



## **Commodity Forward and Futures Contract: An Innovation in Islamic Derivatives**

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### **Abstract**

This paper attempts to analyze the innovation in Islamic forward and futures contracts of crude palm oil in Malaysia. Commodity forward and futures contracts are the most common types of derivative instruments, whose value depends on the value of the underlying assets, namely commodities. The emergence of forward and futures contracts resulted from the advancement of financial engineering that is based on conventional finance. Therefore, this study is significant in order to identify the extent to which conventional commodity forward and futures contracts meet the principles outlined by the *shari'ah* in the discipline of Islamic finance. Initially, this study analyzes the *shari'ah* issues in commodity forward and futures crude palm oil and subsequently, it proposes a set of potential *shari'ah* principles in the contracts. This study uses a thematic analysis approach in analyzing the data obtained from secondary sources and interviews with several selected respondents who are involved in this industry. The result has shown that the contract raised several *shari'ah* issues such as *gharar*, speculation and gambling. Finally, this study recommends the application of the principle of *wa'd* and *bay al-murabahah/musawamah* as an innovation in *shari'ah* compliant commodity forward and futures contracts.

**Key Words:** derivatives, forward, futures, *wa'd*.

## Introduction

Futures and forward contracts are the most common types of derivatives. Derivatives are generally used as instruments to hedge risk, but can also be used for speculative purposes. Forward and futures contracts are the production of financial innovation resulting from the increasing need of a business world that is becoming more complex and challenging. This contract is used in conventional finance for the purpose of hedging and speculation. Crude palm oil is generally traded in the forward and futures market in addition to the cash market. In order to avoid the risk of changes in crude palm oil prices and the risk of supply shortages, forward and futures markets are the best alternatives to the cash market. The objective of hedging is permissible in Islam, so the way to achieve the objective of the hedge has been refined so that the use of forward and futures contracts is not open for speculators to dominate the market by gambling on prices. On the other hand, the conventional commodity futures and forward contract has been rejected by some Muslim scholars due to some prohibited elements such as uncertainty (*gharar*), speculation and gambling. However, due to the need for risk management tools, the use of commodity futures and forward contracts should be accepted with some modifications by applying *shari'ah* principles. Islamic financial institutions are facing the same risk and challenges as conventional ones. Hence, Islam, as not only a religion but a way of life that emphasizes moderation, justice and fairness, plays a significant role in providing a set of principles and guidelines for risk management. Thus, it is capable of managing the balance between risks and desires of profit making, so that the profits obtained are commensurate with the risks incurred.

This article is organised into five phases. In the introductory section, the importance of commodity futures and forward for hedging purposes in Islamic finance is highlighted. The second phase briefly explains the methodology used in this study, while in the third phase, the *shari'ah* perspectives on conventional forward and futures are elucidated. The fourth phase analyzes the innovation in forward and futures contract based on *shari'ah* principles, and the final one provides some concluding remarks.

## Methodology

This study employs a qualitative approach based on primary and secondary sources through the method of document analysis and interviews. The interview was carried out to understand the real *modus operandi* and *shari'ah* issues in the forward and futures contract. The key persons interviewed comprise of an expert in Islamic jurisprudence, a *shari'ah* advisor and practitioner in crude palm oil industry. They are Ahmad Suhaimi Yahya (Head of *Shari'ah*, Kuwait Finance House (Malaysia) Berhad), Aznan Hassan (Advisor of Malaysian Exchange, Malaysian Exchange) and Mazlan Yahya (Head of Operation and Risk Management, Malaysian Exchange).

## *Shari'ah* Perspectives on Conventional Forward and Futures

A forward contract is an agreement of purchasing or selling a commodity at a certain future time for a certain price. A forward contract, therefore, simply amounts to setting a price today for a trade that will occur in the future. The details related to the price such as goods specification, price, quantity and underlying quality of asset are determined. In this matter, the

agreed price could not be changed regardless of whatever circumstances happening to the price when the transaction has taken place.

A futures contract is a standardized contract between two parties to purchase or sell a specified commodity of standardized quantity and quality for a price agreed upon today (the *futures price* or strike price) with delivery and payment occurring at a specified future date, the *delivery date*. The contract is negotiated at a futures exchange, which acts as an intermediary between the two parties. Some scholars have rejected the idea of forward and futures contracts due to the *shari'ah* issues in these contracts (al-Saati, 2003). Amongst the *shari'ah* issues are *gharar* (uncertainty) and gambling that will be explained further.

### ***Gharar (uncertainty)***

There are various definitions of *gharar* given by a majority of Muslim scholars. This is triumphed by the difference in opinions of many previous scholars in defining *gharar*. This difference in definitions is also manifested by present scholars. The consequence of this requires the determination of the status of the contract, since not all contracts containing the element of *gharar* are nullified. Based on scholars' opinions, it can be concluded that *gharar* is an element of uncertainty of a contract giving effect to the parties involved. The presence of uncertainty can be fraudulent to the outcome of a contract. This element of uncertainty may well be exploited by one party to cheat the other by the mere reason that the contract is mutual and has been initially agreed upon. As such, it is thus clear on the wisdom of prohibition of *gharar* that is to protect the rights of the contracting parties and to ensure that the objective of a contract is achieved (Nadhirah, 2014). Analysis will be done on the issue of *gharar* element in forward and futures contracts. The analysis will be divided into nonexistence (*bay ma'dum*) and delay in delivery of goods and deferment in payment (*ta'jil al-badalayn*). The issue of *bay ma'dum* occurs when the subject of the contract, which is the crude palm oil, does not exist at the time of contract. The issue of delivery of goods and payment (*ta'jil badalayn*) occurs when the price and goods will be paid or delivered in the future (Abdul Kader, 2005; Khan, 1995; Ahmad Rayyan, 2003).

The issue is mainly for commodity underlying assets, which requires for the goods to be delivered upon the signing of a contract. One overriding rule to be fulfilled in a buy and sell contract is that the goods or item must exist or be seen by the contracting parties, or if it is not visible, it must be indicated in detail in terms of quality, quantity and price. An example of *bay ma'dum* found in the hadith is in the contract of fruit whilst the buddings have not yet appeared on the trees. Almost all scholars are collective in their agreements on the invalidity of such a transaction. In forward and futures contracts, the requirement to validate a contract is only the detailed specification of goods such as quantity, size and weight, without having the need for the goods to be present and visible at the time of signing of a contract. Therefore, some scholars classify forward and futures contracts similar to *bay ma'dum*, which is forbidden in Islam as the contract may cause conflicts and expose losses to the buyer due to the non-availability of goods.

Forward and futures contracts involve deferment of payment and delay in the delivery of goods (*ta'jil al-badalayn*). Delay and deferment associated with the issue of *gharar* is the uncertainty of payment receipt and acceptance of goods delivered. Contracting parties are also unsure of whether the contracts will be carried out. This may lead to disputes between them. Furthermore, looking at the *gharar* definition stated by the scholars, most relate to the delivery failure of goods and the uncertain outcome of a contract.

Nevertheless, there is a minimum level of *gharar* in futures contracts regarding *bay' ma 'dum* and *ta'jil badalayn* issues. The element of *gharar* in the contract is reduced by the presence of a clearing house, which regulates the contract in terms of delivery. The presence of a clearing house in the futures market is to assure that contracting parties comply with the terms of the contract. In fact, there are mechanisms used by the clearing house to avoid default such as margin payments. Therefore, the element of *gharar* does not dominate futures contracts.

### **Gambling**

Gambling issue occurs when there is no real trading activity occurring in futures contract. It involves paper trading, where those who wish to hedge simply wish to lock in the price, while speculators and arbitrageurs intend to generate a profit from the difference in the sale and purchase price. In Malaysia, physical delivery in futures contracts is less than 3%. It is contrary to the purpose of the contract (*muqtada*), which is to receive and deliver the goods (Ahmad Suhaimi, 2011; Aznan, 2011). Aznan (2011) argued that this contract may lead to harm, compared to the benefits that can be derived from it. Although futures contracts can be used as a hedging tool, it should be independent of the elements of betting. Elements of betting, involving a zero sum game, occur when the contracting parties are only interested in price changes when closing the contract before maturity (close out) and a margin calculation based on the market price (mark to market) (Chapra, 1988; Khan, 1988; Obaidullah, 2001; Usmani, 1999). In this process, the contract price will be matched with the current price to calculate any margin in the trading accounts in order to determine whether the contracting parties generate a profit or loss (Durbin, 2006). Therefore, the elements comprised in futures contracts are in conflict with the objectives of *shari'ah*.

The primary purpose of a futures contract is to provide an efficient and effective mechanism for the management of price risks. However, it is also accompanied by speculators and the arbitrage to earn profit (M. Fazilah, 2006). Mechanisms in futures contracts not only allow hedging activities, but also allow contracting parties to earn profits from speculation and arbitrage. Most scholars argue that there are elements of speculation in futures contracts when there is no intention to engage in physical delivery. Sellers do not have the assets and the buyer is only paying for the margin. Both parties are only interested in price changes when closing the contract before maturity (close out). This reveals that market participation by speculators is solely to obtain a profitable gain from the price difference. The number of commercial trades in derivative contracts that are in excess of the actual value in the cash market support this opinion (Nevi Danila & Jeffers 2009; Wafica Ghoul, 2008).

There are also mechanisms in futures contracts that allow close out activities, where contracting parties can close out the contract by changing the position from long to short and vice versa. Therefore, the contract is not limited to transactions in the primary market only, but it is also traded on the secondary market. However, if the contracting parties did not close the contract before maturity and crude palm oil or palm oil is received, the transaction is only in the primary market. Nevertheless, the primary market or physical delivery only occurs less than 3% in Bursa Malaysia (Mazlan, 2012). It shows that the activities that occur in secondary market transactions dominate futures contracts.

The practices in futures contracts are not in line with Islamic law and mechanisms, such as mark to market and close out. It allows more opportunity for speculators to make profits and has diverted from its original purpose. Thus, futures contracts are not in line with Islamic law because the mechanisms that exist in this contract will lead to conflict from the *shari'ah* law.

## Innovation in Forward and Futures Contract

### Islamic Forward Contract

Since the concept of risk management and its importance is recognized in Islam, the instruments and measures to achieve it are encouraged as long as they are within the legal scope that is permissible by the *shari'ah* (Azlin Alisa & Mustafa 'Afifi, 2014). Therefore, an innovation in forward and futures contract as an alternative method of hedging need to be recommended. The principle of *wa'd* is one of the most relevant and suitable method to be adopted due to its flexibility and easy application in forward and futures contract.

The Islamic commodity forward based on the *wa'd* structure involves a unilateral promise involving two parties, where the first party promises with the counter-party to buy/sell commodity for settlement on a forward value date at the rate and amount agreed today. The party who makes the promise is obliged to honor the contract, however the other party is not obliged to do the same.

Under *wa'd* structure, only one party promises to buy or sell as the case may be wherein he is bound by that promise. The other party is not bound by that promise, however has to proceed with the promise undertaken by the promissory. Since *wa'd mulzim* from only one party is not deemed under Islamic law as a contract, this can facilitate Islamic commodity forward contract. The concept is illustrated in the diagram below:

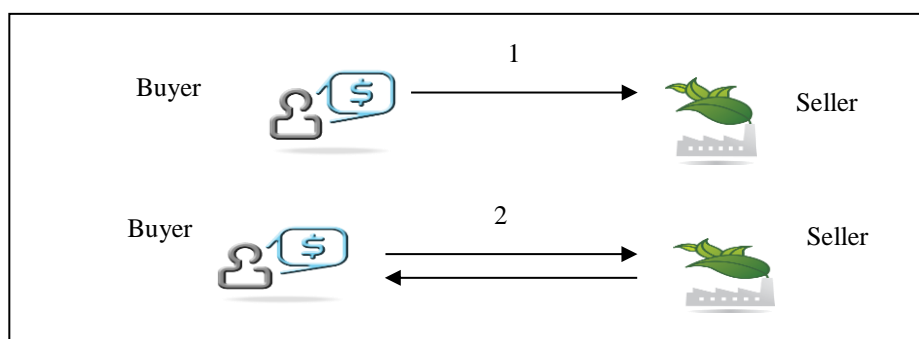


Diagram 1: Islamic Commodity Forward based on *Wa'd*

The discussion based on Diagram 1 is as follows:

1. On 1<sup>st</sup> January 2015, the buyer promises (*wa'd*) the seller to purchase crude palm oil a total of 5,000 tons at RM3, 200.00 per ton on 1<sup>st</sup> June 2015.
2. On 1<sup>st</sup> June 2015, the sale and purchase of the contract between the two parties take place. The buyer pays the seller and the seller delivers crude palm oil as promised on 1<sup>st</sup> January 2015. The seller would sell to the buyer as promised without taking into consideration the price of crude palm oil in the cash market at the time. Based upon this, on 1<sup>st</sup> January 2015, no contract was signed between the two parties. In fact, it is just a promise to make a sale and purchase contract in the future. The actual trading of commodity takes place on 1<sup>st</sup> June 2015 when the contracting parties agreed to make a payment and delivery of the commodity.

### Islamic Futures contract

*Shari'ah* principles that are applicable in the futures contract are *wa'd* followed by *bay 'al-murabahah/musawamah*. *Wa'd* principles or promises are used at the beginning of the

contract. *Wa'd* serves to lock the price of crude palm oil at a certain price in the future. As a futures contract, the buyer will give *wa'd* to buy crude palm oil from a seller in the future at a price agreed upon when the promise was made.

The difference between futures contract with a forward one is that there is a clearing house that will regulate the contract between the seller and the buyer. The clearing house also acts as a guarantor of the contract and this function is not contrary to *shari'ah* principles as in *kafalah*. As a guarantor for all registered contracts, the clearing house will ensure the delivery and payment by the contracting parties. In conventional futures contract, margin payments act as a security or guarantee from a breach by the contracting parties. Every day after the end of the trading session, the clearing house will carry out a daily settlement (daily settlement) and the margin will be adjusted according to the market price or market to market. In this process, the contract price will be matched with the current price to calculate the margin status of the account, either profit or loss.

Islamic futures contracts are structured using *wa'd*, therefore, there are no margin payments that act as a security or guarantee. Calculations based on mark to market are eliminated in *shari'ah*-compliant futures contracts. When none of these calculations, the speculators are not going into futures contracts to gain profit from price adjustments based on the mark to market. In fact, the results are in line with the opinion of scholars, stating that these calculations can lead to gambling when generating profits and losses that are not expected by the contracting parties. The close-out element, the contracting parties can cover their open positions by offsetting before or on the due date in futures contracts. This is because the contract is built on *tabarru* contract', and the promise that binds only promise to perform the contract in the future. Thus, the close-out element is not applicable in this contract because there is no position to be closed or changed position.

An Islamic futures contract can only be strictly used for hedging. Therefore, this study found that the elements leading to speculation of gambling should be removed, although there is the view that speculators play a role in providing liquidity in the futures contract. On the date the contract will be performed, the contracting parties have the option to receive crude palm oil or make a cash settlement (set off). Cash settlement mechanism does not violate *shari'ah* principles, taking into account that the contracting parties or the hedges that do not require the crude palm oil, but only to hedge by locking a certain price. Cash settlement can occur by using the same value of the commodity, in which the seller pays the buyer the price agreed in the agreement before. This concept is illustrated in Diagram 2 below:

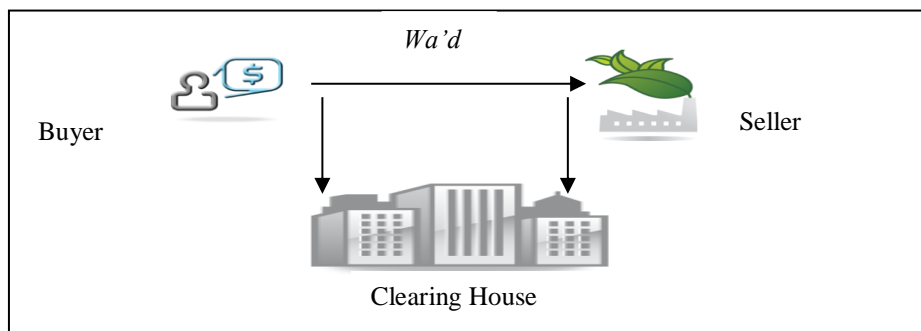


Diagram 2: Islamic Commodity Futures based on *Wa'd*

The discussion based on Diagram 2 is as follows:

1. On 1<sup>st</sup> January 2015, the buyer promises (*wa'd*) the seller to buy 5000 tons at RM3, 200.00 per ton on 1<sup>st</sup> June 2015. Clearing house acts as a regulator of the futures contract and the guarantor of both contracting parties.

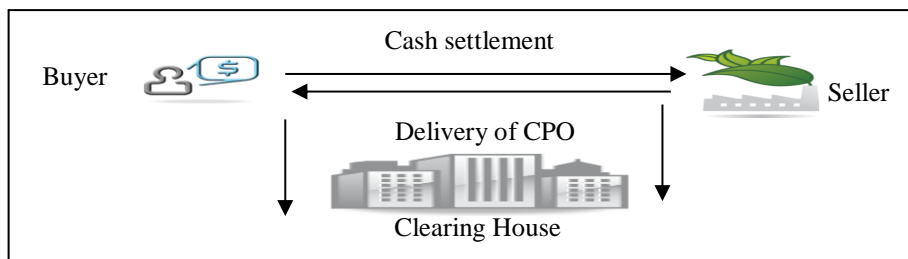


Diagram 2: Islamic Commodity Futures based on *bay' al-murabahah/musawamah*

2. On 1<sup>st</sup> June 2015, the sale and purchase (*bay' al-murabahah/musawamah*) of the contract between the two parties take place. However, the contracting parties may choose to receive and deliver crude palm oil or opt for a cash settlement. If they choose cash settlement, there is no physical delivery and the seller has to pay the difference between the price agreed when the contract agreement was made with the current price.

### Conclusion

Forward and futures contracts, which are commonly practiced in conventional financial institution, are against *shari'ah* principles due to prohibition of *gharar* and gambling, thus *wa'd* structure can be used as an alternative to Islamic Finance industry to offer *shari'ah* compliant hedging products. The discussion on the application of *wa'd* and *bay' al murabahah/musawamah* shows that the principles can become a viable principle for Islamic hedging in facilitating Islamic financial institutions to manage their business risk effectively.

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