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ANALYSIS OF THE CONCEPT OF ISLAMIC CHOICE (*IKHTIYÓR*) ON OPPORTUNITY COST AND TIME VALUE OF MONEY IN ISLAMIC ECONOMICS AND FINANCE

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ABSTRACT

The paper discusses the concept of Islamic choices (*ikhtiyÉr*) and its implication on the opportunity cost's concept. In choosing between good and bad, there is no opportunity cost involved as the good is the only choice. Opportunity concept only applies when the choice is between two or more good choices. To forgo investments in interest bearing deposits is not an opportunity cost. However, to forgo getting a fixed salary in an employment (*ijÉrah*) contract while choosing to work as *muÌÉrib* has an opportunity cost. This concept of *ikhtiyÉr* also has an impact on the conception of time value of money as it is derived from the concept of opportunity cost. Compensation for time value of money in loan or receivable is not permitted, while that for credit sale is permissible. Time alone cannot be the basis for compensation and counter-value (*ÑiwaÌ*). It must be attached to other factors, such as guarantee, effort, and risk. Without meeting these requirements in credit sale, the sale such as *murÉbaÍah* would become an invalid (*bÉÏil)* sale, which must not be chosen by Islamic banks.

JEL Classification: A12, D03, D21, G11

Keywords: Opportunity cost, Time value of money, *IkhtiyÉr*, Counter value, Islamic economics.

INTRODUCTION

One of the living theologians and philosophers in the Muslim world is Syed Muhammad Naquib al-Attas (Wan Daud et al., 2010)[1]. Among his important thoughts is the discourse on Islamic worldview. Out of his discussion on the fundamental aspects of the Islamic worldview is the concept of *ikhtiyÉr* (Islamic choice) which has relevancy for Islamic economics and finance. This paper aims to connect and integrate his concept of *ikhtiyÉr* with the concept of opportunity cost and time value of money.

Khan (1991, 1995) and Saadallah (1994) have discussed the issue of time value of money in Islamic economics. They agree that time can play its role in the pricing of credit sale contract, but not in loan. However, they do not deal with the issue of counter value (*ÑiwaÌ*) which is discussed by Rosly (2008). The contribution of the paper is basically in combining and synthesising the discussion of *ÑiwaÌ*, time value of money (TVM), the opportunity cost and the concept of *ikhtiyÉr*. The synthesis of concept of *ikhtiyÉr* and opportunity cost leads to specific idea that only within the good choice that the concept of opportunity cost can be applied. Since the issues of TVM and *ÑiwaÌ* are related to the concept of opportunity cost, let us start first our discussion with the concept of opportunity cost in economics.

IKHTIYÓR AND OPPORTUNITY COST

Opportunity cost is one of the key concepts in economics. In fact it is "one of the most fundamental ideas that the discipline has to offer" but even qualified economists can easily have an incomplete understanding of this concept (Ferarro and Taylor, 2005). The term was coined by Austrian economist, Friedrich von Wieser, in 1914. His German book was then translated into English under the title of *Social Economics* by A. Ford Hinrichs in 1927. In essence the opportunity cost is the value of the best alternative forgone. However, according to the Nobel Laureate in public choice theory, James M. Buchanan, opportunity costs exist only in the "eye of the beholder" as envisioned "alternatives" that are never brought into existence (Kliemt, 1999).

In the realm of economics, the intuitive idea of opportunity cost differentiates *inter alia* between the concept of accounting cost and that of economic cost. The former considers implicit and apparent cost, whereas the latter includes considerations of implicit and hidden cost as well. For example, if a person decides to perform an Islamic minor pilgrimage *(Ñumrah)* while taking an unpaid leave from his work for a half month, his accounting cost is only the direct expenses of his pilgrimage. However, his economic cost would also include a half month salary he forgoes. This half month salary he sacrifices is the opportunity cost.

In its broader meaning, the concept of opportunity cost is not assessed only in monetary and financial terms, but also in terms of anything which has value. For example, the opportunity cost of carrying 30 kilograms of clothes in your flight baggage is 30 kilograms of your books, and the opportunity cost of having an urgent company meeting on Sunday might be a family picnic. Therefore, the opportunity cost of making a particular choice is the second best alternative of that choice, regardless of whether the choice involves monetary terms or non-monetary terms. The more mutually exclusive is the choice the more would be the opportunity cost.

When economics is said to be the science of making choices, then Islamic economics would inevitably involve a notion of Islamic choice. Al-Attas (1995) in his book *Prolegomena to the Metaphysic of Islam* has discussed some issues related to the concept of freedom and its consequences in making choice from an Islamic worldview. He distinguished between the 'activity' of freedom and the 'condition' of freedom. To him the former is termed as *ikhtiyÉr* and the latter as *Íurriyyah*. For our discussion in this paper we deal only with the former. He explained the notion of *ikhtiyÉr* as follows:

> The activity that is called 'freedom' is in *ikhtiyÉr*, which is an act, not in *Íurriyyah*, which is a condition. The act that is meant in *ikhtiyÉr* is that of making a choice, not between many alternatives but between two alternatives: the good or the bad. Because *ikhtiyÉr* is bound in meaning with *khayr*, meaning 'good', being derived from the same root *khÉra* (*khayara*), the choice that is meant in *ikhtiyÉr* is the choice of what is good, better, or best between the two alternatives. This point is most important as it aligned to the philosophical question of freedom. A choice of what is bad of two alternatives is therefore not a choice that can be called *ikhtiyÉr*; in fact it is not a choice, rather it is an act of injustice (*Ðulm*) done to oneself. (Al-Attas, 1995:33)

IkhtiyÉr is basically to choose only the good choice according to Islamic value. Choosing a bad option or choice is not considered a choice, Islamically speaking. As good and bad are part of Islamic law and ethics, a choice by Muslim consumers and firms would have bearing on their values and ethics. Only the choice which is Í*al*É*l* (lawful), Î*a*ÍÍ (valid) or *khayr* (good) in consumption, production or exchange is considered exercising *ikhtiy*É*r*. Therefore, a non-Í*al*É*l* consumption or exchange, for instance, is not a choice.

We have stated earlier that forgoing a choice would involve an opportunity cost in economics. This discipline, however, does not relate its notion of opportunity cost with ethical issues of good and bad. In fact conventional economics has not been connected anymore to ethics. It is known that modern economics has divorced itself from moral questions. According to Wilson (1995:102) by the nineteenth century, especially after the work of David Ricardo, economics had become separated from its ethical roots. This trend was reinforced still further by the marginal economics and the advent of neo-classical economics. Unlike its counterpart, Islamic economics attempts to bring back this ethical issue and even to cement it with its theological roots. Since in the Islamic worldview God is the Law Giver, then good and bad are subject to Divine Law. This will have bearings in Islamic economics.

The notion of good and bad was the subject of discussion in Islamic theology. Instead of using the term *khayr* and *sharr*, they used the term Í*usn* and *qub*Í for good and bad action respectively. *Ash*ÉÑ*irah*, which is representing the creed of Muslim majority theology, held the view that Revelation is the real criterion to determine what is good and bad. Actions in themselves, according to this creed, are neither good nor bad. It is the Divine Law which makes them good or bad (Abdul Hye, 1999). Its well-known dictum says *al-*Í*asanu m*É Í*assanahu al-shar*Ñ *wa al-qabī*Í*u m*É *qabba*Í*ahu al-shar*Ñ (Goodness is something considered good by the Divine Law, and badness is something considered bad by the Divine Law). Hence Muslims uphold that what is commanded by *Shar*Ñ is good, and what is prohibited is bad. Defending this position, Muslim theologians argued that God never forbids anything that is good. If God forbids something that contains some good, it must be because of the bigger potential danger behind it.

The concept of opportunity cost attached to the notion of *ikhtiy*É*r* then distinguishes between the good and the bad, the right and the wrong, or the Í*al*É*l* and the Í*ar*É*m*. Accordingly a so-called ‘choice’ towards what is bad (*qub*Í), or evil (*sharr*), wrong (*b*ÉÏ*il*), or unlawful (Í*ar*É*m)*, is therefore not an Islamic choice. Just to narrow down our discussion to its legal issue, when a person knows Í*al*É*l* and *ÍarÉm*, the Islamic choice only allows him to choose for the *ÍalÉl* one. Consequently a choice what is *ÍarÉm* is not part of his choice. He has to forgo it. However, when he forgoes the prohibited one this is not an opportunity cost for him.

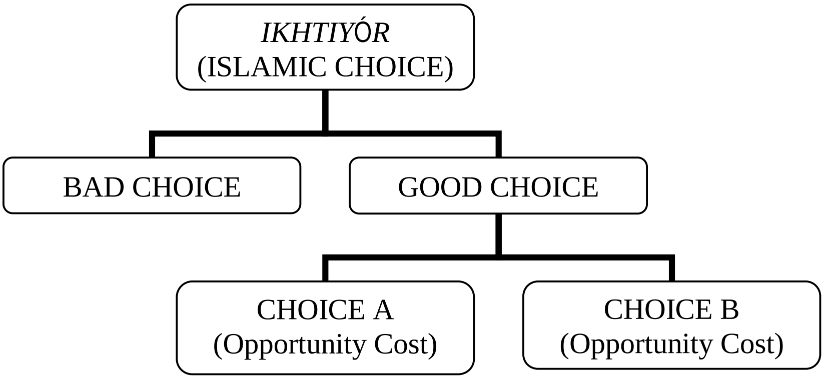
Let us take an example from choices between putting our money in an interest (*ribÉ*) bearing time deposit and that in a *wadīÑah* or *amÉnah* saving deposit. According to conventional economics, forgoing the interest earned in the time deposit account is an opportunity cost. Hence, if your deposit is US$10,000 while the interest rate is 5% a year, the opportunity cost of not depositing your money in this account is US$500 a year. With the concept of *ikhtiyÉr* (Islamic choice), however, there is a different understanding of the concept of opportunity cost in this regard. With the same example of depositing US$10,000 in the *wadīÑah* saving account, we are able to say that, from the Islamic economics point of view there is no opportunity cost in it. Why? The answer is simply because putting the US$10,000 in an interest bearing deposit is not considered a choice. It is not a choice for a Muslim.

To give another example, if a Muslim is offered a glass of wine for free while a glass of juice for US$5, as he chooses the juice, his opportunity cost is merely zero and not US$5 according to the notion of *ikhtiyÉr* (Islamic choice). From the examples above, we can say that there is a kind of choice which has no opportunity cost in the concept of *ikhtiyÉr*. In other words, not every choice has an opportunity cost in Islamic worldview.

All the explanation above, however, does not necessarily imply that there is no opportunity cost concept in Islamic economics. Rather the place of opportunity cost concept exists only within the good choices. Only if there is a mutually exclusive good choice then the concept of opportunity cost would be applicable in Islamic economics. In this case forgoing a good choice for a better one, or sacrificing a better one for the best one, incurs an opportunity cost. If you are to choose, for instance, between putting your money in a lawful business on the one hand and investing it in Islamic mutual funds on the other hand, then you will face an opportunity cost. Similarly if we have to choose between getting a fixed salary of US$2000 a month in an *ijÉrah* contract and becoming an active partner in a *muÌÉrabah* contract, then the opportunity cost of choosing to be a *muÌÉrib* would be US$2000 a month. As both choices are good and *ÍalÉl*, then there is an opportunity cost incurred in choosing one of them. Here the concept of opportunity cost works perfectly the same for both Islamic economics and conventional economics. They differ only when the choice involves the bad (*qub*Í) and the good (Í*usn*) one in accordance with Islamic teaching.

The diagram below summarizes the implication of the notion of *ikhtiy*É*r* (Islamic choice) on the concept of opportunity cost:

FIGURE 1
Implication of Islamic Choice on Opportunity Cost



There is no opportunity cost on the first level of choice, namely the choice between the bad and the good. The opportunity cost would only be operative on the second level of choice, namely the choices within the good one.

Other than Í*al*É*l* and Í*ar*É*m*, Islamic finance must also have concerns on the issue of validity (Î*a*ÍÍ) and invalidity (*b*ÉÏ*il*) of a contractual transaction (Ñ*aqd*) its financial activities. In other words, the Islamic financial institutions must only choose for the valid contract since the invalid contract is not a choice. So the good and the bad under the concept of *ikhtiy*É*r* is not only confined to choice between Í*al*É*l* and Í*ar*É*m* transactions, but also between Î*a*ÍÍ and *b*ÉÏ*il* transactions. There are conditions and stipulations (*shurū*Ï) to be met so that a contractual transaction would be considered valid in Islamic commercial jurisprudence (*fiqh al-mu*Ñ*É*mal*É*t*). If the conditions, especially the major ones, are violated then the transaction is null and void.

From this perspective the notion of *ikhtiy*É*r* (Islamic choice) should govern the behaviour of both individuals as well as firms in Islamic economics. A consumer who forgoes depositing his money in an interest bearing saving account must not consider it as an opportunity cost. Similarly, an Islamic bank which forgoes *b*ÉÏ*il* transaction must not consider it as an opportunity cost if he chooses only the Î*a*Í*īh* transaction instead. The competition with conventional banking system should not corner Islamic banking to resort to choice of transactions which are considered void or defective from Islamic point of view. This is simply a bad choice and this in fact should not be the choice at all. This understanding surely requires a shift in the mind-set and the behaviour of both individual Muslim as well as Islamic firm from the ordinary practice of conventional economics and finance to a self-disciplined Islamic economics and finance. The exercise of *ikhtiyÉr* remains a big challenge especially for Islamic firms such as Islamic banks and other Islamic financial institutions. It is actually the pitfall of the bad choice which invites criticisms against the practice of Islamic banking and finance nowadays.

The fact is that, the criticism against the practices of Islamic banking and finance does not rise only from Muslim economists, but also from Muslim jurists (*fuqahÉÒ*). The latter has put forward the censure because the Islamic banks sometime do not fulfil the conditions and stipulations provided in Islamic jurisprudence. The banks have issued hybrid products using the name of classical contracts such as *ijÉrah muntahiyyah bi al-tamlīk* (lease ending with ownership), *mushÉrakah mutanÉqiÎah* (diminising partnership), *Îukūk*, parallel *salam*, *murÉbaÍah*, etc., but in practice they ignore the conditions and stipulations for each and every underlying contract which make the hybrid contracts invalid. *Bay' al-MurÉbaÍah li al-Ómir bi al-ShirÉÒ*, which is the modern Islamic bank *murÉbaÍah*, is a clear case. Economists as well as jurists are not satisfied with the practices of this mode of financing.

Let us analyse this *murÉbaÍah* sale from jurisprudence point of view and how Muslim jurists may be disappointed with its application. First we would realise that this sale is very complex. It is a composite and hybrid sale which involves a lot of basic nominated contracts (*Ñuqūd al-musammÉt*) which in turn require fulfilment of all the conditions of each individual contract. It involves *waÑd* (promise), *bayÑ* (sale), *wakÉlah* (agency), *kafÉlah* (third party guarantee), *rahn* (mortgage), *ÌaÑ wataÒajjal* (rebate on early payment), *Ñarbūn* (down payment), just to mention few nominate contracts involved. Each and every condition of the contract needs to be taken care of to make the contract valid (*ÎaÍÍ*). When these contracts are combined and manipulated, under the name of *financial engineering*, their combinations need even a greater care, for sometimes a combination of two permissible contracts may even result into a prohibitive transaction (AAOIFI, 2010:441-459). M. Taqi Usmani, one of the prominent jurists in Islamic finance, has warned and cautioned the negligence of the Islamic financial institutions in observing all the conditions of *murÉbaÍah*.

> This mistake is invariably committed in transactions where all the documents of murabahah are signed at one time without taking into account various stages of the murabahah. Some institutions have only one murabahah agreement which is signed at the time of disbursement of money, or in some cases, at the time of approving the facility. This is totally against the basic principles of murabahah. It has already been explained in this article that the murabahah arrangement practiced by the banks is a package of different contracts which come into play one after another at their respective stages. These stages have been fully highlighted earlier while discussing the concept of murabahah financing. Without observing this basic feature of murabahah financing, the whole transaction turns into an interest-bearing loan. Merely changing the nomenclature does not make it lawful in the eyes of Shari‘ah. (Usmani:105)

Ensuring that a transaction is *ÍalÉl* (lawful) and a contract is equally *ÎaÍÍ* (valid) is the most critical responsibility of any Islamic financial institution. As their *Islamicity* is at stake, they have to be meticulous and discipline on this particular issue. Islamic financial institutions, therefore, must not consider an opportunity cost for forgoing non-halal and non-valid types of transaction, even for the sake of competition with their conventional counterparts.

The benefit of applying the Islamic concept of choice (*ikhtiyÉr*) is visible in the impact of financial crisis. Recent financial crisis has proven that more disciplined Islamic banks have shielded themselves much better than their conventional counterparts (Alam et al., 2011). In fact, among the by-product of global financial crisis has been a recent boom for Islamic finance industry.[2]

> "Now the institutions dealing with Islamic finance exist in more than 50 countries. The total number of such institutions is more than 275 of which 54 are reported in Europe" (Khan, 2010:2).

This is the wisdom behind Islamic prohibition of non-halal and non-valid transactions.

Due to reliance on religious input in making decisions, Islamic finance sometimes has been criticised as being paternalistic (El-Gamal, 2006). However, El-Gamal has counter-argued that certain type of paternalism is unavoidable. In fact secular banking regulators equally regulate the banking and financial industry very heavily (Mishkin, 2010:171) which is essentially a form of government-centric paternalism. So much so that some in the banking industry have even viewed that the deregulation contributed significantly to the recent financial crisis (Kemme et al., 2012). Hence, certain kind of paternalism is necessary to maintain soundness of financial system. El-Gamal (2006:46-47) defended his Islamic position of paternalism by saying:

> The paternalism charged is freely admitted, since devout Muslims – and indeed most religious people – do not shy away from a paternalistic image of God. In this regard, Islamic jurists and legal theorists have maintained that God never forbids anything that is good. When God forbids something that contain some good, legal theorists argued, it must be because of the potential for greater hidden harm……Human may be lured by the apparent benefits and thus lose sight of the greater harm.

Islamic banking and finance is a prohibition-driven industry. It is an industry which deviates only insofar as practices of conventional banking and finance are deemed prohibited by the *SharīÑah*. What seems to be an opportunity cost for conventional banks might not necessarily be an opportunity cost for Islamic banks if this is against the prohibitions of *SharīÑah*. As Islamic financial institutions are supposed to be the firm believers of Islamic business and moral ideals, their only choice to comply with the Islamic law and ethics does not involve a trade-off whenever the concept of *ikhtiyÉr* is applied.

IKHTIYÓR, TIME VALUE OF MONEY AND ITS COMPENSATION

Time value of money (TVM) is a fundamental concept in the theory of finance. Almost all finance text books discuss this concept. One of them, for example, stated that "time value is based on the belief that a dollar today is worth than a dollar that will be received at some future date" (Gitman, 2009: 143). The assessment of financial values is normally done by using either future value (FV) or present value (PV) techniques. The method of compounding or discounting is applied to find those values respectively. The general formula of $FV = PV (1 + i)^n$ is then employed.

In finance, the underlying idea behind time value of money is the notion of potential earning capacity of money. Unlike in Islamic finance, however, in conventional finance time value of money is allowed to be operative both in sale and loan contracts. In fact the origin of time value of money is the loan contract. It begins by granting an opportunity of earning interest when depositing money in saving account which is nothing but giving loans to banks. Due to this universal practice in banking, and then approved by all legal systems in the world, a loan has to be compensated by interest payment. Hence, the interest from loan becomes the most important determinant in time value of money and the most considered source of earning in finance. However, if we assume the interest in loan is zero, the whole concept of finance will not exist. Principle of finance says that the difference between the future value (FV) and present value (PV) of money lies in the interest rate. If interest rate is zero, the future value will always be equivalent to the present value, since $FV = PV (1 + 0)^n = PV$. As financing means giving loan, then without earning interest there is no financing, hence no finance.

Integrating this concept of TVM and that of opportunity cost into Islamic finance should theoretically affect the Muslim behaviour in making financial decision. With the notion of *ikhtiyÉr*, his mind-set would be first directed to the first level of choice between lawful investment and unlawful investment. His notion of certain aspects of the Time Value of Money (TVM) should also be then adjusted from the conventional way. He might still regard money today is worth more than money tomorrow, but unlike in conventional finance the way he values money would be subject to the notion of *ikhtiyÉr*.

The Shari'ah acknowledges the value of time in pricing. The majority of Muslim jurists affirm their saying that "*inna lil zaman hiÎÎatun min al-thaman*" i.e., surely time has a share in price (Al-Masri, 2012: 203). Imam al-Shafi'i (d. 204/820) in his book *Al-Umm* used to say "An immediate hundred ÎÉÑ (measure) has more value than a delayed hundred ÎÉÑ (measure)" (Ibid). Take a *murÉbaÍah* sale again for example. It takes into accounts time value of money when they charge higher price for the credit sale. However, theoretically this higher price is not merely derived from the element of time involved in a credit sale but also from the risk of ownership and the risk of handling of the commodity in a contract of sale.

Another proof that time value of money is recognized in Islamic economics and finance is by looking at *bayÑ al-Îarf* (Islamic foreign exchange). One of the conditions of this sale is "*an lā yakūna fīhi ajal*" i.e., absence of deferment in it (Al-Zuhaili, 2002) or simply it should be a spot sale. Because time can affect the value of money, in order to limit its function as commodity hence minimizing the scope of money trading, sale of money must only be done in spot exchange. In other words, there is no deferred sale in selling money for money. So an exchange of Pound for Pound or US$for Yen, for example, cannot be deferred. With this prohibition, the time element has been eliminated, so the remaining aspect is simply the forces of supply and demand in determining the price of currency. The spot price of Pound in term of Pound is certainly the same Pound's price, while the spot price of US$ in term of Yen is dependent on the demand and supply of the two currencies.

Another example of how time value of money is recognised in Islamic economics is through *bayÑ al-salam* (Islamic forward sale). Normally the price of *salam* commodity is cheaper than the spot price of that commodity. It is because in *bayÑ al-salam* the payment is made upfront and full, while the delivery of the commodity is in future. Here it is a very clear proof that the element of time plays its role in determining a cheaper price. *Salam* price and *murÉbaÍah* price are very good examples on how time factor affects the price of commodity. The former has a cheaper price while the latter has a higher price due to certain aspects of time value of money.

Islamic economics considers some aspects of time value of money (Saadallah, 1994). These aspects determine the price of *murÉbaÍah* and *salam* in our earlier examples. What are they? According to Fahim Khan, there are at least two major aspects of time value of money in which Islamic economics would allow it to operate: One is time preference and the other one is supply-demand conditions. In giving reasons of why Islamic jurists allow *bayÑ muÒajjal* (deferred sale) to have higher price he says:

> The difference in the present and future values of the same commodity cannot be considered to have been allowed just because of pure time element involved. The jurists could have allowed this difference because they recognized that supply and demand forces are different at different points of time. Perhaps, this is why they allowed the future price in *bayÑ muÒajjal* contract to be higher, lower or equal to the present price. As far as I know, they never say that the price in *bayÑ muÒajjal* should always be higher than the present price as a rule. Same is the case of *bayÑ salam*. The permission for the difference in the price of a commodity to be delivered in future is likely to be simply recognition of

> forces of supply and demand that may cause prices to differ at different points of time. (Khan, 1991:37)

> A higher price in case of deferred payment in *bayÑ muÒajjal* contract cannot be attributed only to time preference. It has been allowed taking into account both the factors i.e. time preference and supply-demand conditions. Therefore, we can say that there may be time value involved in *bayÑ muÒajjal* contract but this time value is definitely not predetermined. (ibid:39)

By using Fahim Khan's terminology, basically we can say that there are two types of time value of money, namely *predetermined* time value of money and *expected* time value of money. The former refers to *pure* time value of money in which time alone is attributing the future value. The latter refers to *attached* time value of money in which time is only partially attributing the future value. The other part is attributable to supply and demand conditions, according to Fahim Khan.

Refining the argument of Fahim Khan who seems to consider time preference and supply-demand conditions to be mutually exclusive, we would rather consider that time preference can be included as one of the determinants of supply and demand for the time value of money. The *murÉbaÍah* price in our earlier example is higher than the spot price not only due to time factor, but also due to other factors such as risks, efforts and guarantee associated with the contract of sale. These factors are called Ñ*iwa*Ì (counter value) which is the basis of compensation in Islamic jurisprudence.[3]

Rosly (2008:31) has listed three components of Ñ*iwa*Ì in a spot trading, namely risk, effort and guarantee. He says:

> …in trading (*al-bay*Ñ) an equivalent counter value or Ñ*iwa*Ì shall consist of two main components, namely: 1) market risk (*ghurm*), and 2) work and effort, i.e. value addition (*kasb*). A third component, liability (Ì*am*É*n*) is also worth considering. In trading, the supplier provides guarantees on the goods sold. That is, the purchaser can return the goods if found defective. In this way, the trader deserves the profit, as the sale contains a warranty.

Unlike the spot sale, the credit sale such as *murÉbaÍah* has an additional component of Ñ*iwa*Ì, namely the time component. When the profit in a spot sale is justified in Islamic jurisprudence due to components of guarantee (G), effort (E) and risk (R), the profit in a deferred sale may have additional time (T) component in its Ñ*iwa*Ì. Just to make it an acronym, TIGER is the basis of compensation (Ñ*iwa*Ì) for a differed sale, where TI refers to time, and GER refers to guarantee, effort and risk element respectively. It should be underlined, however, that while guarantee, effort and risk can by itself become the basis of compensation, time alone cannot be the basis of compensation in Islamic economics.

In a functional relationship we can say that in Islamic economics, compensation (Ñ*iwa*Ì*)* is a function of time, guarantee, effort and risk. Ñ*Iwa*Ì = f (TIGER). However, time alone cannot be the basis of Ñ*iwa*Ì. So Ñ*Iwa*Ì ≠ f (TI) hence the time value is zero, but Ñ*iwa*Ì = f (GER) hence the value can be positive. By looking at some contracts in *fiqh al-mu*Ñ*É*mal*Ét* we can infer that compensation in a sale contract (*bay*Ñ) in term of the profit is due to guarantee, effort or risk borne by the seller. Compensation in a lease contract (*ijÉrat al-manfa*Ñ*ah*) in term of the rental is due to mostly guarantee of the usufruct in it. Compensation in an employment contract (*ijÉrat al-*Ñ*amal*) in term of the wage is due to the effort. Compensation for a commission contract (*ju*Ñ*Élah*) is due to the effort and the risk. Compensation in a partnership contract of *mu*Ì*Érabah* for the active partner (*mu*Ì*Érib*) in term of the profit is due to his effort and risk, while for the provider of capital (*rabb al-mÉl*) is due to the risk. Compensation for credit sale such as *murÉbahah* is due to the time, the guarantee, the effort and the risk altogether. Never the compensation in Islamic transaction is due to time only. This is the reason why time value of money cannot work in

a loan (*qar*Ì*)* contract.

The basis of this proscription perhaps lies in the Í*adīth* which says that *innamÉ al-ribÉ fī al-nasī*Ò*ah* (*riba* is indeed only in deferment and waiting) or *lÉ ribÉ illÉ fī al-nasī*Ò*ah* (there is no *riba* except with deferment). This Í*adīth* implies that there should not be monetary increase in waiting for liability. Hence, there should not be any Ñ*iwa*Ì or compensation in waiting for settlement of liability. In other words, in comparison with time value of money, there is no compensation for time value of liability. If there is compensation for it, in *fiqh* it is called *faÌl al-mÉl bilÉ Ñiwa*Ì (unjust enrichment).[4] The so-called ‘profit’ in *ribÉ*, due to waiting for settlement of liability, is in fact an illicit profit which must be contrasted with a licit one due to sale contract (*al-bayÑ*) Hence, God permits sale and forbids *ribÉ*, as stated in the *QurÒÉn* (Al-Baqarah:275). This prohibition actually entails the notion of *ikhtiyÉr* which implies that for Islamic finance to charge compensation for time value of money in loan or receivable is a bad choice.

In the Shari’ah, time or waiting alone cannot earn compensation (*Ñiwa*Ì). In order to earn, it must be supported by guarantee, or effort, or risk, or the combination of them. In the language of *mutakallimūn* (Muslim theologians), these three components serve as *dhÉt* (essence) while time only as *ÑarÉ*Ì (accident). Without the essence the accident cannot exist. So without guarantee, effort, or risk components, the time component alone cannot exist independently as the *Ñiwa*Ì. These essentials basis for reward and return are mentioned in the *Íadīth* such as *al-kharÉj bi al-ÌamÉn* or in the legal maxim (*qawÉÑid fiqhiyyah*) such as *al-ghunm bi al-ghurm*.

To give a further analytical example in its application, the above concept of *Ñiwa*Ì and its connection to TVM can also be used as discounting and compounding tools in Islamic finance. Assuming one is indifferent between US$100 now and US$110 a year later. We must firstly analyse what is the meaning or interpretation of the phrase ‘*indifferent between US$100 now and $110 a year later’*. Is he indifferent in waiting for receivable or is he indifferent in waiting for something else? So it has to be first and foremost be interpreted according to the Islamic transaction concept which entails the notion of *ikhtiyÉr*. These are some of the tentative interpretations:

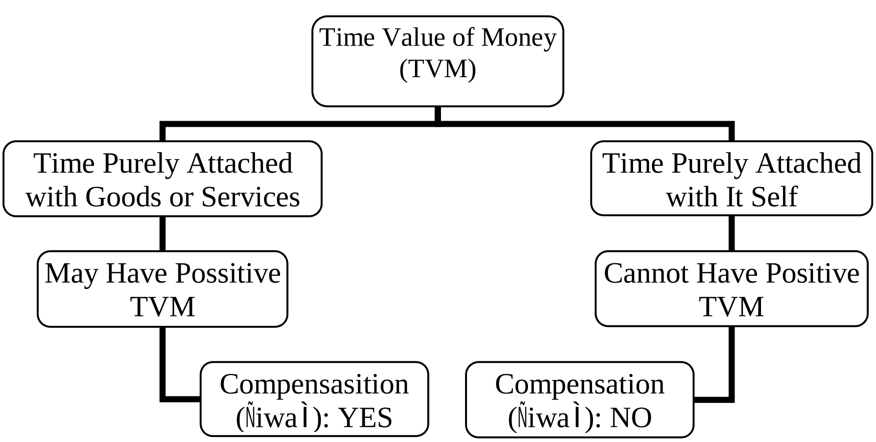
1. A buyer may be indifferent between paying US$100 now and US$110 a year from now for a commodity in a *murÉbaÍah* contract.
2. A *salam* seller may be indifferent between getting US$100 now and US$110 after a year when the *salam* commodity can be sold in a spot market.
3. A worker may be indifferent, when his employer makes a special offer to him, either to receive his bonus payment US$100 now or US$110 a year later.
4. A lessee perhaps is indifferent if a lessor gives him a choice to pay the rental for US$110 at the end of the year or to get a discount by only paying it for US$100 now.

The above interpretations, let’s call them Group A interpretation, are in line with the SharīÑah, hence the time value of money therein is approved. These are good choices or indifferences from the *ikhtiyĖr'*s point of view. However, there are some other interpretations, let's call them Group B interpretation, which are not in line with Islamic transaction concept, hence bad choices and indifferences, so the time value in it is not approved. These are some of the Group B examples:

1. A lender may be indifferent between receiving the money US$100 now and US$110 a year later.
2. A bond holder may be indifferent between redeeming the bond for US$100 now and US$110 after one year.
3. A money changer may be indifferent between selling foreign currency for US$100 now and US$110 after a year.
4. A time depositor may be indifferent between keeping cash US$100 in his wallet and depositing it in a conventional bank and getting US$110 a year from now.

Note that there is a different aspect of time value of money between Group A and Group B interpretation. Depending on its interpretation on the value of good and bad, there are Islamic and non-Islamic interpretations of the phrase '*indifferent between US$100 now and US$110 a year later*'. We further notice that group A's interpretation deals with commodity and effort, while Group B interpretation deals purely with money and debt. In other words, the time value of money in the former is attached with goods or services, while that in the latter is purely attached with the time. The compensation for time value of money in the latter case is, therefore, rejected in Islamic finance. This can be summarized in the following diagram:

FIGURE 2
Time Value of Money and Its Compensation



The above diagram shows that only when time has been attached and bundled with goods and services, such as in credit sale and lease contracts, then the value of the time can be positively compensated. However, when there is no attachment to goods or services and the attachment is purely on time, such as in loan contract, there will be no compensation for the time in Islamic finance.

The explanation above can help us in understanding why the practiced *murÉbaÍah* by certain Islamic banks invites certain controversies. Although the *murÉbaÍah* practiced by Islamic banking is applying the goods-attached time value of money, it has been criticised by many due to its close proximity to applying the pure time value of money instead. The reason is that when the components of guarantee, effort and risk are almost eliminated in the *murÉbaÍah* practice of certain Islamic banks, and the bank's connection with the commodity becomes purely theoretical, the *ÑiwaÌ* enjoyed by the bank is essentially reduced to infinitesimal time component. Hence, from the finance point of view, there is no substantial difference between this practice and the practice of conventional commercial loan.

However, the proponents of practiced *murÉbaÍah* argue that from the economic and legal point of view, there is not only a theoretical but also a practical difference between this credit sale and the loan; this difference, according to them, is due to *transfer of goods*. Vogel (1998:143), for example, has made this particular observation on the issue:

> One thing can be said in defense of modern *murabahahs*, even the synthetic ones just described: they link extension of credit to a unique transfer of goods from a third party to the customer, and in doing so they make a meaningful connection with a credit sale of goods, an event for which Islamic law recognizes the time value of money. A conventional loan, by way of contrast, needs have no connection with any economic or legal event beyond the customer's undertaking to repay.

If the practice is true, the argument above shows that banking *murÉbaÍah* has mediated transfer of goods from the seller to the customer. This is a kind of effort or service component that Islamic bank has undertaken. Without this component, its compensation for the time value of money would not be different from its conventional counterpart. In other words, in order to enjoy the benefit of time value of money an Islamic bank must deal with commodity to certain degree and not simply with time. The more degrees the bank involved and has connection with commodity, the more *SharīÑah* compliance will it be. If then the bank completely eliminates its attachment with commodity, such as the bank and its client agree in advance that the *murÉbaÍah* sale occurs at the same instant as the bank gains the title under the first sale, this *murÉbaÍah* will not be valid from Islamic jurisprudence point of view. In this regard, one of the contemporary Muslim jurists, al-ZuÍaili (2003:361-362) observes:

> The sale is valid as long as the bank is exposed to the risk of destruction of the good prior to delivering it to the final buyer, as well as the obligation to accept return of the goods if a concealed defect were found…..In this regard, the majority of jurists agree that the sale prior to receipt is not permitted…

In short, time value of money has positive compensation only when the time is attached with goods or services in pricing. A mere attachment with receivables, debts or loan contract, the time value of money must not be compensated. This is the chosen position (*ikhtiyÉr)* of Islamic economics and finance. When Islamic firms or individuals do not charge interest on loans or receivables, this action does not entail an opportunity cost from Islamic point of view. This compensation is not operative only in this secular world, but in the hereafter God will reward them double and multiple (Al-Hadid, 57:11).

CONCLUSION

The concept of *ikhtiyÉr* has a far reaching effect on the behaviour of Islamic individuals as well as firms especially in their perception of opportunity cost. The paper discussed, analysed and integrated the concept of *ikhtiyÉr* together with the concept of opportunity cost and time value of money. The contribution of this paper is in synthesising all these concepts and ideas. The result is that Islamic economics and finance has a peculiar understanding of the two concepts. As choosing the non-Islamic transaction is not considered a choice in everyday banking activities, the supposedly opportunity cost involved in this choice must not be valued. Whenever the choice is between good and bad, to give up the bad one does not involve an opportunity cost. It is only when the choice is between two good choices, choosing one and forgoing the other, only then does it involve an opportunity cost. By extension, the concept of time value of money (TVM) derived from this opportunity cost must not have positive value either. TVM from Islamic point of view is recognised as part of pricing and this must be attached with goods or services. Time alone is not compensable as time alone is not considered anÑ*iwa*Ì (counter value) in Islamic transaction.

ENDNOTES

1. For his thought and philosophy, see for example Wan Mohd Nor Wan Daud and Muhammad Zainy Uthman (2010). *Knowledge, Language, Thought and the Civilization of Islam: Essays in Honor of Syed Muhammad Naquib al-Attas*. Johor: Universiti Teknologi Malaysia.

2. “While the financial sector as a whole recorded historic drops in activity and profit over the last two years, a WTO report on trade levels predicted aggregate asset growth of Islamic banks to reach an impressive 15-20% in 2009 – down from the optimistic 20-30% predicted in 2008, but far from disappointing.” http://www.english.globalarabnetwork.com/201002244935/Finance/islamic-banking-in-gcc-resilience-in-the-financial-crisis.html, accessed 11 February 2013.

3. Linguistically Ñ*iwa*Ì means “a substitute; a thing given, or received, or put, or done, instead of, in place of, in lieu of, or in exchange for, another thing; a compensation; a thing given, or received, by way of replacement”. See Lane (1968).

4. For further elaboration on the concept of Ñ*iwaÌ* in Islamic jurisprudence, see De Bellefonds (1997).

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