# THE ISLAMIC HEDGING MANAGEMENT: PAVING THE WAY FOR INNOVATION IN CURRENCY OPTIONS

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### **Abstract**

Islamic hedging is one of the most important tools for risk management. Currency options contracts are commonly regarded as one of the useful tools of risk management and frequently used to reduce risk associated with the movement in price and currency risk. This article attempts to review the suitability of the Islamic currency options in one of the Islamic banks in Malaysia as a hedging mechanism and highlights Shariah issues pertaining to the structures. Currency options are prohibited in Islamic finance due to the issue of riba and to the violation of the bay al-sarf rule which requires currency trading to be done on "spot" basis only. Options contract is also rejected by some scholars because of premium payment or chargeable fees to the right. In view of the overwhelming importance of currency risk management in the volatile market, the application of Shariah principles in currency market faces a great challenge to Islamic scholars today. Based on the observation of the bank's official information disclosed to the public and the interview conducted, the finding of this research indicates that the bank permitted currency options based on the principle of tawwarug (commodity murabahah) or bay al-inah and wa'ad (unilateral promise) which are strictly used for hedging purposes. Tawwaruq and wa'ad principles have given Islamic financial institutions the opportunity to structure Shariah compliant financial products and meet the objective of increasing trading volume and liquidity in order to reduce transaction cost and risk.

**Keywords**: Islamic hedging, options, currency trading, tawarruq, wa'ad.

### Introduction

Hedging is an important risk management tool in financial markets. Hedging is a strategic measure of investors to reduce certain risks through certain financial tools. It also decreases loss-risk of an investment or diminution in the value of an asset (Carter, 2003). Thus, without having a proper risk management mechanism and hedging tools, even when a company makes profit, it could actually be making losses due to currency and exchange-rate risk, which can rise or fall within a short period of time (Chance, 2008).

Hedging in the contract of exchange becomes a need by institutions involved in the business pertaining to foreign exchange. Currency is a real problem in the market as fluctuations in the value of one currency against another are inevitable occurrences of real markets. Currency is exposed to the fluctuation of increase and decrease within a short period of time. Fluctuations in the foreign exchange rate can have significant impacts on business decisions and outcomes. Many businesses of international trade become unworthy due to significant the exchange-rate risk embedded in them (McDonald, 2003). As an illustration, Malaysian exporters will export rubber to Japanese traders in the coming three months. Traders who have the yen currency will exchange them for Ringgit Malaysia to fulfill the requirement of exporters in Malaysia. Therefore, to avoid changes in the foreign-exchange rate within the three month period, both parties will enter the derivative market to determine the future rate of exchange in the specified period of time (Guan, 2002).

Derivatives are commonly regarded as one of the useful tools of risk management and are frequently used to reduce risk associated with the movement in price and currency risk. Derivatives can provide an opportunity for companies to focus on their core business without having to worry about price movements in the market (Asyraf, 2009). One of the derivative contracts used for hedging is the options contract. Options are regarded as one of a number of instruments for hedging against market risk and limiting possible losses. However, in Islamic finance, conventional options are rejected by a majority of scholars (Arbouna, 2006; Smolarski, Schapek, & Mohammad, 2006). An option is a contract between two parties in which one of them is a buyer (option holder) that pays a sum of money, as the option price or known as a premium to the other party who is the seller (option writer) that gives the buyer the right but not the obligation to buy

or to sell the underlying asset, at an agreed-upon price (the strike price) during a certain period of time or on a specific date (exercise date). It provides protection to the buyer against the adverse effects of unpredictable future price movements in exchange for a fixed premium (Chance, 2008).

The issue of Shariah raised in this kind of contract is on the status of the contract itself, whether it is acceptable as *mal* from the Shariah point of view, and also the status of the premium charged for getting the right (Arbouna, 2006). Usmani (1999) and Obaidullah (1998) opined that an option contract is a dealing contract to sell or purchase something at a certain price and in certain period. In this matter, the sealed contract cannot be the subject of the contract, thus the payment of the premium in the option is illegal. In other words, the sale and purchase of options do not fulfill the concept of *mal*.

Competing side by side with conventional finance and facing similar global economic and financial uncertainties and risks, the Islamic finance institutions have to develop Shariah compliant alternatives to the conventional hedging instruments which violate a Shariah ruling. There are over 300 Islamic financial institutions worldwide across 75 countries and they need the hedging instrument to mitigate and minimize the risk of market fluctuation especially foreign currency exchange-rate risk (BNM, 2010). Hence, moving forward, Islamic financial institutions in Malaysia have introduced options which have Shariah compliance features. This article will investigate the Shariah compliance features in one of the Islamic options (Islamic FX Options) offered by an Islamic bank in Malaysia as a case study. The paper also explores the application of tawarrug and wa'ad as a form of hedging mechanism in the Islamic FX Options. The article commences with a literature review of the hedging concept from the Islamic perspective and options contracts. The next section reviews the concept of Islamic FX Options. Thereafter, section three illustrates the Islamic viewpoints on the currency options instruments.

### Literature Review

An effort in managing risks or hedging is permissible by the Shariah and conforms to the Shariah objective (*maqasid al-shariah*) which specifically specifies one of its objectives to protect the wealth from any harm. In fact, there is a verse in al-Baqarah: 282–283 that encourages

the Muslim society to document the debt or present witnesses as one of the ways to reduce the risk of having disputes in the future. The concept of risk management or hedging also has a strong basis in the Tradition of the Prophet (peace be upon him) based on a hadith narrated by Anas bin Malik (may Allah be pleased with him) that: A man asked the Prophet: "O Messenger of Allah, should I tie [my camel] and place my trust [in Allah], or should I leave it untied and trust [in Allah]?" The Prophet answered: "Tie it and trust [in Allah]." (Hadith narrated by al-Tirmidhi and al-Bayhaqi).

The issue is how to reach this goal and what means is used to meet this end since Islam requires that hedging should be done in the condition that it must be free from any element of betting, and an effective use of hedging is by managing the risks not by eliminating them (Aznan, 2010). Islamic financial institutions conducting international business trades such as payment of import and receipt of export goods or service revenue between countries are exposed to the fluctuation rates of foreign currency exchange. If a transaction involves the use of a similar currency, fluctuation of the currency will not give any effects. However, it is contrary for business involving international trade; for instance, business transaction of import and export between companies in Malaysia and companies in the USA. In some circumstances, the fluctuation of currency causes one of the contracting party to be exposed to currency risk. It can lead to the increase of expenditure or decrease of profit whenever change in the currency exchange rate takes place. Scholars unanimously stipulated that different currency exchange is permissible in on the spot or involuntary contract whereby submission and acceptance occur when the contract is sealed. It is to avoid the usury of al-nasi'ah and the sale of debt with debt which are prohibited in Islam (Obaidullah, 2001). The majority of Muslim scholars agree that it is not permissible to carry out a foreign exchange contract in the future since it violates the rule of Islamic exchange-rate guideline which should be done on a on the spot basis. This opinion was adopted as a resolution by the OIC Figh Academy (2010) and Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI, 2007). Therefore, the mechanism of hedging which is Shariah compliant is very much needed to overcome this issue.

One of the hedging mechanisms for currency used by conventional financial institutions is options contract. Options give the owner the right but not the obligation to exchange money from one currency into another currency at a pre-agreed exchange rate on a specified date.

Options are traded over the counter (OTC) or directly between two parties and also exchange trade. There are two basic types of options; call option and put option. A call option entitles the holder the right but not the obligation to buy an underlying asset at a pre-determined exercise price on or before a specific date, while a put option entitles the holder the right but not the obligation to sell an underlying asset at a pre-determined exercise price on or before a specific date (Hull, 2003).

Hedgers primarily use currency options to hedge foreign currency risk by purchasing a currency put or call option. Suppose company A needs to pay USD1 million to company B within three months from now. Being concerned over the changes in foreign currency exchange, company A can opt for options contract to give it the right to exchange USD1 million at the price of RM3.20 per dollar, within three months from the date of the contract. If the current exchange rate of USD 1 is higher than RM3.20, company A is able to execute its right. However, if the USD rate is lower in the cash market, company A will let its right to be lapsed. Company A will lose the premium paid for purchasing the option. By purchasing the option, a person can limit the loss risk to only the total of the premium if there is a fall in the currency exchange rate. However, if the exchange rate is increased, he will gain profit. Based on the advantages of the options contract, there is a need for this contract by the parties who require the Shariah compliant hedging product. Thus, the objective of this study is to examine how the Islamic hedging mechanism operates in order to comply with the shariah requirement which is to eliminate the element of riba, gharar and maysir.

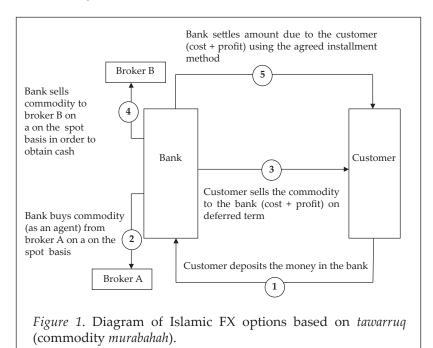
## Methodology

Data for this study was collected from various sources, namely classical books, hadith, contemporary books and journals. We also used the interview method to understand the real modus operandi of the options contract and the application of Shariah principles in the options contract. The key persons that we interviewed were an expert in the Islamic jurisprudence, a Shariah advisor and practitioners in Islamic Banking and Finance in Malaysia. The interview was conducted within one to two hours and was transcribed. We analysed the interview data using analytical analysis by searching for what is common and different and compared the data obtained. We then coded the data into specific themes as described below.

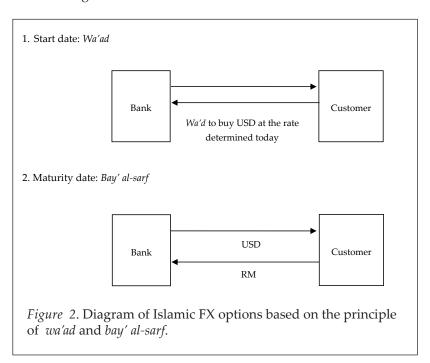
## **Findings**

## Modus Operandi of the Islamic Option

Islamic FX options are based on several Islamic finance concepts namely tawarrug, bay al-inah, wa'ad and bay al-sarf. Based on Shariah principles which are applicable in the structuring of the Islamic FX options, customers will require the bank to conduct tawarruq (commodity murabahah) or bay al-inah. Using the principle of tawarruq, the customer will request the bank to purchase a certain commodity and then appoint the bank as a representative to sell the commodity to a third party. On the date of signing the option contract, the customer and the bank will carry out the first tawarrug transaction to gain profit of sales revenue that is equal to the premium value as in the transaction of a conventional option contract. Next, on the specified date, the second transaction of tawarrug will be conducted with the sale and purchase of commodity via direct payment and delivery. If the transaction is applying bay al-inah, the sale and purchase only happen between the bank and the customer without involving a third party. The illustration of the process of the Islamic FX options is shown in Figure 1:



Later, the customer will trust wa'ad to the bank for entering the contract of bay al-sarf in the future and agree to the current exchange rate. By doing so, the customer will obtain the right to exchange the currency in the future at the rate agreed upon that day. On the future date, the customer might fulfill his promise or might release the bank from its undertaking. If the customer wants to execute the wa'ad upon the maturity date, the bank and the customer will exchange the currencies (bay al-sarf). The customer will want to execute the wa'ad if the currency rate is favourable to him. The customer has the right to wait and see whether the wa'ad is more favourable or less favourable than the prevailing market rate. The illustration of the process is shown in Figure 2.



## Islamic Principles Involved in Forming the Islamic Option

Islamic FX options offered by a bank in Malaysia are based on several Islamic finance concepts, namely *tawarruq* (trading among more than two parties) through the way of commodity *murabahah* (sale at cost plus) or *bay al-inah* (trading between two parties), *wa'ad* (promise) and *bay al-sarf* (contract of exchange, money for money). Commodity

murabahah involves contract of tawarruq. Tawarruq is actually a sale contract whereby a buyer buys an asset from a seller with deferred payment and subsequently sells the asset to a third party on cash with a price lesser than the deferred price, for the purpose of obtaining cash. This transaction is called tawarruq mainly because when the buyer purchases the asset on deferred terms, it is not the buyer's interest to utilize or benefit from the purchased asset, rather to facilitate him to attain liquidity. Tawwaruq practiced in this contract is an organized tawarruq. Apart from that, the principle of wa'ad is also applied to structure this options contract. Wa'ad means a unilateral promise given by a one person to another for accomplishing something in the future (Aznan, 2008), while bay al-sarf is a currency exchange contract that will only occur when the customer exercises the options.

### Discussion

Before analysing the aforementioned options contract, a brief review on the main Shariah issue raised in the options contract should be elaborated which involves the status of the contract or right itself whether it is acceptable as mal from the Shariah perspective. Although there are debates and different opinions among the scholars on this issue, it is opinionated that the options contract fulfills the concept of mal in the Islamic law as it has value in a certain period of time. This is agreed by Al-Amine (2008) who concluded that the concept of mal in Islamic law does include the right according to the majority of Muslim scholars and there is no single verse which defines the characteristics of right which should be accepted as a property right - the whole issue is based on custom. Considering the fact that the right in options is recognized internationally as a property right, it can be regarded as a valid subject matter of a contract in Islamic law. Therefore, options contract is a hag mal that can be the subject of a contract. However, this options contract cannot be sold to a third party because it is not a valid asset for sale and purchase (Mohd Daud, 2008). Nevertheless, the issue of selling to a third party in Islamic FX options has never been raised because the contract holder will hold the contract until its maturity period and decides whether to exercise his right or lapse the right, in contrast to the conventional options contract which can be sold to a third party or can be traded in the secondary market (Aznan, 2011; Zaharuddin, 2011).

While for the contract of *bay al-sarf*, the scholars differed in deciding the permissibility of the foreign exchange contract if it is done in the future. From the Shariah point of view, the issues with the

conventional currency options structure arise when the parties involved want to exchange currency in the future but have already fixed the rate on the day the contract is sealed. Despite the fact that majority of Muslim scholars opined that it is a requirement for an exchange which involves two different currencies to be transacted on a on the spot basis, in the contract of the FX option, the contract is sealed earlier but exchanges actually happen in the future (on the date of maturity). Therefore, it does not violate the Shariah principle of currency trading whereby the transaction can only be done on a on the spot basis.

The Shariah principle applied in the Islamic FX options is the principle of tawwaruq. A majority of jurists viewed that tawwaruq is permissible (AAOIFI, 2007). This concept is expanded from the concept of bay alinah. However, for the organized tawarrug (tawarrug munazzam), the scholars have different opinions. The OIC Academy of Figh (2000) decided that the contracts of organized tawarruq and tawarruq aqsi (reverse tawarrug) are not permissible for they contain the elements of fraud or hilah and usury in the efforts of obtaining money easily. Organized tawarrug is not allowed due to the simultaneous transaction between the financier and the client whether it is done explicitly or implicitly or based on common practice. This is considered as deception to get quick cash behind the transaction and consists riba. In spite of this, there are other opinions from jurists on the impermissibility of organized tawarrug which can be summarized as no physical delivery, containing several contracts in one contract and consisting of the element of bay al-inah. Therefore it is suggested that tawarrug is the only solution to overcome the liquidity problem amongst the Muslims. Although the organized and reversed tawarruq principles are not permissible by the OIC Academy of figh, we can see the importance of this principle in various Islamic banking and capital market products for hedging purposes. In fact, this matter has been approved by a few contemporary scholars such as the leading Saudi jurist, Syeikh Abdullah Sulaiman al-Mani', Dr. Musa Adam Isa, Dr. Usamah Bahr and Dr. Sulaiman Nasir al-Ulwan (Central Bank of Malaysia, 2010). They rejected the opinion stating that organized tawwaruq is a hilah to conduct usury which is inaccurate because the fact of having transactions is to avoid the usury. Other than that, intention is something invisible, while jurisdiction can be seen to be done.

Besides tawarruq, the Islamic FX options contract also provides the selection of using bay al-inah on the customers, especially domestic

customers. Bay al-inah has been widely critiqued by a majority of jurists who suggested that it is only a legal trick that opens the "back door" to riba. However, it is viewed here that tawarruq and bay al-inah are similar as far as the substance is concerned. Both tawarrug and bay alinah-based instruments serve exactly the same contractors' purposes, and share exactly the same economic substance and consequences, albeit their forms may be different. The differences are mainly in two aspects. First, while the latter does not involve a third party, the third party intermediary is present in the case of tawarrug. Second, the sale of objects in bay al-inah is returned to the original owner, whereas in tawarrug, there is no such condition. Thus Shafiis, Abu Yusuff, Abu Daud and Abu Thur, including a report from Ibn Umar, are of the view that the bay al-inah contract is not contrary to Shariah principles. It is also suggested here that bay al-inah is permissible. This permissibility is based on public interest consideration (maslahah), which is to overcome the problem of liquidity shortage in the country, without resorting to conventional riba-based liquidity instruments and transactions. Those who are against bay al- inah basically subscribe to the opinion of classical jurists such as Hanafis, Malikis, Hanbalis and some Shafiis schools who reject bay al-inah and opine that this kind of sale transaction is forbidden (Central Bank of Malaysia, 2010). This somehow explains the global rejection of the Malaysian practice of bay al-inah in the Islamic financial market. However, if it is deemed from the aspect of need or hajah for hedging from the change in currency it is suggested that the principle of bay al-inah and organized tawarruq are the best alternatives in the current market.

Contract in Islamic law, is a complex legal discipline both in its jurisprudential foundation and its practical function. Contract covers a variety of dealings and transactions to meet the needs of the society. No doubt, issues of commercial transactions, unlike devotional issues (ibadah), are not ever lasting and bound to change due to the changing circumstances and situations of both the object and the subject of the transactions (Mohd Daud, 2008a). For this reason, Islamic law approved hajah as a verification of Shariah and a valid basis of judicial resolution. It thus appears that the Shariah seeks to include the will and consensus of the community into the fabric of its laws. Nonetheless, it is also recommended that other principles should also be thought of and developed so that they can be accepted as whole by the scholars. This acceptance is vital so that Shariah compliant products can be transacted globally. Moreover, the Shariah Advisory Council (SAC) of the Securities Commission of Malaysia and the Shariah Advisory Council of the Central Bank of Malaysia had officially endorsed both bay al-inah and tawarruq to be used for liquidity management purposes (Central Bank of Malaysia, 2010).

Another principle in this contract is the principle of wa'ad. The issue raised in this contract is that the principle of wa'ad only binds one side of the party, that is, it only binds the party who makes the promise (wa'ad mulzim). In this matter, only the customer is bound to execute the contract. The bank will not have any obligations to perform the contract because the bank does not give any promise. This matter worries the customers for they do not get the guarantee from the bank to execute the contract especially when the bank is experiencing losses if it conducts the contract. If the bank decides not to perform the contract, the customer has no right to require the bank to carry out the obligation based on the wa'ad. However, normally the bank will proceed with the agreed transaction in order to maintain the bank's reputation (Aznan, 2010; Shamsiah & Rusnah, 2010).

The issue of binding or not of a wa'ad in this contract is still being debated (Nurdianawati, 2008). The majority of scholars opined that the execution of a promise is not binding both contracting parties from the aspect of law and cannot be enforced even though performing a promise is very much commanded in Islam. However, some scholars such as Samurah bin Jundub, 'Umar ibn 'Abd al-'Aziz, Ibn Shubrumah, Hassan al-Basri, Ibn Arabi and Imam Bukhari suggested that promise is binding from the aspect of religion and law. There are also opinions from the Hanafis school who state that promise is binding if it is related to certain conditions (mua'llaqah bi al-syart). Maliki jurists view that if the promise-maker causes the promise-receiver to perform a task based on the given promise or to incur any cost or liability, the promise is binding (Aznan, 2008). OIC Academy of Islamic Figh has taken the approach of the majority of the scholars and decided that this wa'ad has no binding nature (2000). This resolution was also agreed upon by the Shariah Council of AAOIFI (2007) and the Bank Negara Malaysia Shariah Advisory Council (2010).

Although *wa'ad* is still criticized from a conceptual perspective, it is viewed that in practice this instrument has become a contractual promise as it offers great flexibility. *Wa'ad* can be used as a risk mitigation technique to eliminate some unwanted risks such as price risk and exchange rate risk, in the event of default and total loss. It is recommended that the application of the principle of *wa'ad* would be a solution to Shariah issues that exist in the conventional option

contract. Therefore, on the basis of the need for hedging, the Bank Negara Shariah Advisory Council (2010) decided that this contract is permissible, with the condition that the *wa'ad* given must be separated from the transaction of *tawarruq* and it cannot be treated as a condition for the transaction. This to avoid the given *wa'ad* as an exchange for a certain value. Institutions must ensure that every transaction is sealed separately between each other from the aspect of the documentation and execution sequence of the Shariah compliant underlying asset. This is in line with the views of current scholars who stipulate that a *wa'ad* cannot be priced and traded (AAOIFI, 2007). Nevertheless, as an alternative to save the customer from the drop in the exchange rate as compared to the agreed rate in the *wa'ad*, there are potential Shariah principles to be explored in structuring the Shariah compliant options contract, such as the application of two separated *wa'ad* (*wa'adan*) (Aznan, 2008; ISRA, 2011).

### Conclusion

Islamic FX options which is based on tawarruq, bay al-inah, wa'ad and bay al-sarf is seen as a significant alternative in Islamic finance to assist in more efficient and competitive risk management. This paper has sought to increase the transparency and clarity required with the usage of Islamic FX options. With regard to issues pertaining to the options contract itself, it is opinionated that it meets the concept of mal and premium payment is legal. Meanwhile, discussion on the Islamic options shows that commodity murabahah and wa'ad can become a viable principle for Islamic hedging in facilitating Islamic financial institutions and Islamic investors to manage their business risks effectively. It is suggested that the principle of tawarruq is the best choice as an alternative for bay al-inah, although it is permitted only in Malaysia.

The principle of wa'ad seems to have less Shariah issues and can conform easily to the requirements of Shariah compliance and its structure is simple and easy to be understood by players. Wa'ad also offers great flexibility to be used in structuring products that can mimic conventional products. Since derivative products which are commonly used as hedging mechanisms are against Shariah principles due to the prohibition of riba, commodity murabahah and wa'ad structure can be used as alternatives to the Islamic finance industry to offer Shariah compliant hedging products. Future research

will investigate the operation of commodity *murabahah* and *wa'ad* in other Islamic banks in more detail; why its use is still limited and what the challenges and prospects are for greater acceptance from customers.

In conclusion, the concept of hedging conforms to the principles of Shariah. However, the application of derivative instruments as a mechanism for hedging should be refined so as not to conflict with the purpose of contract. By introducing Islamic derivatives, the symptoms of the problems are being treated, that is the fluctuations in currency exchange. If the industry really wants to deal with the problem, more research must be done into researching solutions to treat the source and not the symptoms. Once the source is treated the symptoms will automatically be eliminated and the need for suspect instruments will be done away with. Shariah compatible innovation must always be thought of for the sake of Islamic finance survival and to liberate Muslims from the elements of usury, *gharar* and *maysir*.

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