

Gharar in Forward and Futures Contracts?

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Abstract

This paper attempts to analyze the elements of *gharar* that exist in forward and futures contracts of crude palm oil in Malaysia. A calculation that reflects the level of confidence the presence of *gharar* issue in forward and futures contracts was also carried out. Forward and futures contracts are the most common types of derivative instruments. The value of this contract is derived from the values of underlying assets such as commodities, equities, and currencies. Muslim scholars differ on the permissibility of forward and futures contracts. Among the key issues raised in contracts is the issue of *gharar*. This study uses a thematic analysis approach to explain the data collected through secondary sources and interviews with few individuals involved in this industry. The finding of this research indicates that the issue of *gharar* existed in forward contracts as there is no regulatory body to monitor the contracts. Whilst, futures contracts which are traded on the exchange, the element of *gharar* are minimized by the role of a clearing house that acts as a regulator ensuring compliance from the contracting parties when the contract is made.

Keywords: *gharar*, derivative, forward contract, futures contract, crude palm oil;

1. Introduction

Some scholars rejected the idea of forward and futures contracts due to issues of *gharar* in these contracts (al-Saati, 2003). The *gharar* issue raised in forward and futures contracts was the absence of physical goods at the time the contract is made (*bay ma'dum*), and the deferment in payments and delay in the delivery of goods (*ta'jil badalayn*). This subject pivots on the situation when there is no consensus among the scholars in defining *gharar* and in determining the level of uncertainty that can be categorized as the prohibited *bay'al-gharar*. The difference in opinions is due to no direct prohibition of *gharar* in the Qur'an (Ahmad Hidayat, 2004). The prohibition is only directly stated in the *hadith* in another form and state of contract exhibiting presence of *gharar* element.

There is a need for further research to identify the magnitude of *gharar* element in forward and futures contracts. Thus, this study will examine the elements of *gharar* that exist in forward and futures contracts of crude palm oil in Malaysia. The basis of scholarly differs in opinions on the issue of *gharar* and its impact on the permissibility of forward and futures contracts on commodity needs to be studied based on the present situation in Malaysia. In other words, this dilemma calls for a contemporary formula (al-Suwailem, 2000; Obiyathulla, 1999). This is further acknowledged by El-Gamal (2001) who recognizes the dilemma faced by the Islamic scholars in defining *gharar* concept and in coming up

with the precise meaning, subsequently the difficulty in deciding the law of the current existing contracts. The differences will cause some scholars reject the forward and futures contracts and there will be other scholars who accept the contracts. This will make people confused with the necessity of forward and futures contracts. To meet this goal, this article discusses the concept of *gharar* and the mechanism of forward and futures contracts on conventional commodities. Subsequently, this article analyzes the issue of *gharar* in forward and futures contracts. Finally, this article ends its conclusion with discussion and findings.

2. The Issue of *Gharar* in Forward and Futures Contracts

There are various definitions of *gharar* given by the majority Muslim scholars. This is triumphed by the difference in opinions of many previous scholars in defining *gharar*. This differs 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* nullify the contracts.

Al-Darir (1997) has summarized and divided the definitions given by the Muslim scholars into three main streams. First, the group that defines *gharar* as doubt or uncertainty on whether the contract has taken place. The second refers *gharar* to *jahalah* (ignorance) of the object of a contract. Whilst, the third and the most dominant and widely accepted by most scholars is of the opinion that *gharar* is an element that is unknown and suspicious. The existence of three main streams is a manifestation of differences of the previous scholars in defining *gharar*.

Based on the opinions as mentioned above, *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 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.

Analysis will be 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 deliver 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 sale contract is that the goods or item must exist or be seen by the contracting parties, or if it 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 transaction.

In forward and futures contracts, the requirement to validate a contract is only the detail 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 for the contract may cause conflicts and expose losses to the buyer due to non availability of goods.

Forward and futures contracts involve deferment of payment and delay in 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 the contracting parties. 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.

3. Research Methodology

This study employed 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 *gharar* issues in the forward and futures contract. The key persons interviewed are an expert in the Islamic jurisprudence, a Shariah advisor and practitioners in crude palm oil industry. They are Ahmad Suhaimi Yahya (Head of Shariah, Kuwait Finance House (Malaysia) Berhad), Muhammad Syahrin Hassan (Manager, OTC, Direct Clearing & Exchange Link, Market Operations, Bursa Malaysia), Teoh Beng Chuan (Assistant CEO, The Palm Oil Refiners Association of Malaysia (PORAM) and Hassan Zainal Mohamed (Senior Executive Sales And Logistic Felda Palm Industries Sdn. Bhd). The interviews have been conducted within one-two hours and has been transcribed.

3.1 Method at Measuring Confidence Level in the Presence of Gharar Issue in Forward and Futures Contracts

Analysis on forward and futures contracts is amplified by the researcher's level of confidence in the presence of *gharar* element. Therefore, a calculation that reflects a researcher's level of confidence in the existence of *gharar* issue in forward and futures contracts thus shall be carried out. The level of confidence is given in a percentage. Thus, the presence of *gharar* element in forward and futures contracts calculated on a percentage basis, giving weights for the approach to be considered. Measurements on the attained level can be divided into five levels, namely confident, *zan al-ghalib* (strong suspicion, not amounting to a higher category of sure confidence), *zan* (strong possibility, but not amounting to a strong conjecture of sure confidence), skeptical (contemplating between two possibilities) and *waham* (suspicious, probable small or remote) (Abdul al-Aziz, 2005). The scale measurement of the level of confidence in the presence of *gharar* is illustrated in Table 1.

Table 1. Scale Measurement on the level of confidence in the presence of *gharar* element in forward and futures contracts

Scale	1	2	3	4	5
Level	<i>Waham</i>	Skeptical	<i>Zan</i>	<i>Zan al-ghalib</i>	Confident

Source: 'Abdul al-Aziz, M.'A. (2005), *al-Qawa'id al-Fiqhiyyah*. Kaherah: Dar al-Hadis.

The scale for each *gharar* element will be accumulated and converted into percentages. Percentage calculation is a method to check for the levels of confidence of the *gharar* element found in a forward or a futures contract. The distribution of percentages is given in Table 2.

Table 2. Percentage of level of confidence in the presence of *gharar* element in forward and futures contracts

Level	Confident	<i>Zan al-ghalib</i>	<i>Zan</i>	Skeptical	<i>Waham</i>
Percentage	100%	90%-99%	51%-89%	50%	Below 50%

Source: Ruzman, M. N. (2007), "Burden of Proof in the Case of Matrimonial Property in Malaysia Syariah Court", *Syariah Journal*, 15, 29-42.

After having the scales, the confidence level is calculated to investigate the presence of *gharar* element. An example of the percentage calculation is as following: For the issue of *bay' ma'dum*: the scale is 2 (the scale of skeptical) and defer or delay of *al-badalayn* is also given as scale 2 (skeptical). The scales are then added to obtain a final amount. For example, an addition of 2 with 2 is 4, out of 10. Giving a result of = 4/10. This amount is then multiplied by 100, i.e. 4/10x100. Thus the final result of 40%. Therefore, the level of confidence in the presence of *gharar* in the futures contract is 40%. The same approach will be used to measure the level of confidence in the presence of *gharar* in both forward and futures contracts.

4. Findings and Discussion

4.1 Forward Contract

For the issue of *bay' ma'dum*, the study found that the level of confidence of *gharar* element in forward contracts when the crude palm oil does not exist during the contract is on the scale of a skeptical. Because there is a possibility that the crude palm oil will be delivered to the buyer and at the same time there is also a possibility that the commodity will not be delivered at all. The study also found that the availability of crude palm oil supply in Malaysia is abundance and thus is not an issue. However, the issue that may arise is the possibility of default by the buyer.

The result is in line with the opinion of Ibn Qayyim (1993) who states that the prohibition is only on goods that cannot be delivered irrespective of the goods exist or not exist when the contract is done. The key element of a contract is the ability to deliver and if the seller is unable to deliver the goods, then there arises the issue of *gharar*. The issue of failure to supply crude palm oil should not occur as crude palm oil is usually readily available in the market. However, the failure to deliver the commodity or crude palm oil is due to the risk of default by the seller. If the price of the crude palm oil

increases, the buyer will gain, but is exposed to credit risk if the seller defaults, i.e. fail to deliver the commodity as promised. This is because the commodity can be sold in the cash market and the seller gets a profit against him honoring the promise to deliver to the buyer in the futures contract. Similarly, it is the same if the opposite happens. If the price of the underlying asset in the commodity cash market is lower than the price of a forward contract, the contract seller is exposed to credit risk if the buyer defaults, i.e. did not make a payment. This situation was witnessed in 2008 when there was a sharp decline in prices as a result of the economic crisis in that year. There were more than 60 cases of defaults arising largely from the defaults of the buyers who had refused to pay the agreed price of futures contracts (Teoh Beng, 2011). However, the ratio of defaults was small compared to the number of successful cases, nonetheless it should be avoided in order to be in line with the prohibition of *gharar*.

The absence of a third party who particularly regulate the contract as in futures contracts can also be a cause to a breach of a contract. Therefore, the study is in line with the opinion of Smolarski, Schapek and Mohammad Iqbal Tahir (2006) who opine that *gharar* may exist if the contract is done over the counter due to the absence of a supervising body leading to contracts defaulting. Thus, the issue of *bay' ma'dum* is still small in numbers, which is typical that the contracting parties in the crude palm oil industry or the crude palm oil plantations are usually very unlikely to default in order to safeguard the image of the good name and reputation of the company (Teoh Beng, 2011; Hassan Zainal, 2012).

In conclusion, although the contracting parties are not exposed to risks arising from uncertainties on the terms and condition of the agreement, such as price, quality and quantity of the value exchanged, or the date of delivery, the buyer will still be exposed to risks if it cannot be ascertained that the seller will be able to fulfill the commitment or not when goods are not made visible at the time the contract is made. However, based on the market conditions in Malaysia, there is a balance in the probability of default and probability of delivery. Thus, the prohibition of *bay' ma'dum* in forward contracts is due to the element of *gharar* stemming from the element of uncertainty, not because of nonvisibility of goods when the contract is made. This law of goods nonvisibility at the contract inception were decided based on the possibility of its existence in the future (al-Sanhuri, 1954).

Second, the delay issue of *al-badalayn* where price and goods become one of the reasons of *gharar*. This delay in goods delivery causes uncertainties in the contracting parties of whether the contract will be honored. Furthermore, there is no governing body to monitor and to ensure compliance from the contracting parties when the contract is made. Although there are contract acts the contracting parties can refer to, this delay opens a window of opportunity for either party to default. These elements promote *illah* to *gharar* rendering its prohibition of *gharar* as relevant with the objective to preserve the rights of the contracting parties. Thus, the opinion that says the contract contains the element of *gharar* when the delivery of goods and payment are deferred predominates.

Illah of prohibited delay of *al-badalayn* is the presence of *gharar* when the contracting parties are unsure of goods delivery and payment receipt or whether the contract will be honored or not. Disputes may arise between the contracting parties due to the uncertainty of delivery and the ability for each of the contracting parties to fulfill their obligations. Usually, the defaults are committed by the buyers when the price agreed in the contract is higher than the current market price (Hassan Zainal, 2012). The study finds that the issue of *gharar* exists when there is the delay issue of *al-badalayn*. However, considering this contract is made between parties of interests to hedge on crude palm oil and contracts specifically made between two parties, the element of *gharar* that may arise is at the level of skeptical. In fact, based on the situation in Malaysia, the probability of default and delivery successes is the same.

Based on Table 1, the confidence level of *gharar* issue in forward contracts when goods are not present during contract inception (*bay' ma'dum*) is on a scale of 2 (skeptical), where there are possibilities that the crude palm oil will not be delivered to the buyer. At the same time, there is also the possibility that the commodity will be delivered at maturity of the contract. Therefore, there is no issue of nondeliverance because there is an abundance supply of crude palm oil. However, the issue that may arise is the possibility of default by the seller. Whilst the delay issue of *al-badalayn* is in the scale of 2, that is skeptical. When there is a delay issue of *al-badalayn*, the contracting parties are unsure of whether the goods will be delivered and payment will be made or whether the contract still exists or on the contrary. Disputes may arise between the contracting parties due to the element of uncertainty of delivery and the ability for each of the contracting parties to fulfill their obligations. Normally, defaults are committed by a buyer when the price agreed in the contract is higher than the current market price (Hassan Zainal, 2012).

If converted to a percentage, the level of confidence in the presence of *gharar* in forward contracts accounted for 40 percent and falls under the category of *waham*. The method of calculation of the scale is that all numbers are then added to the total amount. For example, the combination result of scales 2 and 2, gives 4 out of 10. Therefore, the result is = 4/10. This amount is then multiplied by 100, i.e. 4/10x100 and gives the result of 40 percent. Therefore, the level of confidence in the presence of *gharar* in a futures contract is 40 percent and falls under the category of *waham*.

4.2 Futures Contracts

For the issue of *bay' ma'dum* in futures contracts, it can be concluded that the issue of *gharar* exists at a very minimum level. Thus, the study concludes scale 1 for the level of confidence in the presence of *gharar* in futures contracts, which is *waham*, that is less likely *gharar* will occur due to assurance of contract compliance coming from the clearing house. The decision made is based on the arguments explained in the following paragraph.

The study found that the prohibition of *bay' ma'dum* was not due to non availability of goods at the point of contract inception, but because of *gharar*, that is whether the goods can be delivered or not to the buyer. In a futures contract, monitoring is done by the exchange and the clearing house on ensuring compliance from the contracting parties by the way of a mechanism set in the offset of the contract, thus there will not be any issue of breach the contract, resulting from goods not delivered. The result is consistent with the opinion of 'Ali 'Abd Qadir (1982) with a view that a contract is contrary to the syariah when it is done in a well regulated market, thus free from any conflicting issue coming from the contracting parties.

This discussion also takes into account the opinion of Ibn Qayyim (1993), that the prohibition is only on items that cannot be delivered irrespective of their existence. The key element of a contract is the ability to deliver and if the seller is unable to deliver, then there exists the element of *gharar*. The subjects that are forbidden in the Islamic law is not selling goods which do not exist, but rather the risk involved in a contract where the contracting parties may be unable to meet their obligations. A contract of nonexistence goods is valid according to Ibn Qayyim which is synonymous with the concept of contract of goods that are not visible, with specification of goods transacted to be detailed out by the seller. This opinion is concurred by al-Sanhuri (1954) and al-Darir (1997) with the view that the buy and sell of *ma'dum* is void if the future existence of the object is unknown, but is certainly valid if the future existence of the object can be ascertained, either by traditional or customary upon knowledge.

The difference between forward and futures contracts is that futures contracts are done in the exchange and clearing houses act as third parties to regulate and monitor the contract. Commodities traded are not present when the contract is concluded. In fact, the studies show that the number of transactions in commodity futures contracts exceeds the amount of the commodity available in the cash market in the world (Chance & Brooks 2007). The underlying commodity asset in futures contracts in Malaysia is crude palm oil. Normally, the contracting parties, e.g. Felda will enter into a contract to hedge the price of crude palm oil to be produced in the next three months time. Here, it is obvious that the palm oil is still not yet produced. However, usually there will be enough supply in the market as crude palm oil is a commodity that is produced in abundance in Malaysia. Furthermore, in the futures contracts, a clearing house will ensure that the terms and agreement of the contract will be honored by the contracting parties.

If the contracting parties choose to do a physical delivery, they must first inform the clearing house. Physical delivery starts with the receipt of notice from the seller and then the notice sent to the buyer. A clearing house will give notice to the buyer awaiting inception of the contract (Kolb & Overdahl 2003). A clearing house has a role to ensure that the commodity, likely to be delivered has a buyer. A clearing house will also ensure that the buyer pays the seller's price of commodity rendering delivery of goods by the seller. If any one of the parties failed to honor the contract, the clearing house will use its mechanism to compensate the party whose contract was dishonored. One of the mechanisms used is the margin fee paid by the dishonest party will be used to pay for compensation. This indirectly eliminates the element of *gharar* due to non availability of goods when the contract is entered into. However, in the event of a breach of contract, the clearing house does not do delivery to any of the contracting parties. A clearing house merely acts as a regulator to ensure that the contract is honored.

As for the delay issue of *al-badalayn*, there is a small possibility that *gharar* will occur. When there is the deferment of *al-badalayn* in futures contracts, disputes between the contracting parties due to the impact of uncertainty in deliveries and abilities of each of the contracting parties in fulfilling their obligations as rare as there is assurance from the clearing house. The decision is made based on a number of arguments as the following:

Deferment of payment will happen in futures contracts when the contracting parties only pay a margin. A margin is a deposit to protect the contracting parties from default risk. A margin is only for the purpose of protection to the seller in the event of default by the buyer as prices fall and protection to the buyer if the seller defaults when prices rise. A margin is not part of the price of commodities. The full price of the commodity will be paid only when the contract matures (Securities Commission, 2005). Thus, there is deferment of *al-badalayn* in futures contracts.

The deferment issue of *al-badalayn* have to view from the aspect of the buyer's ability to make payment to the seller and the seller's ability to deliver the goods to the buyer. This is because the prohibition of *illah* of the deferment of *al-badalayn* is that the contracting parties are not aware of the consequences, i.e. unsure if the contract will be honored. After receiving the notice of delivery, the buyer must make payment to mark the receipt of delivery of the commodity. If

the buyer defaults, the clearing house will use existing mechanisms to ensure the contract will be honored. Similarly, in the issue of delay in goods delivery, the clearing house gives security that the goods will surely be delivered.

Thus, the study found that *gharar* issue still prevails, but is reduced due to the security employed by the clearing house. In fact, until recently, there has not been any record of breaches of contract by the contracting parties in futures contracts exchanged on Bursa Malaysia (Muhammad Syahrin, 2011).

Based on Table 1, the level of confidence in the presence of *gharar* in futures contracts when goods are not available at the time the contract is performed (*bay' ma'dum*) is on a scale of 1, which is *waham* or a small possibility *gharar* will likely to occur because there is an assurance of contract compliance from the clearing house. As for the delay issue of *al-badalayn*, the scale is 1, which is *waham* or a small possibility *gharar* is likely to occur. When there is a delay of *al-badalayn* in futures contracts, disputes between the contracting parties due to uncertainty of deliveries and abilities of each of the contracting parties in honoring their obligations is rare as there is assurance from the clearing house. If converted to a percentage, the level of confidence in the presence of *gharar* in futures contracts is 20 percent which fall under the category of *waham*. The method of calculation of the scale is that all scale numbers are then added to get the total amount. For example, due to the mixture of scales 1 and 1, the result is 2 out of 10. Therefore, the result = 2/10. This amount is then multiplied by 100, i.e. 2/10x100 and the result obtained is 20 percent. Therefore, the degree of confidence level of *gharar* existence in futures contracts is 20 percentage. This percentage indicates that the level of confidence of the existence of *gharar* in futures contracts is very low.

Based on the discussion above, the presence of *gharar* is due to the unavailability and delay of goods and deferment of payment mainly for over the counter contracts such as forward contracts, as there is the absence of regulating parties to monitor and ensure compliance from the contracting parties. As for futures contracts transacted in the exchange, the element of *gharar* can be reduced by the presence of a clearing house that acts as a regulator providing security for compliance of the contracting parties in honoring the contract. The strength of market regulation may be a factor influencing the law of contract against *gharar*. This is because the issue of *gharar* is closely associated with the element of uncertainty and risk inherent in a contract. It is just like buying and selling fishes in the water. The consensus of scholars says that the buy and sell of fishes that swim free in the river or huge pond area is invalid due to the element of *gharar* when it is unsure that the fishes can be delivered to the buyer. However, the Islamic scholars differ in their opinion, if the fishes are in a small pond or river. It is due to the visibility of the fishes, thus can be ascertained of their condition and able to catch.

5. Concluding Remarks

The results show that the issue of *gharar* exists only in *ma'qud alyh* and not on the contracting parties and in terms of rule of *ijab qabul* of the buy and sell contract. The issue of *gharar* in *ma'qud alayh* is the non availability of commodity at the time of the contract is entered, (*bay' ma'dum*) and deferment of both counter values (*ta'jil al-badalayn*). This study shows the *illah* prohibition of *bay' ma'dum*, that is non availability of goods upon entering into a contract is that there is the potential possibility that the goods cannot be delivered. Whilst, the *illah* prohibition of *ta'jil al-badalayn* is that the contracting parties are not sure whether the contracts will be honored.

As the results of the analysis, it can be concluded that the issue of *gharar* exists in forward and futures contracts. To strengthen the degree of confidence level, the result is translated into percentages. The level of confidence in the existence of *gharar* element in forward contracts is 40 percent and in futures contracts is 20 percent.

There are differences of opinions among scholars on the issues of *gharar* in forward and futures contracts. This difference stems from the difference of understanding in the interpretation of *gharar* and in a contract interpretation. As a result, there are scholars who argue that there exist the issue of *gharar* in forward and futures contracts whilst another group of scholars think otherwise. Opinions of the scholars are general, whereas the element of *gharar* has a different legal interpretation, whether it is *gharar fahish* that does impinge on the contract or *gharar yasir* that does not impinge on the contract. Which is, despite the presence of *gharar* which is *gharar yasir*, it will not impinge on the contract. The one that will impinge on the contract is if and only if the element of *gharar* is categorized as *gharar fahish*.

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