Financial Options in Islamic Contracts: Potential Tools for Risk Management

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ABSTRACT. The paper attempts to undertake an Islamic assessment of financial contracting in the global currency markets. Some basic currency-related contracts in mainstream finance, such as, spot transactions, options, forwards, futures, swaps are examined in the light of Islamic norms of financial ethics, such as, freedom from *riba*, *gharar*, *jahl*, *qimar* and *maisir*. The study also highlights the views of Islamic scholars on various conventional as well as Shariah-based contractual mechanisms. In cases where there is some degree of divergence of views, the study examines the nature and source of disagreement as also the implications and economic significance of the arguments. In view of the overwhelming importance of currency risk management in volatile markets, the study undertakes an assessment of the various financial contracts as risk management tools.

1. Introduction

Islamisation of currency markets poses a great challenge to Islamic scholars and thinkers even today. The elimination of riba, gharar, qimar and maisir are among the major goals of the process of Islamisation of financial markets. While significant success has been achieved in engineering an alternative Islamic model in specific segments of the financial markets, such as banking and the insurance sector, the same has not been the case with currency markets. A majority of Islamic scholars have held a view that only spot transactions in currencies, both domestic and foreign, are permissible. This view, specifically in relation to exchange of foreign currencies, has been labeled as unduly restrictive and somewhat impractical by policy makers and regulators in most Islamic economies. Further, with divergent views from other Islamic scholars, the issue is perhaps largely unresolved. The outcome has been that the currency markets all over the globe have continued with "unIslamic" transactions with all the undesirable consequences that follow. Ironically, the Islamic world has realized the urgency of implementing the Islamic and ethical alternative after incurring a heavy cost, as some of the fastest growing Islamic economies in South East Asia have been engulfed in an unprecedented financial crisis, primarily because of riba-based and maisir-driven contracting that were permitted in these markets.

The purpose of this paper is to identify the Islamic system for currency exchange. Since the financial system essentially implies the system of financial contracting, the paper focuses on the Islamicity of alternative contractual mechanisms in the currency markets in the light of Islamic norms of ethics, such as, prohibition of riba, gharar and maisir. The paper seeks to present a comprehensive analysis of various arrangements in support and against the permissibility of some basic contracts involving currencies. Section 2 discusses some basic forms of contracting from the Islamic legal literature that may have relevance for currency markets. These are also compared and contrasted with currency-related contracts found in conventional markets, such as, spot contracts, forwards, futures, options, and swaps. We also undertake a survey of past studies that have examined the Islamicity of these conventional contracts. In section 3 we explicitly deal with the issue of prohibition of riba from a fighi point of view and examine the various contracts from the standpoint of riba prohibition. The central theme of section 4 is the issue of gharar and maisir. We examine the various forms of contracting in the light of the Islamic requirement to avoid excessive gharar and minimize the possibility of speculative gains or maisir. In section 5 we examine the issue of risk management in volatile currency markets which is often used as an argument for tolerating speculative abuse of various conventional mechanisms called currency options, futures, forwards and swaps. We also highlight some Islamic alternatives for risk management. Section 6 attempts to evaluate the contractual mechanisms from another fighi perspective, the issue of swapping one debt for another or bai al kali hi al kali. Section 7 undertakes a holistic view of all the Shariah related issues as also their economic significance and provides a summary of major conclusions.

2. Forms of Contracting

The Islamic law of contracts explicitly deals with exchange of currencies. There is a general consensus among Islamic jurists on the view that currencies of different countries can be exchanged on a spot basis at a rate different from unity. There also seems to be a general agreement among a majority of scholars on the view that currency exchange on a forward basis is not permissible, that is, when the rights and obligations of both parties relate to a future date. However, there is considerable disagreement among jurists when the rights of either one of the parties, which is same as obligation of the counterparty, is deferred to a future date.

To elaborate, let us consider the example of two individuals A and B who belong to two different countries, India and US respectively. A intends to sell Indian rupees and buy US dollars. The converse is true for B. The rupee-dollar exchange rate agreed upon is 1:20 and the transaction involves buying and selling of \$50. The first situation is that A makes a spot payment of Rs. 1000 to B and accepts payment of \$50 from B. The transaction is settled on a spot basis from both ends. Such transactions are valid and Islamically permissible. There are no two opinions about the same.

It may be noted here that the real life spot markets for currencies often provide for actual delivery within 48 hours or two banking business days due to practical reasons (for example, time differences among various global markets). Some authors, such as M. Akram Khan (1988) have argued that the above practice of allowing a two day lag cannot be accepted in the Islamic framework. Others consider this position to be too rigid and find this practice to be Islamically acceptable on the ground that the so-called time lag involved in the spot transaction is not a time lag between the delivery of one currency compared to the delivery of the other, but rather is a lag between the deals date and the execution date. Further, even if there is a time lag, the same does not affect the price or the exchange rate between the two currencies involved. ²

The second possibility is that the transaction is partly settled from one end only. For example, A makes a payment of Rs. 1000 now to B in lieu of a promise by B to pay \$50 to him after six months. Alternatively, A accepts \$50 now from B and promises to pay Rs. 1000 to him after six months. There are diametrically opposite views on the permissibility of such contracts. The *Fiqh* Academies³ across the globe have been deliberating on the permissibility of such contracts. Among the scholars who argue in favor of permissibility of such contracts, the views of Justice Muhammed Taqi Usmani have received wide attention. On the other hand, scholars, such as, Dr. M. Nejatullah Siddiqi have sought to justify the more commonly held view that only spot settlement is permissible in case of currency exchange on the ground that if settlement from one end is allowed to be deferred to a future date, this would become a source of earning *riba*. Such contracts are however, not very common in the conventional financial markets.

The third scenario is that settlement of the transaction from both ends is deferred to a future date, say after six months from now. This implies that both A and B would make and accept payment of Rs. 1000 or \$50, as the case may be, after six months. Such contracts are known as currency forwards and futures in mainstream finance. The predominant view is that the such contracts are not Islamically permissible. The Islamic Figh Academy, Jeddah in its seventh session clearly ruled out the permissibility of such contracts. According to Justice Taqi Usmani, "it is a well recognized principle of the Shariah that sale and purchase cannot be effected for a future date. Therefore, all forward and future transactions are invalid in Shariah. Secondly, because in most of the futures transactions, delivery of the commodities or their possession is not intended. In most cases, the transactions end up with the settlement of difference of prices only, which is not allowed in the Shariah. As futures are not permissible, no rights and obligations can emanate therefrom. (Further), futures are totally impermissible regardless of their subject matter. Similarly, it makes no difference whether these contracts are entered into for the purpose of speculation or for the purpose of hedging."5 Other contemporary scholars, such as, Subhi Mahmassani (1983), M Akram Khan (1988), M Fahim Khan (1995) and Kamali (1996) have also examined the Islamicity of forwards and futures and have found these contracts to be forbidden, the notable exception being Kamali (1996). As Mahmassani notes, "contracts concerning future things (al ashya al mustaqbalah) are basically invalid, for such things are non-existent at the time of contract- except for the fact that the majority of the jurists have exceptionally permitted certain contracts such as salam (forward sale) and istisna (contract of manufacture)." M Akram Khan prefers to make a clear distinction between

forwards and futures as the latter have a "strong element of speculation". While condemning the latter, Khan observes that the former are not legally enforceable. The two parties may "agree" or "promise" to transact an exchange business at a future date and that such an agreement is "morally" enforceable. Mohammed Fahim Khan finds currency forwards and futures to be totally forbidden and prefers to examine only the case of commodity-related contracts for possible modification and making them acceptable in the Islamic framework. As he states, "the present concept and practice of foreign currency futures involves interest as well as violates the Islamic principle of delivery with respect to exchange of currencies ..hand to hand." Kamali however does not find anything objectionable about futures in general, "futures trading falls under the basic principle of permissibility (*ibahah*)." However, even Kamali's affirmative opinion pertains to futures in general without specifying the underlying asset. Kamali also explicitly recognizes the need to view currency related contracts differently from other commodities. While asserting that possession (qabd) is not an essential requirement of sale and therefore futures may not be deemed prohibited on this ground, he also states that "only in case of sale of currency for currency (sarf) is qabd elevated to a prerequisite of a valid contract." ¹⁰

Yet another form of contracting which has been described as an Islamic swap ¹¹ may be as follows. A makes a payment of Rs. 1000 to and receives US\$50 from B today at the given rate 1:20. Both A and B use and invest the money so received at their own risk. At the end of a stipulated time period, say six months, the transaction is reversed. A repays US\$50 to and receives Rs. 1000 from B. This form of contracting can also be viewed as an exchange of or swapping of interest-free loans between A and B. This is in contrast to conventional swaps which are generally interest-based and involve swapping of principal (often notional) and interest payments. Conventional swaps clearly have no place in the Islamic system. ¹² As discussed and demonstrated later in section 5, Islamic swaps may help both A and B in various ways, such as, enabling them to manage their currency risk. There are again divergent views on the permissibility of such contracting.

The other common form of currency-related contracting in mainstream finance relates to purchase and sale of currency options. Scholars who consider that currency exchange must be settled on a spot basis rule out the possibility of any option for either or both parties. The currency option if considered as a promise, is not binding as the two parties cannot agree in advance to the rate to be applied for currency exchange in future according to the traditional Islamic law. ¹³ Justice Taqi Usmani rules out the acceptability of conventional options which are promises traded as independent contracts for a fee. As he asserts, "such a promise in itself is permissible and is normally binding on the promisor. However, this promise cannot be a subject matter of sale or purchase. Therefore, the promisor cannot charge the promisee a fee for making such a promise...it makes no difference if the subject matter of the option sale is a commodity, gold, silver or a currency..the contract is invalid *ab-initio*." The Islamic *Figh* Academy has also resolved that all forms of conventional options traded as independent contracts in themselves are not permissible. 15 These views however, do not rule out the possibility of a sale contract with a stipulated option for either party or both in the khiyar al shart (option as condition) framework of the Islamic law of contracting. Whether the possibility also exists with respect to currency exchange deserves further investigation.

3. The Issue of *Riba* Prohibition

The need to eliminate *riba* in all forms of exchange contracts is of utmost importance. This is emphasized by the Quranic verse: "But Allah has permitted sale and forbidden usury" (2:275). The original Quranic prohibition of usury or *riba* relates to loan contracts or *riba al-jahiliyyah* which surfaces when the lender asks the borrower on the maturity date if the latter would settle the debt or extend the same. Increase is accompanied by charging interest on the amount initially borrowed. ¹⁶ Apart from this pre-Islamic form, *riba* may exist in a loan contract, if it provides any advantage to the lender. Thus, provision for any excess in the amount to be repaid by the borrower over what was borrowed in the contract is a source of usury or *riba*. ¹⁷

The definition of *riba* was later extended to the exchange of currencies and several denominated articles, primarily based on several hadiths. One hadith that is widely quoted by scholars because of its concise form is: the holy prophet (peace be upon him) said, "Exchange gold for gold, silver for silver, wheat for wheat, barley for barley, date for date, salt for salt, measure for measure and hand-to-hand; and when the articles of exchange are different, exchange as it suits you, but hand-to-hand." The prohibition was further extended by figh scholars to exchange of commodities other than the six mentioned in the hadith. Riba in any exchange or sale contract is defined ¹⁹ by figh scholars as "an unlawful gain derived from the quantitative inequality of the counter values in any transaction purporting to effect the exchange of two or more species (anwa), which belong to the same genus (jins) and are governed by the same efficient cause (illah)." Riba is generally classified into riba al-fadl (excess) and riba al-nasia (deferment) which denote an unlawful advantage by way of excess or deferment respectively. Prohibition of the former is achieved by a stipulation that the rate of exchange between the objects is unity and no gain is permissible to either party. The latter kind of riba is prohibited by disallowing deferred settlement and ensuring that the transaction is settled on the spot by both parties.

The prohibition of *riba* in the exchange of currencies belonging to different countries requires a process of analogy (*qiyas*). And in any such exercise involving analogy (*qiyas*), efficient cause (*illah*) plays an extremely important role. It is a common efficient cause (*illah*), which connects the object of the analogy with its subject, in the exercise of analogical reasoning. The appropriate efficient cause (*illah*) in case of exchange contracts has been variously defined by the major schools of *Fiqh*. This difference is reflected in the analogous reasoning for paper currencies belonging to different countries.

A question of considerable significance in the process of analogous reasoning relates to the comparison between paper currencies with gold and silver. In the early days of Islam, gold and silver performed all the functions of money (*thaman*). Currencies were made of gold and silver with a known intrinsic value (quantum of gold or silver contained in them). Such currencies are described as *thaman haqiqi*, or naqdain in *fiqh* literature. These were universally acceptable as principal means of exchange, accounting for a large chunk of transactions. Many other commodities such as various inferior metals also served as means of exchange, but with limited acceptability These are described as *fals* in *fiqh* literature. These are also known as *thaman istilahi* because

of the fact that their acceptability stems not from their intrinsic worth, but due to the status accorded by the society during a particular period of time. The above two forms of currencies have been treated very differently by early Islamic jurists from the standpoint of permissibility of contracts involving them. The issue that needs to be resolved is whether the present age paper currencies fall under the former category or the latter. One view is that these should be treated at par with thaman haqiqi or gold and silver, since these serve as the principal means of exchange and unit of account like the latter. Hence, by analogous reasoning, all the Shariah-related norms and injunctions applicable to thaman haqiqi should also be applicable to paper currency. Exchange of thaman haqiqi is known as bai-sarf, and hence, the transactions in paper currencies should be governed by the Shariah rule relevant for bai-sarf. The contrary view asserts that paper currencies should be treated in a manner similar to fals or thaman istilahi because of the fact that their face value is different from their intrinsic worth. Their acceptability stems from their legal status within the domestic country or global economic importance (as in case of US dollars, for instance).

3.1 Analogical Reasoning (Qiyas) for Riba Prohibition

The prohibition of *riba* according to the above quoted *hadith* applies to the two precious metals (gold and silver) and four other commodities (wheat, barley, dates and salt). It also applies, by analogy (*qiyas*), to all species which are governed by the same efficient cause (*illah*) or which belong to any one of the genera of the six objects cited in the tradition. However, there is no general agreement among the various schools of *Fiqh* and even scholars belonging to the same school, on the definition and identification of efficient cause (*illah*) of *riba*.

For the Hanafis, efficient cause (illah) of riba has two dimensions: the exchanged articles belong to the same genus (jins); these possess weight (wazan) or measurability (kailiyya).²⁰ If in a given exchange, both the elements of efficient cause (illah) are present, that is, the exchanged countervalues belong to the same genus (jins) and are all weighable or all measurable, then no gain is permissible (the exchange rate must be equal to unity) and the exchange must be on a spot basis. In case of gold and silver, the two elements of efficient cause (illah) are: unity of genus (jins) and weighability. Thus, when gold is exchanged for gold, or silver is exchanged for silver, only spot transactions without any gain are permissible. It is also possible that in a given exchange, one of the two elements of efficient cause (illah) is present and the other is absent. For example, if the exchanged articles are all weighable or measurable but belong to different genus (jins) or, if the exchanged articles belong to same genus (jins) but neither is weighable nor measurable, then exchange with gain (at a rate different from unity) is permissible, but the exchange must be on a spot basis. ²¹ Thus, when gold is exchanged for silver, the rate can be different from unity but no deferred settlement is permissible. Further, the possibility of stipulating options in the contract for either or both parties is also not lawful. It is stated in al-Hidaya that such stipulations are preventive of mutual seisin (or settlement), which is an indispensable condition. ²² If none of the two elements of efficient cause (illah) of riba are present in a given exchange, then none of the injunctions for riba prohibition apply. Exchange can take place with or without gain and both on a spot or deferred basis.

Considering the case of exchange involving paper currencies belonging to different countries, *riba* prohibition would require a search for efficient cause (*illah*). Currencies belonging to different countries are clearly distinct entities; these are legal tender within specific geographical boundaries with different intrinsic worth or purchasing power. Hence, a large majority of scholars perhaps rightly assert that there is no unity of genus (*jins*). Additionally, these are neither weighable nor measurable. This leads to a direct conclusion that none of the two elements of efficient cause (*illah*) of *riba* exist in such exchange. Hence, the exchange can take place free from any injunction regarding the rate of exchange and the manner of settlement. The logic underlying this position is not difficult to comprehend. The intrinsic worth of paper currencies belonging to different countries differ as these have different purchasing power. Additionally, the intrinsic value or worth of paper currencies cannot be identified or assessed unlike gold and silver which can be weighed. Hence, neither the presence of *riba al-fadl* (by excess), nor *riba al-nasia* (by deferment) can be established.

The Shafi'i school of figh considers the efficient cause (illah) in case of gold and silver to be their property of being currency (thamaniyya) or the medium of exchange, unit of account and store of value. 23 However, the efficient cause (illah) of being currency (thamaniyya) is specific to gold and silver, and cannot be generalized. That is, any other object, if used as a medium of exchange, cannot be included in their category. Hence, according to this version, the Shariah injunctions for riba prohibition are not applicable to paper currencies. The Maliki view also considers the efficient cause (illah) in case of gold and silver to be their property of being currency (thamaniyya) or the medium of exchange, unit of account and store of value. However, according to this view, even if paper or leather is made the medium of exchange and is given the status of currency, then all the rules pertaining to *naqdain*, or gold and silver apply to them. Thus, according to this view, exchange involving currencies of different countries at a rate different from unity is permissible, but must be settled on a spot basis. As far as Hanbali view is concerned, different versions attributed to Ahmad Ibn Hanbal have been recorded as documented in al-Mughni by lbn Qudama. The first version is similar to the Hanafi version while the second version is close to the Shafi'i and Maliki version.24

3.2 Comparison between Currency Exchange and Bai-sarf

Bai-sarf is defined in *fiqh* literature as an exchange involving *thaman haqiqi*, defined as gold and silver, which served as the principal medium of exchange for almost all major transactions.

Proponents of the view that any exchange of currencies of different countries is same as *bai-sarf* argue that in the present age paper currencies have effectively and completely replaced gold and silver as the medium of exchange. Hence, by analogy, exchange involving such currencies should be governed by the same Shariah rules and injunctions as *bai-sarf*. It is also argued that if deferred settlement by either parties to the contract is permitted, this would open the possibilities of *riba-al nasia*.

Opponents of categorization of currency exchange with bai-sarf however point out that the exchange of all forms of currency (thaman) cannot be termed as bai-sarf.²⁵ According to this view bai-sarf implies exchange of currencies made of gold and silver (thaman haqiqi or naqdain) alone and not of money pronounced as such by the state autorities (thaman istilahi). The present age currencies are examples of the latter kind. These scholars find support in those writings which assert that if the commodities of exchange are not gold or silver, (even if one of these is gold or silver) then, the exchange cannot be termed as bai-sarf. Nor would the stipulations regarding bai-sarf be applicable to such exchanges. According to Imam Sarakhsi, "when an individual purchases fals or coins made out of inferior metals, such as, copper (thaman istilahi) for dirhams (thaman haqiqi) and makes a spot payment of the latter, but the seller does not have fals at that moment, then such exchange is permissible....taking possession of commodities exchanged by both parties is not a precondition" (while in case of bai-sarf it is.)²⁶ A number of similar references exist which indicate that jurists do not classify an exchange of fals (thaman istilahi) for another fals (thaman istilahi) or for gold or silver (thaman haqiqi), as bai-sarf.

Hence, the exchanges of currencies of two different countries which can only qualify as *thaman istilahi* can not be categorized as *bai-sarf*. Nor can the constraint regarding spot settlement be imposed on such transactions. It should be noted here that the definition of *bai-sarf* is provided in *fiqh* literature and there is no mention of the same in the holy traditions. The traditions mention about *riba*, and the sale and purchase of gold and silver (*naqdain*) which may be a major source of *riba*, is described as *bai-sarf* by the Islamic jurists. It should also be noted that in *fiqh* literature, *bai-sarf* implies exchange of gold or silver only; whether these are currently being used as medium of exchange or not. Exchange involving *dinars* and gold ornaments, both qualify as *bai-sarf*. Various jurists have sought to clarify this point and have defined *sarf* as that exchange in which both the commodities exchanged are in the nature of *thaman*, not necessarily *thaman* themselves. Hence, even when one of the commodities is processed gold (say, ornaments), such exchange is called *bai-sarf*.²⁷

Proponents of the view that currency exchange should be treated in a manner similar to *bai-sarf* also derive support from writings of eminent Islamic jurists. According to Imam Ibn Taimiya "anything that performs the functions of medium of exchange, unit of account, and store of value is called *thaman*, (not necessarily limited to gold and silver). As far as the views of Imam Sarakhsi regarding exchange involving *fals* is concerned, according to them, some additional points need to be taken note of. In the early days of Islam, *dinars* and *dirhams* made of gold and silver were mostly used as medium of exchange in all major transactions. Only the minor ones were settled with *fals*. In other words, *fals* did not possess the characteristics of money or *thamaniyya* in full and was hardly used as store of value or unit of account and was more in the nature of commodity. Hence there was no restriction on purchase of the same for gold and silver on a deferred basis. The present day currencies have all the features of *thaman* and are meant to be *thaman* only. The exchange involving currencies of different countries is same as *bai-sarf* with difference of *jins* and hence, deferred settlement would lead to *riba al-nasia*.

Dr Mohammed Nejatullah Siddiqi illustrates this possibility with an example. ³⁰ He writes "In a given moment in time when the market rate of exchange between dollar and rupee is 1:20, if an individual purchases \$50 at the rate of 1:22 (settlement of his obligation in rupees deferred to a future date), then it is highly probable that he is ,in fact, borrowing Rs. 1000 now in lieu of a promise to repay Rs. 1100 on a specified later date. (Since, he can obtain Rs. 1000 now, exchanging the \$50 purchased on credit at spot rate) "Thus, *sarf* can be converted into interest-based borrowing and lending."

3.3 Defining Thamaniyya

It appears from the above synthesis of alternative views that the key issue seems to be a correct definition of *thamaniyya*. For instance, a fundamental question that leads to divergent positions on permissibility relates to whether *thamaniyya* is specific to gold and silver, or can be associated with anything that performs the functions of money. We raise some issues below, which may be taken into account in any exercise in reconsideration of alternative positions.

It should be appreciated that thamaniyya may not be absolute and may vary in degrees. It is true that paper currencies have completely replaced gold and silver as medium of exchange, unit of account and store of value. In this sense, paper currencies can be said to possess thamaniyya. However, this is true for domestic currencies only and may not be true for foreign currencies. In other words, Indian rupees possess thamaniyya within the geographical boundaries of India only, and do not have any acceptability in US. These cannot be said to possess thamaniyya in US unless a US citizen can use Indian rupees as a medium of exchange, or unit of account, or store of value. In most cases such a possibility is remote. This possibility is also a function of the exchange rate mechanism in place, such as, convertibility of Indian rupees into US dollars, and whether a fixed or floating exchange rate system is in place. For example, assuming free convertibility of Indian rupees into US dollars and vice versa, and a fixed exchange rate system in which the rupee-dollar exchange rate is not expected to increase or decrease in the foreseeable future, thamaniyya of rupee in US is considerably improved. The example cited by Dr Nejatullah Siddiqi also appears quite robust under the circumstances. Permission to exchange rupees for dollars on a deferred basis (from one end, of course) at a rate different from the spot rate (official rate which is likely to remain fixed till the date of settlement) would be a clear case of interestbased borrowing and lending. However, if the assumption of fixed exchange rate is relaxed and the present system of fluctuating and volatile exchange rates is assumed to be the case, then it can be shown that the case of riba al-nasia breaks down. We rewrite his example: "In a given moment in time when the market rate of exchange between dollar and rupee is 1:20, if an individual purchases \$50 at the rate of 1:22 (settlement of his obligation in rupees deferred to a future date), then it is highly probable that he is, in fact, borrowing Rs. 1000 now in lieu of a promise to repay Rs. 1100 on a specified later date. (Since, he can obtain Rs. 1000 now, exchanging the \$50 purchased on credit at spot rate)". This would be so, only if the currency risk is non-existent (exchange rate remains at 1:20), or is borne by the seller of dollars (buyer repays in rupees and not in dollars). If the former is true, then the seller of the dollars (lender) receives a predetermined return of ten percent when he converts Rs. 1100 received on the maturity date into \$55 (at an exchange rate of 1:20). However, if the latter is true, then the return

to the seller (or the lender) is not predetermined. It need not even be positive. For example, if the rupee-dollar exchange rate increases to 1:25, then the seller of dollar would receive only \$44 (Rs 1100 converted into dollars) for his investment of \$50.

Here two points are worth noting. First, when one assumes a fixed exchange rate regime, the distinction between currencies of different countries gets diluted. The situation becomes similar to exchanging pounds with sterlings (currencies belonging to the same country) at a fixed rate. Second, when one assumes a volatile exchange rate system, then just as one can visualize lending through the foreign currency market (mechanism suggested in the above example), one can also visualize lending through any other organized market (such as, for commodities or stocks.) If one replaces dollars for stocks in the above example, it would read as: "In a given moment in time when the market price of stock X is Rs. 20, if an individual purchases 50 stocks at the rate of Rs. 22 (settlement of his obligation in rupees deferred to a future date), then it is highly probable that he is, in fact, borrowing Rs. 1000 now in lieu of a promise to repay Rs. 1100 on a specified later date. (Since, he can obtain Rs. 1000 now, exchanging the 50 stocks purchased on credit at current price)" In this case too as in the earlier example, returns to the seller of stocks may be negative if stock price rises to Rs. 25 on the settlement date. Hence, just as returns in the stock market or commodity market are Islamically acceptable because of the price risk, so are returns in the foreign currency market because of fluctuations in the prices of foreign currencies.

A unique feature of *thaman haqiqi* or gold and silver is that the intrinsic worth of the currency is equal to its face value. Thus, the question of different geographical boundaries within which a given currency, such as, *dinar* or *dirham* circulates, is completely irrelevant. Gold is gold whether in country A or country B. Thus, when currency of country A made of gold is exchanged for currency of country B, also made of gold, then any deviation of the exchange rate from unity or deferment of settlement by either party is not permissible. However, when paper currencies of country A is exchanged for paper currency of country B, the case may be entirely different. Paper currency of B is not *thaman* in country A. Nor is the paper currency of A *thaman* in country B. The price risk (exchange rate risk), if positive, would eliminate any possibility of *riba al-nasia* in the exchange with deferred settlement. ³¹

Another point that merits serious consideration is the possibility that certain currencies may possess *thamaniyya*, that is, used as a medium of exchange, unit of account, or store of value globally, within the domestic as well as foreign countries. For instance, US dollar is legal tender within US; it is also acceptable as a medium of exchange or unit of account for a large volume of transactions across the globe. Thus, this specific currency may be said to possesses *thamaniyya* globally, in which case, jurists may impose the relevant injunctions on exchanges involving this specific currency to prevent *riba al-nasia*. The fact is that when a currency possesses *thamaniyya* globally, then economic units using this global currency as the medium of exchange, unit of account or store of value may not be concerned about risk arising from volatility of inter-country exchange rates. At the same time it should be recognized that a large majority of currencies do not perform the functions of money except within their national boundaries where these are legal tender.

3.4 Possibility of Riba with Futures and Forwards

So far, we have discussed views on the permissibility of deferring settlement of obligation of only one of the parties to the exchange. What are the views of scholars on deferment of obligations of both parties? Typical example of such contracts are forwards and futures.³² According to a large majority of scholars, this is not permissible on various grounds, the most important being the element of risk and uncertainty (gharar) and the possibility of speculation of a kind which is not permissible. This is discussed in section 3. However, another ground for rejecting such contracts may be riba prohibition. In the preceding paragraph we have discussed that bai salam in currencies with fluctuating exchange rates cannot be used to earn riba because of the presence of currency risk. It is possible to demonstrate that currency risk can be hedged or reduced to zero with another forward contract transacted simultaneously. And once risk is eliminated, the gain clearly would be riba.

We modify and rewrite the same example: "In a given moment in time when the market rate of exchange between dollar and rupee is 1:20, an individual purchases \$50 at the rate of 1:22 (settlement of his obligation in rupees deferred to a future date), and the seller of dollars also hedges his position by entering into a forward contract to sell Rs. 1100 to be received on the future date at a rate of 1:20, then it is highly probable that he is, in fact, borrowing Rs. 1000 now in lieu of a promise to repay Rs. 1100 in a specified later date. (Since, he can obtain Rs. 1000 now, exchanging the 50 dollars purchased on credit at spot rate)" The seller of the dollars (lender) receives a predetermined return of ten percent when he converts Rs. 1100 received on the maturity date into 55 dollars (at an exchange rate of 1:20) for his investment of 50 dollars irrespective of the market rate of exchange prevailing on the date of maturity.

Another simple possible way to earn *riba* may even involve a spot transaction and a simultaneous forward transaction. For example, the individual in the above example purchases \$50 on a spot basis at the rate of 1:20 and simultaneously enters into a forward contract with the same party to sell \$50 at the rate of 1:21 after one month. In effect this implies that he is lending Rs1000 now to the seller of dollars for one month and earns an interest of Rs. 50 (he receives Rs. 1050 after one month. This buy-back or repo (repurchase) transaction so common in conventional banking is termed as *bai aleinah* and rightly rejected by almost all Islamic scholars. ³³ Thus, forward and future contracts can be seen to be clearly unIslamic on grounds of being a source of generating *riba*.

4. The Issue of Freedom from Gharar

Gharar, unlike riba, does not have a consensus definition. In broad terms, it connotes risk and uncertainty. It is useflil to view gharar as a continuum of risk and uncertainty wherein the extreme point of zero risk is the only point that is well-defined. Beyond this point, gharar becomes a variable and the gharar involved in a real life contract would lie somewhere on this continuum. Beyond a point on this continuum, risk and uncertainty or gharar becomes unacceptable³⁴. Jurists have attempted to identify such situations involving forbidden gharar. A major factor that contributes to gharar is inadequate information (jahl) which increases uncertainty. This is when the

terms of exchange, such as, price, objects of exchange, time of settlement etc. are not well-defined. *Gharar* is also defined in terms of settlement risk or the uncertainty surrounding delivery of the exchanged articles.

Islamic scholars have identified the conditions which make a contract uncertain to the extent that it is forbidden. Each party to the contract must be clear as to the quantity, specification, price, time, and place of delivery of the contract. A contract, say, to sell fish in the river involves uncertainty about the subject of exchange, about its delivery, and hence, not Islamically permissible. A number of *hadiths* forbid contracts involving uncertainty.³⁵

An outcome of excessive *gharar* or uncertainty is that it leads to the possibility of speculation of a variety, which is forbidden. Speculation in its worst form is gambling. The holy Quran and the traditions of the holy prophet explicitly prohibit gains made from games of chance, which involve unearned income. The term used for gambling is *maisir* which literally means getting something too easily, getting a profit without working for it. Apart from pure games of chance, the holy prophet also forbade actions, which generated unearned incomes without much productive efforts. ³⁶

Here it may be noted that the term speculation has different connotations. It always involves an attempt to predict the future outcome of an event. But the process may or may not be backed by collection, analysis and interpretation of relevant information. The former case is very much in conformity with Islamic rationality. An Islamic economic unit is required to assume risk after making a proper assessment of risk with the help of information. All business decisions involve speculation in this sense. It is only in the absence of information or under conditions of excessive *gharar* or uncertainty that speculation is akin to a game of chance and is reprehensible.

4.1 Gharar and Speculation with Currency Forwards, Futures and Options

Considering the case of currency forwards and futures first, where settlement by both parties is deferred to a future date, these are forbidden according to a large majority of jurists on grounds of excessive *gharar*. In such contracts the two parties become obliged to exchange currencies of two different countries at a known rate at the end of a known time period. For example, individuals A and B commit to exchange US dollars and Indian rupees at the rate of 1: 22 after one month. If the amount involved is \$50 and A is the buyer of dollars then, the obligations of A and B are to make a payments of Rs. 1100 and \$50 respectively at the end of one month. The contract is settled when both parties honor their obligations on the future date.

Traditionally, an overwhelming majority of Shariah scholars have disapproved such contracts on several grounds. The prohibition applies to all such contracts where the obligations of both parties are deferred to a future date, including contracts involving exchange of currencies. An important objection is that such a contract involves sale of a non-existent object or of an object not in the possession (*qabd*) of the seller. This objection is based on several traditions of the holy prophet. ³⁷ There is difference of opinion on whether the prohibition in the said traditions apply to foodstuffs, currencies,

or perishable commodities or to all objects of sale. There is, however, a general agreement on the view that the efficient cause (*illah*) of the prohibition of sale of an object which the seller does not own, or of sale prior to taking possession is *gharar*, or the uncertainty about delivery of the goods purchased.

Is this efficient cause (illah) present in an exchange involving future contracts in currencies of different countries? In a market with full and free convertibility or no constraints on the supply of currencies, the probability of failure to deliver the same on the maturity date should be no cause for concern. Further, the standardized nature of futures contracts and transparent operating procedures on the organized futures markets is believed to minimize this probability. Some recent scholars have opined in the light of the above that futures, in general, should be permissible. According to them, the efficient cause (illah), that is, the probability of failure to deliver was quite relevant in a simple, primitive and unorganized market. It is no longer relevant in the organized futures markets of today³⁹. Such contention, however, continues to be rejected by the majority of scholars. They underscore the fact that futures contracts almost never involve delivery by both parties. On the contrary, parties to the contract reverse the transaction and the contract is settled in price difference only. For example, in the above example, if the currency exchange rate changes to 1: 23 on the maturity date, the reverse transaction for individual A would mean selling \$50 at the rate of 1:23 to individual B. This would imply A making a gain of Rs. 50 (the difference between Rs. 1150 and Rs. 1100). This is exactly what B would lose. It may so happen that the exchange rate would change to 1:21 in which case A would lose Rs. 50 which is what B would gain. This obviously is a zero-sum game in which the gain of one party is exactly equal to the loss of the other.

Currency options provide a right without obligation to the purchaser of the option to exchange currency with a counterparty at a predetermined exchange rate within or at the end of a stipulated time period. For example, individual A may purchase an option to exchange \$50 for equivalent rupees at the rate of 1:21 at the end of one month. If the exchange rate on the maturity date is 1: 20, this implies a gain (he would gain by exchanging Rs. 1000 for \$50 in the market and then exercising his option to exchange the dollars for Rs. 1100 and thus, make a profit equal to Rs100 minus the option premium). This would be the loss to the seller of the option. However, if the US dollar appreciates against Indian rupee say, to 1:23, he would be better off by not exercising his option. His losses would equal to the premium paid for purchasing the option. This would be the gain of the seller of the option. In this exchange, the counterparty, in all probability, would have diametrically opposite expectations regarding future direction of exchange rates. Again like futures, this is a zero-sum game.

This possibility of gains or losses (which theoretically can touch infinity in specific cases) encourages economic units to speculate on the future direction of exchange rates. Since exchange rates fluctuate randomly, gains and losses are random too and the game is reduced to a game of chance. There is a vast body of literature on the forecastability of exchange rates and a large majority of empirical studies have provided supporting evidence on the futility of any attempt to make short-run predictions. Exchange rates are volatile and remain unpredictable at least for the large majority of market participants.

Needless to say, any attempt to speculate in the hope of the theoretically infinite gains is, in all likelihood, a game of chance for such participants. While the gains, if they materialize, are in the nature of *maisir* or unearned gains, the possibility of equally massive losses do indicate a possibility of default by the loser and hence, *gharar*.

Thus, as per the Shariah objection to contracts involving excessive *gharar* for either or both parties to the contract, forwards, futures and options may not be admissible in the Islamic framework. The other serious objection to the former is because of their being in the nature of *bai al kali bi al kali* which is discussed later in section 6.

4.2 Gharar with Complex Products of Financial Engineering

Another dimension of *gharar* is complexity which raises a question mark on the permissibility of a host of products of financial engineering involving currencies. Many such contracts have embedded conditions and can be extremely complex with the risk-return possibilities that are difficult to assess. Elimination of forbidden *gharar* requires that the contracts are simple and the parties to the contract have complete knowledge of the countervalues being exchanged. Complexity brings in *jahl*, is a source of potential conflict between parties to the contract and hence, is frowned upon.

The Islamic swap contract highlighted in section 2 is perhaps unnecessarily complex. It amounts to a composite contract equivalent to two simultaneous *bai salam* contracts entered into by both parties. It can also be seen as a composite contract involving mutual loans (*qard*). There is no reason why the two contracts cannot be separately executed at the same time if there is a matching need. The requirement to identify a matching need and tie up the two contracts is perhaps unnecessary.

5. The Issue of Risk Management

Currency markets across the globe are characterized by excessive volatility. In these volatile markets, economic units are faced with a need to manage currency risk. Conventional risk management tools, such as, currency options, forwards, futures and swaps are generally believed to add to the efficiency of the system by serving as tools of hedging and risk reduction. It is therefore pertinent to examine the hedging argument from an Islamic point of view.

5.1 Currency Options

Currency options provide a right without obligation to the purchaser of the option to exchange currency with a counterparty at a predetermined exchange rate within or at the end of a stipulated time period. As a simple illustration of how currency option may enable a party to hedge against currency risk, we may reconsider the earlier example with some modifications. Assume that individual A is an exporter from India to US who has already sold some commodities to B, the US importer, and anticipates a cashflow of \$50 (which at the current market rate of 1:22 mean Rs. 1100 to him) after one month. There is a possibility that US dollar may depreciate against Indian rupee during the one month in which case A would realize less amount of rupees for his \$50 (if the new rate is 1:20, A would realize only Rs. 1000). Hence, A may purchase an option to exchange

\$50 for equivalent rupees at the rate of (say) 1:21.5 at the end of one month (and thereby, is certain to realize Rs. 1075). In this case, A is able to hedge his position and at the same time, does not forgo the opportunity of making a gain if his fears do not materialize and US dollar appreciates against Indian rupee (say, to 1:23 which implies that he would now) realize Rs. 1150. He would obviously prefer not to exercise his option. The premium paid for purchasing the option is akin to cost of insurance against currency risk. In this exchange, the counterparty, in all probability, would have diametrically opposite expectations regarding future direction of exchange rates and would sell this option with the hope of gaining the option premium.

Conventional options as independent contracts are not admissible in the Islamic framework and there is a near consensus among Islamic scholars on this issue. However, the Shariah does provide for introduction of options as conditions in the framework of khiyar al shart. In this framework, either or both parties to the contract retain an option to confirm or rescind the contract within a stipulated time period. Studies have hinted at the possibility of designing Islamic contracts with embedded options within this framework. 40 In the context of currency exchange however, this possibility has been ruled out with the overwhelming view in favor of spot settlement and binding nature of the currency exchange contracts. However, as discussed throughout this paper there may be a case for permissibility to settlement of foreign currency exchange contracts from one end. In this context, the views of Imam Shams Sarakhsi seem to admit the possibility of options: "In an exchange involving fals and dirhams when there is a stipulated option (khiyar al shart) for either of the parties and both parties depart after taking possession (qabd) of countervalues, then such exchange is valid. This is so because, the settlement is deemed to be complete and the contract is binding for the party which does not retain any option... and possession (qabd) of at least one of the countervalues is required here.. the same is not true for bai-sarf."41 If the domestic currency because of its property of full thamaniyya is viewed similar to dirhams and foreign currency because of its property of very limited thamaniyya is viewed similar to fals, then exchange involving a foreign currency may perhaps provide for embedded options. The issue certainly deserves further research and investigation.

5.2 Currency Forwards and Futures

It is generally believed by conventional thinkers in mainstream finance that futures and forwards are tools for risk management or hedging. Hedging adds to planning and managerial efficiency. In the context of currency markets which are characterized by volatile rates, such contracts are believed to enable the parties to transfer and eliminate risk arising out of such fluctuations. To demonstrate this possibility with the same example as with options, individual A may enter into a forward or future contract to sell \$50 at the rate of 1:21.5 at the end of one month (and thereby, realize Rs. 1075) with any counterparty having diametrically opposite expectations regarding future direction of exchange rates. In this case, A is able to hedge his position and at the same time, forgoes the opportunity of making a gain if his expectations do not materialize and US dollar appreciates against Indian rupee (say, to 1:23 which implies that he would have realized Rs. 1150, and not Rs. 1075 which he would realize now.)

While hedging tools improve planning and hence, performance, it should be noted that the intention of the contracting party - whether to hedge or to speculate, can never be ascertained. There is little empirical data to prove or disprove any hypothesis relating to the intention of the contracting parties. There may indeed be an element of circular reasoning in the hedging argument and a confusion between micro-level and macro-level concerns. In volatile markets, firms or individuals at a micro level may justifiably have recourse to some tools of risk reduction. However, permissibility to forwards and futures by enabling speculative transactions, may actually lead to greater volatility in exchange rates, thus, aggravating the problem at a macro level. The consequent instability brought into the system may at times prove to be too costly for the economy as has been demonstrated in the case of the South East Asian economies. This perhaps is the economic justification why hedging with futures and forwards is not permissible in the Islamic framework.

5.3 Bai-Salam

It may be noted that hedging can also be accomplished with *bai salam* in currencies. As in the above example, exporter A anticipating a cash inflow of \$50 after one month and expecting a depreciation of dollar may go for a *salam* sale of \$50 (with his obligation to pay \$50 deferred by one month.) Since he is expecting a dollar depreciation, he may agree to sell \$50 at the rate of 1: 21.5. There would be an immediate cash inflow of Rs. 1075 for him. The question may be, why should the counterparty pay him rupees now in lieu of a promise to be repaid in dollars after one month. As in the case of futures, the counterparty would do so for profit, if its expectations are diametrically opposite, that is, it expects dollar to appreciate. For example, if dollar appreciates to 1:23 during the one month period, then it would receive Rs. 1150 for Rs. 1075 it invested in the purchase of \$50. Thus, while A is able to hedge its position, the counterparty is able to earn a profit on trading of currencies. The difference from the earlier scenario is that the counterparty would be more restrained in trading because of the investment required, and such trading is unlikely to take the shape of rampant speculation.

5.4 Islamic Swaps

The fourth form of contracting as highlighted in section 2 is supposed to be the Islamic variant of the conventional swap transactions. The conventional swaps have been generally observed to be unIslamic as they clearly involve interest payments. Islamic swaps (*al-murajaha al-Islamiyah*) as highlighted in section 2 are in use by several Islamic banks. A close look at the nature of contracting reveals that the same essentially involves an exchange of two interest-free loans (*qard*) in different currencies which are repaid by both parties at the end of a stipulated time period. It is easy to see that such swaps partially enable the parties to hedge their currency risk. For example, bank A in India has liquid funds denominated in US dollars and currently it expects the US dollar to weaken against Indian rupee over the next six months. Bank B in US with its liquidity in Indian rupees has diametrically opposite expectations. It expects the Indian rupee to weaken against the US dollar over the next six months. Thus, both banks are exposed to and perceive currency risk. An Islamic swap between the two banks may help both banks to partially reduce their risk. It may comprise the following.

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Today: A lends - 1 million US dollars - B borrows and A borrows - 20 million Indian rupees - B lends
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After six months and A repays - 20 million Indian rupees - to B
And A is repaid - 1 million US dollars - by B

In the absence of the swap, bank A would have continued with its dollar liquidity or generated some dollar income by investing the same. With rupee being the reporting currency and with continued fall in the value of dollar against rupee, the bank would have faced a loss due to the currency rate changes. With the swap now, the bank would be able to make rupee investments for the time period and generate rupee income. At the end of the time period, the bank reverses the transaction and gets back its dollar liquidity. A similar situation exists with respect to bank B which can now hedge its rupee resources against the fall in the value of rupee against dollar (dollar being the reporting currency). The major difference of this type of swap from its conventional counterpart is that in case of the latter, the interest payments along with the principal is swapped. In case of Islamic swap, only the principal is being swapped since the incomes to be generated on the investments are not predetermined.

Islamic swaps can also be explained using the earlier example with some modifications. Assume now that individual A is an exporter from India to US who has already sold some commodities to a US importer and anticipates a cash flow of \$50 (which at the current market rate of 1:22 mean Rs. 1100 to him) after one month. There is a possibility that US dollar may depreciate against Indian rupee during this one month, in which case A would realize less amount of rupees for his \$50 (if the new rate is 1:21, A would realize only Rs. 1050). Let us also assume that B is another exporter from US who anticipates a cash flow of Rs. 1100 after one month and has diametrically opposite expectations regarding future direction of exchange rates. It is worried about a possible fall in the value of rupee against dollar which would mean a reduced dollar realization. Now A and B may agree to enter into an Islamic swap under which A lends Rs. 1100 to B now and borrows US\$50 from him. (A and B are neither gaining nor losing with this exchange and can always find the rupees and dollars to exchange, since the current exchange rate is 1:22). At the end of the one month A and B receive their respective dollars and rupees from the counterparties. When they reverse the earlier transaction and repay to each other it would imply an exchange rate of 1:22 again. Thus, A and B would be able to ensure that their future receipts are hedged against adverse currency rate movements.

Islamic swaps may perform many other useful functions besides serving as a tool of risk management, such as, reducing cost of raising resources, identifying appropriate investment opportunities, better asset-liability management and the like. These are also the benefits with conventional swaps. Islamic swaps are different in that they do not involve interest-related cash flows. However, Islamic swaps are not free from controversies and there is no consensus regarding their acceptability as would be discussed below.

6. Exchange of Debt for Debt (Bai al kali bi al kali)

The exchange of debt for debt, *bai al dayn bi al-dayn* or *bai al-kali bi al-kali* is generally found to be prohibited by Islamic scholars. It is a widely recognised principle of Shariah that in any exchange contract, "seisin of one of the parties is an indispensable requisite, lest the contract prove to be an exchange of debt for debt." Such exchange of debt for debt can take various forms and scholars give a number of instances involving such exchange.

For example, individual A borrows Rs. 100 from individual B for a period of three months. After one month, individual B purchases an equipment from individual C which is to be delivered after one month in exchange of the loan to A. Another example may be that individual A sells an equipment to individual B for Rs. 100 payable in one month and then repurchases from B the equipment for Rs. 120, payable after two months. In both examples, the exchanges are prohibited. The first case involves excessive *gharar* due to uncertainty over delivery. The second case, also known as *bai al-einah*, clearly involves *riba*. Both are also examples of exchange of debts.

Some contemporary scholars do not agree on the precise interpretation of *bai al kali bi al kali*. For instance, Kamali notes "general consensus (*ijma*) is said to have materialized on the prohibition of *bai al kali bi al kali*...but evidence shows that such an *ijma* is unfeasible. the legal schools have recorded divergent rulings, which means that the claim of *ijma* on this issue is unfounded." He also notes that "its precise meaning is also subject to doubt, as *kali* is somewhat unfamiliar even to native Arab speakers." ⁴⁴

Some authors have attempted to demonstrate that *bai al kali bi al kali* refers only to *riba jahilyah* or pre-Islamic *riba*. Shaikh Mahmud Ahmad (1992) notes that Imam Malik explains the meaning of such *bai* in these words: "A person sells cloth or some other goods on the promise of payment by the buyer after one month. A month passes and the buyer, being unable to make the payment, asks the seller to sell his debt of one month for a debt of two months, and *raise the quantum of debt*. This is the sale of debt in exchange for another debt." (italics added)⁴⁵

Any contract where the settlement by both parties is deferred to a future date is a clear case of exchange of debt for debt. The same is the case with currency forwards and futures. When A and B contract to exchange Rs. 1000 and \$50 at the rate of 1:20 at a future date, say 3 months, then it can be easily seen that A's debt of Rs1000 payable to B after 3 months is being exchanged for B's debt of US\$50 payable to A after 3 months. Thus, according to a majority of scholars who consider such exchange of debts as another type of *bai al kali bi al kali*, forwards and futures are both unacceptable in the Islamic framework on this ground.

Are Islamic swaps unacceptable also because they involve exchange of debts and fall under the category of *bai al kali bi al kali?* Available opinion seems to reject Islamic swaps on different grounds. According to Mufti Muhammed Taqi Usmani, it is one of the principles of Shariah that two financial transactions cannot be tied together in the sense that entering into one transaction is made a precondition to entering into the

second. Keeping this principle in view, the swap transaction is not permissible because the loan of US\$50 is made a precondition for accepting the loan of Rs. 100. He however goes on to say that "this is my first hand opinion about this transaction... it needs further study and research."46 Some scholars justify a prohibition of conditional loans based on a hadith narrated by Abdullah bin Umar "whoever advances a loan should not make it conditional with the exception of return of the loan." ⁴⁷ Mahmud Ahmed however, quoting Allama Wahid-uz-Zaman interprets the above hadith as that a lender should not impose any condition which confers any advantage on the lender. Defending another financial product which has this common property as Islamic swaps, he asserts that "under the above arrangement, exactly identical values are exchanged and no advantage exceeding the loan value received is conferred by the borrower on the lender. In fact, both parties to the contract are simultaneously lenders as well as borrowers, and there is nothing that one lends to the other which is anything less or more than either of them borrows from the other. Unless the borrower is forced to give some kind of advantage to the lender in addition to the loan value he receives, the arrangement cannot be called conditional loan of a variety which is forbidden." ⁴⁸.

7. Summary & Conclusion

In this paper we have attempted an assessment of various conventional forms of contracting, such as, spot transactions, options, forwards, futures, swaps and various complex and composite products of financial engineering in terms of the overwhelming need to eliminate any possibility of *riba*, minimize *gharar*, *jahl* and the possibility of speculation of a kind akin to games of chance.

It is obvious that spot settlement of the obligations of both parties would completely prohibit *riba*, and *gharar*, and minimize the possibility of speculation. However, this would also imply the absence of any technique of risk management and may involve some practical problems for the participants.

At the other extreme, if the obligations of both parties are deferred to a future date, then such contracting, in all likelihood, would open up the possibility of infinite unearned gains and losses from what may be rightly termed for the majority of participants as games of chance. Of course, these would also enable the participants to manage risk through complete risk transfer to others and reduce risk to zero. It is this possibility of risk reduction to zero which may enable a participant to earn *riba*. Future is not a new form of contract. Rather the justification for proscribing may be new. If in a simple primitive economy, it was prevention of *gharar* relating to delivery of the exchanged article, in today's' complex financial system and organized exchanges, it is perhaps the prevention of speculation of a kind which is unIslamic and which is possible under excessive *gharar* involved in forecasting highly volatile exchange rates. Such speculation is not just a possibility, but a reality. Independent currency options are also not permissible on this ground. Forwards and futures are prohibited also on the ground that these involve *bai al kali bi alkali* or exchange of debt obligations.

Islamic swaps though may be beneficial in some ways, are not free form controversy. Viewed as a composite of two *bai-salam* contracts, the tying up seems unnecessary. Risk management is possible with delinked *bai-salam* contracts too. This would be simpler and more efficient. Islamic swaps may also be questionable, when these are seen as tying up of two interest-free loans.

The form of contracting with deferment of obligations of one of the parties to a future date falls between the two extremes of spot and future contracts. While Shariah scholars have divergent views about its permissibility, our analysis reveals that there is no possibility of earning *riba* with this kind of contracting. The requirement of spot settlement of obligations of at least one party imposes a natural curb on speculation, though the room for speculation is greater than under the first form of contracting. The requirement amounts to imposition of a hundred percent margin which, in all probability, would drive away the uninformed speculator from the market. This should force the speculator to be a little more sure of his expectations by being more informed. When speculation is based on information it is not only permissible, but desirable too. *Bai salam* would also enable the participants to manage risk. At the same time, the requirement of settlement from one end would dampen the tendency of many participants to seek a complete transfer of perceived risk and encourage them to make a realistic assessment of the actual risk.

There is perhaps a case for reconsideration of the definition of *thamaniyya*. Money is what money does and the acceptability of specific currencies as medium of exchange, unit of account and store of value varies widely across geographical boundaries. Such an assessment is of utmost importance as many of the Shariah related injunctions and prescriptions regarding the exchange mechanism, such as, permissibility of *bai-salam* in specific currencies, are dependant upon this crucial risk.

Notes

- 1. See **Mohammed Akram Khan** "Commodity Exchange and Stock Exchange in Islamic Economy", *The American Journal of Islamic Social Sciences*, **Vol. 5**, 1988, pp 102-103.
- 2. See **Hussein E Kotby**, *Financial Engineering for Islamic Banks: The Options Approach*, Working Paper No.23, Institute of Middle Eastern Studies, International University of Japan, pp 72-74
- 3. Papers by Justice Muhammed Taqi Usmani and Dr M N Siddiqui highlighting their views on this issue were circulated among all leading *fiqh* scholars by the Islamic *Fiqh* Academy, India for their comments and were the main theme of deliberations during the session on Currency Exchange at the Fourth *Fiqh* Seminar of the Academy held in 1991.
- 4. Resolution No.65/1/7 on Financial Markets, *Resolutions and Recommendations of the Seventh Session of the Council of the Jslamic Fiqh Academy*, Jeddah, 1992.
- 5. Response of **Justice Muhammed Taqi Usmani** to the author's query, published as an article "Futures, Options, Swaps and Equity Investments", *New Horizon*, June 1996, p.10
- 6. **Subhi Mahmassani**, *al Mujibat wa al Uqud fi al Fiqh al Islami*, Dar al Ilm Ii al Malayin, Beirut, 1983. p327

- 7. See **Muhammed Akram Khan**, note 1, pp 104-105. In contrast to futures, Khan does not find any problem with the forward market in general. He even suggests that *bai al-salam* may be modified with the condition of payment of full price in advance being substituted by some bank guarantee to legalize the contract under Islamic law. (pp 96-97).
- 8. **Muhammed Fahim Khan**, *Islamic Futures and Their Markets: With Special Reference to their Role in Developing Rural Financial Market*, Research Paper No.32, Islamic Research and Training Institute, IDB, Jeddah, 1995.
- 9. **Muhammed Hashim Kamali**, "Islamic Commercial Law: An Analysis of Futures", *The American Journal of Islamic Social Sciences*, Vol. 13, No.2, 1996, p221.
- 10. Muhammed Hashim Kamali, Note 9, pp209-210.
- 11. **Gamal Attia**, "Financial Instruments Used by Islamic Banks", *Islamic Banking and Finance*, Butterworths, London, 1986, pp. 106-107.
- 12. Muhammed Akram Khan, Note 1, pp. 103-104.
- 13. **Gamal Attia**, Note 11, pp. 107.
- 14. Response of Justice Muhammed Taqi Usmani, Note 5, p.10.
- 15. Resolution No.65/1/7 on Financial Markets, *Resolutions and Recommendations of the Seventh Session of the Council of the Islamic Figh Academy*, Jeddah, 1992.
- 16. This is explained in a narration by **Zaid b. Aslam**, quoted in the chapter 418 regarding interest in loan in Imam Malik's *Al Muwatta, Kitab al-Buyu*.
- 17. For a summary of sources of the prohibition of *riba*, see **Nabil Saleh**, *Unlawful gain and Legitimate Profit in Islamic Law*, Graham and Trotman, London, 1992, p.42-43.
- 18. Hadith narrated by Ubadah ibn as-Samit; Sahih Muslim, Book 9, No.3798.
- 19. Nabil Saleh, Note 17, p. 16.
- 20. Shams Al Aimmah Al Sarakhsi, al-Mabsut, Vol. 12, pp. 116-120.
- 21. Al Marghinani, al-Hedaya, Trans. by C.T.Hamilton, Vol. 2, Book 16, pp 312.
- 22. Al Marghinani, Note 21, pp. 312.
- 23. Al-Nawawi, Minhaj al-Talibin, translated by L.W.C.Van Berg, Vol.1, p. 355.
- 24. Ibn Qudama, al-Mughni, Vol. 4, pp. 5-9.
- 25. These diverse views are reflected in the papers presented at the Fourth Fiqh Seminar organized by the Islamic Fiqh Academy, India in 1991 which were subsequently published in Majalla Fiqh Islami, part 4 by the Academy. The discussion on comparison of foreign currency transaction with bai-saif draws on these views.
- 26. Shams Al Aimmah Al Sarakhsi, al-Mabsut, Vol. 14, pp. 24-25.
- 27. Al Marghinani, Note 21, pp. 313.
- 28. **Ibn Taimiyah**, *Majmua Fatawa Shaikh al Islam Ahmad Ibn Taimiyah*, Vol. 9, p. 451, al Riyadh Press, Riyadh.
- 29. Paper presented by **Abdul Azim Islahi** at the Fourth *Fiqh* Seminar organized by Islamic *Fiqh* Academy, India in 1991.
- 30. Paper by **Dr. M N Siddiqi** which was deliberated upon in the Fourth *Fiqh* Seminar organized by Islamic *Fiqh* Academy, India in 1991.

- 31. It may be noted here that this argument does not apply to exchange of gold with silver on a deferred basis where the exchange rate between gold and silver may fluctuate over time. An individual exchanging gold for silver on a deferred basis may indeed be exposed to exchange rate risk or price risk. But this does not make the exchange permissible. Exchange of gold for silver may be a rate different from unity, but must be settled on a spot basis.
- 32. Some Islamic scholars use the term forward to connote a *salam* sale. However, we use this term in the conventional sense where the obligations of both parties are deferred to a future date and hence, are similar to futures in this sense. The latter however, are standardized contracts and are traded on an organized Futures Exchange while the former are specific to the requirements of the buyer and seller.
- 33. *Bai al einah* which is considered forbidden by almost all scholars with the exception of Imam Shafii. Followers of the same school, such as Al Nawawi do not consider it Islamically permissible.
- 34. It should be noted that modern finance theories also distinguish between conditions of risk and uncertainty and assert that rational decision making is possible only under conditions of risk and not under conditions of uncertainty. Conditions of risk refer to a situation where it is possible with the help of available data to estimate all possible outcomes and their corresponding probabilities, or develop the ex-ante probability distribution. Under conditions of uncertainty, no such exercise is possible. The definition of *gharar*, real-life situations, of course, fall somewhere in the continuum of risk and uncertainty.
- 35. The following traditions underscore the need to avoid contracts involving uncertainty. See M. Akram Khan, Economic Teachings of Prophet Muhammad (pbuh): A Selected Anthology of Hadith Literature on Economics, International Institute of Islamic Economics, Islamabad.
 - Ibn Abbas reported that when Allah's prophet (pbuh) came to Madina, they were paying one and two years advance for fruits, so he said: "Those who pay in advance for any thing must do so for a specified weight and for a definite time".
 - It is reported on the authority of Ibn Umar that the Messenger of Allah (pbuh) forbade the transaction called habal al-habala whereby a man bought a she camel which was to be the off-spring of a she-camel and which was still in its mother's womb.
- 36. The form of gambling most popular to Arabs was gambling by casting lots by means of arrows, on the principle of lottery, for division of carcass of slaughtered animals. The carcass was divided into unequal parts and marked arrows were drawn from a bag. One received a large or small share depending on the mark on the arrow drawn. Obviously it was a pure game of chance.
- 37. The holy Prophet is reported to have said, "Do not sell what is not with you". Kamali (1996) offers a detailed analysis and discussion on this *hadith* narrated in *al Tirmidhi* and *Abu Dawud* and questions the "precise legal value" of this *hadith* because of "a certain weakness in its authenticity and transmission". See M Hashim Kamali, Note 9, pp. 205-208.
- 38. The Futures Exchange performs an important function of providing a guarantee for delivery by all parties to the contract. It serves as the counterparty in the exchange for both, that is, as the buyer for the sale and as the seller for the purchase.
- 39. M Hashim Kamali, Note 9, pp. 207-208.
- 40. The possibility of designing Islamic contracts with embedded options in the Khiyar al Shart framework has been examined in detail in, M. Obaidullah, *Financial Engineering with Islamic Options*, Working Paper, Xavier Institute of Management, India, 1997. The study, however, does not deal with currency options in particular.

- 41. Shams Al Aimmah Al Sarakhsi, al-Mabsut, Vol. 14, p. 25.
- 42. Al-Marghinani, Note 21, p. 312.
- 43. **M Hashim Kamali**, Note 9, pp. 211-212.
- 44. **M Hashim Kamali**, Note 9, pp. 212-213.
- 45. **Shaikh Mahmud Ahmad**, *Towards Interest-Free Banking*, International Islamic Publishers, 1992, pp. 130-131.
- 46. Response of Mufti Muhammed Taqi Usmani, Note 5, pp. 10-11.
- 47. Imam Malik, Al-Muwatta, Karachi, p. 581.
- 48. Shaikh Mahmud Ahmad, Note 44, pp. 129-130.

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الخيارات المالية في العقود الإسلامية الأدوات الممكن استعمالها في إدارة المخاطر

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أستاذ المالية المساعد معهد زاوير للإدارة – بوبانشير – الهند

المستخلص: يقوم البحث إسلامياً العقود المالية في أسواق العملات العالمية، فيتفحص بعض العقود المتعلقة بالعملات في السوق المالي التقليدي: المعاملات الحالة، الخيارات، العقود الآجلة، المستقبليات وعقود المقايضات من منظور المعايير الإسلامية - هل هي حالية من الربا والغرر والجهالة والقمار والميسر. كما يناقش البحث آراء العلماء المعاصرين حول بعض الأدوات التقليدية والشرعية، وينظر إلى أسس الخلاف، إن وجدت، وإلى الآثار الاقتصادية لبعض هذه المواقف. ونظراً إلى الأهمية البالغة لإدارة مخاطر تقلب العملات في الأسواق، يقوم البحث العقود المالية المتنوعة بوصفها أدوات لإدارة المخاطر.