On the other hand, ‘if the product is easily available to the seller from some other vendor or supplier at a known price, then from a legal standpoint it is effectively—though not literally—in the seller’s possession. In this case, such a sale does not come under the Prophet’s prohibition.’\(^{92}\)

Kamali remarks that contemporary writers such as Yusuf Musa,\(^{93}\) Ali Abd al-Qadir,\(^{94}\) and Yusuf al Qardawi,\(^{95}\) have drawn attention to the fact that the marketplace of Madinah during the Prophet’s era was so small that it could not guarantee regular supplies at any given time. This would, therefore, provide a plausible explanation for the prohibition stated in the hadīth: uncertainty with regard to the ability to deliver.\(^{96}\) However, in modern times, when the seller can find the goods at almost any time and

\(^{89}\) Al-Zuhayli.

\(^{90}\) Al-Suwailem, "Fatwa archives, commerce and employment".


\(^{92}\) Ibid.


\(^{95}\) Yusuf al-Qardawi, Bay al-murābahah li al-āmīr bi al-shirāʾ, 2nd ed. (Cairo: Maktābat Wahḥāb, 1987).

\(^{96}\) Kamali, "Islamic commercial law: an analysis of futures." p. 207.
make the necessary deliveries, such prohibition would no longer be applicable. ‘[T]he fear of not being able to find the good and make delivery (the basic rationale of the original prohibition) is now irrelevant.’ 97

Obaidullah acknowledges that the nature of options and futures contracts today makes them standardised, transparent operating procedures. Due to the easy availability of goods, the probability of failure to deliver, leading to gharar, becomes negligible. However, he negates Kamali’s argument on this basis by reiterating that options and futures contracts almost never involve delivery by both parties; thus, they still lead to gharar from another angle. 98

To reprise the legal opinions stated above: for a sale to be valid there must be a transfer of ownership of the item sold; if the seller does not possess the item he cannot transfer ownership. The paramount reason for this prohibition would seem to be due to gharar, uncertainty about delivery of the goods purchased. 99 However, according to Ibn Taymiyyah’s opinion, if the item is easily available in the market then the prohibition would not apply. This opinion fits well with the reason for the prohibition, i.e. to prohibit gharar. If the commodity or asset is easily available the issue of gharar would not arise. This opinion also has practical utility. To prohibit a person from selling items he does not possess but knows he can easily obtain, requiring him to first take possession of the item before reselling it, would cause a delay in the completion of commercial transactions. The impact of such a rule would be particularly severe on international business, which would be greatly hampered and made difficult to complete, especially global trade between countries.

4.1.5 Futures and Option Trading Involves Speculation and Verges on Gambling and Gharar

The issue of gharar has been raised numerous times in the foregoing discussion. It is the underlying reason that scholars have objected to:

97 Ibid., p. 208.
99 Obaidullah, "Financial engineering with Islamic options."
• the sale of one debt for another,
• sales of nonexistent objects, and
• sales of items before taking possession of them.

The following discussion of *gharar*, on the other hand, is linked to the issue of gambling, the zero-sum nature of derivatives, and pure uncertainty about the outcome of the contract.

A. Khan states that speculation per se is not unlawful in an Islamic framework; however, ‘speculators cannot thrive’ in an Islamic framework because each transaction requires physical delivery.100 Furthermore, speculation often requires borrowed funds on interest, which is not allowed in Islam. Also, in an Islamic economy the liability of the borrower is unlimited. This would not favour speculators, who would not want to expose all their assets to infinite risk. ‘Therefore we believe that the Islamic framework leaves little room for speculators.’101

Wilson, in discussing the validity of futures and options under the Sharī‘ah, explains that it expects the highest moral standards from traders.102 The responsibility of traders includes not only honesty in all dealings and behaviour free of exploitation, but the trade itself should also be productive and socially desirable. Wilson opines that these requirements automatically preclude speculative behavior, which is ‘both unproductive and socially undesirable because of its potentially exploitative nature’.103 It is for this reason Wilson concludes that forward, futures and option dealing are viewed as ‘potentially corrupting’.104 Wilson also avers that ‘options and futures contracts cannot be traded under the Sharī‘ah because they are too remote from the underlying assets’,105 which is *gharar*.
Obaidullah asserts that excessive uncertainty or *gharar* leads to the possibility of speculation, which is forbidden; the worst form of speculation being gambling. Obaidullah then goes on to explore whether conventional options involve excessive risk. He notes that in options the buyer and seller have diametrically opposite expectations; the gains of the buyer equal the losses of the seller and vice versa. He concludes that the sale of options is a risky zero-sum game. Obaidullah explains that the possibility of speculating on the future direction of the price of the underlying asset due to random fluctuation in prices, causes the gains and losses to the parties to be random, too, resulting in the options contract being nothing more than a game of chance. The gains are therefore in the nature of *maysir*, and the possibility of massive losses indicate a possibility of default by the loser and, hence, *gharar*. Obaidullah concludes his discussion on options by stating that “options as an independent contract may not be a suitable form of hedging or managing risk….These can be used for speculating on price movements and generate unearned income, which violates Islamic norms of financial ethics.”

Obaidullah extends the same argument to futures as well. He states that conventional financial markets tolerate the presence of large-scale speculation in options and futures on the grounds that they provide liquidity and ensure active markets. The speculators’ presence is seen to improve operational efficiency of the market by bringing transaction costs down. However, this tolerance of gambling because of its efficacy as a hedging facility will not apply in the Islamic framework, which decisively rejects zero-sum transactions.

A similar stance is taken by DeLorenzo. The scholar classifies both options and futures as intangibles that are part of zero-sum markets in which any gains that take place must be accompanied by corresponding losses. Delorenzo states that this sort of economic activity is clearly forbidden in the Shari‘ah. The scholar adds that

106 Obaidullah, "Financial engineering with Islamic options," p. 84.
107 Ibid., p. 100.
109 DeLorenzo.
proponents of futures and options markets may argue that these activities perform the function of stabilizing prices and regulating risk, but as far as the Sharī‘ah is concerned, these markets produce nothing of value. He concludes that ‘options and futures amount to bets on the direction the market is moving in. Obviously, the ethics of this market are unacceptable.’

El-Gamal stresses that financial options are pure gharar. He goes on to explain that this does not mean that they are necessarily going to be considered invalid forever because if jurists find the benefit for allowing them to be overwhelming, then it may be endorsed. As an example, El-Gamal explains that the salam contract contains gharar since the object of sale does not exist at the time of the contract; however, it is considered permissible due to the need for this contract to improve economic efficiency.

F. Khan opines that the current future (and option) markets, which developed from the forwards market, are a total departure from the original concept and philosophy of forward sale. The futures market today allows traders to sell and purchase future contracts without the intention of making or receiving delivery. Khan observes that producers and farmers are forced to compete with the pure speculators and that the futures markets today is an independent industry in which traders can earn income by trading risks without ever getting involved in actual production or delivery of any commodity. Speculators use futures market to make a great deal of profit by guessing future prices. Khan feels this type of profit through speculation discourages producers and farmers; when it is possible to make profit without producing, then why bother with production? He argues that Islamic economic philosophy does not permit pure speculation. The primary concern in Islam is commodity exchange and not merely financial exchange for the purpose of making economic gains. The Islamic spirit of

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110 Ibid.
exchange is totally against this philosophy that isolates the producers from the markets.

Kahf concurs that futures markets are very speculative and stresses that only a small percentage of transactions end up being implemented; therefore, these contracts are inadmissible.\textsuperscript{113}

Al-Suwailem explains that in a zero-sum game one party gains at the expense of the other. It is a ‘transfer of wealth for no counter-value’, which, he opines, is ‘condemned in the Qur’ān’.\textsuperscript{114} He explains that the interests of the parties to a zero-sum game are in direct conflict. The expected outcome of such conflicting interests is hatred between the two parties, which is one of the reasons why maysir is prohibited in the Qur’ān: “Satan only wants to plant enmity and hatred among you through wine and maysir.”\textsuperscript{115} Al-Suwailem argues that derivatives are clear examples of zero-sum games. They are obligations to exchange goods with money or just certain amounts of money at a future date. In the latter type of contracts the difference between the price at the time of contract and that at maturity is debited from one party and credited to the other, and that is why they are called contracts for differences. Al-Suwailem suggests that to achieve desirable risk transfer, Islamic finance must utilize structures that allow for mutual gain, in other words, non-zero-sum games. ‘Such games, while implying the possibility of zero-sum outcome, permit a positive-sum outcome, and thus provide room for mutual benefits.’\textsuperscript{116}

Contrary to the above arguments, the Malaysian Securities Commission Sharī‘ah Advisory Council, at its 11\textsuperscript{th} Meeting on 26 November, 1997, resolved that futures contracts on crude palm oil are permissible, and at its 13\textsuperscript{th} meeting on 19\textsuperscript{th} March 1998, it resolved that the mechanism for stock-index futures contracts does not contradict Sharī‘ah principles. The SAC ruled that as long as the index component is made up of Sharī‘ah-compliant securities, stock-index trading is allowed. In making their ruling the SAC had to deal with issues of gambling, gharar, jahālah and

\textsuperscript{113} Kahf.
\textsuperscript{114} Al-Suwailem, "Hedging in Islamic finance. Occasional paper no. 10." p. 73.
\textsuperscript{115} Qur’ān 6:91
\textsuperscript{116} Al-Suwailem, p. 85.
speculation before ruling that the two types of futures contracts were permissible in the Shari‘ah.

On the issue of gambling the SAC explained that the requirement imposed on a market player to place a deposit as a margin of payment before he begins trading, did not constitute a bet, as some had argued. The fluctuation of the value of the commodity (crude palm oil) occurs due to the change in demand in the crude-oil futures market and is not a gambling activity because ‘gambling activities depend solely on luck and are not related to demand and offer’."117

As for the buying and selling of the index, the SAC ruled that it is not gambling because it has no similarity with losing a bet. The SAC explained that in gambling, the player loses all his money if he makes a wrong guess. The SAC opined that this does not happen in index trading as the total index point has its own inherent value. ‘What happens is, the investor will experience a decrease or increase in the value depending on the demand for the total number of shares that comprise the index component. Index trading does not involve any element of betting."118

As for gharar, the SAC defined it as something that is not certain. It is uncertainty in obtaining goods that have been bought and in receiving potential profits. The SAC opined that profit and loss in business is a common factor and that a trader should take steps to minimise it. When a crude-oil futures contract is offered, specifications such as quantity, type, price and delivery date are made known to the market players. Therefore, there is no element of gharar in the contract. ‘All specifications are made clear in the contract, and surveillance and regulation are provided to ensure there is no cheating."119

As for stock-index future contracts, the SAC held that they do not contain elements of jahālah and gharar, as they are traded in clear quantities, and no vagueness in price or

117 Securities Commission, p. 76.
118 Ibid., p. 81.
119 Ibid., p. 77.
quantity exists. ‘The price is determined by the market based on demand and supply.’  

On the issue of speculation, the SAC states that speculation exists in all forms of business and is not unique to futures transactions.

The underlying justifications for the SAC’s ruling seem to have been developed in a total vacuum, oblivious to the surrounding Sharī‘ah scholarly opinion on derivatives at that time. First, this resolution was made in 1997; the SAC should have known of the arguments of F. Khan, A. Khan, Kamali, and the OIC Fiqh Council’s fatwā, at the very least. None of these authors’ arguments were countered or supported. Second, none of the arguments of these authors have been dealt with appropriately, except for the general headings of gharar, gambling, etc. Third, the SAC did not discuss the reality of futures trading. Even though it involves trading in commodity futures, most players do not take possession; this was not dealt with. If the SAC had sufficiently discussed the various scholarly opinions present at that time, its resolution would definitely have been more persuasive and of heavier weight.

Bacha believes that elimination of speculative activity would hurt rather than help, because without speculators, hedgers would be hurt.  

A similar viewpoint is taken by Kamali. In Kamali’s opinion, speculation cannot be altogether eliminated; even Islamic transactions such as muḍārabah and mushārakah are highly speculative. Kamali opines that ‘speculation deals in risks that are necessarily present, but gambling creates the risk that would otherwise be nonexistent’. Kamali argues that in a futures market risk shifts from those who are unwilling to take it to those who are, and that, even if the ‘motivations of a speculator could be identical with those of a gambler’, there are differences between the two

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120 Ibid., p. 81.
122 Kamali, "Prospects for an Islamic derivative market in Malaysia."
123 Ibid., p. 533.
because futures speculation ‘reallocates risk from those who do not want it to those who do’. 124

Kamali further contends that derivatives lack the vital element of gambling, which is the wrongful misappropriation of the property of others. He claims that derivatives facilitate price discovery, hedge ‘production planning’, and ‘create trading vehicles’ and an ‘arena for profitable commerce that can avert the flight of much needed funds to foreign markets’. 125

These advantages of derivatives are also highlighted by Smolarski et al., who claim that the criticisms that options are gharar and gambling does not take into account their risk reduction utility, whereby options are bought and sold to prevent losses. 126 The authors further argue that each option contract is ‘standardized in terms of duration, quantity, type of option and so on’. 127 This also means that mutual consent between the parties exists throughout the trading, settlement and clearing processes. Furthermore, the third party which monitors the trading, settlement and clearing process ensures that the terms of the contract agreed to by mutual consent are carried out as promised, which ensures fairness. ‘This process helps to ensure that gharar prevention is maximized, since there is a substantial reduction in the risk within the financial system. Thus the requirement that functional and operational gharar be avoided is largely met.’ 128

In summary, the majority of scholars believe that speculation in derivatives leads to excessive uncertainty that amounts to gambling. They consider derivatives to be clear examples of zero-sum games, mere contracts of differences—a means of gambling and betting. The counterargument seeks to highlight the advantages of derivatives, such as price discovery, creating trading vehicles and an arena for profitable commerce. Further, its proponents argue that standardisation of the contracts,

124 Ibid., p. 534.  
125 Ibid., p. 535.  
127 Ibid., p. 437.  
128 Ibid.
monitoring by third parties and mutual consent between the parties of the contract help minimise gharar.

The single most important objection to derivatives centers on the element of gharar. Therefore, if gharar can be removed there may be a possibility of derivatives being more widely used in Islamic finance. However, the fact remains that the overwhelming opinion of the scholars firmly holds derivatives to be impermissible. Notwithstanding that fact, there is some use of conventional derivatives in Islamic finance. A matter that requires further examination is the extent of that use.

### 4.2 Conventional Derivatives in Islamic Finance

In 1997 the Sharī‘ah Advisory Council (SAC) of the Securities Commission in Malaysia resolved that futures contracts on crude palm oil are permissible and in accord with Sharī‘ah principles.

Then in 1998, the SAC resolved that the mechanism for stock-index futures contracts does not contradict Sharī‘ah principles and that stock-index trading is allowed as long as it is Sharī‘ah compliant, which is accomplished by ensuring that the index component is made up of Sharī‘ah-compliant securities.

Later, in 2006, the SAC approved another derivative instrument: the single stock futures (SSF). As long as the underlying stocks of the SSF were Sharī‘ah compliant, the SSF was considered permissible. Five of the ten SSFs trading on Bursa Malaysia Derivatives Berhad were deemed Sharī‘ah compliant, namely

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129 A composite index-futures contract is created when a total number of shares which form the index components are made the underlying asset to the instrument. The share index is a benchmark which indicates the performance of the share/equity market. The contract is an agreement between a buyer and seller to receive and hand over a certain number of shares comprising the selected share components at an agreed price and at a determined future date. However, the agreed price is not paid in full, merely a margin value until a full settlement is made.’ Securities Commission. p. 80.

130 Ibid.

AirAsia, IOI Corporation, Maxis Communications, Scomi Group and Telekom Malaysia.\textsuperscript{132}

In the same year, on the 12\textsuperscript{th} of September, the International Swaps and Derivatives Association (ISDA) and the International Islamic Financial Market (IIFM) signed a Memorandum of Understanding as a basis for developing a master agreement for documenting privately negotiated Sharī‘ah-compliant derivatives transactions. ISDA and IIFM intend that the agreement will be accepted by Sharī‘ah advisors and become a standard document used for Sharī‘ah-compliant privately-negotiated derivatives around the world.\textsuperscript{133}

In November, 2006, Malaysia witnessed the signing of the derivative master agreement to document Islamic derivative transactions between Bank Islam Malaysia Bhd. and Bank Muamalat Malaysia Bhd.\textsuperscript{134}

These developments indicate that, despite the objections raised by scholars (discussed above), derivatives are present in Islamic finance and are likely to have a greater presence.

However all these developments have been primarily in Malaysia; there has yet to be a similar movement to adopt derivatives in other parts of the Islamic financial world. Perhaps this is due to the overwhelming objections to these instruments.

Contracts that share certain features with derivatives can, however, be found in the Sharī‘ah. These contracts have been used to develop derivative-like contracts that have gained greater acceptance with scholars in Islamic finance.

\textsuperscript{132} Securities Commission.


\textsuperscript{134} "Banks sign Islamic derivatives agreement," The Star, 23 November, 2006.
5.0 ISLAMIC DERIVATIVES

Islamic instruments that have derivative-like features or can be used to develop derivative-like instruments include salam, īstīṣnāʿ, 'arbān, īstijrār, Islamic swaps, khiyār al-sharṭ, waʿd and jiʿālah. Some of these are being further developed, and some are already used in Islamic finance.

The bayʿ al-salam allows delivery of an asset at a predetermined future date with the price being paid in full today. Salam can be compared to a forward contract except for the fact that in a salam contract only one party defers his contractual obligation. Further, in a salam contract the goods have to be defined and the date of delivery has to be fixed. ‘The objects of this type of sale are mainly tangible things, but exclude gold or silver, as these are regarded as monetary values. Barring these, bayʿ salam covers almost all things which are capable of being definitely described as to quantity, quality and workmanship.’ It should be noted that the parties cannot reserve an option to rescind the contract, but the option of revoking it on account of a defect in the subject matter is allowed. Islamic banks also adopt it as a mode of financing.

Īstīṣnāʿ is another deferred-sale contract, in which the price is paid in installments as the work progresses in manufacturing or building an object. The īstīṣnāʿ contract will provide specifications for the item that the manufacturer will undertake to manufacture. In a typical īstīṣnāʿ contract the Islamic financial institution funds the manufacturer during the construction of the asset, acquires title to that asset on completion, and either immediately passes title to the developer on agreed deferred-payment terms or, possibly, leases the asset to the developer.

There a number of differences between salam and īstīṣnāʿ. First, the īstīṣnāʿ contract must always be utilised for assets which are to be manufactured, with great attention

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136 ‘As a form of financing, the purchaser is able to acquire the assets by advance payment at a discounted price and subsequently sells the assets upon delivery, either back to the seller or to a third party for a profit.’ http://www.nortonrose.com/html_pubs/view.asp?id=5997, Norton Rose Publications 2006. Retrieved 27 June, 2006.
138 Ibid.
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given to the specifications of the ordered goods, whereas salam has a wider scope than this. Also, in contrast to an istiṣnā’ contract, the purchase price for the asset in a salam contract must be paid in full at the outset, and the date for delivery must also be fixed. This is not a fundamental requirement for istiṣnā’, since production will be in stages and may require capital to be given in installments. Specifying the time of delivery is an essential part of the salam sale, while in istiṣnā’ the time of delivery need not be fixed. ‘Lastly, the contract of salam, once effected, cannot be canceled unilaterally, while the contract of istiṣnā’ can be cancelled before the manufacturer begins work.’

Bay‘ al-‘arbūn is a sale in which the buyer deposits earnest money with the seller as part payment of the price in advance and agrees that if he does not continue with the contract he will forfeit the deposit money, which the seller can keep. If the buyer, after some time, decides to go ahead with the transaction, the payment is adjusted for the initial deposit. As can be seen, bay‘ al-‘arbūn is similar to a call option, except that in the call option the down payment is not subtracted from the contract price, and secondly, in the case of bay‘ al-‘arbūn the future price is known on the day of the contract agreement.

The legality of bay‘ al-‘arbūn is still unsettled. The Ḥanbalī School considers bay‘ al-‘arbūn a legal contract, but the other schools object to it and rule that it is invalid; first, because it is considered akin to misappropriating the property of others, and secondly, it involves an indeterminate option or condition, which amounts to gharar. But a number of contemporary scholars have proposed its use as an Islamic derivative, for example, Al-Amine and Kamali.

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140 Obaidullah, “Financial contracting in currency markets: an Islamic evaluation.”
141 M.M.A. Al-Amine, "Arbun, risk management and options," Journal of Islamic Banking and Finance 17, no. 4 (2000). The source of the difference of opinion lies in two ḥadīths of disputed authenticity. The majority rely on a ḥadīth reported by Imām Mālik in al-Muwāṭṭa’ as well as by Imam Aḥmad, al-Nasā’ī Abū Dāwūd and Ibn Mājah to the effect that the Prophet (peace be upon him) prohibited ‘arbūn sales. However, the ḥadīth is considered to be weak. The Ḥanbalī School relied on a ḥadīth reported by ‘Abd al-Razzāq to the effect that the Prophet (peace be upon him) was asked about the ‘arbūn sale and he declared it permissible.
*Istijrār* contracts are more complicated. They involve two parties: the buyer, which is usually a company seeking financing to purchase an underlying asset, and a financial institution. The financial institution buys the commodity at the prevailing price and resells it to the company at a price to be paid at a specified date in the future. The actual price at that date depends on the underlying asset’s price movement from the day of the contract initiation to the day of maturity. The contract also includes an upper-bound option and a lower-bound option, by which the parties can choose to fix the price at which settlement will occur at any time before contract maturity.\(^{144}\)

**Diagram 1: An Example of the *Istijrār* Contract**

\[\text{A} \quad \begin{align*}
1 & \text{Financial Institution buys asset} \\
2 & \text{Resells Asset at a price to be determined at a future date}
\end{align*} \]

\[\text{B} \quad \begin{align*}
3 & \text{A has the option to fix price if it falls such that it breaks the lower bound before date of maturity (put option)} \\
4 & \text{B has the option to fix the price of the commodity before the maturity date if the price of the commodity moves upward to a predetermined level (call option)}
\end{align*} \]

(Source: Adopted and modified from Bacha 1999, 11)

Another interesting development for Islamic derivatives is the use of *wa‘d*. Dar has highlighted its introduction and its use as a tool to create Islamic derivatives.\(^{145}\) *Wa‘d* is a promise or undertaking. It is unbinding and has no value; however, in certain

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\(^{142}\) Al-Amine.


\(^{144}\) Bacha, "Derivative instruments and Islamic finance: some thoughts for a reconsideration.”

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circumstances a promise will be valuable and binding. The OIC *fiqh* puts the following requirements for a *wa’d* to be binding:

1. It must be unilateral.
2. It must have caused the promisee to have incurred some costs/obligations.
3. If the promise is to purchase something, then the actual sale must take place at the appointed time by the exchange of offer and acceptance. Mere promise itself should not be taken as the concluded sale.
4. If the promisor reneges, the court may force them to either purchase the commodity or pay actual damages to the seller. The actual damages will include the actual losses suffered by the promise and will not include the opportunity lost.

Given these conditions attached to a *wa’d*, Dar is of the opinion that it can be used to create innovative products that incorporate characteristics of an option.

Islamic swaps were introduced by CIMB in 2004. The common types of Islamic swap structures used are the Islamic Profit Rate Swap (IPRS) and the Islamic Cross Currency Swap (ICCS). The former instrument is used to swap or exchange floating payment obligations with fixed payment obligations (or vice versa) for the purposes of hedging. The ICCS is used to hedge against fluctuations in currency rates by swapping or exchanging a series of profit payments in one currency for another currency. The common underlying Islamic contracts used by the banks in Islamic swaps are *tawarruq*, commodity *murābahah* and *wa’d*.

An example is the Kuwait Finance House’s (KFH) Ijarah Rental Swap-i, where a payer or receiver of floating rental payments can swap its floating rental into fixed rental, or vice versa, for a predetermined time period.147 *Wa’d* comes into play as

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146 Ibid., p. 11.
147 Although KFH has entered into the Ijarah Rental Swap-i, there are those who oppose the structure because of the use of the interest rate benchmark. DeLorenzo for example opines, “The purpose of this swap is to bring returns that are not compliant to Shariah investors, and everyone knows it….It is a mistake to say that the *harām* basket is no more than a benchmark….. If you're going to swap returns of one basket of performing assets for another, then you must insist that the assets in both baskets are *halāl*. Only then can you be sure of receiving returns that are *halāl*.” Kuwait Finance House, “Calyon London and Kuwait Finance House (Malaysia) Berhad conclude Ijarah Rental Swap Agreement- a first between two international financial institutions”, Kuwait Finance House http://www.kfh.com.my/about_us/media_centre/news_events/articles/article.php?intPrefLangID=1&intArticleID=86
well: the promise agreement by which returns from one basket of assets are swapped with fixed returns. The floating interest-rate benchmark is usually derived from the KLIBOR (Kuala Lumpur Inter-Bank Offered Rate) or the LIBOR (London Inter-Bank Offered Rate) benchmark.\textsuperscript{148}

To understand how exactly these Islamic swap instruments are carried out, the IPRS and ICCS are explained in greater detail below.\textsuperscript{149}

The IPRS is a bilateral agreement between parties to make regular payments to each other at agreed intervals. These instruments are used to hedge against adverse profit-rate movements, usually by exchanging cash flow from fixed to floating (or vice versa) within the same currency. The commodity transaction is used to facilitate the transfer of cash flow at each settlement date. The amount and the period of time between the regular payments are customizable, according to the client’s and bank’s needs.

As for the structure, the fixed rate is determined at the start of the contract and remains the same until the end of the tenure and agreed reset date. The floating rate is referenced to an index and is determined at every settlement date. The notional may or may not be exchanged; usually, only the net-off amount is exchanged at each settlement date.

Example: A client has a RM2 million rental obligation with a two-year remaining tenure. The client is paying a floating rental by paying a KLIBOR flat every quarter and wishes to manage its portfolio into fixed-profit assets.

The Islamic bank agrees to swap the floating rental payments with a fixed rate for the next two years at 3.5%. In other words, the client will give the Islamic bank the rental


\textsuperscript{149} Information on the workings of these structures was obtained through interviews with treasury personnel of Islamic banks in Malaysia in late 2009 and also from Asyraf Wajdi Dusuki, “\textit{Shar\\’ah parameters on Islamic foreign exchange swap as a hedging mechanism in Islamic finance},” \textit{ISRA International Journal of Islamic Finance} 1, no. 1 (2009).
based on KLIBOR, and the Islamic bank will swap this with the client at the fixed rate of 3.5%.

Through the use of commodity *murābahah* or *tawarruq* or *musāwamah*, the Islamic bank carries out the IPRS in the following manner

**Diagram 2: An Example of IPRS**

**FIRST LEG – Islamic bank buys commodity from client- RM2m x 3.5% x 3 months**

1. Step 1: Client buys commodity through Islamic bank from Trader B
2. Step 2: Islamic Bank buys commodity from client at cost plus fixed rate at 3.5% pa
3. Step 3: Islamic bank sells off the commodity at cost
SECOND LEG: Client buys commodity from Islamic bank – RM2m x KLIBOR x 3months

| Step 4: Islamic bank buys commodity from Trader A |
| Step 5: Islamic bank sells commodity from client at Cost + KLIBOR (assuming KLIBOR is floating at 2.5%) |
| Step 6: Islamic bank assists the client to sell off the commodity at cost. |

<table>
<thead>
<tr>
<th>Client</th>
<th>Islamic bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM2mil x 3.5% x 92/365 = RM17,643.80</td>
<td>RM2mil x 2.5% x 92/365 = RM12,602.26</td>
</tr>
</tbody>
</table>

Islamic bank to pay net-off (muqāṣṣah) to client, an amount of RM5041.20

Source: Modified from interviews with Islamic bankers, and Dusuki 2009, 85-86

The ISSC is also a bilateral agreement between two parties to make regular payments to each other at an agreed interval, but in two different currencies. It is used as a risk-management tool to hedge both the foreign-currency rate and the profit-rate risk. The
bilateral payments can be done in different arrangements: fixed-floating, floating-floating, fixed-fixed and float-fixed. A commodity transaction is used to facilitate the transfer of cash flow at every settlement date.

Example: A client receives fixed investment returns in US Dollars (USD) but requires Malaysian ringgit (RM) to pay for its liabilities. Thus the client receives 5% quarterly for 5 years for its USD10m investment. This it swaps with an Islamic bank for ringgits, based on KLIBOR. The exchange rate is fixed, thus hedging against FX rates.

Through the use of commodity *murābahah* or *tawarruq*, the Islamic bank carries out the ICCS in the following manner:

**Diagram 3: An Example of ICCS**

**FIRST LEG – Islamic bank buys commodity and pays client cost x KLIBOR in RM**

1. **Step 1:** Client buys commodity through Islamic bank from Trader B
2. **Step 2:** Islamic Bank buys commodity from client at cost x KLIBOR in RM (assuming that KLIBOR is floating)
3. **Step 3:** Islamic bank sells off the commodity at cost
SECOND LEG: Client buys commodity and pays Islamic bank cost + 5% USD.

Step 4: Islamic bank buys commodity from Trader A
Step 5: Islamic bank sells commodity to client at Cost + 5% USD
Step 6: Islamic bank assists the client to sell of the commodity at cost.

<table>
<thead>
<tr>
<th>Client</th>
<th>Islamic bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD10mil x 5% x 92/365 = USD126,027.00</td>
<td>RM34mil x 2.5% x 92/365 = RM214,244.20</td>
</tr>
</tbody>
</table>

Notional amount exchanged

Source: Modified from interviews with Islamic bankers and Dusuki 2009, 85-86

Another Sharī‘ah instrument is *khiyār al-sharṭ*. This is in essence an option within a certain period after the conclusion of a bargain, during which either of the parties may cancel it. This implies that the parties get some time to assess the benefits of the contract.150

*Wa’d* and *khiyār al-sharṭ* are instruments which could be used to build more comprehensive instruments that are capable of hedging risk and also comply with the principles of the Sharī‘ah.

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150 Obaidullah, "Financial options in Islamic contracts: potential tools of risk management."
Another contract which is still at the drawing-board and proposal stages is the *ji’ālah* contract. The *ji’ālah* contract can be defined as ‘an open promise by one party to pay whoever performs a particular task a named reward (the *ju’il*)’. The party who undertakes to pay a reward or the principal is called the *ja’il*, while the party who is required to perform the act is called the *maj’il*.

Simple examples of the *ji’ālah* contract include a person announcing a reward to anyone who finds his lost animal, prizes in a tournament, a reward for inventions, or even a reward for a doctor who is able to cure an illness.

Currently, some have applied the *ji’ālah* contract in Islamic banking as a justification for bank charges and commission. However, F. Khan, Salehabadi & Aram, and Kunhibava have suggested that the *ji’ālah* contract can be used as a substitute for the futures market.

There are certain important points about the *ji’ālah* contract which make it suitable as a derivative instrument. First, it is not necessary for the principal to be the owner of the property positively affected by the performed task. In this case the performance of the act will benefit the owner, but the reward will be given by the principal. Second, it is also not necessary for any given person to accept the *ji’ālah* contract, even if the person is named by the principal, because the *ji’ālah* contract is only binding on one party alone. Third, the principal can even specify one reward if a specific person performs it and another reward if another person were to perform it. Finally, the promise or reward is valid even if the worker is unknown or unspecified. Naturally, the Islamic version of the futures market cannot be exactly the same as the

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conventional one, but these features of the *ji’ālah* contract make it a suitable candidate. A very simple model and example is proposed:\(^{155}\)

**Diagram 4: The *Ji’ālah* Futures Market**

![Diagram 4: The *Ji’ālah* Futures Market](source)

*Source: Author’s own*

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i. **Where a person wants to hedge his risk when he is selling a commodity**

As in the futures market, there is an exchange and a clearinghouse. Here the exchange could be the principal, who at the suggestion of the agent could offer a reward for a certain task.

**For example:**

*Adam* is a palm-oil farmer who will be harvesting his crop in another 6 months. He intends to export his palm oil and wants to fix his price today to hedge his risk. He suggests to the exchange that he will deliver 3 tonnes of palm oil in 6 months, the exchange accepts and promises a reward to be paid on delivery of the palm oil. A *ji’ālah* contract is formed.

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\(^{155}\) Ibid.
ii. Where a person wants to hedge his risk when he is buying a commodity.

When a person wants to hedge his risk in buying a commodity, the exchange would be the agent in the *ji‘ālah* contract. The principal would be the person buying the commodity.

**For example:**

*Babu* is a baker who needs 3 tonnes of palm oil in 6 months. He promises a reward to the exchange to be paid on delivery of the palm oil. This reward would be the prevailing price of the palm oil. Thus, a *ji‘ālah* contract is formed.

When there are more players in the market, it would be simple to find a counterparty to match the tasks required by the principals. Alternatively, the exchange with the help of the clearing house could obtain the commodity from the market. Of course, delivery and payment would all be regulated in a fashion similar to the settlement of futures contracts; that is, delivery would be at the clearing house.

The *ji‘ālah* contract has advantages over the *salam* contract since both the payment of the price and the delivery of the commodity could be delayed. At the same time, speculators going in and reversing their position before the delivery of the commodity would not work in the above framework.

As can be seen from this example, the objections to the futures market would be overcome. First, even though both counter-values may be nonexistent at the time of the contract, this is allowed under the *ji‘ālah* contract. Secondly, in a *ji‘ālah* contract the principal is asking for a service to be provided, so the person who provides the commodity need not necessarily be the owner of the goods. The third objection, that of taking possession of the item prior to resale, will not be an issue since the agent will take possession of the goods to deliver them to the clearing house. The fourth objection, that a futures sale is a sale of one debt for another, will not apply, since here the *ji‘ālah* contract is a request for a service to be undertaken and offer of a price if the service is completed. It is not a debt in return for a debt. Lastly, futures trading involves speculation and verges on gambling and *gharar* (uncertainty and risk taking).
This last objection would not apply to a ji‘alah type of market since each of the participants will be those who truly want to hedge their risk and not just speculate to reverse their position before the delivery of the commodity or service.\textsuperscript{156}

There is, however, one important problem that has to be overcome: the possibility of the parties not fulfilling their promises. In the case of the clearing house, proper regulation would ensure its performance of all contracts, but in the case of the hedgers, something has to be worked out to prevent default because the nature of the ji‘alah contract means it is a unilateral contract, binding only on the principal.\textsuperscript{157}

Further, ji‘alah is usually used for services required or provided; it has yet to be verified whether the ji‘alah contract can be used in the manner proposed. Also, the above example dealt solely with commodities futures and not financial futures. At a first glance, it appears that financial futures would also be able to work in the model proposed above; however, further research is needed to investigate whether the above model can be used for financial derivatives as well.\textsuperscript{158}

\section*{6.0 CONCLUSION}

This article has attempted to provide an overview of the status of derivatives in Islamic finance. The admissibility of conventional derivatives, such as forwards, futures and options, is unsettled, with the majority of scholars opposed to them. The paramount underlying reason for the objections to conventional derivatives is gharar, which encompasses maysir (gambling). Further research is required to determine whether these elements can be limited in conventional derivatives to make them more admissible in the Shari‘ah. At the same time, without the elements of gharar and maysir, could conventional derivatives actually function as they do? This and many similar questions require further research.

\textsuperscript{156} Ibid.
\textsuperscript{157} Ibid.
\textsuperscript{158} Ibid.
Alternatively, there are a range of contracts in Islamic finance that might be used which may mirror some of the risk-mitigating factors of forwards, futures, and options. These are salam, istiṣnā’, ‘arbūn, istijrār, Islamic swaps, khiyār al-sharī’, wa’d and ji`ālah. While these Islamic derivatives do not entirely replicate the functions of conventional derivatives, they do provide a substantial degree of flexibility that allows certain risk-mitigating characteristics. However, all Islamic derivative contracts are currently privately negotiated or concluded over-the-counter. There are no Islamic derivatives which are traded on an exchange. The problem with privately negotiated derivatives is that they are opaque and terms may not be standardized. By trading on an exchange, all aspects of the contract, i.e. price, duration, quality and quantity, are known and standardized. There is transparency, and monitoring and regulation are possible. It is the opinion of the author that steps should be taken to develop exchange-traded Islamic derivatives with strict regulation and monitoring by a regulating body.

159 There are, nevertheless, steps currently being taken to create global standards for Islamic derivatives contracts. Bloomberg, "Issa writes global standards for Islamic derivatives," The Malaysian Reserve, 28th October, 2009, p. 32.
References


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