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PRIMARY RESEARCH

Re-visiting Current Debate on Sharī‘ah Position of Derivatives

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Abstract. The current practices in Money, Capital, Foreign Exchange and Securities markets, based on interest and short selling, stress upon using hedging instruments for risk management. Nevertheless, there is disagreement among scholars and researchers regarding permissibility status of these instruments. Although majority of Islamic economists and scholars have expressed serious concern on the use of financial engineering products, a number of scholars insist on their use by the Islamic financial institutions. The present study aims to evaluate the permissibility status of derivatives in the light of the main features of Islamic law of contract. It is found that, while the hedging instruments may carry various advantages for individual institutions, their usage leads to fragility in the global financial system and markets owing to involvement of gharar, short selling and interest. In order to circumvent the Sharī‘ah prohibitions their structures are extremely complicated that lead to deviance from real economic activity. Although some Muslim jurisdictions have allowed derivatives, their usage is not appropriate in the light of set principles for a valid contract, as envisaged by Sharī‘ah. Muslim countries and scholars need to develop distinguished instruments for hedging risk in a Sharī‘ah compliant manner. This study thus provides with an extensive overview of scholarly views and contemporary practices and offers objective evaluation of derivative contracts.

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INTRODUCTION

Islamic Finance (IF) is fast emerging as an alternative system and asset class owing to religious considerations, attractive returns and resilience of IF institutions during the recent crisis (Beck, Demirguc-Kunt, & Merrouche, 2010). It seeks to promote certain norms in commercial transactions and preserve transparency and fairness in dealings. IF related

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transactions need to be distinguished from ordinary financial transactions in certain respects and may carry some unique challenges. As such, it is difficult for IF institutions to hedge the unforeseen risks as the conventional institutions do, as there is debate among scholars and regulators regarding permissibility of hedging instruments. This paper contributes to existing literature by exploring the views of regulators and scholars regarding derivatives and evaluates the permissibly status of these contracts in the light of the main principle of Islamic law of contract.

Derivatives are financial instruments whose price is determined by or derived from some other underlying assets or objects (Chance & Brooks, 2015). The underlying assets can be anything ranging from real assets (i.e., commodities, agricultural products), natural resources (i.e., metals, energy products), financial assets (i.e., stocks, bonds) to notional assets (interest rates, currency rates, indexes and credit risk). Derivatives involve different kinds of contracts and structures. Forwards and swaps are mostly customised contracts performed by two parties without the involvement of any guarantor or moderator. However, the futures are concluded under the supervision of futures exchange that not only protects contracting parties from counterparty risk but also performs important functions, like ensuring transparency of trade activities and daily settlement. Futures contracts are used for sale/purchase of the underlying assets on deferred basis. The settlement procedure results in fixation of prices on daily basis and the investors who face losses are required to deposit money in order to cover their position through margin calls.

Islamic finance that claims to deal in the real economy only is bound to follow Sharī'ah rules (El-Gamal, 2006). However, as derivatives are different from ordinary transactions, dissenting opinions are found in contemporary IF literature regarding their permissibility in Sharī'ah . Although majority of the scholars and the global standard setting bodies in Islamic finance agree that derivatives carry certain features which are impermissible in Sharī'ah (Mansoori, 2005), it appears that some scholars, particularly from Malaysia, hold different view. The Malaysian IF industry has embraced the notion of financial engineering and introduced Islamic derivatives. Malaysian regulators have permitted the usage of forward foreign exchange transactions that are based on unilateral *wa'd mulzim* (binding promise), Islamic Profit Rate Swaps, *bay*' *al-'īnah*, Forward foreign currency exchange transaction based on *bay*' *al-'mu'ajjal* (deferred payment sale and options based on *wa'd* and two independent *tawarruq* transactions (Sharia Advisory Council, 2006). It has impacted the Middle East market as well and some IFIs operating in Dubai are using swaps and some FX Forwards.

This paper critically examines the issue of admissibility of derivative instruments. The discussion is also substantiated with the economic perspective of derivatives. This paper uses the lens of Islamic Law of Contracts to assess the permissibility status of derivatives. This assessment is more objective, as it employs the criteria acceptable to all the *fiqh* schools.

The underlying wisdom (*ḥikmah*) behind impermissibility of many of the contracts and the acts is their harmfulness to the society. This paper performs the appraisal of derivative instruments in the light of the elements of a contract. In addition, the critical examination of these contracts is made to observe the presence of impermissible elements like *qimār* (gambling) *maysir* (something achieved without making any effort), *jahālah* (ignorance) and *gharar* (excessive uncertainty regarding the subject matter, price or delivery) in derivative contracts.

The rest of the paper is organized as follows: Section 2 provides with a detailed review of the literature and contemporary practices. Section 3 indicates the findings. Section 4 highlights economic implications for Islamic banks if they avoid derivative contracts. Section 5 concludes the study.

REVIEW OF LITERATURE

Emergence of and Use of Various types of Financial Derivatives

Derivatives are used for risk management through hedging i.e., taking a position in an asset to safeguard against adverse movement of the market. Modern day corporations use derivatives for hedging as well as speculation strategies to manage the risk. The hedging related advantages coupled with the associated higher returns resulted in creation and growth of derivatives markets possessing huge volume of daily trading in futures and other derivatives. Still, there were many dissenting voices raising concerns against the ever growing reliance on derivative instruments. Kunhibava and Shanmugam (2010) discussed objections against derivatives in detail and indicated at least two fundamental legal issues concerning derivative contracts in conventional law. The first, futures contracts hold no enforceability as they involve merely the sale of promises and no transfer of possession is made and no actual physical delivery takes place. The basis of this claim emanated from McGovern (1969) who contended that a sale of promises or an executory contract was not enforceable due to the reason that the promisor has not yet received any benefit. Adams (1924) referred to Glanville's Tractatus and stated that a sale could be enforced only if it meets any of three conditions i.e., delivery of subject matter, or full/partial payment of the price, or giving of earnest money. Even when the earnest money is paid, the seller cannot bind the buyer for enforcement and can only confiscate his earnest. These arguments point towards inherent defects in derivatives as at the time of contract, merely the promises are made (that are not enforceable) and both the counter values are deferred (i.e., no value is exchanged). The margin paid on futures resembles earnest money that does not enforce any action in case of default by buyer.

The second reservation is that futures sales are the contracts made mainly for differences/netting off and tantamount to wagering and therefore should be deemed illegal. The payment of the difference in price should be interpreted as betting as there is no intention to eventually deliver the underlying asset or commodity (Dewey, 1886). When two persons enter into, apparently, a contract of sale of goods but real intention is not to buy or sell the commodity, but they merely speculate and upon maturity pay the difference of the market price on a particular day, such a contract is illegal as per common law and it cannot be enforced.

Stout (2011) elaborates the stance of the traditional English and American common law systems that distinguishes between hedging agreements (where at least one of the contracting parties seeks to reduce risk), and purely speculative contracts (where the sole intention is making profit). The derivative contract was deemed enforceable when one of the parties in fact owned or expected to own the actual physical asset or commodity underlying the contract i.e. exposed to the risk or decrease in value of the underlying asset. Therefore, a forward contract based on Wheat prices between a Wheat grower and a grain trade would be enforced. On the other hand, a derivative contract between two parties who neither owned nor expected to own Wheat is evidently made for speculation. It is betting where each party hoped to profit from its prediction of future Wheat prices. This contract is considered void and legally not enforceable. The aggrieved party would not have any recourse in public courts and face enforcement problem. An exception is that even if neither party to a derivative contract is expected to take delivery of the underlying assets, the contract would still be enforceable if any party held some pre-existing economic interest in the underlying assets and there is a risk of damage of interest in case of occurrence of the same event that would allow it to earn profit under the contract.

The exception highlights how common law seeks to promote hedging and discourage speculation that it considers gambling. The primary intention was to discourage the waste of precious human capital as gambling results in redistribution of existing wealth instead of creating new wealth. The gambling stretches from a zero-sum game to a negative-sum game and ultimately results in reduction of net social welfare. Therefore, the common law judges resorted to condemning the speculative derivatives to promote legitimate trade.

Another threat foreseen by judges was the possibility that gamblers and derivatives traders may try to manipulate the fate of the very thing they were betting on. The speculators can try to turn the tide of events in order to profit from their position. Therefore, when a person is not allowed to buy insurance policy for his neighbour's house as there is a threat that he may end up burning it to earn profit from insurance claim, he should not be able to buy credit default swaps against mortgages of other persons as he may try to manipulate the underlying assets to earn profit. In this scenario, investment banks like Goldman Sachs deliberately structured derivative contracts to fail so as to earn profit for their hedge-fund clients.

Finally, the common law realised that these instruments increased the risk instead of reducing it that would result in ruining of losing speculators and their families creating other social ills. The winners would also spread easily gotten money in the system and cause perversion in the society.

Impact of Financial Derivatives on Global Finance and Markets

Stout (2011) pointed out that derivatives are a double edged sword, contribute to social welfare if used for hedging and risk mitigation, and are harmful if the purpose is speculation and gambling. Their abuse leads to creation of more risks and after the financial crisis of 2008, financial world not only experienced the damages caused by these engineered products, but also observed the spillovers. In addition to the faults in design, derivatives also had many flaws from the contractual point of view. The Financial Crisis Inquiry Commission (Financial Crisis Inquiry Commission, 2011) explored the factors that brought the system to a collapse, and raised some basic questions regarding legal status of these instruments and the pillars of the underlying contracts.

The FCIC report identified that the investment banks like Lehman Brothers or Morgan Stanley resorted to bundling loans into securities that were subsequently sold to the investors. Investors had the option of holding these financial assets or trade them in the market. The underlying assets were loans of various categories like mortgages, financial leases of equipment, credit card receivables, auto loans and other forms. The banks not only used the depositors' money for this purpose but also borrowed funds from the capital markets in order to invest in loan based securities. The banks employed this technique to clean their balance sheet and effectively reduce the capital requirement.

The development of OTC markets also added into the problem as the dealers started introducing the instruments developed through unregulated financial engineering. The industry expanded without control and investors, in pursuit of higher interest rates, neglected that the structures of the product were designed in such a way that they had huge potential of downside risk against a small probability of upside gains. The most popular such instruments were Credit Default Swaps (CDS) that not only helped the banks and Financial Institutions (FI) to insure against credit losses but also to escape the regulatory oversight that was more stringent in case of conventional insurance. The CDS were categorised as deregulated OTC derivatives and therefore required no reporting. These CDS had many implications from a contractual point of view as they were entirely different from the ordinary contracts like insurance. For Example, someone can buy insurance for his car but not for his friend's car, but in case of CDS, a person speculates on the default of those loans that never belonged to him. These contracts carried great risk in view of the fact that there was no requirement for maintaining reserves against these exposures. As a result, even insurance companies like AIG started investing in these instruments as they did not require allocating any reserves against these CDS.

The banks, insurance companies and other FIs not only played unwisely but they were also involved in the breach of contracts with the stakeholders. They violated provisions of contracts with the customers by not acting as per mandate and took excessive risks. They were committed to supervisory agencies to fulfil the regulatory requirements but they purposely defied the rules.

In this context, the FCIC report raised some very pertinent questions about the legal status of the derivative contracts that may determine derivatives' position vis-à-vis Islamic law of contracts. For example, what subject matter was purchased against trillions of dollars? What exactly was in possession of all those financial institutions that were on the edge of failure? Who were the counterparties to the contract? How were they going to act in this situation?

These questions were not new and many people had been expressing similar concerns regarding derivatives. The purpose of futures had never been the delivery of real assets but merely earning from the difference in prices. The counterparties to the contract were identifiable in case of futures, but vague in case of CDS as there had been many layers. The first layer comprised of issuers and purchasers of CDS who had no direct relation with the underlying loans in most of the cases. The second tier comprised of buyers and sellers of mortgage backed securities. The third layer had been formed by mortgagors and lenders. It was a complex structure and who was liable to who was an uphill task to ascertain. Therefore, it was dubious how they were going to act in that mess.

The empirical evidence of causality of global financial crisis and derivatives is provided by various studies like Aloui, Aissa, and Nguyen (2011), Sornette and Woodard (2010). Claessens, Demirguc-Kunt, and Moshirian (2009) have listed various studies that have explored this linkage.

Developing Sharīʻah Compliant Financial Products

Financial engineering is required mainly to enhance liquidity, transfer risk and generate revenues from credit and equity and Islamic financial markets lack such instruments (Iqbal, 1999). Sharīʻah allows all financial instruments that do not contain prohibited elements like *ribā* (interest), *gharar* (asymmetric information and uncertainty), *qimār* (gambling) and *ikrāh* (coercion) and financial engineering needs to be performed within the stipulated boundaries. However, modern finance theory rests on the concept of predetermined interest rates and use of asset-pricing models without reference to prevailing or predicted interest rates is difficult. IFIs can choose among two different approaches i.e. reverse engineering (replication) or innovation (design new instruments). Existing IF instruments like *ijārah* (lease), *ḍamān* (Guarantee), *kafālah* (suretyship), *takāful*, *salam* and *istiṣnāʻ* can be used to perform hedging.

Al Suwailem (2007) lists four principles for financial engineering in Islamic framework namely balance (between business and charity), interdependence (mutual cooperation), acceptability (all economic activities are permissible unless otherwise stated by Sharīʻah) and consistency (form and substance should be consistent). There can be three strategies of product development i.e. imitation (replicating conventional product), mutation (introducing variations in acceptable Islamic products) and satisfaction (identifying customer needs and designing products accordingly). The customers' satisfaction eventually results in market evolution.

Ayub and Paldi (2015) stress upon the need to distinguish between real business risk (arising out of real economic transactions) and external risks (created out of thin air and traded without any accompanying real activities and projects). In order to mitigate the business and other real risks, Sharīʻah compliant tools like *rahan* (collateral), personal guarantees, *ḥāmish jiddīyah*, options to revoke contract, agency, promise, *takāful* and parallel forward transactions can be used. In addition, IFIs should be encouraged to adopt cooperative risk management techniques to safeguard against unforeseeable losses. There is a strong need for developing secondary markets for the trading of Islamic finance instruments, to effectively fulfil the liquidity needs of IFIs. Hence, Islamic financial products need to be designed in such a manner that they remain compliant to Sharīʻah requirements and contribute positively towards the achievement of objectives of Sharīʻah (Abbas, 2015).

Consequently, the instrument based on Islamic financial engineering should address a genuine hedging need instead of speculation (Sole & Jobst, 2012). The returns should be arising from actual ownership of the asset. They should not resemble futures and the collateralised payments should be solely used for risk protection instead of profiteering motives. The contracts should be clear in terms of objectives and outcome to avoid all prohibited activities including gambling, speculation and extreme uncertainty and contributing to achieve *maqāṣid al*-Sharī'ah. Therefore, while designing IF products, it should be ensured that financial transactions hold economic substance and follows the guidelines developed in the light of objectives of Sharī'ah (Dusuki & Abozaid, 2007).

Contemporary Views Against Use of Financial Derivatives in Islamic Finance

IF seeks ultimate guidance from the principles laid out by Sharī'ah instead of any man made laws (Usmani, 2002). However, the scholars have different views regarding validity or otherwise of the financial derivatives. Kamali (2007) mentions five core reasons cited by scholars and organizations while declaring futures impermissible.

1) The futures contracts are made for goods that do not exist at the time of contract and therefore it is only a paper transaction and does not constitute a genuine sale.
2) In this kind of sales, the seller does not own what he sells.
3) The requirement of possession (*qabḍ*) is not fulfilled prior to resale.
4) The deferment of both counter-values to a future date tantamount to the sale of one debt for another.
5) The futures are excessively speculative and in some cases close to gambling.

Khan (1988) discussed these issues in detail and observed that in the course of trading in futures market, only 1% of the contracts materialised in actual exchange of goods at maturity and there was no physical delivery taking place. He observed that if actual delivery had taken place, it would have been a source of social welfare as it would create new jobs to perform activities like storage, transport and packaging. He asserted that in an Islamic framework, speculation per se is not completely prohibited. However, it has an inherent mechanism owing to which speculation can never thrive. Islamic law of contract requires a mandatory physical delivery in case the buyer demands, but generally it is hard for speculators to deliver the goods. Furthermore, they play on the basis of interest that is forbidden in Islam. Finally, a borrower's liability is unlimited in Islam which also discourages speculators as they may need to surrender their personal assets in addition to the collateral in case of any huge losses. These conditions effectively reduce the options for speculators and they cannot flourish in an Islamic economy.]

The Jeddah based OIC Fiqh Academy has generally decided on the impermissibility status of derivatives in line with these arguments. OIC Fiqh Academy prohibited all the forward/future transactions including that of currencies where both the counter values were delayed and clarified the same status of options contract as well (OIC Fiqh Academy, 2000). The trading in index is also deemed gambling and declared not permissible. Their respective resolution recommends establishment of an Islamic international money and commodity market where only permissible transactions could be performed. The contracts like *salam*

(Advance Payment Sale), *al-ṣarf* (Currency exchange), *wa'd bi al-bay'* (Commitment to sell at a future date) and *istiṣnā'* (Industrial production order) could be used for trading in this market.

Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), in its Sharī'ah standard 20 (Clauses 3/2, 3/3 and 5) deals with Sale of Commodities in organized markets and discusses in detail the permissibility of various types of forward contracts (Accounting and Auditing Organization for Islamic Financial Institutions, 2010). This permission is based on the *salam* and *istiṣnā'* contracts that are accepted as valid forward contracts It states that the conventional forward/futures contracts (where both counter-values are delayed) are generally not permitted. AAOIFI also declares that trading in derivatives like options (a right to purchase a financial asset) and swaps (an agreement for pre-determined exchange of financial assets) is not Sharī'ah compliant. In this respect, the practice of *'urbūn* cannot be considered a basis for the permissibility of options contracts as it merely gives the right of revocation of contract to one or both of the parties. This right is a part of contract that cannot be detached and should not be considered tradeable.

As per Islamic law, at least one counter value in a sale contract should be delivered on spot meaning that the both cannot be delayed. Therefore, the existing forward and future transactions had been considered non-compliant to Sharī'ah principles. Moreover, AAOIFI raised another concern that sales occur without an offer and acceptance, especially in options. Deferred transactions in currencies are equivalent to sale of objects which are not in the physical possession of the seller as yet and in case of Swaps, no delivery takes place and a majority of them is constituted by exchange of interest payments.

On the other hand, Kamali (1996) is of the opinion that even though the counter-values in futures contracts do not exist at the time of contract, this does not lead to *gharar* due to the presence of clearing houses that provide a guarantee against any uncertainty due to counterparty risk. He contends that during the time of Prophet (PBUH), the marketplace in Madinah was very small and there was no regular delivery of all the supplies and so, it was hard to guarantee the availability of goods at any given time. Therefore, the trading of something not in possession was prohibited. However, this is not the case in modern times as a seller can procure goods from many locations and deliver them. Hence, this restriction is no longer applicable in his view.

Kamali differentiates between speculation and gambling and mentions that speculation deals in those risks that are present in the environment but gambling, on the other hand, creates the risk that were otherwise non-existent. The futures markets are instrumental in transferring the unwanted burden of risk to those who are willing to take it. He further adds that in case of derivatives, there is no wrongful misappropriation of another person's property.

He claims that options are valid under Sharī'ah owing to the concept of *al-ikhtīiyār*. He contends that they are not merely a right but an intangible asset and usufruct. The Shafi and Hanbali schools as well Hanafi and Maliki jurists from later periods have generally included "usufruct" in their definition of property. In his opinion, charging a fee for the rights granted under an option contract is valid.

Kamali disagrees with the prohibition on an exchange of debts with debts and claims that there are divergent rulings among the schools on this issue. He argues that a number of scholars approve exchange of debts and it should be permissible provided it is free from the elements of *ribā* and *gharar*. Therefore, he states that the futures contract is in effect made between the buyer/seller and the clearing house only. As no third party is involved in the said transaction, there is no uncertainty involved in clearance and delivery. The clearing house assumes the whole liability and effectively serves as a principle and fully committed guarantor. In essence, futures contracts are "fulfilment of obligations" and the "repayment of debt by the debtor" that are allowable acts under Islamic law (Kamali, 2000). He observes that in the absence of derivative markets, the funds belonging to Muslim investors may move to foreign markets to the detriment of community as a whole.

Smolarski, Schapek, and Tahir (2006) highlight many advantages of derivatives contracts and claim that the criticism does not take into account various functions performed by them. To them, derivatives are beneficial in risk reduction and protect the buyers from financial loss. They argue that these contracts are transparent as each contract is standardized with respect to duration, quantity, consideration and the outcomes. Therefore, the parties enter into the contract with mutual consent and perform it without any pressure. Moreover, the presence of a third-party warrants fairness in the processes and minimizes *gharar*.

Sharīʿah Basis of Permissibility of Various Types of Derivatives

Sharīʿah Advisory Council (SAC) of Bank Negara Malaysia has taken up a somewhat different stance. Although it has issued various resolutions pertaining to dealings in derivative transactions in organized markets mostly in line with AAOIFI guidelines (Malaysia, 2010), it has also approved certain derivative products that are engineered to serve the needs of IFIs. For example, SAC has permitted the IFIs to conduct forward foreign exchange transactions based on unilateral *waʿd mulzim* (binding promise). This promise is binding on the promisor and the party who suffers losses owing to non-fulfillment of the promise can claim compensation. IFIs can carry out such transactions with their customers, Islamic financial institutions or conventional financial institutions.

SAC resolution in respect of Islamic Profit Rate Swaps (IPRS) is a bit different from AAOIFI that deems swaps as impermissible. Islamic Profit Rate Swap (IPRS) is an agreement of mutual exchange of profit rates (one party offering fixed rate and the other offering floating rate) by executing a set of Sharīʿah compliant sale contracts meant for trading in certain assets. The purpose is to facilitate the bank to manage any mismatch between cash inflow and outflow. The proposed underlying Sharīʿah contract is *bay*ʿ *al-ʿīnah* to be conducted among involved parties. SAC elaborates that the offset practice in the IPRS structure is not equivalent to the sale of debt with debt which is prohibited by the Sharīʿah as per majority opinion. Similarly, it considers the transfer of beneficial ownership as reflected in the contract documentation sufficient and resolves that it is acceptable.

The SAC has further resolved that the forward foreign currency exchange transaction based on *bay*ʿ *al-mu'ajjal*) is permissible. This ruling is a series of distinguished contracts where the delivery is spot and the payment is deferred. SAC has also allowed Foreign

Currency Option based on *ḥāmish jiddīyah*, *wa'd* and *tawarruq*. This structure is designed to hedge forward foreign currency exchange transactions. Similarly, a foreign currency option product *wa'd bi al-syira'* (a promise to buy) based on *ḥāmish jiddīyah* (security deposit), *wa'd* (promise) and *tawarruq* is also approved by the SAC.

Finally the SAC has resolved that an options product comprising of a *wa'd* and two independent *tawarruq* transactions is permissible provided this product is used only for hedging purpose, *wa'd* to be independent from the *tawarruq* transactions, every transaction to be conducted independently from each other in terms of documentation and most importantly, the underlying asset has to be Sharī'ah compliant.

The above review suggests that although extensive literature is available on the theoretical and practical implications of derivatives, there is no such study in existing literature that has evaluated the permissibility of currently used Sharī'ah Compliant derivatives in the light of Islamic Law of Contracts and the present study fills this gap. Moreover, we evaluate whether derivatives contain impermissible elements like *gharar*, *jahālah* and *qimār* or not.

RESULTS AND FINDINGS

The Pillars (*arkān*) of Contract

Islamic law of contract specifies certain elements/pillars of contracts the conditions of which has to be fulfilled for validity and effectiveness of the contracts. The Sale is permitted subject to observing justice and mutual harmony and avoiding breach of contracts [1]. However, as Prophet (PBUH) points out, Muslims are not bound to accept conditions that are meant to allow something declared unlawful by the Creator [2]. This section identifies the pillars of derivative contracts and endeavours to see whether they fulfil the essential requirements of Islamic law of contract.

Ṣīghah al-'aqd (Offer and Acceptance)

The parties to any contract are required to express their clear intention to form a contract and hence there needs to be a formal *ījāb* and *qubūl*. The derivative markets of present day fulfil this objective through electronic trading platforms and sophisticated information technology based applications. The use of usernames/passwords and digital signatures is also prevalent and may be considered a permissible '*urf* in case of transactions involving the exchanges and other moderators. For the customised contracts like forwards and swaps, there is a need for formal offer/acceptance through signing of formal documentation.

Contracting Parties and their Legal Capacity

The contracting parties should possess the capacity to enter into the contract and execute the documents. In case of agency arrangements, the powers of agent should be clearly spelled out in the mandate.

[1] O you who have believed, fulfil [all] contracts (5:1)

[2] Muslims abide by their conditions, except for a condition that legalizes the prohibited or prohibits the lawful (reported by a number of companions and recorded by Al-Ahmed).

In case of derivative contracts, most of the transactions are performed by institutional brokers and individual traders who act as the agents of the investors. The large investors are mostly aware of the activities of their agents as they receive the reports of each transaction and the instruments are in their direct possession or control. However, in case of smaller investors who invest in those mutual funds or investment banks that deal in derivatives, this condition is fulfilled on papers. In practical terms, however, there are instances of misuse of authority by investment bankers and fund managers. They sometimes breach the set rules of their agency and invest in riskier assets (as compared to the given mandate) to achieve higher returns with a motive to increase their own compensation. There is little these investors can do to stop this violation of contractual stipulations and the role of regulators becomes more important.

In such cases, Sharī'ah has set guiding principles for a *muḍārabah* arrangement (for investing in permissible avenues only) to protect the interests of *rabb al-māl* as he can insert the clauses that may penalise a *muḍārib* on its negligence and misconduct (Zainol & Kassim, 2012). Thus, it is easier for the principal in these cases to seek remedial action from a court due to the presence of clear terms and conditions in the agreement. Conventional mutual funds lack this accountability structure and therefore more prone to moral hazards.

The Subject matter of a Contract (Assets to be Exchanged)

In any trade, the underlying subject matter should be compliant to Sharī'ah . Islam prohibits dealing in assets or services that are declared *ḥarām* (impermissible). This list includes food items like pork meat, dead animals, blood, strangled animals and liquor [3]. In case of financial transactions, all the dealings that involve *ribā* (usury) are impermissible.

The financial derivatives that involve commodities like forwards, futures, and swaps involve assets like any Forex, interest rates, profit rates, mortgages, debts obligations, stocks, indexes or goods like petroleum wheat, cotton etc. As per the terms of any agreement, some values are exchanged that visibly are nothing more than speculating on the price of the asset/commodity, but not the counter values to the effect that ownership is transferred along with risk to the buyer against the price paid , or to be paid. However, in practice, this does not happen and only the difference is paid by the party who loses in the trade. Therefore, the subject matter is not the commodity itself but a bet on the possible movement of price of that commodity.

The goods based derivatives are not different from the derivatives involving monetary or financial assets and all involve gambling and interest, while many of these items are of *ribāwī* nature. The category of *ribāwī* items including money/medium of exchange and foodstuff that have standard weight and units of measurement can be exchanged only on spot

[3]Prohibited to you are dead animals, blood, the flesh of swine, and that which has been dedicated to other than Allah , and [those animals] killed by strangling or by a violent blow or by a head-long fall or by the goring of horns, and those from which a wild animal has eaten, except what you [are able to] slaughter [before its death], and those which are sacrificed on stone altars, and [prohibited is] that you seek decision through divining arrows (5:3).

basis and against equal values (for the same category) [4] in case of barter. More specifically, money is used as a medium of exchange in an economy, it cannot be deemed as subject matter in contracts like the other goods (Rahman, 2001). Hence, these are not for exchange in derivatives market while implementing the Islamic law principles.

Another concern in accepting derivatives is the non-existence of subject matter at the time of contract as *Majallah* states that "the thing sold must be in existence" and "the sale of a thing which is not in existence is void" (Tyser, Demtriades, & Ismail, 1967). With the exception of *bay' al-salam* and *istiṣnā'*, no trade can take place for the assets or services that do not exist, cannot be contracted, as a general rule (Kamali, 1996). Furthermore, the contract is considered speculative or fictitious when the ability to deliver is questionable, or the intention to deliver is missing.

However, the Sharī'ah Advisory Council of the Malaysian Securities Commission (Sharia Advisory Council, 2006) held that trading in futures contracts for crude palm oil was permissible. It argued that buying the non-existent assets (*bay' ma'dūm*) was prohibited due to uncertainty in capability of the seller to deliver the asset, which subsequently led to *gharar*. The Council members observed that if *gharar* is eliminated, then the issue of non-existence of goods at the time of contract would not be of relevance as to make a contract void. Analysing this argument, it is pertinent to observe that issue of selling any no-existent goods is much more serious than mere the uncertainty indelivery of the subject matter. If such sale is not as per the rules of *salam*, it could end up in un-entitled benefit (sales proceeds) to the short seller at the cost of others. That is why, the holy Prophet (PBUH) ordered, "*Don't sell what you do not have /possess*" [5], and also advised special rules for exchange of fungible items that could serve as a medium of exchange, namely gold, solver, wheat, barley dates and salt (Bukhari, Muslim, see FN. 5). This is the major issue creating volatility in the market, much more problematic than uncertainty regarding delivery. Further, in the most of the cases, delivery is neither intended, nor made in derivatives. Accordingly, we see that as Zuayli and Eissa (2007) state that top scholars belonging to all the schools of Islamic jurisprudence (*madhab*) are in agreement over invalidity of the sale of goods that are non-existent or might cease to exist [6]. Even in conventional framework, short selling could be considered as big cause of financial chaos and crises. Ayub and Paldi (2015) cited a serious example of short selling, "*George Soros caused huge loss to the Bank of England in 1992, where he shorted $ 10 billion worth of Pounds for one day gain of over $ 1 billion. It established that "the horse of financial innovation was much ahead of the mule of supervision*".

[4] Ubadah Ibn Samit narrated that Prophet ﷺ said "Gold is to be paid for by gold, silver by silver, wheat by wheat, barley by barley, dates by dates, and salt by salt - like for like, equal for equal, payment being made on the spot. If the species differ, sell as you wish provided that payment is made on the spot" (Muslim).

[5] https://bit.ly/2m7IIWm

[6] There are famous *aḥādīth* on this subject:- i) Jabir narrated that the Messenger of Allah (PBUH) forbade the selling of fruits until they ripen. ii) Abu Bakhtari reported: "I asked Ibn Abbas about the selling of dates. He replied: 'The Prophet (pbuh) forbade the sale of dates until they became fit for eating and could be weighed.' A man asked: 'What to be weighed?' Another man sitting beside Ibn Abbas replied: 'Until they are estimated'." iii) Ibn Abbas reported: "The messenger of Allah (pbuh) prohibited the sale of fruit before its quality is known, the sale of wool on the back of sheep, and the sale of milk in an udder"

Hence, although some scholars advocate permissibility of short sales, there are many challenges involved in accepting its permissibility. Not only the tangible goods, but also the rights/intangible assets must be in seller's ownership and possession and one should be able to deliver/transfer them upon demand. If this is not the case, there can be the case of uncertainty and many issues relating un-entitles enrichment at the cost of others. The profiteering from sale of options tantamount to selling an asset whose ownership risk is not taken, that as per the broader definition of *ribā* involves *ribā* (Ayub & Paldi, 2015). Regarding trading in the options, OIC Fiqh academy is of the view that a right is not tradable as it does not exist per se and should be understood only as an integral part of the contract.

Purchase Price

The majority of the derivatives have underlying assets in shape of commodities or monetary assets that are considered *ribāwī* items of the same category. As earlier mentioned, the payment of their prices cannot be deferred and should not involve any premium as it would amount to *ribā* . It is evident that this restriction is not observed in derivative contracts.

The contracting parties in derivatives trading rely more on traders and brokers who hide certain contractual implications from the parties to their benefit. This creates ambiguity and uncertainty. Sharī'ah prohibits certain terms and conditions that may be a part of some of the derivative contracts. For example, there is a clear prohibition of two sales in one sale in contracts [7] of exchange . In this regard, the swaps are series of periodical payments of two different cash flows and in effect multiple sales are conducted in one sale. Similarly, the financially engineered "Islamic derivative" products also have the same issue and due to this very reason, there are certain objections raised in recent studies (Khan, 2010). Further, if a contract a series of contracts, no contract should be contingent on the other contract. The contracts that are combination of sale(s) and a loan are also not permissible and in derivative markets, many such structures are involved.

Consequently, since the derivative contracts generally involve the trading of non permissible underlying assets (bets on future outcomes and *ribāwī* items) and many a time contain the impermissible terms and condition, they fall in the category of void contracts as per general consensus of jurists.

The Element of *Qimār/Maysir* in Derivatives

The gambling is strictly prohibited in Islam [8] as the winner attains the money without investment of time and his skills and these ill found gains in turn give birth to many social and

[7] Muwatta narrates three *aḥādīth* and incidents to this effect:- iv) Yahya related to me from Malik that he had heard that the Messenger of Allah, may Allah bless him and grant him peace, forbade two sales in one sale v) Yahya related to me from Malik that he had heard that a man said to another, "Buy this camel for me immediately so that I can buy him from you on credit." Abdullah ibn Umar was asked about that and he disapproved of it and forbade it. vi) Yahya related to me from Malik that he had heard that al-Qasim ibn Muhammad was asked about a man who bought goods for 10 dinars cash or fifteen dinars on credit. He disapproved of that and forbade it.

[8] They ask thee concerning wine and gambling. Say:'In them is great sin, and some profit, for men; but the sin is greater than the profit" (2:219)

moral evils. As Usmani (1996) notes, in case of most of the futures transactions, the real intention is not delivery or possession of the underlying commodity and a transaction is settled through payment of price difference. This act is not allowed under Sharī‘ah law as the purpose is not trading and the parties are only interested in benefitting from the occurrence of certain events i.e. changes in prices of commodities, changes in interest rates, default of a debtor and so on.

It is also relevant to add that the stance of common law judges where they approved derivatives for hedging purpose and provided recourse to the parties who entered in futures contracts to counter the adverse market movements is not acceptable from Sharī‘ah point of view (as per majority view) as it involves delaying both the counter values. The commodity futures are known to impact the commodity prices instead of managing price risk and several studies have pointed out their manipulative impact (Gilbert, 2010; Irwin, Sanders, & Merrin, 2009; Sanders & Irwin, 2010). The approved mode by Sharī‘ah for such transactions is *salam* through which farmers/sellers get liquidity to invest in their crops to buy the seeds and other required utensils like pesticides and equipment etc. The buyer hedges against any unfavourable price movement. But, the both when enter into contract have to perform by giving and accepting delivery at the agreed time and this has many positive implications for the parties and the economy. The same is the case of *istiṣnā‘*, also a kind of forward sale, allowed as per Islamic law. These two modes are effective way to manage risks in comparison to derivatives that promote gambling on the one hand and instability and chaos on the other hand.

Jahālah in Derivative Contracts

Islamic teachings ensure the transparency in all the matters related to personal and business contracts. The prime objective is to minimize any chances of *ẓulm* (oppression/injustice) and disputes among the parties. As a result, *jahālah* (ignorance/lack of clarity about rights and duties of contracting parties) makes a sale invalid. If a person does not know the specification of the subject matter or the terms of the agreement, he would not be able to become a part of sale/purchase or exchange transactions.

The derivative contracts carry the elements of ignorance as the short seller does not have any idea what will be the outcome of their position. They simply wait for happening of a certain event to know the outcome of their investments (bet). The buyer of a call option is certain about his maximum loss only as it would be restricted to the option price. On the other hand, he may earn unlimited profit. The seller of a put option can earn maximum profit up to the option price but his loss can be unlimited. Evidently, this situation is not acceptable from the perspective of Islamic law of contract as no party is aware of outcomes and completely ignorant of its rights or responsibilities.

Gharar in Derivatives and Broader implications

It is not possible to completely remove uncertainty from real life events and humans are not capable of foreseeing the future. Therefore, business transactions cannot be considered free from the uncertainties and this is the reason why Imam Malik ibn Anas approved minor uncertainty in the contracts (Al-Saati, 2003). However *gharar* implies higher degrees of vagueness in the contracts regarding the subject matter, the price, or delivery, and hence, forbidden in Islam. As Kunhibava and Shanmugam (2010) mention, *gharar* is more general in nature and encompasses the other elements like *maysir* and *jahālah*. High risk and the uncertainty of outcome lead all *qimār/maysir* transactions to *gharar* but all the *gharar* transactions are not *maysir* or *qimār* (Zuayli & Eissa, 2003). In essence, *gharar* is such a sale of probable items which has uncertain characteristics and it makes a risky business quite similar to gambling in nature [9].

Derivative transactions, as already mentioned, contain *gharar* that can be understood from the nature of most of the contracts. The sale without possession is a common feature of these contracts that leads to *gharar*. Particularly, in the case of derivatives, the possession and delivery is not intended even. As the payment is also due in future, the customers need only a little amount to enter into high volume trade transactions. This results in inflation of the trade activity to the disadvantage of the genuine traders.

THE ECONOMIC IMPLICATIONS FOR ISLAMIC FINANCIAL INSTITUTIONS

The practitioners in Islamic finance markets are of the view that in case the IFIs are not allowed to deal in derivatives market, it could have serious implication for their business. They IFIs can only enter in *salam* transactions for commodity forwards. As such, they may lose in terms of opportunity cost of investment in comparison to traditional forwards where payment is also deferred. They may not be able to reap the benefits of hedging and as per conventional finance ideology they There will obviously be lower number of investors due to involvement of real commodities and assets and markets will be hosting only high net worth individuals. This argument neglects, however, some core principles related to IF. Islam draws a clear line between permissible (*ḥalāl*) and impermissible (*ḥarām*) modes of trade, and mere earning profit at any cost is not the objective of any Islamic institutions. Rather, all business by the IFIs has to be subject to observance of the tenets of the Sharī'ah . Furthermore, even conventional finance is shifting towards instruments that are engrained in economic reality after the global financial crisis of 2008 and there is ongoing criticism on the derivative instruments. There is growing awareness among conventional financial institutions to practice ethics in commercial activities and refrain from dealing in arms, drugs and gambling. IFIs are more required to observe the Divine ethics to save the human society from the problems created by 'financialisation' by involving derivatives and other complicated financial products engineered to deceive the masses.

In this scenario, IFIs have to select among three options. They can either continue trading in derivatives markets as their business need (*ḍarūrah*). But Islam does not accept mere

[9] The following hadith adequately defines and sums up various elements of *gharar*:- The Prophet forbade two kinds of sales: i.e. al-limais and an-nibadh (the former is a kind of sale in which the deal is completed if the buyer touches a thing, without seeing or checking it properly and the latter is a kind of a sale in which the deal is completed when the seller throws a thing towards the buyer giving him no opportunity to see, touch or check it) and (the Prophet forbade) also ishtimal as-samma' and al-ihtiba' in a single garment (Kunhibava & Shanmugam, 2010).

business or earnings a *ḍarūrah* if that involves any of the principal Sharī'ah prohibitions Hence, this may threat even their very existence as Islamic finance is being evolved solely upon the basis of Islamic principles as identified by (Asadov, Muhamad Sori, Mohamad Ramadilli, Anwer, & Shamsudheen, 2018). The second option is to completely refrain from securitization and taking part in trading of investment instruments thereby suffering losses in terms of lost opportunities. The most viable solution seems the introduction of distinguished instruments and products while maintaining one-to-one relationship between finance and the real economy. Islamic financial experts and engineers must know that the derivatives have been used overwhelmingly for speculative purpose and as such, they cannot become a means of evolving a stable and really Sharī'ah compliant financial system. This is why, even Warren Buffet, an American business magnate and the chairman/CEO of Berkshire Hathaway, took a stronger stance against derivatives than some Islamic academics and considered derivatives as "*financial weapons of mass destruction*" (cf: Al-Suwailem 2007: 50; Ayub & Paldi, 2015).

The ultimate solution is establishment of dedicated markets having specifically designed innovative IF products. The concerned parties should try to evolve such markets that can bridge this gap for Muslim investors and IFIs.

CONCLUSION AND WAY FORWARD

Some scholars have stressed the importance of derivatives and mentioned that a more rationalist deduction of provisions of fundamental principles of Islamic law establish the permissibility of some of the derivative instruments. They argue that the growth of modern technology has given new meanings to the concept of uncertainty and there is a need to look back and redefine the terms like *gharar* and *jahālah*. It is, of course, crucial to observe that permissions for some derivatives have been given for the purpose of genuine hedging and the IFIs have been suggested to observe the relevant rules of Islamic business and trade. Sole and Jobst (2012), an economist at the IMF qualified Islamic derivative with such conditions observance of which would not yield the return that the IFIs would wish to earn, while competing with the conventional hedge funds. These conditions included effective and intended delivery/ownership in an identifiable asset or venture, rejecting deferment of contractual obligations, and avoiding all prohibited activities like gambling, *gharar* and *jahal*.

Further, these arguments apparently seem to hold some ground, but there are many challenges involved in acceptability of these contracts. Firstly, they contain serious issues like non-existent subject matters, *ḥarām* underlying assets, *ribā* based transactions and the presence of *qimār* , *maysir*, *jahālah* and *gharar*. But the issues in the financially engineered "Islamic derivatives" as being used in some markets, lead to separation of risk from ownership, trading in excessive risk, short selling and netting-off by using some grey area concepts and terms like *wa'd*, *tawarruq* and *muqāṣṣah*. As a whole, it implies avoiding the implication of transfer of possession and bearing business risk the major requirement of valid business contracts. This is what caused the collapse of big corporate entities in recent years, and this is why such practices have been prohibited in the Divine law. This is precisely why financial derivatives had never been among the most appreciated transactions even from conventional law and finance point of view. As a result, international standard setters like OIC Fiqh academy and AAOIFI have declared them not permissible. Secondly, the proposed Sharī'ah compliant derivatives are, in no way, different from their conventional counterparts in terms of economic reality. Finally, in addition to their flawed legal form, derivatives do not contribute to achieve objective of Sharī'ah . Our argument is based on the assessment of innovative IF-derivative products. For example, forward foreign exchange transactions based on unilateral binding promise tailored for the purpose of risk management do not involve exchange. Similarly, the returns on Islamic Profit Rate Swaps are not the result of actual sales. Likewise, the options product is a set of engineered transactions and the returns are based on interest rates, instead of returns resulting from the economic activity. Evidently, these transactions do not contribute to achievement of objectives of Sharī'ah , owing to their inability to promote employment or remove hardships or assist in providing necessities to the stakeholders.

There are several recommendations to conclude the study. In order to perform effective risk management, IFIs should come up with the innovative ideas and products to replace conventional derivative instruments. Similarly, as there are conflicting views regarding derivative products developed through financial engineering in certain jurisdictions, it is the role of AAOIFI and IFSB to issue detailed standards covering the innovations while ensuring Sharī'ah compliance.

Additionally, from the legal point of view, there is a need for clarification of some concepts in the light of new circumstances and global conditions. For example, a practical difficulty in international commodity dealings is ascertainment of possession (*qabḍ*) in case of inter-related transactions. The trading volume is usually very high in international markets and countless contracts are executed and settled on daily basis. Therefore, delivery and sale occur simultaneously most of the times and it becomes very difficult to be sure of the fact that there is no overlap in the roles of buyer and seller. The similar problem is faced by IFIs who work as agents in *tawarruq* transactions. The Sharī'ah scholars and other standard setters should deliberate on relevant texts in Fiqh literature and define suitable conditions to clearly identify *qabḍ* in case of such contracts to avoid selling something which is not in possession and risk. Finally, it is again stressed that Muslim countries need to develop their own markets and come up with distinguished instruments that can be practised on these platforms so as to fulfil the religious obligations attached to the trade activity. The core principle has to be the transactions engrained in economic reality instead of artificial transactions that result only in more uncertainty and vulnerability of financial system.

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