Asian Social Science; Vol. 10, No. 8; 2014
ISSN 1911-2017 E-ISSN 1911-2025
Published by Canadian Center of Science and Education

The Concept of Hedging in Islamic Financial Transactions

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Received: December 12, 2013 Accepted: February 24, 2014 Online Published: March 26, 2014

doi:10.5539/ass.v10n8p42 URL: http://dx.doi.org/10.5539/ass.v10n8p42

Abstract

Hedging is a method to safeguard or minimize loss from risk that constantly exists in the financial market. Nevertheless, hedging in conventional perspectives involves the usage of derivative instruments which are controversy in Islamic view. Thus, the noble purpose of hedging that is to manage risk has been misunderstood as only to gain profit. The concept of hedging needs a further discussion because of its various interpretations on the meaning of hedging. Hence, the aim of this study is to discuss the general concept of hedging and subsequently the concept of hedging according to Islam. The approach used in this study of content analysis is the qualitative research method of document analysis. The researcher highlights the literature materials such as academic books relating to hedging including contemporary and classic *fiqh* scriptures. The study finds that the concept of hedging according to Islam is different from the conventional concept of hedging. This means, the study has developed a new theory of Islamic hedging. The theory of Islamic hedging must be based on the *hadith* of *al-kharaj bi al-daman* and *fiqh* maxim of *al-ghunm bi al-ghurm* approaches. In addition, the objective of Islamic hedging to reduce risk must only be related to real economic activities.

Keywords: hedging, risk management, speculation, shariah

1. Introduction

International trades do not run effectively without foreign currency exchange transactions. However, fluctuations of foreign currency rates can affect losses as well as gains to those involved. Thus, the ability to exchange currencies at a lower cost is a major prerequisite in making sure such trading optimise gains. Indeed, the ability to reduce exposure of foreign currency exchange risks is also vital in the view that international trades normally take time in payments and invoice submission.

Muslims involvement in the international trade resulting in the essential requirement of foreign exchange trade in the context of Muslim world. Among the parties who are directly involved in foreign currency exchange transactions are the central bank, commercial banks, corporate firms, brokers and savings funds. Hence, hedging is necessary for that purpose (Obiyathulla, 2000). With hedging activities, concerns over future price movements facing the investors, importers and exporters will be reduced.

There are varying views of hedging concept. Some suggest hedging as an activity of buying insurance policy to cover loss from unwanted risks. (Toporowski, 2000; Clark & Gosh, 2004; Kolb & Overdahl, 2006). Apart from that, hedging is also defined as a consolidation of profiteering objective and to risk aversion. Profit is important in hedging operations in the sense that the profits made will offset against any future price fluctuations (Abu Bakar, 2010). Even though the main objective of hedging concept is to reduce the risk of loss, the questions arise whether the concept of hedging can be used to avoid risks (Elgari, 2010), eliminate risks (Abu Bakar, 2010), or gains (Rosalan, 1993), or perhaps simply to reduce risks alone (al-Suwailem, 2006)? This shows that the understanding of hedging concept in accordance to syariah perspective is still being shrouded with confusions.

In Arabic, the definition hedge is known as *tawaqa, tahawwut, hiyatah, ihtima'* or *taghtiyyah* which means protection. The word *hiyatah* according to the language is precaution, protection and attention (Ibn Manzur, 2002). *Al-tahawwut* on the other hand originally meant the years of drought. It is also associated to something that enshrouds mankind and can destroy them (al-Zabidi, t.th.) In other words, *tahawwut* means enshrouding because droughts have always been engulfing mankind and surrounded them in troubles. Meanwhile, according to Elgari (2010), *tahawwut* technically is a strategy devised to eliminate risks.

Hedging is also an effort to ensure that the risk or possible losses can be reduced when a person makes a commitment in a liquidity market. This is because traders entering the market normally do not have yet in possession the goods they're intending to sell, instead will buy it in the future when the time comes to deliver the goods to the buyers (Al-Saati, 2002). Besides, hedging is also defined as investment activities intended to reduce or avoid risks of another investment (Khan & Ahmed, 2001; Kolb & Overdahl, 2003; Obiyathulla, 2004; Suhaimi, 2008). So, when one undertakes a hedging activity, he will initiate a position in the futures market that aims to temporarily replace the actual time of buy and sell of commodity in the liquidity market (Clark & Ghosh, 2004).

Besides that, hedging is also defined as an amalgamation of profiteering and risk aversion. Profit is important in hedging activity because the profits gained will offset against future price fluctuations (Abu Bakar, 2010). Hence, Roslan (1991) defines hedging as an activity to gain profits based on market price fluctuations.

The various views of hedging concept show that the concept of hedging is not fully understood and is frequently associated with the derivatives contract. The indefiniteness in understanding the concept of hedging causes the derivatives contract to be misused by those who intend to reap easy profits by means of speculations due to the similarities of the contracts. Hence, in the effort to introduce a syariah-based hedging contract, the concept of hedging should be understood first in order to ensure that the requirement to hedging is not misused (al-Amine, 2008).

2. Research Methodology

2.1 The Research Methodology Is Divided into Three Categories

2.1.1 Research Design

The qualitative research design selected involves literature research. It is chosen because it does not involve any statistical and numerical experiments. In fact, the result of outcome is not obtained by any statistical procedure. Considering that a qualitative research also emphasizes on the importance of carrying out actual and natural ground of studies, so it is in conformity with this study in the form of observation and explanation of some actual and natural situations. This study needs in-depth and thorough information for the purpose of answering research questions about such problems faced by the current participants of financial markets in Malaysia. The research approach of contents analysis is the qualitative research method of document analysis. Among the main documents selected are the *hadiths* and the scriptures of *turath* with regards to hedging concept.

2.1.2 Data Collection Method

The method used for data collection is document analysis. The researcher obtains highlights on literature materials such as academic books regarding hedging including the contemporary and classical *fiqh* scriptures, journals, and seminar working papers. Islamic legislature sources such as *hadiths* and *fiqh* methods are also the prominent materials used in this textual method approach. This textual approach is important because through this approach the researcher can get a clear picture on the appropriate principles, concept, method, modifications and data analysis.

2.1.3 Data Analysis Method

Data analysis method used in this study is by the approach of inductive and descriptive method. Descriptive approach is chosen because this approach is more suitable for the research, which is to enquire the concept of hedging that is in accordance with the syariah requirement. Meanwhile, inductive approach is to make conclusion or find evidence from specific subjects in order to formulate a general conclusion. This approach had been used in the discussion on hedging because it involves the activities of collecting and interpreting information, then to make generalisations or conclusions. So, the approach is suitable to be used in this study to develop the concept of Islamic hedging after scrutinizing and interpreting the general information on hedging.

3. Result: Hedging Concept in Islam

According to al-Suwailem (2006), the term hedge is used to indicate an activity that aims to reduce risk and to neutralize those risks. Hedges are also described as a process to achieve price stability in order to protect customers or buyers from an abrupt increase in price. Hence, it is a challenging method in acquiring equilibrium between uncertainty and opportunity loss (Gandhi, 2006). In the context of asset and liability management, hedging is crucial for it can compensate for any disequilibrium between the assets and liabilities of a company such as maturity dates of long term financing and short term deposits (Obiyathulla, 2007; Suhaimi, 2008; Wajdi & Smolo, 2009).

Examples of hedging activities is: A investors take long positions in the portfolio of stocks in the cash market

and want to avoid the risk of stock prices in the future. This is because the increase in prices in the future may result in having to buy at a higher price. Due to the stock price in the future is always changing, so investors will take long position (buy) stock totalling 1,000 shares of company A at Rs 100 (= 100,000). Then, he can also take a short position by selling 500 shares of company B for $ 200 (500 x 200 = 100,000) as a hedge. On the second day, said the good news happen, the A share price rose by 10 percent = 10,000 (100,000 + 10,000 = 110,000). While B shares rose as much as 5 percent = 5,000 (100,000 + 5,000 = 105,000). This means that the investor is loss of Rs 5,000 for selling the stock today. On the third day, say going bad news, of all the shares down as much as 50 percent. A stock fell by 50 percent = (110,000/2 = 55,000). Then he suffered a loss of 45,000. Hey while B decreased by 50 percent = (105,000/2 = 52,500). Capital to buy stock B is 100.000 to 52.500 = 47,500. Although investors have lost 45,000 of stock A. However, due to gains from stock B, then investors still made a profit of 2,500. Thus, based on this example, a hedge is defined as the guarantee of severe losses due to loss faced by an investor would be compensated by the gain.

The result of study finds that all scholars have almost similar definitions of hedging, which is a method to reduce the risk of price movements by taking an opposite position in derivatives market to offset losses in the liquidity market (futures market) with reasonable gains in futures market (liquidity market). An example of hedging activity is as follows: An investor takes a long position in a liquidity market stock portfolio at the same time wants to avoid the risk of stock price future increase. This is because an increase in the future stock price will cause him to buy at a higher price. Due to movements in the future stock price, the investor then will take a long position (buy) on the stock i.e. 1,000 shares from company A at the cost of RM100 (=100,00). He could then, take a short position by selling 500 of his shares in company B at the price of RM200 (500x200=100,000) as hedging. On the second day, let say there is a good news i.e., the price of shares A goes up by 10 percent = 10,000 (100,000 + 10,000 = 110,000). Whilst, shares B is also up by 5 percent = 5,000 (100,000+5,000 = 105,000). This means, that he suffers a loss of RM5, 000 for selling his shares the day before. On the third day, let say there is a bad news instead i.e., all shares prices are down by 50 percent = (110,000/2 = 55,000). Thus, the investor suffers a loss of RM45, 000 from shares A. Whilst, the price of shares B also goes down by 50 percent = (105,000/2 = 52,500). The capital to buy shares B is RM100,000-RM52,500 = RM47,500. Even though this investor suffers a loss of RM45,000 from shares A, the gain from shares B enables him to still make a profit of RM2,500. Hence, based on this example, the definition of hedging mentioned here is a guarantee against heavy losses faced by investors whence any losses suffered will be offset by the profits gained.

Therefore, it is hoped that hedging can limit losses when the time comes for the trader to buy goods to be sold in the future (Salihin, 2000). Table 1 below shows various definitions of hedging according to contemporary researchers. However, the table shows majority views of the researchers with a statement that hedging is a method to manage and reduce risks.

Hence, in this study, hedging can be referred to as one of the risk management approach that aims to reduce risk while limiting the probability of losses inflicted due to the instability of commodity prices, currency values or securities. Subsequently, hedging can determine that the selling price sealed with the buyers will not affect the projected gains as those holding positions in the liquidity market will strive to reduce those risks in the futures market. Considering almost all the researchers agree with the statement that the concept of hedging is to manage and reduce risk, then it can be concluded that this concept is most appropriate.

Table 1. Definition of hedging

Views	**Risk transfer**	**Avoid risk**	**Cautious**	**Eliminate risk**	**Reduce Risk**	**Avoid loss**	**Profit**	**Insurance**
Zahan & Kenett (2012)	√				√		√	
Elgari (2010)		√		√	√		√	
Abu Bakar (2010)				√				
Asyraf Wajdi (2010)					√			
Metzger (2009)	√							
Saadiah & Ali (2008)					√			
Ahmad Suhaimi (2008)					√			

Views	Risk transfer	Avoid risk	Cautious	Eliminate risk	Reduce Risk	Avoid loss	Profit	Insurance
Kolb & Overdahl (2007)	√				√			√
al-Suwailem (2006)					√			
Obiyathulla (2004)	√				√	√	√	√
Chance (2003)					√			
Kamali (2002)	√				√		√	
Al-Saati (2002)					√			√
Ibn Manzur (2002)			√		√			
Khan & Ahmed (2002)					√		√	
Obaidullah (2001)	√				√			
Roslan (1994)							√	
Johnson (1960)					√		√	

Source: Author's Compilation (2011)

Despite of clear hedging objective, that is to reduce risk, the concept of hedging has been misconstrued so much so that the above objective has been mixed with the goal to make money. Can then this concept be used for the purpose of avoiding risk, or to make profit, or simply to minimize risk?

As a matter of fact, the concept of hedging is not profit motivated, but mainly to minimize the risk or unwanted loss. According to Salihin (2000), the risk that should be reduced in hedging is associated with future price movement of which would likely result in cost increase or reduce in profit rate. However, the function of derivatives for hedging is often abused by unscrupulous traders. For instance, the financial assets or securities purchased may decline or depreciate in price and buyers are concerned that those financial assets prices will suffer a great loss. Thus, they can sell the assets before the due payment date to reduce the probability of loss by telling the brokers that the assets are for contras transactions. Therefore, the buyers only need to pay the difference between the sales and purchase price and not the full price of the financial assets (Salleh, 1996).

Besides, hedging can also offset the imbalance of assets value and liabilities of a bank. According to Mohamad Akram & Shabnam (2009), the Islamic banking institutions also require hedging to protect their assets. As an example, an Islamic bank needs to obtain foreign currency to meet the customers' demand and at the same time offers *ijarah* financing to the customers based on floating rates. According to Asyraf Wajdi (2009), the use of hedging against the risk of price fluctuations allows banking institutions to trade and operate their business transactions on a larger scale. Although the financial cost of hedging instrument is high, returns from large scale operations would normally be higher than if not using hedging at all (Wajdi, 2009).

This suggests that the actual role of hedging as a risk management tool is very easy to be manipulated for the purpose of maximizing profits. Further to the importance of hedging, Islamic banking acts as a mechanism for the preservation of one of the most important aspect of human life i.e. assets, for all Islamic banking activities involve Islamic asset management.

Generally, all Islamic scholars agree on the permissibility of hedging activities as long as it is not against sharia (al-Amine, 2008). In fact, Islam also permits hedging aims to maintain the possibility of a profit as a result of permissible investment. Thus, although the market is very important derivatives in hedging, but until now there is no consensus of scholars regarding the permissibility of the use of derivative contracts for hedging purposes (al-Amine, 2008). According to al-Suwailem (2006), only with the purpose of hedging activities in accordance with the risk management only Maqasid al-shari'ah.

Generally, all Islamic scholars agree on the permissibility of hedging activities as long as they are not against the *shariah* law (al-Aminie, 2008). Islam even permits the objective of hedging in maintaining the probability of a profit as a result of *halal* investment. Therefore, even though the derivatives market is very important in hedging, so far there has been no consensus among the Islamic scholars regarding the permissibility of the use of derivatives contracts for hedging purposes (al-Amine, 2008). According to al-Suwailem (2006), only hedging activities with

the purpose of managing risks fulfill the requirement of the *maqasid al-shari^c^ah*.

Even though hedging is permissible in Islam and brings maslahah (benefits) (Obaidullah, 2005), the presence of gambling and speculation in hedging instrument however are forbidden. The simple application of derivatives contract makes it suitable for speculative purposes (Obiyathulla, 1999). This means that even though the objective of hedging is permissible, the issue is the underlying aspect of instrument and means (wasilah) used to achieve the objective. If the instrument involves betting and gambling then it is forbidden, even though the goal is permitted by syarak for the means does not justify the end. Forbidden wasilah can bring detrimental effects, and usually also the opposite end with the original goals and maqasid al-sharicah. The instrument of derivatives allow risk related to the price of the underlying asset to be transferred from one party to another. This id due to derivatives contract involves one party reducing its risk, and the other taking on risk associated with an underlying asset. This allows parties to speculate on the values of underlying assets, without necessarily having any actual interest in the asset itself. (Note 1).

Subsequently, all parties whether individuals, investors, traders, importers and exporters should understand the actual concept of hedging, which is to specifically reduce the risk alone, instead of taking the opportunity to earn profits based on forecasts of price volatility in the market. The concept of hedging should not also be misused for purposes other than risk management so as not to defeat the original purpose, which is the protection of assets as one of the shariah objectives that must be preserved.

Therefore, based on this discussion, it can be concluded that the theory of Islamic hedging is to be in accordance with the hadith of al-kharaj bi al-daman and fiqh maxim of al-ghurm bi al-ghunm. Al-Ghurm bi al-ghurm is one of the famous Islamic legal principle which means returns are justified by taking risks (Ayub 2007). The principle refers to one is entitled to a gain only if one agrees to bear the responsibility for the loss. Thus, earning profit is legitimised only by risk-sharing and engaging in an economic venture. Islamic hedging first and foremost recognizes the importance of risk-taking, rather than evading it. The profits made without risk-taking is not permissible in Islam. Economic activities carried out must also be linked solely to real economic activities.

Table 2 below summarizes the concept of hedging promoted by Islam. The table shows that the concept of hedging in accordance with Islam is the one with the objective of reducing and managing risks. The behaviour of risk adverse, risk elimination, profit gain and risk transfer to other parties is not in accordance with the hedging concept allowed by Islam.

Table 2. Hedging concept according to Islam

Hedging Objective	**In accordance with Islamic Hedging Concept**
1. Risk Averse	X
2. Risk Elimination	X
3. Risk Transfer	X
4. Profit Gain	X
5. Risk Management	√
6. Risk Reduction	√

The activity of hedging is closely related to inevitable risk taking in the effort to obtain profit (al-Suwailem, 2006). Without taking this risk, the return is invalid because the returns earned in a job is actually a result of the risk taken (al-Misri, 1993). For example, a dealer in doing business should bear the risk of any damage, defect or depreciation on the goods sold before the goods are transferred to the buyers (Azhar, 2005). The seller must guarantee that there are no defects on the goods to be sold. If the buyer is not satisfied or finds that the merchandise is damaged, then the seller must bear the damage and replace it with the good one. This coincides with one of the fiqh methods of al-ghunmu bi al-ghurmi which means any income or profits generated are based on the risk assumed (al-Nadawi, 1999) (Note 2).

Al Suwailem (2006) is also with the view that the risk acceptable in Islam is the one that follows the economic activities and the one that generates returns, rather than unprofitable risk detrimental to the economic activities. Ibn Taymiyyah (2008) (Note 3) on the other hand is with the view that Allah SWT (Glory to Him, the Exalted) and His Messenger SAW (peace be upon him) never forbid all risks as there are several types of risks that can bring maslahah.

In addition to that, the legal basis to permit risk-takings is based on the *hadith al-kharaj bi al-daman* (Note 4)

which means that to gain profit is to face risk. This clearly shows that in order to gain profit, the seller must bear the risk for yield is inevitable if without effort (no risk no gain) (Chapra, 2008a). In fact, the act of obtaining profit without taking risk or risk-sharing is considered to be devouring *riba* and is deplored by Islam.

4. Conclusion

Risk is the norm in life. In financial activities, risks cannot be avoided. Among the financial risks caused by the presence of financial variables movements are the risks of foreign exchange rates, equity risks, interest rates risks, and commodity price risks. Due to the presence of these risks, hedging is needed to avoid the occurrences of unwanted losses.

Generally, both the Islamic banking and the conventional banking are exposed to many risks. In fact, there are several other risks faced by the Islamic banking which is not faced by the conventional banking due to the compliance requirement as outlined under the shariah principles. In the context of Islamic financing, risks management takes place in the actual market of goods as opposed to conventional financing activities that does not emphasize on actual merchandise. Hence, the widely known risks management method in conventional market is the derivatives contract. For the purpose of hedging, a derivatives contract merely transfers unwanted risks from one party to another party who is willing to bear the consequences of risk. This is on the contrary to the Islamic *muamalat* principles that emphasises on the concept of risk bearing. Profit gained must be based on the risks taken.

The study on the concept of risk management and hedging finds that the use of derivatives contract is not wrong. But the use of derivatives contract opens the door to speculators to make speculations. Profit making made easy out of speculative activities is the reason why derivatives become more favourable compared to hedging. Thus, as a result, the use of derivatives contract for hedging purposes defeats the objective of hedging and risks management. Whereas, according to Islam, a good risk management is a *shariah* prerequisite because to protect one's assets is part of the *maqasid al-shari^{c}ah*. Therefore, neglects of measures in managing risks are contrary to the Islamic *shariah* law. The study on hedging concept and the use of derivatives for the purpose of hedging thus has been conducted in this chapter.

This study basically answers the issue of diversity in defining the concept of hedging. Furthermore, the objective of hedging is permissible in Islam, so how to achieve the objective of the hedge has been refined so that the use of derivatives contracts is not open to speculators who would dominate the market by bidding on prices. Transfers of risks or risks averse should not have happened in the market since Islam only emphasizes on risk-sharing between two contracting parties, rather than risks transfer.

This study basically answers the issue of diversity in the hedging concept. Furthermore, the objective of hedging is permissible in Islam, so how to achieve the objective of the hedge has been refined so that the uses of derivative contracts are not open to speculators dominate the market by doing gambling on prices. Or transfer of risk aversion should not have happened in the market since Islam only emphasizes the risk-sharing between the two contracting parties, rather than risk transfer. Therefore, the method leading to hedging objective has been refined so as not to give space for speculators to dominate the market by betting on prices. Risk transfer or risk aversion should not happen in the financial market since it only emphasizes risk sharing between two contracting parties.

The result of this study explains the difference of Islamic hedging concept and the concept of conventional hedging. This means that this study has succeeded in forming the theory of Islamic hedging. The theory of Islamic hedging must be based on the *hadith* of *al-kharaj bi al-daman* and the principle of *al-ghunm bi al-ghurm*. Besides that, the sole objective of Islamic hedging in reducing risks must relate only with real economic activities.

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Notes

Note 1. There are also opinions stating of the huge difference of speculation and betting. This is due to the fact that speculation activities depend on information, experiences and observations before taking any action. On the contrary, betting activities depend merely on luck and chance alone. In fact, gambling has resulted in the creation of risk as speculation serves to absorb the risks transferred to it. See: al-Masri (2007).

Note 2. Some of the contracts permitted in Islamic *muamalat* as they contain the risk-taking elements i.e. the contracts of *musharakah*, *mudarabah* and *ijarah*. In the contract of *musharakah* for instance, all share partners must share the profits gained from the shared risks. Furthermore, if there is any incurred loss, all parties must bear the loss.

Note 3. According to Ibn Taymiyyah (2008), the risks which have the element of ill-gotten gain is forbidden, as how ill-gotten gain is forbidden even if there is no risk involved.

Note 4. Hadith narrated by Ibn Majah in Kitab al-Tijarat, Bab al-Kharaj bi al-Daman, Hadith number 2243. Lihat Ibn Majah, *Sunan Ibn Majah*, 385; Abu `Abd Allah al-Hakim al-Naysaburi, *al-Mustadrak `ala al-Sahihayn*, Kitab al-Buyu`, Hadith number 2230. Based on this hadith, Ibn Qayyum (1968) states that Islam does not ask men to defy risks for the sake of profits. But Islam assumes the requirement of liability (*al-daman*) for a profit. *al-Daman* here means assume asset responsibility, i.e. the responsibility followed by ownership of property and not separated from it. It is in line with the *hadith* of *al-kharaj bi al-daman*. The profit pursuant to liability according to the Shafi^{c}i sect is any profit obtained belongs to the right person who is responsible for the risks of the property. See: al-Khin et al. (2006).

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