The Concept Of The Time Value Of Money: A Shari‘Ah Viewpoint

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Abstract

Purpose –The purpose of this study is to examine the legal authority of the time value of money in Islam and its application in contemporary Islamic finance. The study aims to establish the Islamic conceptual foundations of TVM and differentiate it from that of conventional finance particularly in relation to the concept of time preference that constitutes essential basis for TVM in conventional finance.
Design/methodology/approach – This study undertakes a library research where the literature on Islamic jurisprudence in the area of Islamic financial transactions as well as Islamic economics, both in Arabic and English is reviewed critically to construct the conceptual framework of TVM from an Islamic perspective.
Findings– The findings indicate that Islam recognizes the legitimacy of the time value of money emanating from deferral (*ajal*) and acceleration (*‘ajal*) in Islamic financial transactions such as deferred sale and bilateral rebate (*da‘ wata‘ajjal*) but its application must be in conformity with specific guidelines laid down by the Shari‘ah to avert unfair economic effects of financial transactions such as interest (*Riba*). The application of TVM in accordance with its fundamental rules can actually remove *Riba* from the economy and prevent from making of money out of money.
Practical implications – The findings of this study have a great contribution in establishing the concept of TVM and its general parameter in Islamic finance.
Originality/value – It has significant implications for regulators, industry players and practitioners because it provides a clear Shari‘ah viewpoint on TVM and general parameter of its application in Islamic finance.
Keywords -Time preference, Time value of money, *al-Bay‘ bi al-taqsit*, Deferment, Money, Parameter.

Introduction

The time value of money (TVM) is a concept that has been hotly debated by Islamic scholars and economists (Kahf 1994; al-Masri 1990; Khan 2005). The question of its similarity to interest remains a significant issue, particularly when interest is calculated on the basis of TVM. Hence, those who reject the legitimacy of TVM in Islam do so largely because TVM is an established financial concept in conventional economics that is used to justify interest on the loan principal. They argue that the acceptance of TVM provides justification for interest and helps entrench it in the economy.

There are others who hold that Islam does not negate TVM in commercial transactions; rather, it recognizes its significance and its implications for justice in contractual arrangements. They argue that the Islamic view of TVM is distinct from that of conventional finance since Islamic recognition of TVM does not amount to a sanction for making money out of money as it does in conventional finance. It is worth noting that there are three payment modes that may affect the price of a commodity: deferment (ajal), acceleration ('ajal) and spot (hal). This can be clearly observed in various financial issues that jurists discussed extensively in the classical literature; for example, an immediate claim for payment of debt (القرض حال أم مؤجل؟),i prepayment of debt at a discounted price (*da' wa ta'ajjal*)[ii] and mark-up sales (*bay' al-Murabahah*).

If TVM is acceptable in Islam, it should be different from conventional finance's concept of it, particularly as regards its basis and financial implications. Hence, this paper attempts to illuminate the Shari'ah perspective on TVM and distinguish it from the conventional perspective. It is undeniable that the main argument for TVM in conventional finance is deeply rooted in the concept of Positive Time Preference (PTP). Hence, the Islamic viewpoint on the concept of PTP is carefully examined to distinguish it from the conventional viewpoint.

Conventional economists are of the opinion that the present value of anything is greater than its future value, based upon the widespread human preference for the present possession of an asset over its possession in the future. Thus, conventional finance stresses that a sum of money loaned to someone should be repaid with a contractually stipulated increment. Similarly, the deferred price of a commodity should be higher than its spot price to compensate for the difference between its present and future values.

It is worth examining the Islamic viewpoint on this concept because Islam prohibits interest without rejecting the concept of Positive Time Preference in TVM, despite its use to justify interest in conventional economics. The Islamic legitimacy of TVM is established on three bases: 1) the concept of Positive Time Preference (PTP); 2) the permissibility of a different price in a cash sale as opposed to a credit sale; and 3) Islamic legal maxims. These three bases are delineated in this paper to distinguish between the conventional and Islamic understandings of TVM.

Literature Review

The time value of money is not a new concept in Islamic jurisprudence; the classical jurists of all schools of law discussed it indirectly in many cases, particularly in financial transactions such as *Murabahah*, bilateral *ibra'* (*da' wa ta'ajjal*),[iii] stipulation of a deferred period in a loan (*al-qard hal am mu'ajjal*),[iv] and *zakat al-dayn*.[v] Their discussions on these issues generally reflect Islamic acceptance of the financial and economic effects of the time factor in financial transactions. There are three dimensions of time that have such financial effects in Islamic financial transactions, namely deferment (*ajal*), spot (*hal*) and acceleration (*'ajal*). Each of them can make the price of a commodity either lower or higher. For example, deferment causes the price of a commodity in a deferred sale to be higher than its spot price (*thaman hal*) while giving a rebate when a debt is paid before its due date is permissible, according to some scholars.

However, those classical jurists did not explicitly discuss the features of TVM that distinguish it from *Riba*. Consequently, the Islamic concept of TVM shares certain similarities with the conventional concept, particularly in contemporary finance where the interest rate is regularly used as a benchmark for financial decisions. Although some modern Islamic thinkers such as Mawdudi (Mawdudi, n.d) and Akram Khan (Akram Khan, 2005) have attacked TVM because it is the rationale for payment of interest in a capitalist economy, it can be argued that the classical discussion of the abovementioned issues in Islamic jurisprudence (Al-Kasani, 2000; al-Shirazi n.d. ; Ibn Muflih n.d.; Ibn

Qudamah n.d.) provides a strong indication for Islam's recognition of TVM and that deferment does earn a portion in the price. In fact, classical jurists justified the economic value of deferment by acknowledging that the spot price of an asset is lower than its deferred price.

However, this raises the question as to whether their concept is the same as the conventional theory of Positive Time Preference that justifies *Riba* in conventional economics. Classical scholars did not differentiate between the time factor that causes *Riba* and that which does not lead to *Riba* but, rather, acts as a mechanism for fairness that avoids *Riba*. In this respect, several contemporary scholars have attempted to distinguish between the acceptance of TVM in Islam and *Riba* in conventional finance. For example, Sulayman al-Turki and Muhammad 'Uqlah discuss the main differences between the permissible increment (*ziyadah*) in a deferred sale and the impermissible increment in a loan contract.

In addition, some scholars have also invoked the concept of TVM in relation to the issue of discounting in project evaluation. This is manifested in the use of Net Present Value (NPV) to determine the fair value of an asset by discounting its future value to compensate for its present value. This is undoubtedly deeply rooted in the theory of Positive Time Preference. Anas al-Zarqa' argues that positive time preference is neither a fixed rational principle nor an empirically established predominant tendency among consumers. It is simply one of three patterns of inter-temporal choice (the other being zero and negative time preference), each of which is rational and observable under its own conditions (al-Zarqa', 2005).

Kahf has a different argument regarding PTP; he stresses that time preference in real life is an investment phenomenon more than a purely consumption phenomenon (Kahf, 1994) because people will not forgo the present consumption of their money unless the future investment gives higher return. On the contrary, al-Masri argues that PTP, which he calls *tafdil zamani*, is in fact a man's natural preference for present consumption of a commodity over his future consumption of it. Therefore, this study seeks to complement the previous attempts of classical and contemporary scholars in determining the Islamic viewpoint on the concept of TVM and suggesting comprehensive parameters for its application in Islamic finance.

The Islamic Viewpoint on the Concept of the Time Value of Money

The concept of the monetary value of time is established upon a strong Shari'ah basis. There are three elements that constitute the basic legal authority of the concept of monetary value of time in Islam. The first, as mentioned earlier, is a matter of controversy because the concept was articulated in its modern form by non-Muslims as a justification of interest.

The Theory of Positive Time Preference (PTP)

This term was coined by Austrian economist Eugene Von Bohm-Bawerk (1851-1914), in his book *Positive Theory of Capital* (Kahf, 1994). He states, "As a rule present goods have a higher subjective value than future goods of like kind and number. And since the resultant of subjective valuations determines objective exchange value, present goods, as a rule, have a higher exchange value and price than future goods of like kind and number (Bohm-Bawerk, 1888)." Although the theory became influential, its critics sought to refute it with two contrary concepts: zero time preference and negative time preference. Some scholars argue that PTP is built upon intrinsic human nature, which urges people to always prefer present gratification to future gratification (al-Masri, 1990).

Positive Time Preference: An Islamic Viewpoint

The concept of PTP can best be explained by answering the following questions: "If A loaned RM1000 to B, would A prefer to get the money back immediately or in the future? If he prefers having it at present then he is considered to exhibit Positive Time Preference (PTP) whereas, if he prefers having it in the future, then his attitude is called Negative Time Preference (NTP).

The question that arises in this case is whether PTP is compatible with the tenets of Islam and hence considered praiseworthy (*mahmudah*), or is it in conflict with Islamic teachings and hence considered blameworthy (*madhmumah*)? The next question is: if A prefers the present to the future, i.e., exhibits PTP behavior, what is the reason for that?

The above questions give rise to other questions discussed in conventional economics. First, does he prefer the present because of the uncertainty of the future, or because of lost opportunities, or because of the money's loss of purchasing power in the future? It may be all of the above.

Based on the above questions, it can be said that TVM provides a framework for explaining individual attitudes toward time preference; either PTP or NTP. If PTP is the dominant preference, then a person who forgoes his present consumption of an amount of money by lending it to someone should deserve the principal amount with a fixed incremental amount upon maturity in the future. This means that the future value of a good should be sufficiently and reasonably increased to compensate for the difference from its present value. This difference is termed "*the natural rate of interest*" (Khan, 2005).

Does Islam accept PTP as praiseworthy behavior? Does it consider it a natural and inborn attitude? Muslim scholars and economists have expressed a range of opinions as to what the Islamic viewpoint is on this concept. Some Muslim scholars totally reject PTP while others affirm certain aspects of it.

Khan (1991) opines that time preference is a concept compatible with Islamic teachings as long as no fixed and predetermined time value is assigned to money. However, Khan's idea of time preference has been criticised by Kahf (1994), who argues that time preference is an investment phenomenon rather than mere preference of present consumption of money over its future consumption: "Justice and fairness require that the time value of money be related to the outcome of investment, risky and uncertain though it is in real life"

In reality, TVM is not restricted to consumption and investment; rather, from the very beginning of their creation, every person has been endowed with a natural preference for the present over the future. Hence, Kahf's argument is partly right, i.e., one will not give up part of his income today without having an expectation of earning higher return tomorrow.

The great Companion and scholar 'Abd Allah ibn Mas'ud was once reciting Surah al-A'la' for some of his students. When he reached the following passage

> "But you prefer the life of the world, although the hereafter is better and more lasting (Qur'an, 87:16-17)."

He stopped and commented, "We have preferred the life of the world over the hereafter." No one said anything. Ibn Mas'ud continued, "We prefer the life of the world because we see its ornament, its women and its food and drink while the hereafter is remote for us. Therefore, we prefer this which is immediate over that which is deferred." (Al-Tabari, 2000). This same consideration leads one to naturally prioritize the present consumption of an asset over its future consumption.

The Qur'an repeatedly characterizes human nature as loving the fleeting present life, a trait that inclines humans toward impatience. Allah says in Surah al-Qiyamah 75: 20-21:

> "Nay, but you love this fleeting life, and give no thought to the life to come."[vi]

Some have argued that the above verses have nothing to do with TVM in that they admonish those who act only for worldly gains and neglect the hereafter. It could be counter-argued that these verses admonish people for preferring the worldly life to the hereafter despite the hereafter being of higher value. Hence, the deferred gratification of higher value should be preferred to the present gratification of lower value. By implication, if the value of the deferred (hereafter) were the same as the present (world), it should not be preferred. Therefore, the Qur'an condemned those people for faulty judgment. Al-Tabari said:

> Allah says to those who are addressed by the Qur'an and prefer the pleasure of the worldly life to the hereafter: It is not as you have said, O people, that you will not be resurrected after your death and that you will not be required for your deeds. In fact, what led you to that claim is your love for the immediate world and your preference of its pleasure to the deferred hereafter.

Allah says in another verse:

> "Man is a creature of haste; [but in time] I shall certainly show you My signs; do not, then, ask Me to hasten (Qur'an, 21: 37)."

Al-Zamakhshari (1407 AH) comments:

> "Allah begins by condemning humans for their excessive hastiness and [declares] that it is their very nature. He then prohibits them [from that] and rebukes them. It is as if He said: "Your impatience is not an innovation; indeed, it is implanted in you, and it is your nature and disposition."

In this regard, al-Tabari mentioned that some commentators of the Qur'an averred that the above verse refers to the creation of Adam. When his soul reached his eyes, he saw the fruits of the paradise; when it reached his stomach, he desired food and tried to leap up to get the fruits before the soul had reached his legs (Al-Tabari, n.d.). Although haste (*al-'ajalah*) can be considered an aspect of human nature, can it be considered commendable? After all, the Qur'an admonishes humans for this tendency. This can be compared to the attribute of envy; the Prophet (peace be upon him) condemned it in certain statements, but in other statements he encouraged people to envy those endowed with wealth and wisdom (i.e., to wish for the same). Envy is a natural attribute that can motivate people to struggle and exert effort to better their lives. However, if it is not properly managed, envy can easily become a blameworthy trait that nullifies one's good deeds. Similarly, *al-'ajalah* is mentioned in a *hadith* as a blameworthy trait, but it can be a positive trait if properly managed, such as being quick in the race for Allah's forgiveness.

The Views of Classical Jurists on the Superiority of the Present to the Future

Jurists overwhelmingly recognize the superiority of present consumption of money or a commodity to its future consumption. Al-Sarakhsi mentioned it in his discussion of a dispute between the buyer and the seller concerning the period of deferment. He mentioned the view of Zufar and al-Shafi'i that both the seller and the buyer must swear an oath to the veracity of their claims because this oath is related to the value of the price (*miqdar maliyyat al-thaman*). The reasoning being that "the deferred [payment] has less proprietary value than the present [payment] (Al-Sarakhsi, 2001)."

Al-Zayla'i (2000) also advocates the superiority of the present over the future. This can be found in his discussion on cheating in a *Murabahah* contract where he says that if a person purchased a commodity for 1000 on a deferred payment basis and sold it at a mark-up price of 1100 without disclosing to the buyer that the first transaction was conducted on deferred payment basis, the buyer should be given the option [to annul] (*khiyar*). The reason is that the price was increased on account of the deferral (*al-ajal*), and the deferral in this case is tantamount to a part of the sold item (*al-mabi'*). It is as if the seller bought two things (the deferral and the commodity) and sold one of them at the [combined] price of both through the *Murabahah* contract. He argues that this is a form of cheating because the deferred price certainly has less financial value than the spot price (Al-Zayla'i, 2000; al-'Ayni, 2000)."

The Views of Contemporary Scholars on the Superiority of the Present to the Future

Contemporary scholars have different views regarding the superiority of the present to the future. Some, like Rafiq Yunus al-Masri, are totally in agreement with the aforementioned views of the classical jurists on this issue. However, a few scholars oppose Positive Time Preference for a variety of reasons. Most of their proofs are rational arguments. In his book *al-Riba*, Mawdudi argues that making a distinction between the present and future value of a thing is a misconception. He raises the following question: "Is it even slightly true that it is human nature to believe that the present is more valuable than the future? If so, then what about the majority of people who do not spend their money immediately but, rather, prefer to keep some for their future life?" (Mawdudi, n.d.).

Akram Khan holds the same view as Mawdudi in his struggle to eliminate *Riba* by rejecting the concept of Positive Time Preference. In his scholarly work titled "*Time Value of Money*", he states that the time value of money is an unsound concept on rational grounds….The argument that theory of positive time preference does not necessarily legitimize *Riba* is a logical contradiction (Akram Khan, 2005)." Rafiq Yunus al-Masri is one of those contemporary scholars who affirm that Islam recognizes the concept of PTP, based on substantive juristic argumentation and justification. In his book *Bay' al-Taqsit: Tahlil Fiqhi wa Iqtisadi*, he spells out the views of the classical jurists on PTP, which include the abovementioned juristic texts concerning the superiority of the present to the future (al-Masri, 1990). In another book, *al-Jami' fi Usul al-Riba*, he justifies the superiority of the present over the future on the basis of the Qur'anic testimony to the natural human preference of immediacy. He cites the verses mentioned above, as well as others (al-Masri, 2001). In his book *al-Riba wa al-Fa'idah*, he discusses in depth all justifications of interest, including the concept of PTP, and he cites scholars' arguments against PTP and then rebuts them (al-Masri, 1999).

Fahim Khan is also considered a proponent of the concept of PTP. He is of the opinion that PTP does not oppose any Islamic principle. However, he does not accept it on a general basis; he has stipulated certain conditions for its acceptance. In his article "Time Value of Money and Discounting in Islamic Perspective", Fahim Khan (1991) argues "There is nothing against Positive Time Preference or realizing [the] time value of money in [the] Islamic framework as long as a time value of money is not claimed as [a] predetermined value."

In his article "The Value of Money and Discounting in Islamic Perspective: Re-Visited," Kahf (1994), Monzer Kahf argues that time preference is a phenomenon related to investment more than consumption. The article reviews Fahim Khan's assertions on PTP and TVM, disagreeing with some of them. For example, he argues that one should not incorporate other factors such as changing supply and demand because meaningful treatment of TVM requires isolating other factors in order to avoid ambiguity regarding TVM's effect on exchange transactions. In fact, Kahf's argument is in line with some Qur'anic verses that deal with this subject. He stresses that one will not give up part of his income today for investment purpose without having an expectation of getting higher income or higher investment return tomorrow. The expected incremental value of investment return is the compensation for making saving or investment today. According to him, this is the main source of time preference and time value of money (Kahf, 1994).

Anas al-Zarqa' holds a different opinion from both proponents and rejecters of the concept of PTP. In his scholarly article "An Islamic Perspective on the Economics of Discounting in Project Evaluation", Zarqa' (2005) stresses that time preference is not always positive and that economists acknowledge that some consumers may have negative time preference. Historically, many consumers kept on saving in interest-bearing accounts even when the real expected rate of interest was clearly negative for certain years. Zarqa' (2005) states: "It seems fair to conclude that positive time preference is neither a principle of rationality nor an empirically established predominant tendency among consumers. It is simply one of three patterns of inter-temporal choice (the other being zero and negative time preference), each of which is rational and observable under its own conditions." He argues that a preference for the future or the present is dependent upon individual situations, which will vary; therefore, it cannot be a Shari'ah rule. He does not present the views of any classical jurists, who had already discussed this issue at length long before Von Bohm-Bawerk articulated the concept of PTP as a justification for interest. Although he mentions the opinion of his father (Mustafa al-Zarqa')—and his father was an expert on the Hanafi School—Anas al-Zarqa' makes no mention of the Hanafi opinions on the matter, even though their literature is full of such references and many Hanafi scholars accepted the concept of PTP.

Based on the aforementioned views of Muslim economists regarding the concept of PTP, it can be concluded that those who rejected the concept in totality based their arguments on rational grounds without examining the specific Shari'ah texts and juristic views related to the concept. They were also reacting to Western economists' use of PTP to justify the legality of interest. In fact, the prohibition of *Riba* in Islam should not lead to denial of the time value of money, which lies in the concept of PTP. This is because, while PTP is acceptable in both Islamic and capitalist economics, its application in the two economic systems is totally different. Conventional application of PTP or TVM leads to *Riba* in the form of making money out of money whereas the Islamic application of TVM removes *Riba* from the economy.

Even though PTP is accepted in Islam as a natural human behavior that is inborn in each and every person, it is said to result in *Riba* in the form of compensation for three things: 1) opportunity cost, 2) inflation cost, and 3) credit premium risk, which are all taken into account in determining the interest rate in a conventional loan. A question arises as to whether or not Islam allows these three things to be taken into account in determining the profit in a sale contract that obviously involves TVM; for example, a standard contemporary *Murabahah* contract. This issue is important because sale contracts differ from loan contracts in their basis and legal effects.

The Permissibility of Increasing the Price Due to Deferment in a Deferred Sale (Bay' Mu'ajjal)

Jurists hold different opinions concerning the legitimacy of increment in a deferred sale (*bay' mua'jjal*) as it is a purely time-value-based contract in which deferment (*ajal*) is exchanged for a monetary counter-value. However, a large majority of them—including the *imams* of the four schools of Islamic law as well as earlier scholars like al-Zuhri, Qatadah, Tawus and Sa'id ibn al-Musayyib—permitted a markup in a deferred sale in the light of the Qur'an, the *hadith* and reasoning. In summary, their view is supported by the following Qur'anic verse:

"They say: 'Trade is like usury (Qur'an, 2: 275)'"

This verse illustrates that the Arabs of the pre-Islamic period argued that the increment in *Riba* is like the profit in a sale; therefore, if *Riba* is prohibited, sales should be too. Since sales are clearly not prohibited, *Riba* should, likewise, be permitted. The way *Riba* worked in the then Arab society was in the context of delayed payment sales. Al-Tabari says:

كان إذا حلّ مالُ أحدهم على غريمه، يقول الغَريم لغريم الحق:"زدني في الأجل وأزيدك في مالك". فكان يقال لهما إذا فعلا ذلك:"هذا ربًا لا يحل". فإذا قيل لهما ذلك قالا"سواء علينا زدنا في أول البيع، أو عند مَحِلّ المال"! فكذَّبهم الله في قيلهم فقال:"وأحلّ الله البيع".

"When the debt of one of them comes due on his debtor, he (creditor) will say to the debtor: "Give me more time, and I will give you more money." It was said to them when they did this: "This is a prohibited interest." When this was said, they say: "It is the same for us if we increase [the amount] at the beginning of the sale or when it comes due." Allah rejected this argument and said: "Allah has permitted trade and forbidden usury." [vii]i.e., the mark-up on a deferred payment sale is not the same as usury.

Scholars have also inferred the permissibility of *bay' mua'jjal* from a number of *hadiths* that indicate the Shari'ah 's recognition of the monetary value of time. For instance, 'A'ishah and Ibn 'Abbas both narrated that Allah's Apostle bought grain from a Jew on credit and mortgaged his armour to him.[viii] A sale for deferred payment without any contractual increment would only be executed by a person who is not avidly concerned with worldly gain. However, the Qur'an (al-Baqarah 2:96) characterizes the Jews as having the opposite trait:

"You will most certainly find that they cling to life more eagerly than any other people,
even more than those who are bent on ascribing divinity to other beings beside God:
every one of them would love to live a thousand years."

This implies that the deferred price in the above *hadith* would have been higher than the spot price for the same commodity and that the increment would have been stipulated in the contract. The Prophet's acceptance of those terms constitutes tacit approval, which indicates the permissibility of a deferred sale with increment (Abu Ghuddah, 1999). Therefore, a markup in a deferred sale is considered legitimate compensation for the deferment.

Recognition of this reality is common in numerous classical texts of Islamic jurisprudence; for example, al-Sharbini (2003) states:

"…because a portion of the price is in exchange for the deferment."[ix]

The permissibility of contractual increment in a deferred sale constitutes a legal recognition of TVM that is interrelated with the concept of Positive Time Preference. Some argue that the increment in a deferred sale is permitted on the grounds of usufruct (*manfa'ah*). In a sale contract with TVM, the buyer gets two things: the asset and its use, and is thus expected to pay more in return for getting the immediate use. It is only just that the seller be compensated for allowing the buyer to use the purchased asset without having paid its full price. If the justification was purely PTP, then it should have been allowed in a loan contract as well. This also gives rise to another issue: whether TVM should also be considered in *mudarabah* and *musharakah* contracts. Doing so would lead to a guarantee of capital and return. In a BBA with a markup, the IFI gets a predetermined increase with a capital guarantee. Hence, it is important to find a reason why a predetermined return is not allowed in a loan (cash now for more cash later) or *mudarabah* but is allowed in BBA. As explained, *mudarabah* and *musharakah* are characterised as *qard* if the principal is guaranteed and the increase (return) is predetermined; hence, they take the same rule as *qard*, particularly on the issue of TVM. The reason that an increase is permissible in BBA but not in a loan is that BBA is a sale contract, which must be based on justice, as explained by al-Kasani and other jurists, whereas *qard* and *Mudarabah* (which also takes the same ruling of *qard* if the increase is predetermined) are based on *ihsan* (benevolence). If the predetermined increase is stipulated in them, the principle of *ihsan* is corrupted as *ihsan* means doing more than what is required and, hence, requires no counter-value.

The Islamic Legal Maxims

The Islamic viewpoint on TVM is also premised upon legal maxims related to the Shari'ah ruling of the primary and its auxiliaries. The maxim reads:

> "The auxiliary follows [the primary in its ruling] (Ibn Nujaym, 1999; al-Suyuti, 2001)."
>
> "Things may be excused in the secondary that are not excused in the primary (Al-Suyuti, 2001)."

The above maxims indicate a critical distinction between an increment (*ziyadah*) imposed on the principal on account of the deferred payment of a loan (*qard*) and an increment imposed on the spot price on account of deferred payment in a deferred sale (*bay' mua'jjal*). The excess in the loan contract is independent of the principal since it is imposed in total isolation from the amount of the loan. In contrast, the excess in the deferred sale is considered supplementary (*tabi'*) to the spot price of the transacted commodity, which is considered primary (*matbu'*), and it is imposed in association with it. This in turn signifies that the contractual increment is derived from the existence of the commodity and its spot price. Hence, a financial counter-value incorporated in the price is recognised by the Shari'ah only if it is associated with the original price of the commodity. This situation indicates that time can only be assigned monetary value indirectly; i.e., in association with the contracted subject matter.

In contracts where the Shari'ah recognizes positive time value, the existence of a transacted commodity is crucial in order to prevent a mere exchange of money for time, which may lead to making of money out of money. Money is not intended for its physical attributes and, hence, cannot be utilised directly to fulfill human needs. It is only desirable because people accept it in exchange for goods and services. Making money out of money through imposition of incremental value on the loan principal corrupts the essential function of money. The above maxim is also supported by another maxim of its kind which reads as follows:

> "What is ancillary does not have its own particular ruling." (M. Zuhayli 1999; Ibn Nujaym 1999; al-Suyuti 2001).

Another corollary of the maxim *al-tabi' tabi'* that is relevant to TVM states:

> "The attributes of [assets that are the subject of] rights cannot be waived independently [of their assets]."

Jurists like al-Suyuti and al-Zarkashi discussed the issue of *al-ajal* (the deferment period) in Islamic jurisprudence in the course of discussing the abovementioned maxim:

> "If a person owing a debt to be paid at a future date foregoes the deferral, does the creditor have the right to demand payment immediately? There are two opinions [in the Shafi'i School]; the most correct is that [he does not] because the payment period is an ancillary attribute, and attributes have no independent ruling (al-Zarkashi 1985; al-Suyuti 1990)."

This maxim signifies that something that is considered ancillary is not isolated from the specific ruling of its primary; rather, it is covered under the same dictates and legal rulings of the primary. In this regard, time does not command a price directly because it does not have all the distinctive features of property (*mal*) that qualifies it to be treated as property. However, time can be a secondary subject matter to the contracted commodity, and its price is to be associated with the price of the primary contracted commodity (Fahim Khan, 2004).

In a deferred payment sale, for example, time has a share in the price because it is monetarily valued in association with the subject-matter (*al-mabi'*) of the contract, and it is not sold independently of the contracted subject matter. Time in this case is considered ancillary (*tabi'*) whereas the subject-matter of the contract is primary (*matbu'*). Hence, the juristic rulings of the primary should be extended to its ancillary, as mentioned earlier.

Parameters of TVM in Islamic Finance

The preceding discussion on the legitimacy of TVM signifies that TVM is closely related to *Riba*, particularly in contemporary Islamic finance where Islamic finance operates in a dual banking environment. Hence, in order to avoid the substance as well as the suspicion of *Riba*, this paper suggests any monetary increment resulting from exchanging time for money in contracts involving time value must be associated with the price of the contracted commodity. This parameter is significant to avoid *Riba al-nasi'ah,* which lies in an increment resulting from exchanging time for money independently without linking it to the transacted commodity. The increment associated with the transacted commodity, such as in *bay' al-Murabahah*, is considered a legitimate profit rather than *Riba* because this transaction does not amount to money begetting money, which is the very essence of *Riba* and the ultimate purpose of its prohibition.

This issue needs to be carefully examined in order that the major differences become clear between the increment in a *Riba*-bearing loan and that of a deferred sale. The increment in a loan contract due to deferred payment is merely a debt responsibility established on the liability of the debtor (*thabit fi al-dhimmah*) whereas the increment in a deferred sale that arises from deferred payment is not merely a debt liability (*dayn*) by itself; rather, it is the price of the contracted commodity for which the buyer is held responsible in exchange for the benefit of deferment that he enjoys upon execution of the contract. Instead, the increment in a loan contract on account of deferment is not associated or attached to anything; it stands alone, whereas the increment in a deferred sale is ancillary to the price of the contracted commodity. This is substantially supported by a corollary of one of the leading maxims: يغتفر في الشيء ضمنا ما لا يغتفر فيه قصدا

"[Issues] can be excused in something when it is included [with something else] that would not be excused when it is intended independently (Ibn Nujaym 1999; al-Suyuti, 2001)."

In this regard, an increase in the price in a deferred sale is exchanged for deferment in association with the original price of the commodity. It is not merely exchanged for deferment as in the conventional concept of the time value of money, which emphasizes exchanging money for deferment independently and directly to compensate for opportunity loss incurred by the lender. The period of deferred payment in a deferred sale justifies increment on the spot price without having its own separate and independent price because it is not intended primarily (*qasdan*); it is only intended as part of something else (*dimnan*). This means that money in a deferred sale is not treated as a commodity and is hence free from the element of producing money out of money. On this basis, the following maxim for governing the application of TVM can be constructed:

الأجل يبادل بالمال تبعا لا استقلالا

> "The deferred period can be transacted for property in association (*taba'an*) [with the commodity's price] not independently (*istiqlalan*)."

Examples of Contemporary Applications of TVM in Islamic Finance

TVM is used in determining the net present value of an asset; discounting is calculated with reference to interest rates (Pricewaterhousecoopers, n.d.). This appears to conflict with the prohibition of interest in the Shari'ah . Discounting future value and cost is important in capital and investment theories; however, it becomes a debatable issue when it is based on, or linked to, the interest rate. Hence, the following questions arise from this issue: Shall we apply the method of discounting to arrive at the present value of resources utilised in the productive process? Does this method violate any fundamental principles of Islamic economics?

From the perspective of TVM, there is nothing wrong in applying discounting in project evaluation by determining the net present value of an investment or the fair value of an asset. This issue is related to the concept of Positive Time Preference (PTP) that has been highlighted in the forgoing discussion. In fact, PTP is acceptable in Islam because it is a part of man's pristine nature (*fitrah*) that needs to be taken into account, and hence, scholars argue that deferment takes a portion of the price in consideration of humans' natural preference for present consumption of their assets. Therefore, it can be said that Islam recognizes discounting future cash flows at a certain rate in order to make the present and future values comparable. This argument led them to arrive at the conclusion that an increment in a *Murabahah* contract is permissible on the ground that deferment earns a portion of price. Therefore, the value of a deferred thing should be discounted to strike a balance of justice in exchange contracts. Similarly, in the case of discounting in project evaluation or decision making, the future value of an investment is to be discounted at the TVM rate to determine the present value of the investment. A precedent for this can be found in the following classical juristic views discussed by the Maliki jurist al-Dasuqi (1996):

> His statement that this is based on the accepted and reliable opinion is questionable; rather, the established opinion is that after the lands (*butun*) have produced their yields, it is necessary to know the value of [the produce of] each tract of land at the time of the calamity (*ja'ihah*) as compared to [its value] if it had been possessed when it became ripe. It would have been better for the commentator to have said: Then the value of each tract if it had been harvested and possessed at a certain time should be stated. Undoubtedly, if something is possessed at the time of its existence, but paid for now in advance, the value would be lower than the price of something [paid for and possessed] when it exists now, by which I mean at the time of the calamity. That is because deferment has a portion of the price.

Conclusion

In conclusion, it is obvious that Islam recognizes TVM, but its recognition of TVM is totally different from that of conventional finance in both theory and practice. In theory, a fixed and predetermined increment in a deferred sale as compensation for time is acceptable in Islam as long as it is associated with the price of the contracted subject matter. This implies that deferment (*ajal*) cannot be compensated with a stipulated and fixed incremental amount in isolation of the price of the transacted commodity, as in the case of a loan contract in which deferment alone is given monetary value without being associated with any commodity. In consequence, it leads to money begetting money, which is the essence of interest (*'ayn al-Riba*) or the reason for which *Riba* is prohibited.

In practice, the application of TVM in Islam is treated differently from its application in conventional finance. TVM, in the sense of a fixed monetary increment, is applied in Islam to sale contracts like deferred sales and mark-up sales. On the other hand, in a loan contract the compensation is deferred to the hereafter, with a greater reward, because it is established that the present is superior to the future unless there is a higher return that can be expected from an investment in the future. Similarly, one who has forgone his present consumption of money in this world will be compensated with multiplied reward in the hereafter. This treatment is consistent with the *fitrah* of human beings, which inclines them to prefer the present to the future. Conversely, conventional finance recognizes TVM and its application in borrowing and lending arrangements in the form of a predetermined increment on the loan principal, which Islam does not because it can amount to the element of money producing money, which is prohibited by Islam.

References

Al-Qur'an.

Abu Zahrah, M. (n.d.). *Al-Imam Zayd: Hayatuh, wa 'Asruh, Ara'uh wa Fiqhuh*. Cairo: Dar al-Fikr al-'Arabi.

Al-Baji, A.W.S.K. (1999). *Al-Muntaqa Sharh Muwatta' al-Imam Malik*. Vol. 6. Beirut: Dar al-Kutub al-'Ilmiyyah.

Al-Dardir. (n.d.). *Al-Sharh al-Kabir*. Vol. 3. Beirut: Dar al-Fikr.

Al-Dasuqi, M.A.A. (1996). *Hashiyat al-Dasuqi*. Vol. 4. Beirut: Dar al-Kutub al-'Ilmiyyah.

Al-Ghazali. (1993). *Ihya' 'Ulum al-Din*. Vol. 1. Beirut: al-Dar al-Shamiyyah.

Al-Kasani, 'A.D. (2000). *Bada'i' al-Sana'i' fi Tartib al-Shara'i'*. Vol. 4. Beirut: Dar Ihya' al-Turath al-'Arabi.

Al-Khurashi. (n.d.). *Al-Khurashi 'ala Mukhtasar Sayyid al-Khalil*. Vol. 5. Beirut: Dar al-Fikr.

Al-Masri, R.Y. (2005). *Fiqh al-Mu'amalat al-Maliyyah*. Damascus: Dar al-Qalam.

Al-Masri, R.Y. (2001). *Al-Jami' fi Usul al-Riba*. Damascus: Dar al-Qalam.

Al-Masri, R.Y. (1990). *Bay' al-Taqsit: Tahlil Fiqhi wa Iqtisadi*. Beirut: al-Dar al-Shamiyyah.

Al-Mawdudi, A.A. (n.d.). *Al-Riba*. Damascus: Dar al-Fikr.

Al-Sarakhsi. (2001). *Al-Mabsut*. Vol. 13. Beirut: Dar al-Kutub al-'Ilmiyyah.

Al-Shafi'i. (1993). *Al-Umm*. Vol. 3. Beirut: Dar al-Kutub al-'Ilmiyyah.

Al-Sharbini, M.K. (2003). *Mughni al-Muhtaj ila Ma'rifat Ma'ani Alfad al-Minhaj*. Vol. 2. Beirut: Dar al-Fikr.

Al-Shatibi. (1997). *Al-Muwafaqat.* Vol. 2. Saudi Arabia: Dar Ibn 'Affan.

Al-Shawkani. (2002). *Nayl al-Awtar*. Vol. 2. Beirut: Dar al-Ma'rifah.

Al-Suyuti. (2001). *Al-Ashbah wa al-Nada'ir*. Beirut: Dar al-Kutub al-'Ilmiyyah.

Al-Zarqa', A. (2005).An Islamic Perspective on the Economics of Discounting In GhazaliA. *et al.* (Ed.). *An Introduction to Islamic Economics and Finance* (pp. 116-120). Kuala Lumpur: CERT Publications.

Al-Zuhayli, M. (1999). *Al-Qawa'id al-Fiqhiyyah 'ala al-Madhhab al-Hanafi wa al-Shafi'i*. Kuwait: Lajnat Nashr al-'Ilm.

Al-Zuhayli, W. (2008). *Al-Mu'amalat al-Maliyyah al-Mu'asarah*. Damascus: Dar al-Qalam.

Al-Zuhayli, W. (2004). *Al-Fiqh al-Islami wa Adillatuh*. Vol. 5. Damascus: Dar al-Fikr.

Hammad, N. (2008). *Mu'jam al-Mustalahat al-Maliyyah wa al-Iqtisadiyyah fi Lughat al-Fuqaha'*. Damascus: Dar al-Qalam.

Ibn Abu Shaybah. (1989). *Al-Musannaf fi al-Ahadith wa al-Athar*. Vol. 5. Beirut: Dar al-Fikr.

Ibn Hajar, A.A.A. (2000). *Fath al-Bari Sharh Sahih al-Bukhari.* Vol. 12. Riyadh: Maktabat Dar al-Salam.

Ibn Nujaym. (1999). *Al-Ashbah wa al-NaĐa'ir 'ala Madhhab Abi Hanifah al-Nu'man*. Beirut: Dar al-Kutub al-'Ilmiyyah.

Ibn Qayyim al-Jawziyyah. (n.d.). *I'lam al-Muwaqqi'in 'an Rabb al-'Alamin*. Vol. 1. Beirut: Dar Ihya' al-Turath al-'Arabi.

Ibn Taymiyyah, A. (1998). *Majmu' al-fatawa*. Vol. 15. Al-Mansurah: Dar al-Wafa'.

Ibrahim Mustafa. (1972). *Al-Mu'jam al-Wasit*. Vol. 2. Istanbul: al-Maktabah al-Islamiyyah.

Kahf, M. (1994). Time Value of Money and Discounting in Islamic Perspective: Revisited. *Review of Islamic Economics*. Vol. 3. No. 2. pp. 33.

Khan, M. Fahim. (1991). Time Value of Money and Discounting in Islamic Perspective. *Review of Islamic Economics*. Vol. 1. No. 2. pp. 35.

Khan, M. Fahim. (1995). *Essays in Islamic Economics.* Leicester: The Islamic Foundation.

Khan, M. Fahim. (2004). Theory of Islamic Banking, paper presented at Seminar on Orientation in Islamic Economics organised by Marmara University and Islamic Development Bank. 20-28 October 1994.

Khan, M. Akram. (2005). Time Value of Money. in Ghazali, A. *et al.* (Ed.). *An Introduction to Islamic Economics and Finance*. Kuala Lumpur: CERT Publications. pp. 154.

Lashin, M.S. (2003). *Taysir Sahih al-Bukhari*. Vol. 2. Cairo: Maktabat al-Shuruq al-Dawliyyah.

Rosly, S.A. (2007). *Critical Issues on Islamic Banking and Financial Markets*. Kuala Lumpur: Dinamas Publishing.

Shafi, M. and Mufti M. Taqi Usmani. (1997). *The Issue of Interest*. Pakistan: Darul-Ishaat.

Yusra, I.A.S. (1413 AH). Al-Bay' bi al-Taqsit wa Ahkamuh fi al-Fiqh al-Islami wa al-Qanun al-Wad'i. *Majallat al-Mu'amalat al-Islamiyyah*. Markaz Salih 'Abd Allah Kamil li al-Iqtisad al-Islami..

Further Reading

Al-Nawawi (n.d.). *al-Majmu'*. Vol. 6. Beirut: Dar al-Fikr.

Al-Shawkani (n.d.). *al-Sayl al-Jarrar al-Mutadaffiq 'ala Hada'iq al-Azhar*. Vol.3. Beirut: Dar al-Kutub al-'Ilmiyyah.

Al-Shirazi (1996). *al-Muhadh-dhab fi Fiqh al-Imam al-Shafi'i*. Vol. 3. Damascus.

Al-Tahanawi (1997). *I'la' al-Sunan*. Vol.14. Beirut: Dar al-Kutub al-'Ilmiyyah.
Al-Tabari (2000). *Jami' al-Bayan fi Ta'wil Ayi al-Qur'an*. (Ed.) Ahmad

Muhammad Shakir. Beirut: Mu'assasat al-Risalah.

Ibn Muflih (1997). *al-Mubdi', Sharh al-Muqni'*. Vol. 4. Beirut: Dar al-Kutub al-'Ilmiyyah.

Ibn 'Abd al-Barr (1993). *al-Istidhkar*. Vol.20. Cairo: Maktabat al-Thaqafah al-Diniyyah.

Ibn Qudamah (1968). *al-Mughni*. Vol.4. Cairo: Maktabat al-Qahirah.

Ibn Rushd (2004). *Bidayat al-Mujtahid wa Nihayat al-Muqtasid*. Vol. 3. Cairo: Dar al-Hadith.

M. Fairooz Bin Abdul Khir (2010). "Shari'ah Parameters of Hiyal in Islamic Finance". *ISRA International Journal of Islamic Finance*. Vol. 2 No. 2. pp. 159-167.

M. 'Uqlah, *Hukm Bay' al-Taqsit fi al-Shari'ah wa al-Qanun*. p. 108; cf. Ibn al-'Arabi. *Ahkam al-Qur'an*. Beirut: Dar al-Ma'rifah. n.d,Vol. 1. 241.

Muslim b. Hajjaj al-Qushayri (n.d). *Sahih Muslim*. Vol. 5. Beirut: Dar al- Jil.
Sahih al-Bukhari. 3:1068. *hadith* no. 2759; *Sunan al-Tirmidhi*. 3:519; *hadith* no. 1214; *Sunan al-Nasa'i*. 7:303. *hadith* no. 4651.

Notes:

[i] See Ibn Qudamah (1968, 4:137); al-Kasani (2000, 4:317); al-Shirazi (1996, 3:184); Ibn Muflih (1997, 4:198)
[ii] See Ibn Rushd (2004, 3:162); al-Shawkani (n.d., 3:149); Ibn Qayyim (n.d., 3:442); Ibn 'Abd al-Barr (1993, 20:262); al-Tahanawi (1997, 14:407).
[iii] See Ibn Qudamah (1968, 4:189); al-Shawkani, (n.d., 3:149); Ibn Qayyim (n.d., 3:442); Ibn ÑAbd al-Barr (1993, 20:262); al-Tahanawi (1997, 14:407).
[iv] See al-Kasani (2000, 8:317); al-Shirazi (1996, 3:184); Ibn Muflih (1997, 4:198); Ibn Qudamah (1968, 4:387).
[v] See al-Nawawi (n.d., 6:22).
[vi] See also al-Qur'an, (17): 11.
[vii] See al-Tabari (2000, 6:13).
[viii] See *Sahih al-Bukhari*, 3:1068, *hadith* no. 2759.
[ix] See al-Dasuqi (1996, 4:266); al-Kasani (2000, 4: 466); al-Sharbini (2003, 2:107); ibn Taymiyyah (1998, 15:275)