

Sharia Ruling on Financial Derivatives and their Possible Sharia Compliant Alternates

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ABSTRACT

Sharia law is the Islamic moral code and religious law that establishes guidelines for dealing with money as well as other aspects of daily life. Modern finance has seen a rise in the use of financial derivatives like futures and options, although some academics have criticized them for being non-Sharia compatible forms of speculation. Each transaction or contract must, in accordance with Sharia law, involve physical goods or services that are clearly defined and agreed upon by both sides. As a result, Sharia prohibits the use of derivatives that entail speculative transactions or are not based on actual assets. Yet, some academics have proposed substitute financial products that are Sharia legal that could take the place of derivatives. They include Islamic forward contracts, in which two parties mutually agree to buy or sell an asset at a later time, and Islamic swaps, in which cash flows are exchanged in accordance with specified guidelines and conditions. In conclusion, even though some financial derivatives are seen as not complying with Sharia, there may be prospective substitutes that can be used to satisfy the demands of Islamic finance markets. While assessing the Sharia conformity of financial goods, it is crucial to have advice from experienced scholars in the field.

Keywords: financial derivatives, Sharia compliant, Musharakah, Salam, Sukuk

Introduction to financial derivatives

The value of a financial derivative is derived from the value of an underlying asset, such as a commodity, stock, or bond. Financial derivatives are a type of financial instrument. Market participants utilize them to mitigate risk, speculate on future price movements, or hedge their positions in the market. There are many kinds of financial derivatives, such as forwards contracts, futures contracts, options contracts, and swaps. (Hull, John C.2018)ⁱ.

Futures contracts are agreements to acquire or sell an item at a defined price and date in the future. These terms are set in advance. Option contracts grant the holder the right, but not the responsibility, to buy or sell an asset at a fixed price and date in the future. Nevertheless, the holder is not required to actually carry out either transaction. Swaps are agreements between two parties to exchange cash flows, with the value of an underlying asset or benchmark serving as the basis for the arrangement. Forwards contracts are agreements to buy or sell an asset at a predetermined price and date in the future, but unlike futures contracts, they are not traded on an exchange like futures contracts are. Forwards contracts are agreements to buy or sell an asset at a predetermined price and date in the future. (Kolb, Robert W. 2010)ⁱⁱ.

Investors and traders frequently utilize financial derivatives for the purposes of risk management and price movement speculation, respectively. For instance, a producer of a commodity may use a futures contract to fix a price for their future production, while a speculator may use an options contract to profit from a predicted price movement in the market. Both contracts are types of financial derivatives. Financial derivatives come with a significant amount of both risk and complexity, even though they can be helpful tools for mitigating risk and earning profits. To effectively use financial derivatives, one must have a comprehensive knowledge not only of the financial markets but also of the particular instrument being employed. (McDonald, Robert L. 2014)ⁱⁱⁱ.

Types of financial derivatives

The value of a financial derivative is derived from the value of an underlying asset, such as a stock, bond, commodity, or currency. Financial derivatives are a type of financial instrument. They are employed for the purposes of risk management, speculating on price changes, or hedging positions in the market. The following are some examples of several types of financial derivatives: Futures contracts: These are agreements to buy or sell an underlying asset at a stated price and date in the future. The future price and date are also specified. Futures contracts are standardized in terms of contract size, expiration date, and quality of the underlying asset, and they are traded on exchanges. Futures contracts are traded on exchanges. (Hull, J. C. (2018)^{iv}.

Options contracts: These provide the holder with the right, but not the responsibility, to buy or sell an underlying asset at a predetermined price and date in the future. But the holder is not required to actually carry out either transaction. Option contracts can be utilized both for speculating on future price fluctuations and for protecting oneself against the risk of incurring losses. Swaps: These are contracts made between two parties to facilitate the exchange of cash flows. According to the value of an underlying asset or standard. The use of swaps allows for the management of risk as well as the customization of exposure to various classes of assets or marketplaces. (Kolb, R. W. (2010)^v.

Forwards contracts: These are agreements between two parties to buy or sell an underlying asset at a specific price and date in the future. They are comparable to futures contracts, although they are more personalized than futures contracts. Forwards contracts are not traded on any exchanges because they are customized to meet the requirements of the parties engaged in the transaction.

Credit derivatives: These are financial instruments that give investors the ability to transfer or control credit risk, such as the risk of defaulting on a loan or bond. Examples of this risk include the risk of defaulting on a loan or bond. Credit derivatives are financial instruments that can be used either to protect against the possibility of financial loss or to speculate on credit risk. (McDonald, R. L. (2014)^{vi}.

In the global financial markets, there are many kinds of financial derivatives, each of which has its own specific set of characteristics and uses. It is necessary for investors and traders who want to control risk and earn profits to have a solid understanding of the various forms of financial derivatives as well as the purposes they serve.

Features and characteristics of financial options.

An example of a financial derivative is a financial option, which grants the holder the right but not the duty to purchase or sell the underlying asset at a given price and date in the future. Among the crucial traits and qualities of financial alternatives are: Exercise price: The price at which the holder can buy or sell the underlying asset is referred to as the exercise price, often known as the strike price. The option contract specifies the exercise price, which is normally determined by the asset's current market value.

Expiration date: The option contract expires on the expiration date, and the holder must then decide whether to exercise the option or let it lapse. The expiration dates of the majority of choices range from a few days to several years in the future. Option premium: The cost incurred by the option holder to acquire the option is known as the option premium. The underlying asset's current market price, the amount of time to expiration, and the volatility of the asset's price are some of the factors that affect the premium. (Al Bunyan, A. (2008)^{vii}.

Call and put options: Call options and put options are the two primary categories of options. As opposed to put options, which offer the holder the right to sell the underlying asset at the exercise price, call options allow the holder to purchase the underlying asset at the exercise price. American and European options: Moreover, there are two primary choices styles: American options and European options. European options can only be exercised at expiration, but American options can be executed at any time prior to that day. Hedging and speculation: Options can be used for speculating as well as hedging. While speculating is using options to profit from fluctuations in the price of the underlying asset, hedging entails using options to lower the risk of an underlying asset.

Leverage: The ability to control a big portion of the underlying asset for a relatively little premium makes options potentially very leveraged. (McDonald, Robert L, 2014)^{viii}. Investors and traders who want to utilize financial options as instruments to control risk or make money in the financial markets must understand their features and characteristics.

Features and characteristics of futures

Futures contracts are a sort of financial derivative that binds both the buyer and the seller to buy and sell the underlying asset at the same price and date in the future. Futures contracts have several important properties, like the following: Standardization: In terms of the underlying asset, contract size, quality, and expiration date, futures contracts are standardized. Due to this uniformity, trading on exchanges is made simple and pricing is made transparent.

Margin requirements: In futures contracts, both the buyer and the seller are required to post margin, which is a portion of the contract value kept as security by the exchange. This buffer ensures that both parties can carry out their contractual responsibilities. (Al Bunyan, A. (2008)^{ix}.

Leverage: Given that the margin required is a small percentage of the contract value, futures contracts provide tremendous leverage. As a result, traders can gain substantial power over the underlying asset for a very small investment. Delivery: Both physical delivery of the underlying asset and monetary settlement are options for futures contracts. The difference between the

contract price and the asset's market price upon expiration is paid through cash settlement. Marking to market: Futures contracts are marked to market every day, which means that gains and losses are resolved every day depending on the price at which the underlying asset is currently trading.

Hedging and speculation: Futures contracts can be used for speculating as well as hedging. Although speculation involves utilizing futures contracts to profit from changes in the price of the underlying asset, hedging is using futures contracts to control risk associated with an underlying asset. Liquidity: Futures contracts have a high level of liquidity, making it simple to buy and sell them on exchanges with little effect on the price of the underlying asset. (Hull, J. C. (2018)^x. Investors and traders who want to use futures contracts to reduce risk or increase profits in the financial markets must understand their features and characteristics.

Features and characteristics of forward contract

A sort of financial derivative known as a forward contract binds the buyer and seller to buy and sell the underlying asset at a given price and time in the future. The following are some of the main qualities and aspects of forward contracts: Customization: Forward contracts, as opposed to futures contracts, are frequently tailored to the unique requirements of the buyer and seller. This implies that the parties may agree to discuss the scope, standard, and end date of the contract. Lack of standardization: The level of standardization that is present in futures contracts is absent from forward contracts. This can make them less transparent, which in turn makes trading them more difficult. (Chance, D. M., & Brooks, R. (2015)^{xi}.

No margin requirements: Forward contracts do not require the posting of margin, which means that in order to execute the terms of the contract, the parties must rely on each other's creditworthiness. Delivery: Settlement of forward contracts can take place either through the actual delivery of the underlying asset or through the payment of cash. When the contract is initially established, this is the time when it is customarily negotiated between the parties. (Baz, J., & Chacko, G. (2012)^{xii}.

Counterparty risk: As a result of the fact that forward contracts are negotiated in secret between two parties, there is a possibility that one of the parties would breach the obligations outlined in the contract. The term for this kind of risk is "counterparty risk." Hedging and speculation: The usage of forward contracts can include both risk management and market speculation. Both hedging and speculation involve the use of forward contracts; however, hedging involves using forward contracts to reduce the risk associated with an underlying asset, while speculation involves using forward contracts to increase one's potential profit from changes in the price of the underlying asset.

Lack of liquidity: Forward contracts are often less liquid than futures contracts, which implies that it may be more difficult to sell them before they expire. This contrasts with futures contracts, which are very liquid. (Steil, B., & Litan, R. E. (2001)^{xiii}. For investors and traders who want to use forward contracts as a risk management or profit generation tool in the financial markets, it is vital to have a solid understanding of the elements and qualities that comprise these products.

Features and characteristics of financial swap

A financial swap is a sort of financial derivative that involves the exchange of cash flows between two parties based on the performance of an underlying asset. This exchange takes place based on the performance of the underlying asset. The following are some of the most important qualities and characteristics of financial swaps:

Customization: Swaps, like forward contracts, can be tailored to suit the interests of the parties involved. Hence, the notional amount, payment dates, and underlying asset are all negotiable between the parties to the contract. **Counterparty risk:** Swaps, which are very similar to forward contracts, are subject to counterparty risk, which simply implies that there is a possibility that one of the parties to the deal would not fulfil their obligations. **No exchange of principal:** Swaps, in contrast to forward contracts and futures contracts, do not require the actual transfer of the underlying asset to take place. Swaps, on the other hand, involve exchanging cash flows dependent on how well the underlying asset performs.

Fixed vs. floating rates: There are two possible types of swaps: fixed-for-floating and floating-for-floating. One side makes payments at a fixed rate during a fixed-for-floating swap, while the other party makes payments at a floating rate that is based on a benchmark such as LIBOR. Both parties in a floating-for-floating swap are responsible for paying a floating rate that is determined by one of several distinct benchmarks. (McDonald, R. L. (2014). **Netting:** The cash flows due from one party can be offset against the cash flows due to that party through the use of swaps, which means that the swaps can be "netted." This can help to lower the risk of credit and make cash flow more straightforward.

Hedging: Swaps can be used to hedge, which means that they can be used to manage risk connected with an underlying asset or liability. This can be accomplished by using the swaps to manage the risk. **Over-the-counter (OTC) market:** Swaps are almost often transacted on the over-the-counter (OTC) market, which means that the terms of the exchange are discussed in confidence between the two parties involved. Because of this, they may be less transparent and more complicated to trade than derivatives that are traded on an exchange. (Sathe, V. (1996)^{xiv}. It is essential for investors and traders who wish to use financial swaps as a risk management tool or a profit-generating instrument in the financial markets to have a solid understanding of the functions and features of these products.

Sharia ruling on financial option, futures, forward contract and financial swap

Options, futures, forward contracts, and swaps are all examples of financial derivatives that must be Sharia-compliant in order to be used in Islamic finance. This is because Islamic finance is based on the concepts of risk-sharing, fairness, and the prohibition of interest (riba) and uncertainty (gharar). The general Sharia rulings for each financial derivative are as follows:

Financial options: Whether or not a given option complies with Sharia law is determined by the contract's terms and conditions. Options that involve speculation, undue risk, or uncertainty are generally forbidden by Islamic law. Thus, options whose underlying assets are haram (prohibited in Islam) goods or businesses are not permitted. Option contracts that require the purchaser to pay the seller a premium or interest rate are likewise prohibited.

Futures contracts: Futures contracts are generally allowed in Islamic finance, provided that the underlying asset is halal, and the contract terms are clear and avoid riba and gharar. At the time of the contract, the value of the underlying asset must also be understood and established. (Hosen, M. N. (2017)^{xv}. **Forward contracts:** In Islamic finance, forward contracts are allowed as long as they do not involve riba, gharar, or speculation. The price of the underlying asset should be known and agreed upon at the time of the contract, and the terms of the contract should be explicitly described. Furthermore, the asset being traded must be halal, and delivery must occur when custody of the asset is transferred.

Financial swaps: To the same extent as with other types of financial derivatives, whether or not a certain swap complies with Sharia law is determined by the underlying asset and the terms of the contract. Riba, gharar, and gambling are all forms of exchange that are forbidden under Sharia. It is also forbidden to engage in interest payment swaps or transactions involving haram assets. Swaps that adhere to Sharia law, on the other hand, can be utilized for both risk control and trade facilitation. (El-Gamal, M. A., & Inanoglu, H. (2012)^{xvi}.

Notably, experts and practitioners of Islamic finance continue to discuss and interpret the laws that govern financial derivatives. If you're thinking about using financial derivatives in your investments or transactions, you should consult with knowledgeable Islamic finance professionals beforehand..

Sharia ruling on financial option

Sharia compliance governs the use of financial options in Islamic finance, ensuring that all monetary dealings correspond to the aforementioned principles of risk distribution, equity, and the abolition of interest (riba) and speculation (gharar). The specifics of the contract determine the Sharia ruling on financial possibilities. Options that involve speculation, undue risk, or uncertainty are generally forbidden by Islamic law. Thus, options whose underlying assets are haram (prohibited in Islam) goods or businesses are not permitted. Option contracts that require the purchaser to pay the seller a premium or interest rate are likewise prohibited.

Nonetheless, choices that adhere to Sharia standards and meet the criteria of risk-sharing, transparency, and justice are acceptable. Real estate, crops, and precious metals are all examples of underlying assets or commodities that can be used in options. Risk-management and trade-facilitating options are also acceptable as long as they do not entail riba or gharar. (Irfan, M. (2015)^{xvii}.

It's worth noting that experts and practitioners of Islamic finance are always debating and reinterpreting the religion's laws on financial derivatives. Investors and traders who are considering using financial derivatives would do well to consult with knowledgeable Islamic finance professionals before doing so.

Sharia ruling on futures

Compliance with Sharia law, which mandates that all financial transactions adhere to Islamic principles of risk-sharing, justice, and the prohibition of interest (riba), applies to the usage of futures contracts in Islamic banking (gharar). Futures contracts are ruled by Sharia law based on

their individual terms and circumstances. Futures contracts are generally allowed in Islamic finance, provided that the underlying asset is halal, and the contract terms are clear and avoid riba and gharar. In addition, the contracting parties must agree upon the value of the underlying asset. Nevertheless, speculation, undue risk, or unpredictability in futures contracts are not permitted. Futures contracts that include premium or interest payment exchange are likewise prohibited. Sharia law allows the use of futures contracts for risk management, price stabilization, and trade facilitation, among other authorized commercial uses. Commodities, currencies, and some financial instruments are all examples of halal underlying assets for futures contracts. (Usmani, M. T. (2002)^{xviii}.

Sharia ruling on financial swap

Compliance with Sharia law, which mandates that all financial transactions adhere to Islamic principles of risk-sharing, justice, and the prohibition of interest (riba) and uncertainty, applies to the usage of financial swaps in Islamic finance (gharar). The specifics of a contract determine whether or not it is subject to the Sharia judgement on financial swaps. If the contract adheres to the principles of openness, fairness, and risk-sharing, financial swaps that entail the exchange of cash flows between two parties are permitted in Islamic finance. To qualify as an Islamic financial swap, both parties must simultaneously possess the assets being traded.

Furthermore, the underlying assets' performance, and not interest payments or speculation, must be the basis for the cash flows being traded. Financial swaps, such as profit rate swaps, currency swaps, and commodity swaps, are permitted in Islamic finance. Currency swaps include exchanging cash flows based on the difference in exchange rates between two currencies, whereas profit rate swaps involve exchanging cash flows based on the difference in profit rates of two assets. For the purpose of exchanging cash flows based on the difference in a commodity's price over a given time period, traders utilize commodity swaps. (Abbas, S. M. (2017)^{xix}.

Sharia ruling on forward contract

Sharia compliance governs the usage of forward contracts in Islamic finance, ensuring that all monetary dealings correspond to the aforementioned principles of risk distribution, equity, and the abolition of interest (riba) and uncertainty (gharar). The advance contract terms and circumstances will determine the Sharia ruling.

In Islamic finance, forward contracts are generally allowed if they involve the sale and purchase of halal goods at a set price and date. All terms of the contract, including the commodity's price and the date of delivery, must be finalised prior to the execution of the contract. Additionally, the contract must be clear and unambiguous, with no provision for riba or gharar.

But, premium or interest payment swaps in forward contracts are prohibited in Islamic finance. Furthermore, speculation or excessive risk in forward contracts is not allowed. For legitimate business goals like easing trade and mitigating risk, forward contracts are permitted under Sharia law. Forward contracts on halal commodities can be made in a variety of industries, including agriculture, minerals, and precious metals. (Hosen, M. N. (2017)^{xx}.

Islamic alternative products of financial options, futures, forward contracts and financial swap

In order to adhere to Islamic principles of risk-sharing, fairness, and the prohibition of interest (riba), Islamic finance offers numerous products that can be utilized in place of conventional financial options, futures, forward contracts, and financial swaps (gharar). You can find some of these goods in:

Murabaha: The buyer acquires the product from the vendor at the vendor's cost plus a predetermined profit margin. The buyer resells the item to a third party for a profit, deferring payment until a later date. Rather than using futures or forward contracts, you can use this instead. (Abbas, S. M. (2017)^{xxi}.

Wakala: To invest in Sharia-compliant assets, an investor signs an investment agency agreement with a manager. To compensate for their services, investment managers receive a fee, and both the investor and the manager benefit from any gains. This is an alternate strategy that can be used with money.

Musharaka: This is an example of a partnership agreement in which several people or organizations pool their resources to pursue a common goal. Each partner invests money, time, or expertise into the venture, and the profits and losses are split according to a predetermined ratio. An alternate to using currency swaps.

Salam: This is an example of a forward contract that can be used to pay for the acquisition of a commodity. The commodity is purchased by the buyer in advance of its delivery to the seller. Similar to conventional forward contracts, (Irfan, M. (2015)^{xxii}.

Products like Ijara, Sukuk, and Takaful, which are in accordance with Sharia principles and can be utilized in place of conventional financial products, are also permitted within the framework of Islamic banking. It's worth noting that scholars and practitioners in the field of Islamic finance continue to argue and interpret the use of alternative products.

Alternative Islamic product of financial option

Due to their speculative nature and element of uncertainty (gharar), Islamic finance does not permit the purchase and selling of financial options, which involve the right to buy or sell an underlying asset at a preset price and date. Products that adhere to Islamic risk-sharing, justice, and the prohibition of interest (riba) and uncertainty can be utilised instead of conventional financial alternatives (gharar). You can find some of these goods in:

Wakala: To invest in Sharia-compliant assets, an investor signs an investment agency agreement with a manager. To compensate for their services, investment managers receive a fee, and both the investor and the manager benefit from any gains.

Mudaraba: In this arrangement, the investor (Rab al-Maal) provides the funds, and the entrepreneur or manager (Mudarib) offers the skills, labour, and management in exchange for a portion of the profits. Each investor receives a certain percentage of the profits and is responsible for all of the losses. (El-Gamal, M. A., & Inanoglu, H. (2012)^{xxiii}.

Musharaka: This is an example of a partnership agreement in which several people or organizations pool their resources to pursue a common goal. Each partner invests money, time, or expertise into the venture, and the profits and losses are split according to a predetermined ratio.

Sukuk: A profit-sharing bond is a type of Islamic bond in which investors put up money to finance a project or business venture in exchange for regular payments. The payments are secured by the project's assets or future cash flows. (Kamali, M. H. (2008)^{xxiv}.

Since these derivatives are backed by real investments in tangible assets and the associated risks and rewards are spread among the participants, they are in accordance with Sharia law. There is continuing discussion and interpretation about the usage of alternative products in Islamic finance among academics and industry professionals.

Islamic alternative product of futures and forward contracts

In Islamic finance, futures and forward contracts are forbidden because of the speculation and the element of uncertainty (gharar) they involve in the purchasing and selling of an asset at a preset price and date in the future. Futures and forward contracts are not compatible with Islamic risk-sharing, justice, and the prohibition of interest (riba), however there are other products that can be utilised instead (gharar). You can find some of these goods in:

Salam: This is a purchase agreement for a commodity or asset where the payment is made in advance and the delivery occurs at a later date. (Mirakhor, A., & Iqbal, Z. (2011)^{xxv}. The seller delivers the commodity or asset at a specified future date, and the buyer pays the full price at the time of the contract.

Istisna: With this type of agreement, the buyer gives the funds, and the seller delivers the manufactured good or constructed asset at a later date. Payment is made before production begins, and the seller bears all risks in creating the good or constructing the service. (Ali, S. S. (2012)^{xxvi}.

Murabaha: This is an agreement to sell a commodity or item at a certain profit margin, with full payment due at a later date. The seller incurs the cost of acquiring the good or service and resells it to the purchaser for a profit. (Abuzaraida, M., & Al-Matari, Y. A. (2018)^{xxvii}.

Ijarah: For a predetermined amount of money each month, the lessor (the owner of the asset) rents it out to the lessee (the user of the asset) under this lease or rental agreement. (Elgari, M. A. (2008)^{xxviii}.

Due to the fact that these alternative products entail genuine transactions and investments in physical assets and that the profits and risks are distributed among the parties concerned, they are seen as Sharia-compliant. It is significant to highlight that scholars and practitioners continue to argue and interpret the usage of alternative goods in Islamic banking.

Islamic alternative product of financial swap

An agreement between two parties to exchange future cash flows based on various financial instruments or indices is known as a financial swap. Traditional swaps are not regarded as Sharia-compliant in Islamic finance due to the presence of interest (riba) and speculating (gharar). Swaps

can be replaced with alternative solutions, nevertheless, that adhere to the Islamic values of equity, openness, and risk-sharing. Many of these items are:

Wa'ad (Promise): This is a contract that commits the parties involved to buying or selling an item at a later time in exchange for a mutual promise. Unlike conventional swaps, the commitment is enforceable against both parties, and there is no trading of cash flows or interest payments.

Musawamah (Bargaining): This kind of sale involves a price negotiation between the buyer and seller with no set asset specifications or predetermined price. The price and other parameters of the deal are agreed upon by the buyer and seller, and full payment is made at the time of the contract. (Saeed, A. (2019)^{xxix}.

Tawarruq (Monetization): In this type of financing, a client buys a good or asset on credit from a vendor and then sells the same good or asset to a third party for less money. The buyer pays the third party a profit margin in addition to the original seller when they get the cash payment in cash. (Usmani, M. T. (2002)^{xxx}.

Since these alternative products entail genuine transactions and investments in physical assets and that the profits and risks are distributed among the parties concerned, they are seen as Sharia-compliant. It is crucial to remember that scholars and practitioners continue to argue and interpret the usage of alternative products in Islamic finance.

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