

# Derivatives -An Islamic Finance Perspective

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Recent events in the world economy have sparked a global debate about so-called toxic financial instruments and the damage caused by them. Derivatives were cited as the main culprit of the recession and bankruptcies of the affected financial institutions. Nevertheless, thanks to the criticism of these detrimental derivatives, the world of banks and financial elites have finally come to see Islamic finance in a more positive light. The subject of the Islamic way of making money has been put forward as an alternative way to prosper economically without the danger of going under. Furthermore, Islamic banking has been applauded for its ethical standards and respect of moral values so much forgotten in contemporary conventional banking.

## **Nature of Derivatives**

If one wants to look at the attitude of Islamic finance as well as Shari'ah scholars towards derivatives, one has first to fully grasp the meaning and scope of both derivatives and Islamic finance. Derivatives are financial instruments, whose value, in simple words, depends on the underlying, like e.g. currency, price of stocks, price of gold, silver; sometimes even weather conditions. Derivatives, contrary to popular belief, were not created only a few years ago. The first derivative-like contract was known a few centuries ago in England and the Netherlands. It was most similar to the present forward-contract. In a classic forward contract, the buyer purchases the item which will be obtained at a later time, e.g. fruit, vegetables. Thus, the subject matter of the contract basically does not exist at the time the contract is entered into. In the more complicated forward contracts, the buyer is entitled to demand from the seller delivery of the financial instrument upon which the transaction was based for the price agreed by the parties to the transaction. For instance, let's say the buyer enters into a forward contract, where the underlying is US dollars. The seller obligates itself to sell a certain amount of US dollars to the buyer at an agreed price at a future date. The buyer earns if he buys the currency at higher rate than is on the market at the time the contract is being fulfilled. If the rate is lower on the market, the buyer loses.

From the aforementioned example, a few conclusions instantly come to mind. First, that the subject matter may not be in the possession of the seller at the time the transaction is entered into. Second, the contract is to be fulfilled at a future date. Third, neither the buyer nor the seller knows what the rate of the subject currency will be.

If we look at the example and the conclusions from the Shari'ah point of view, we have to admit that such a transaction would be deemed haram. Why? The transaction refers to the subject matter that may not be in possession of the seller neither at the time of entering into contract nor at the time of its fulfillment. Thus, the key resolution of the contract contains Gharar – e – Kathir and as such the whole transaction is deemed invalid. The existence of Gharar – e – Kathir or a major gharar renders the contract null and void and cannot be omitted. The Shari'ah scholars are unanimous in this respect.

Furthermore, the future fulfillment of the contract indicates that the parties are sure about the events of the future. As one of the most important aspects of Islam is that Allah is the one who knows the future, humans cannot arrogate to themselves such knowledge which is God's domain alone. Moreover, the future is uncertain, which is why it could invalidate such a contract. Finally, neither of the parties to the contract know what the future currency rate will be, and hence it is all based on gambling and speculation. From the Islamic finance perspective, the presence of Maisir and Qimar in the contract renders it invalid.

### **Bai Salam Contract**

Nevertheless, some say that the Islamic contract of Bai' salam is similar to the forward contract. Yes, there are some similarities, but the whole idea behind Bai' salam is totally different. Bai' salam is defined as a contract, where the seller obligates itself to deliver a certain, specified thing of already defined qualities at some point in the future and the buyer pays the price upon entering into contract. To avoid any impermissible elements in Bai' salam, the following conditions have been introduced. The whole price for a thing has to be paid at the moment the transaction is entered into. Partial payment is not permissible as it would mean the use of credit (Bai' al – Kali bi al -Kali), which is prohibited in this context.

Moreover, payment of the whole price eliminates in a way the element of gharar on the side of the buyer who by paying the whole price ensures the purchase of the product. It also ensures that the essential reason for a salam sale, which is an urgent need, is met.

The subject matter of Bai'salam has to possess defined qualities; its quantity has to be clearly specified. Furthermore, it should be changeable. This means that the subject matter can be changed, which will not influence the contract. For instance, the seller sells 100 kg of grain.

Thus, the seller can pick the grain or even buy them anywhere he wants. While in the case of a future sale of an animal, each animal possesses different qualities, so such a sale would not be permissible.

The other crucial aspect of bai' salam is the fixed time and place of delivery. The term and the place for delivering the subject matter should be stipulated exactly in the contract to eliminate gharar and ensure its permissibility under Shari'ah. By providing the aforementioned, strict conditions, Shari'ah scholars want to ensure that the trade is done in a permissible, Shari'ah-compliant way. Moreover, it emphasizes the difference between a forward derivative and Bai' salam. In respect of Islamic banking & finance, this type of contract is used for financing the agricultural sector. Though, it can also be used by banks to purchase a good with Bai'salam and then sell it through a parallel Salam.

One must also bear in mind, that contrary to the instruments of conventional banking, Islamic banking is fully based and intertwined with the faith. If we look at recent developments in conventional banking, we can observe an increasing dependence on debt and interest. Most transactions in the modern banking system are debt-based. Whereas in Islamic banking, every transaction has to serve a greater good.

The pure economical interest of a man would be considered selfish in Islam. The transactions have to be balanced between debt and equity, which is explicitly expressed in the pillars of Islamic banking. The trade of debt is not permissible as well as trade in interest, which is directly condemned in the Holy Qur'an. Derivatives have been one of the most favourite instruments of modern, conventional banking. Generally, the creators of the derivatives contract are not limited by the provisions of law. Thus, such a contract could be changed in various ways, to be in the end profitable for the bank only.

Even the mathematicians and specialists in statistics are used to creating complicated logarithmic structures for the derivatives trade. The other facilitating factor for the derivatives trade was either a lack of relevant laws or lax state policy in that matter. One has to draw a conclusion, that derivatives are still very much a mystery to those outside the banking and finance milieu.

Thanks to this degree of ignorance in the matter among the public, the trade in derivatives and its toxic modifications have been successful much to the detriment of society. The banks and investments funds gained profit, hefty bonuses were paid and nobody asked any questions.

## **Option Contracts**

If one looks at derivatives, these are nothing more than simple contracts with quite clear rules. Their value depends on the value of underlying, which can be, as mentioned earlier, currency rate, price of precious metals, price of stocks, etc. The general principle in derivatives is that the fulfillment of the contract will take place in the future. It can offer a buyer or a seller a possibility of profit in the future without any effort on his part.

If one is lucky enough, one can earn and even make a windfall, if not, lose, often significantly. Anybody who is familiar with the rules of Shari'ah can see that the idea behind these derivatives goes against the very pillars of Islam. It undermines the very purpose of work.

The gain in derivatives depends on chance; it is affected by Maisir and Qimar. The example of option contracts can illustrate this well.

Option contracts are the most popular types of derivatives. The principle of the option contract can be seen in employment agreements, managerial contracts, as well as in corporate regulations like shareholders agreements. They can be divided in general into two categories: call option and put option. Call option contract is a contract where the buyer is entitled to buy a certain amount of underlying (e.g. Euro) for a price agreed by the parties, that is, a buyer and a financial institution trading in derivatives. The buyer enters in a call option contract wishing to buy from the financial institution the underlying for a value that is lower or higher than a market one at the time the contract is fulfilled. The parties agree in the contract that the buyer will be entitled to buy a specified amount of specified underlying in the fixed date in the future at a specified price (called the strike price).

The call option contract, contrary to other derivative contract (e.g. futures contract) gives an entitlement to the buyer. The buyer usually pays a special fee (called the premium) for the possibility to benefit from the option. The idea behind the call option is that the buyer expects that certain asset will have certain value in the future. The buyer in fact makes a bet that thanks to his forecast, he will earn. The second type of option contract is a put option contract. Here, the buyer enters into a put option contract with the financial institution, where he gets a possibility to sell the underlying asset at a certain price (the strike price) at certain time in the future.

The option contracts can also function as the so -called listed options and over - the - counter options (OTC). In the first example, the listed option contracts are formally listed on a stock exchange and go through an intermediary of the clearing houses. OTCs are not formally listed, but are traded between private institutions or persons.

In case of OTCs, there is a greater flexibility in respect of terms and conditions of such a contract. Generally, the parties are free to create the provisions of the OTC in a manner that suits them as long as the key resolutions of an option contract are kept. Through the years, the option contracts have evolved and have been modified into complicated structures like exotic options or options where the weather is the underlying asset.

From the Islamic banking perspective, options contracts are considered haram and thus are not permissible under Shari'ah. The reason is that the option contracts generally trade in possibility, which means that no commodity is actually transferred between the parties. Both in call and put option contracts, the buyer/the seller intend to buy/sell the asset, but at the time the contract is entered into, there is no transfer of commodity. Furthermore, option contracts are entered into for future purposes, hence the buyer/seller may not execute the contract and in the end, may not sell/buy the asset. The option contracts trade in possibility of buying or selling asset in the future.

The buyer/seller does not have to put an effort to earn through such a contract. The result of this bet, as we called it earlier, is unknown both to the seller/buyer and the institution. He can have no influence on it, e.g. in respect of the currency rate, it is difficult to predict what the value of a US dollar will be in a couple of months. Especially, as some events are unpredictable like natural disasters or domestic riots. However, the financial institution can easily afford a professional forecast in respect of the asset prepared by the economists whereas a client who enters into an option contract thinks that he has made a good bet.

The whole concept of option contracts is based on bet and chance. If we were to use Islamic terms, we would say that an option contract is based on riba as interest is involved in the form of a premium paid by the client. And just this one element renders the contract haram and a heavy sin by Islam standards.

Furthermore, the contract contains gharar as the result is uncertain and the parties do not possess the knowledge what the outcome of the option will be. The gharar may also refer to the lack of sufficient experience and know-how regarding the consequences of entering into an option contract. One may not earn anything, but might suffer serious financial losses, one did not expect upon entering into the contract. The gharar may also cover the unclear and ambiguous provisions of an option contract, which are not comprehensible to the client. The financial institution can hire a team of both lawyers and economists to draft such a contract, that its terms and conditions will be hard to comprehend for the customer. Such occurrence of gharar would also invalidate the contract.

Furthermore, the option contract contains elements of *maisir/qimar*, as it is based on chance or luck. The client bets simply with the help of a financial institution or other intermediary. It can be a comfortable way of earning the money, where without any labour or arduous effort one can quickly gain. Such behaviour, though, is criticized in Islam. One's benefit and enrichment must serve the good of the whole society, which is expressed for instance in the institution of *zakat*. Entering into an option contract is regarded as a fast way of making money for the purpose of making it. This could be viewed as hoarding, which is collecting money for the sake of collecting it, which is also considered *haram* in Islam.

The money should be used for beneficial purposes, like building a factory and giving work to people. The very process of hoarding money or goods is regarded as selfish and sinful and detrimental to society. Nevertheless, some may argue that option contracts can be used for good causes. Moreover, the option contracts can protect investors (like exporters/importers who depend on currency rate) from disadvantageous currency rates.

But as recent events in the US showed, the case is much more complicated than simple protection of businessmen. The option contracts as mentioned above offer an option to sell/buy the underlying. There is a possibility that the rights from the contract will be transferred to a third party, and the seller/buyer will not in the end execute the contract. The assignment, whether by the client or by the bank, will change the original parties to the contract which can also be classified as *gharar*.

### **Concept of Urbun**

When analysing the option contract, one cannot ignore *urbun*, known also as a down- payment sale. The buyer who intends to buy a certain commodity in the future pays a certain amount to the seller as a down- payment. If the buyer purchases the commodity, the down- payment is counted towards the total price for the commodity. If the buyer decides not to buy the commodity, the down- payment is forfeited and is treated as a gift from the buyer to the seller. The use of a down-payment sale (*urbun*) was declared permissible after long discussions in *Shari'ah* scholarly circles. At first glance, the terms and conditions of *urbun* seem similar to an option contract; nevertheless, there are serious differences between them.

Firstly, in *urbun*, the down payment serves as a kind of collateral or guarantee to the seller that the potential buyer has a serious intention to purchase the commodity. The down payment also serves as compensation to the seller in case the buyer withdraws from the purchase. Secondly, the down- payment upon purchase of the commodity is counted towards the total price of the commodity, whereas in an option contract, premium is paid by the client as consideration for the possibility/entitlement to purchase underlying for an agreed price on an agreed term in the future. Thirdly, in *urbun*, both parties bear the risk of the transaction.

The seller, as he may not sell the item and the buyer as he may forfeit his down-payment. In an option contract, the client bears always the risk of his unlucky bet; the financial institution is secured thanks to the premium and in fact never loses. The premium is paid at the moment the contract is entered into and the financial institution does not have to worry about the result of the client's forecast. One of the principles of Islamic banking is the profit and risk sharing principle. It implies that any transaction between two parties has to create a healthy balance in sharing the risks and the profits. A contract where the burden of risks lays mostly on one party is not permissible. Fourthly, the purpose of *urbun* is to secure future purchase of the commodity, the total price of which is known to the parties. If the contract is successful, there will be a transfer of commodity which is regarded as the core issue of any Islamic sale contract. The client does not bet what the future price of the commodity might be; he knows it at the time the contract is entered into.

In option contracts, it is based on bet and chance, which as previously mentioned is considered haram due to the existence of *maisir/qimar*. One must remember here that man has to obey the pillars of faith and cannot infringe on God's domain. In a transaction where man tries to influence the time that does not belong to him, he encroaches upon a divine domain. Moreover, man does not know what the future will bring, hence he should not make a bet on it.

### **Other kinds of derivatives**

In respect of option contracts, one must not forget about the so-called naked short sale. The idea behind this type of a derivative is as follows. The seller enters into contracts with potential buyers for the sale of the underlying asset the seller does not possess at the time the transaction is entered into. Thus, he sells something for which he has no legal title or he may never get the legal title to it. The potential buyer of the assets purchases a mere idea not commodity. The seller sells the possibility that he might sell to the buyer a certain amount of the underlying at a certain price in a fixed time in the future. The seller does not know at the time of entering into a transaction if he will get the right to the assets. Naked short sale is enumerated as one of the most risky derivative transactions. It has been banned by several countries including the US in order to limit the potential risks and losses associated with this kind of a transaction.

Another popular kind of derivatives are swap contracts. Swap contracts are created to literally swap (exchange) the claims between the parties. For instance, two companies of different national origin have entered into facility agreements with their respective banks. Company A has got a credit of 1 000 000 Euro in Germany and Company B has got a credit of 1500 000 Ruble in Russia. Company A is making a great investment in Russia and it is easier for it to repay the debt in rubles; Company B is investing in Germany and it needs euros.

Thus, the companies enter into a swap contract where they exchange their claims from their respective facility agreements with banks. During the period of time for which the swap contract is entered into, there will be exchange of interest payment (due to the facility agreements), which renders the transaction of swap non permissible ab initio. The prevailing aspect of riba that exist in swap contracts makes them not possible to be entered into by Shari'ah-compliant banks and companies. Furthermore, like with all other derivatives, a swap contract implies the existence of gharar, as the result of the contract is in the future and the parties are not able to influence future events. The swap contract also includes maisir/qimar as the parties enter the contract because at the time the contract is entered into, the ratio of the currencies of their respective facility agreements is beneficial for them. The parties expect (make a bet) that the ratio will stay beneficial and the swap of claims will prove to be profitable for them.

In order to make the swap transactions Shari'ah compliant, some professionals advise using a double murabaha to resolve the problem. Instead of the standard currency swap, where riba is present, it is recommended to enter first into term murabaha and then a reverse murabaha. The option of two separate contracts derives from the fact, that combining two contracts into one is not permissible under Shari'ah as it contains gharar. The proposed two murabaha contracts are to be entered into for the sale of commodity like metals or other Shari'ah compliant goods. However, if we change a standard swap contract into a Shari'ah compliant two murabaha contracts, the very idea of the swaps changes. As the swaps are foremostly used to exchange the claims and liabilities, one should be more inclined towards urbun in respect of buying the commodity rather than swaps. The question whether the claims and liabilities can be treated as commodity remains.

The solution to the problem might be a musharaka mutanaqisah or diminishing musharaka. The parties who wish to obtain the result tantamount to those from the swap contract enter into 2 musharaka mutanaqisah contracts. The parties aim to perform certain investments (in two different locations following the above example with swaps) and for each investment they set up a separate musharaka mutanaqisah.

Then the partners to each musharakah enter into separate mudarabah agreements with the Islamic institutions that would provide the financing for each musharaka. In mudarabah, the partners to musharaka will act as mudaribs, and the financing partner as rabbul-mal. When each mudarabah agreement is fulfilled, the partner to a musharaka progressively buys the shares in musharaka from the other partner. However, the presented solution is just a brief idea and requires a further analysis.

## **Futures Contract**

The other derivative is a futures contract. Futures contract is often compared to a forward contract. Nevertheless, there are some significant differences between the two. Futures contract is a standardized one, which means the parties do not enjoy the freedom to create their mutual obligations in a way it is possible in a forward contract. The futures contracts are traded on a futures exchange. The underlying asset can be currency, stock index, stock prices etc. Contrary to forward contracts, the delivery date (the date the contract is fulfilled) is specifically specified by a body that is authorized to trade in futures contracts like e.g. stock exchange. Usually, there are four times during the calendar year where the futures contracts are fulfilled (March, June, September and December).

Upon that time, the person who entered into a futures contract is obligated (not entitled like in a classic option contract) to buy or sell an agreed amount of the specified underlying at an agreed price. Thus, the party that entered into such a contract has to behave in a certain way in accordance with the terms and conditions of it.

Furthermore, the party is obliged to pay a margin of 5 – 15 % of the value of the futures contract in order to minimize the risk on the side of the financial institution. The futures contract, although standardized and supervised by law, is not permissible under Shari'ah as it contains elements of both gharar and maisir/qimar. Moreover, there is no balance between profit and risk sharing between the parties. In respect of gharar, the result of the contract is in the future, hence is unknown for the parties at the time it is entered into. The parties bet on the future result of the contract. The risk is borne solely by the person who pays the margin, as a financial institution is secured thanks to the margin and in fact never loses.

## **Arbitrage**

Another interesting aspect in case of derivatives is arbitrage. Arbitrage is speculating on differences in prices of commodities and assets on different markets. The persons involved in arbitrage called arbitrageurs earn on price differences of the assets. The practice of arbitrage would also be considered haram as the profit is based on speculating.

However, some may argue that compared to standard derivatives, arbitrageurs earn just on price differences. But, price differences are seen also in derivatives for instance and this renders the transaction non permissible. This non-permissibility affects as well the so-called leverage financing used in derivatives transactions. Leverage financing is based on loans and facilities used to provide financing for the transaction that are supposed to bring greater profit than the money derived from the facility. Leveraged financing is risky as it implies that the investment through indebtedting (loans and facility) the Company will bring huge profit that will cover the facility and auxiliary costs.

Under Shari'ah, using leverage would be deemed haram and would invalidate the whole transaction. The leverage transaction involves payment of interest (loans, facilities). The aim of the transaction is to gain maximum profit. There are no intentions of the transaction being beneficial to society or for charitable purposes. Also, the parties to the transaction make a bet on the prospected profit or loss of the investment.

Thus it could be seen that the market of Shari'ah – compliant derivatives is at its early stages. Firstly, due to the negative approach of the Shari'ah scholars toward the usage of the instruments and secondly, due to the simple fact of creating complicated transactional structures in lieu of a standard derivatives contract (e.g. option contract).

### **Innovative Structures**

As presented above, conventional derivatives are not permissible under Shari'ah due to the existence of elements that invalidate the contract. There are some Islamic instruments like Bai' salam or urbun that could well serve as an Islamic answer to haram instruments. However, these contracts are not that popular in modern banking. The other issue discussed in the article is the proposed replacement of a non- Shari'ah compliant instrument with double or triple Islamic contracts like murabaha. The idea is good, but in terms of facility and the access to a standard derivative is much more complicated and time- consuming.

Likewise, from a legal point of view, it is important for the participants of a derivative or derivative- like transaction to be fully aware of their rights and obligations in the contract. In the case of a big market player that wishes to play in compliance with Shari'ah, entering into various Islamic contracts does not have to be a problem. But for smaller entities or individual investors who want to have a simple procedure, such complications might prove to be deterrents.

That is why both Shari'ah scholars and Islamic organizations like AAOIFI or IFSB should ask themselves if there is a point in creating complicated structures to obtain a derivative- like product. It is worth considering promoting a further development of Bai transactions and urbun to provide the offer of a derivative-like possibility for the clients who intend to invest in accordance with Shari'ah. Furthermore, the area of Islamic contracts has to be fully explored in order to come up with innovative structures, structures which would offer the clients of Islamic banks and institutions an investment that is fully Shari'ah compliant. If we agree on the non permissible nature of conventional derivatives, why create a similar product?

Summing up, there is no need in the author's opinion to create a product that is supposed to be similar to a product which is ex lege against Shari'ah principles. It would result in fact in omission of the law. Instead, it should be thoroughly analysed whether existing Islamic

contracts like Bai' salam or urbun can be modified further to provide clients a Shari'ah compliant and modern alternative from a banking point of view.

The world of conventional derivatives and the world of Islamic financial products are two very different worlds that have contradictory principles in important issues like interest or ambiguity. Likewise, the derivatives are blamed for the present recession and increase in unemployment rates as well as decreased credibility of banks and financial institutions. Islamic banking and finance offers such a wide and innovative range of products that there is no need to copy instruments which can prove detrimental both for the investor and the market, thus influencing entire societies in a negative manner.

Islamic banks following Shari'ah should build their credibility and stability with the use of Islamic financial instruments. It should not be forgotten that in Islam, banks and financial institutions work for the good of the people and not just for the further enrichment of the rich. Clients decide to entrust their monies with these banks due to their compliance with Shari'ah and due to their being different from conventional banks.