

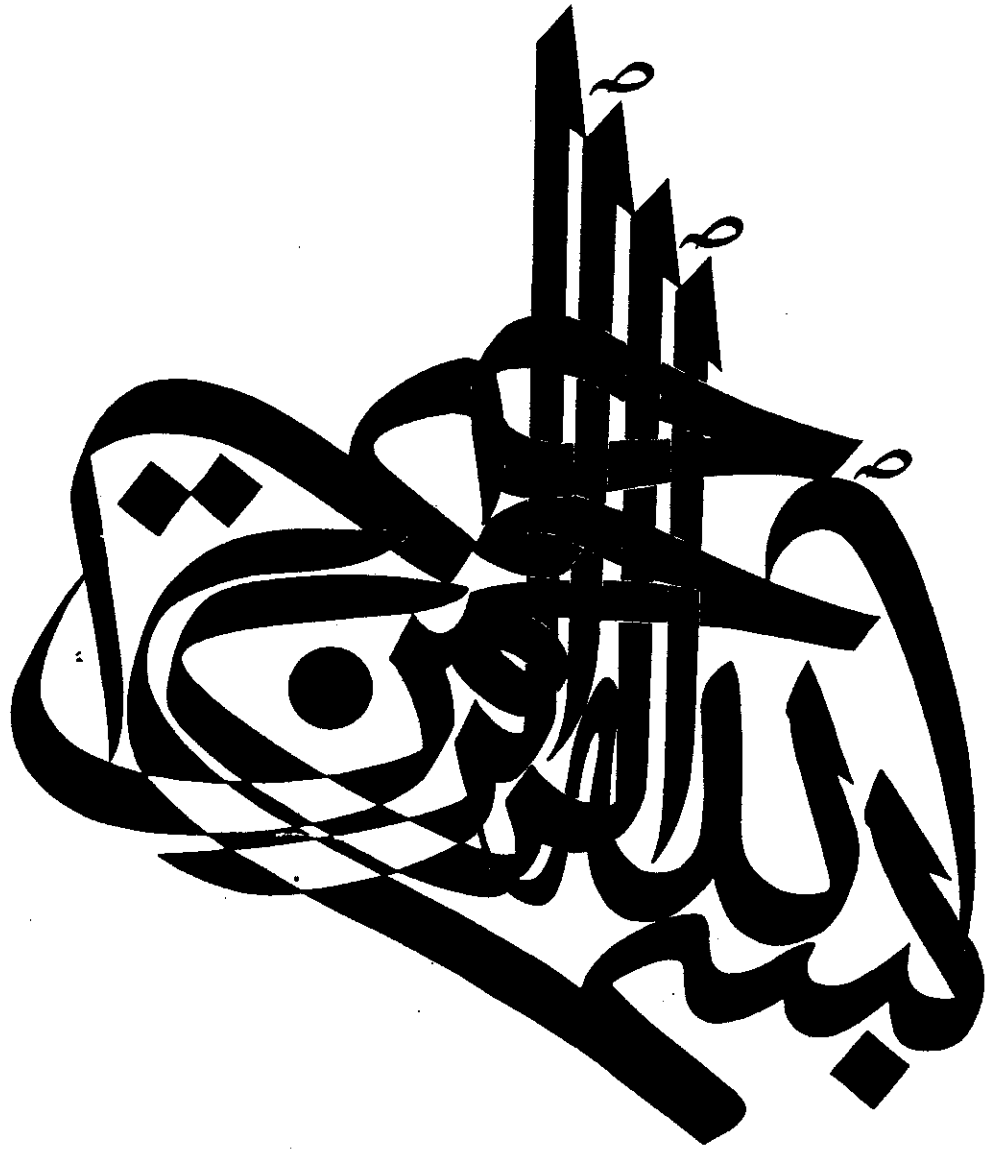
Proceedings of the

Second Harvard University Forum on Islamic Finance

Islamic Finance into the 21st Century

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IN THE NAME OF GOD, THE MOST MERCIFUL, THE MOST KIND

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A Short Outline of the Foundations of Islamic Economics

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ABSTRACT

Western economic theories are flawed in their lack of reference to absolute good and their focus on the life of this world only. Islamic economics, by contrast, has a strong moral dimension inspired by its religious basis. The belief in man's vicegerency on earth has important implications for economic behavior. In Islamic economics, a policy-oriented framework, normative values play a key role. *Riba* (interest) is forbidden in Islam. This guideline is both wise and economically sound. Money, instead, is understood in Islam as a ~~value~~ ^{standard} of value. The institution of *zakat* acts as a tax on hoarding, while encouraging productive savings. *Zakat* further carries important spiritual benefits that foster Islamic moral values.

I. INTRODUCTION

The early 1990's have witnessed the collapse of the USSR and the downfall of communism—one of the major events of this century and may be of the history of modern times. Capitalism has won the day against communism. But the defeat of communism was preceded and followed by alarming events in the capitalist camp. The financial crash of October 1987 in the United States, the prolonged high rate of unemployment in Europe, the massive economic crises in what used to be called the economic tigers of south east Asia and now, the deep financial crises of Japan, are only some symptoms of a deeper problem. This is not to mention other problems that beset the whole world, including the industrial economies, such as the high rates of pollution, crime, broken families, AIDS, and other social challenges. In spite of economic prosperity in the American economy over the past five years, some economists have warned that the American economy has actually gone through a long period of a "silent depression" (Peterson, 1994).

What has caused all of these gyrations? Does the problem lie in economics alone? There is a vast literature written about capitalism, its nature, characteristics, and its tendency toward stability or instability. It would be a daunting task to review the entire literature on this issue, but a few observations may help.

II. A NOTE ON THE CAPITALIST SYSTEM

The economy is an "instituted process" that results from the choices and behavior of society (Polanyi, 1944). Economics, as field of inquiry, is essentially a behavioral science. Scientists develop theories to describe World phenomena, to propose solutions for existing problems and to anticipate future events. The emergence of Europe from dark ages (dark for Europe) was manifested in four major events. The first was the revolt against the authority of church and religion. The second was the rise of nation-states. The third was the innovation of the machinery. The fourth was the spread of finance. The pervasive socioeconomic organization was the market. An intellectual revolution in almost every field of life took place. The growing importance of physical capital (the machine) has brought with it mass production and greater amenities of consumption. But it has also brought with it greater chances of unemployment. The spread of finance facilitated the rise of the corporation, the separation of the craftsman from the ownership of his instruments, and the greater dependence of many people on their physical and mental capacities as the only source of survival. It was natural to inquire about the causes and ideals of freedom, equality, and other values. But the individualist system has no supreme ideal that it tries to reach. Freedom and equality do not have clear definitions or objectives.

There has been dissatisfaction with the individualist insistence on man's absolute rationality as we have seen with Schumpeter. Some Western economists tried to come up with an alternative paradigm. According to the neo-institutionalist school of thought, (1) limited rationality and (2) opportunism characterize human behavior. The neo-institutionalist transaction cost economics approach looks at the firm as a governance structure of contracts; the purpose of which is to economize on man's bounded rationality and safeguard against his opportunism (Williamson,

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1985). This is a step forward indeed, for it recognizes some of the basic weaknesses of mankind. But it also implies that man is ill motivated: hardly an optimistic view. While neo-institutionalist economics tries to explain and remedy contractual shortcoming, it has no moral dimension to deal with inner weaknesses of the contractors. There are two basic problems with Western paradigms: (a) the absence of an "outside" reference of what is good and what is bad (to rectify for one's limited rationality), and (b) limited horizons that do not go beyond this world. The ideas of resurrection, the hereafter, and the Day of Judgment are either absent or very weak in the Western "scientific" thinking. These concepts act as additional deterrents against opportunism in case the law is absent or powerless. Contracts, then, are necessary but not sufficient to economize on bounded rationality and guard against opportunism. A search for an alternative system is thus called for.

III. THE SYSTEM OF ISLAM

A. The Moral Base

A major distinction between religion and philosophy is that religion has a spiritual dimension that philosophy does not have. This gives religion a source (but not the only source) of permanency and supremacy in organizing and directing the behavior of man. The separation of the moral code of Christianity from the common law that organizes the day-to-day affairs of people took place at an early stage of Christianity. This was followed over the years by sharp disputes among Christians about the essence of belief, and led to the abuse of religion by the church and confusion among the commons about its usefulness. This has led to the natural revolt against religion in Europe and the separation of science from religion. Judgments based on values were denounced as non-scientific as many of these values could not stand to reason. Nevertheless, it was too unscientific to judge every religion as every other religion.

Such a conflict did not exist in the history of Islam for three reasons. First, the Qur'an, the prime source of the Islamic faith, has been kept the same, unscathed over all times and places. Second, for the careful mind, there is nothing in Qur'an that contradicts reason. Third, the teachings of the Qur'an were the driving force for Muslims to investigate the universe and offer humanity major contributions in almost every field of knowledge. In other words, the religion of Islam has been a source of inspiration rather than an obstacle against development. This by itself is a historical proof that the Islamic approach to the matters of life is not only scientific, in the sense of amenability to world proof, but it is also much more firmly grounded than other speculative approaches. Ekelund and Hebert (1990) write:

"The death of the last Roman emperor in 476 ushered in a long period of secular decline in the west and a concomitant rise in the fortunes of the east. For five centuries, from 700 to 1200, Islam led the world in power, organization, and extent of government; in social refinements and standards of living; in literature, scholarship, science, medicine, and philosophy. The Arab world acted as a sort of conduit to the west for Hindu wisdom and culture. It was Moslem science that preserved and developed Greek mathematics, physics, chemistry, astronomy, and medicine during this half millennium, while the west was sinking into what historians commonly call the Dark Ages. By 730 C.E. the Muslim empire reached from Spain and southern France to the borders of China and India, an empire of spectacular strength and grace. Perhaps the most significant, single innovation that the eager, inquisitive Arab scholars contributed to the west was their system of writing numbers. They displaced the clumsy Roman numerals of the previous empire with the much more utilitarian Arabic numerals of today. One of the more eccentric Arab mathematicians, Alhazen, founded the modern theory of optics around the year 1000. But for our purposes, the most important contribution of Arab culture was its reintroduction of Aristotle to the west."

After Toledo, Spain, was recaptured from the Moors in 1085, European scholars flocked to that city in order to translate the ancient classics. The ancient texts were turned from Greek (which Europe had forgotten) through Arabic and Hebrew into Latin. In this last mode their philosophical gems were mined for the next four hundred years by the Schoolmen of the medieval church" (Ekelund and Hebert, 26).

But what is the basic organizing principle of Islam? In a short verse of the Qur'an, it says, "I have only created Jinns and men, that they may worship Me" (51: 56). This verse implies that all acts, material and spiritual, has to be in accordance with what the Lord has ordered. Thus, every act is an act of worshipping. In such a system of life, material amenities and spiritual practices both complement each other, and serve toward the same goal - the worshipping of the Lord. To achieve that goal, the Islamic system has three tenets. These are (1) faith in God, The Creator and The Sustainer, and a belief in the Hereafter (Day of Judgment), (2) moral-preserving-enhancing codes of conduct, and (3) a comprehensive set of rituals and laws that organize every bit of the life of the individual and society. Whereas God is the ultimate Creator and Owner of everything in the Universe, Man is ordained as his

vicegerent on earth for its cultivation and betterment. Chapra (1971) explains that the submission to the Lord implies that Man is subservient to none but to Him. Thus man is created free, and as a vicegerent he is not created as a sinner. *Falah* (felicity in both worlds) can only be achieved through these believes (Siddiqi, 1971). In the economic domain, vicegerency has three implications: (1) man's right of ownership and freedom of exchange must be respected, (2) contracts must be enforced and, and (3) work is the major source of ownership. For a Muslim, freedom is an essential ingredient of faith. By contrast, the European man acquired freedom only by revolt against religion. But Islam emphasizes collective responsibility and solidarity. Obviously then, Islam strikes a balance between personal freedom and collective interest. Some Marxist scholars accused Islam of being akin to capitalism since it protects personal freedom, while some capitalist scholars accused it of being akin to communism, since it establishes collective interests. Islam is neither; it represents a middle road between the two.

The general theme of Islamic jurisprudence can be described as one that seeks to attain benefits (collective and personal) and deter hardships. Protecting the five necessities: religion, life, [man]kind, reason, and wealth achieve this. Since the preservation of wealth is one of the five necessities, one wonders about the nature of the Islamic economy and economics.

B. The Nature of the Islamic Economy and Economics

We have already explained that the supreme organizing principle of the Islamic system of life is worshipping God and that the "worshipping man" replaces the "economic man." The recognition of the freedom of ownership and exchange implies that markets are an important socioeconomic Islamic Institution. Freedom is incomplete without markets. Markets are a necessary but not sufficient condition for the expression of freedom. Market competition is guided by moral geniality that promotes cooperation, and state deterrence that enforces the law. Government intervention, however, should be kept to the minimum. The limitations of this paper do not allow for a detailed discussion of the nature of government in Islam. The market has both legal and moral constraints. The distribution of wealth and the allocation of resources are the outcome of these two constraints, and prices are no longer considered in abstraction. The market process becomes a reflection of an objective-related exercise of the freedom of choice. The idea of the scarcity of resource is relevant but only in the relative sense of their possible abuse. Otherwise, the universe was created in a state of equilibrium. The Qur'an says, "And there is nothing but We have its treasures, and We send it down in due amounts."

Since faith is the source of law and behavior, Islamic economics becomes essentially policy-oriented, and the distinction between positive and normative economics becomes blurred, if even relevant. The teachings of Islam act as the agenda of research in economics and other fields, and as such, research becomes less speculative. A correct practice may precede a complete comprehension of the underlying theory. It requires belief before it requires theorizing. This does not imply that the two can remain indefinitely separate. Theory, on the basis of belief, is more required as belief is weakened and/or as new circumstances develop. Also, a correct theory should enhance, solidify, and promote the growth of a correct practice.

There are five areas of Islamic jurisprudence that effect the distribution of wealth and the allocation of resources. These are:

1. the laws of ownership of land and natural resources;
2. the law of inheritance;
3. the contract law;
4. the law on money and credit; and
5. the law of taxation.

These laws represent a vehicle to implement the moral code by giving detailed rules of conduct in every worldly affair. This paper discusses briefly only the implications of the last two laws.

C. The Economics of Money and Interest

Discussions about money and interest (usury) are at least as old as the time of Aristotle, if not earlier. For many centuries interest was understood in many, if not all, parts of the world as a contractual mark-up over loans. It was only with industrial revolution, the spread of finance, and the revolt against the church that people in Europe started to confuse interest and profit and consider both as acceptable forms of income. Eugen Von Bohm Bawerk has written three volumes surveying the history of the theory of interest in Europe (1884).

In Islam, *riba* (interest) is strictly prohibited, and there are many verses in the Qur'an and *Hadith* (traditions of the Prophet Muhammad) that severely warn against taking and giving *riba* (interest). Ibn Taymiyyah (1232-1299) defines *riba* by saying, "*Riba* is prohibited for it implies grievance, since it represents the taking of an excess

(of wealth) that is a counter reward for nothing" (vol. 20, p. 341). The prohibition is applied to *riba* on all objects, money and otherwise. It is interesting to know that some major contemporary western economists share the same opinion about interest. In explaining the potential "Social Philosophy" of his General Theory, Keynes writes, "It would mean the euthanasia of the rentier.... Interest today rewards no genuine sacrifice, any more than does the rent of land.... I see therefore, the rentier aspect of capitalism as a transitional phase which will disappear when has done its work" (Keynes, 1936).

The *riba* that Islam came to forbid is two basic kinds: (1) *riba* of debts (on money loans) and (2) *riba* of sales. Without going into the details of each, the *riba* of debts is the form that used to be the most common before Islam and remains so today. Interestingly enough, there were several variations of the *riba* of debts before Islam that still exist today. One variation is for a person to lend money to another. On the due date either the principal is paid back or payment is deferred in return for a mark up. This resembles a penalty on delinquency in payment such as that when people use their credit cards today. In another variation, the payment of a mark up is conditioned at the beginning of the loan period. This is similar to simple interest today. A third variation is for interest to be paid every month, while the principle is left intact and paid at maturity. If the principle is not paid, more interest will have to be paid. The deal resembles a regular bond today. The common feature of debt-based interest is the fact that an increment is paid in return for delay in payment. It should be noticed that there is no difference in Islam between interest and usury. The magnitude of the interest rate makes no difference; both are considered *riba* (usury), and both are forbidden.

But why does Islam forbid *riba*? There are two issues here. The first is the *hikmah* (wisdom) of the prohibition of *riba*, the second is the *'illa* (motive, description) of prohibition. The *hikmah* (wisdom) has been already mentioned in the definition of *riba* given above: that *riba* is a source of injustice, because it is a return for nothing, or as Keynes puts it, "Interest today rewards no genuine sacrifice." What then motivates an interest-based contract? Interest results from a contract between two capitalists: one wishes to avoid risk (via a guaranteed return), the other wants to have control together with the speculative possibilities and the risks brought along with it (Hadley, 1884). The fulfillment of some expectations in some endeavors gives the illusion that fulfillment of another may be practically certain (Boulding, 1951). Interest then increases cost of production in two ways: it is a sure markup and it increases risk. The possible disappointment of expectations not only foils the borrower's speculation but also defeats the lender's attempt to avoid risk. Kenneth Arrow observes a "fundamental paradox in the determination of demand for information: that its value is not known by the purchaser until he has the information, but then he has in effect acquired it without cost" (1982). There is a similar paradox in the "sale" of money in the sense that the value of its use is not known until investment comes to an end or until the loan contract expires, whichever comes first" (Uthman, 1994). Thus, there is an analogy between information and money "in the sense that none of them fits the image of a 'normal' commodity" (Uthman, 1994b).

Islamic economists are not alone in their discomfort with interest as an economic institution. Schumpeter observes that "interest acts as a tax upon profit" (1961). He also observes that "as soon as it comes into existence many entrepreneurs are eliminated, and as it rises more and more of them disappear. For although possibilities of profit are practically unlimited, they differ in size and most of them are of course only small" (Schumpeter, 1961). The risk of entrepreneurship "makes the requisite profit rate (by the borrower) always higher than the market interest rate (which includes its own risk premium), by a risk sufficiently high premium.... The higher the accumulation of capital, the lower the MEC (marginal efficiency of capital) and, the higher the profit's risk premium would be. There is, thus, an element of stickiness in the requisite profit rate, in addition to the element of stickiness in the requisite interest rate. No doubt that the latter reinforces the former and, hence, the existence of interest is bound to kill numerous profit opportunities causing an involuntary unemployment of investment" (Uthman, 1994).

This is how the issue of risk enters into the prohibition of interest. The above discussion investigated some elements of *hikmah* (wisdom) of the prohibition of interest. What is the *'illa* (motive, description) for the prohibition of interest on money in particular? In other words, what particular characteristics of money make interest bad and thus prohibited?

Ibn Alqayyim (1292-1350) explains that interest on the two monies (gold and silver) is prohibited because money is the standard of value. A measure of value has to be standardized and standardization requires stability over place and time (Vol. II, pp. 156-7). For this to happen it should not grow or depreciate on its own. In other words, the standard of value can be a medium of exchange but must not be the object of exchange. Interest, then disturbs the informational content of money. In other words, for Ibn Alqayyim and many other Muslim jurists, the most important function of money is its service as a unit of account and thus a measure of value (a numeraire). The other two functions, the medium of exchange and the store of value, are derivative functions of the prime one. The major implication of Ibn Alqayyim's reasoning is that interest must be prohibited on any object that serves as a measure of value.

The debate about the prime function of money continues today. It is interesting to note that the early Muslim scholars were ahead of some western scholars in arguing for the primacy of the numeraire function of money. Aschheim and Tavlás (1996) argue "that at least since Walras, a major strand of monetary economics imparts primacy to money's capacity to act as a numeraire." This "constitutes what may be viewed as embryonic money. A monetary exchange system appears once a numeraire exists. The unit of account is a sufficient condition for the existence of a money-exchange economy, whereas the medium of exchange does not constitute a sufficient condition." But the discussion of the functions of money by the economists of the 19th century, such as Walras, Walker, and Del Mar, was motivated by an inquiry about whether paper money or bimetallic money serve as a better mean to stabilize the price level. Both arguments imply a quantity theory of prices. Aschheim and Tavlás (1996) explain that the importance of a numeraire is explained in Walras' general equilibrium model where "The existence of a numeraire allows market clearing to occur, through a continuous groping for prices... Yet this process of atonement takes place without money changing hands (means of payment) and without money having served as a store of value. Consequently, it is the existence of money solely as a numeraire that allows for the distinction to be made between a money-exchange system and a barter-exchange system... The contraction in transaction costs (for example, calculation information, search) imparts a non-neutrality character to money." This explains the importance of the numeraire function of money but it does not explain the line of causality between money and prices. For if abrupt changes destabilize the value of money (its numeraire function) why would the quantity of money change.

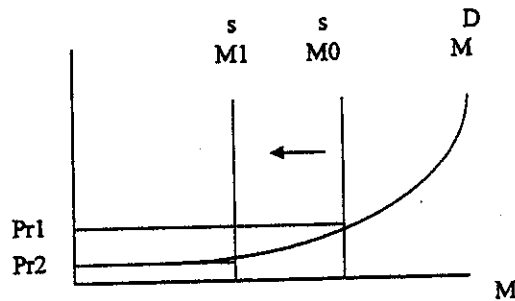
This forces us back to Ibn Algayyem and other Muslim scholars who considered the introduction of interest as a destabilizing element to the prime function of money. How does it work? In order to answer this question, let us assume that the stock of money is constant at quantity Y and interest on loans does not exist to start with. If interest is introduced into the economy, it will affect prices in more than one way. First, borrowers-producers will add an increment to the prices of their goods that is at least as high as the interest rate. At the end of the period, borrowers will have to pay back to lenders an amount of money equal to $Y + \text{interest}$. The introduction of the interest rate pushes the cost of production upward, raises the price level, increases the demand for money, and thus would increase the interest rate. If the stock of money is kept constant, the interest rate will rise further and a debt-deflationary process sets in. Bankruptcies may develop. Otherwise, the stock of money has to be increased, an action that tends to validate the inflationary process. The introduction of the interest rate makes the money supply endogenous. A further complication comes from the fact that production usually takes place in a world of uncertainty. There will be stories of success and other of failures. To impose a penalty of more interest payments on the ailing firms only worsens their position. A foreclosure will make things worse.

The Islamic financial solution, in addition to the prohibition of interest, is to give a moratorium on debt payment. Better yet, is to forgive the debtor if possible. If further debt is to be extended, it has to be interest-free. The Qur'an says, "If the debtor is in difficulty grant him time till it is easy for him to repay. But if you remit it by way of charity, that is best for you if you only knew" (2: 280). A major remedy to the current financial crises in Japan has been for banks to write off some of its debts i.e. to forgive debtors.

It might be noticed that Muslim scholars such as Ibn Algayyem and his mentor, Ibn Taymiyyah (1232-1299), did not come explicitly forward with a quantity theory of money and prices. Several reasons can be imagined to explain this. First and foremost, those scholars (as jurists) were concerned mainly about answering the question on the essential function of money. Reaching a satisfactory answer seems to have settled the issue for them. Second, the bimetallic money supply was highly inelastic. Discoveries of metals at that time (the 13th and 14th centuries) were not easy. The only way for money supply to be increased in the short run was either via debasement, or the introduction of new metallic money, such as *phelos* (copper money). Relaxing the law on interest would encourage both actions. One would speculate that sometime during periods of instability and weakening of belief, price and output instability occurred when the rules of *riba* were not strictly observed and gave Ibn Taymiyyah and Ibn Algayyem (T&G) an empirical support about their interest-based theory of the instability of the value of money.

To see this, in the absence of interest, and when the money supply is constant in the short run, the demand for money will be determined by the needs of trade and will be positively related to the profit rate (Pr).

FIGURE 1. MONEY DEMAND AND THE RATE OF PROFIT



If interest-based lending is permitted, the interest rate will rise from zero into some positive level. The emergence of a new business (the business of lending) will generate hoarding and speculation, reduce the money supply available for trade, and reduce the velocity of money. Output and the profit rate are going to fall, and prices are going to rise. The value of money, which is the inverse of the price level, will decrease. The introduction of interest must be encouraging to debasement and the introduction of other means of payment, such as copper-made phelos, or paper money later on, adding a further complication to the economy. We may say that the T&G theory is an interest-based theory of money.

Aschheim and Tavlas (1996) disagree with David Laidler (1991) that the prime function of money is to serve as a store of value and agree with John Hicks (*The Market Power of Money*) that money's prime function is the measurement of value. Aschheim and Tavlas (A&T), however take an exception to Hicks' argument that "money as a means of payment is just a debt." They argue that this fails to illuminate the difference between a barter-exchange economy and a money exchange economy. For debt can exist under both types of economy. To them, "The essence of money as a medium of exchange is the quality of money as generalized purchasing power." A&T are right in a microeconomic sense of the word debt. Money may not be debt in a microeconomic sense, because a person who accepts money in exchange for some good or service he offers has no recourse to the person who offered him money. But in a macroeconomic sense, money may be thought of as debt, because the person who accepted money, thinking of it as a generally accepted medium of exchange, will want to exchange it later on for other goods and services. In other words, the holder of money has a claim against society at large and thus money is debt in a macro sense of the word. This brings the issue of wealth into the discussion. For debt, whether it is monetary or in kind, represents a temporary transfer of wealth from debt acceptors to debt providers. If we can imagine this process to go on indefinitely, then there is a permanent transfer of wealth from the issuers of debt (monetary or in kind) to the buyers of debt. This is the essence of interest-based lending in general and the fractional reserve banking system in particular. Thus the issuance of money (a macro debt) entails no net addition of wealth to society at large, but money, as Laidler (1969) argues in his response to Pesek and Saving (1967) expands wealth just as trade expands it, without an increase in initial endowments. It may be argued that banks are entitled a return (a share of the national pie) because of the role they assume between savers and borrowers (the theories of the evolution of banks). But interest-based lending and the fractional reserve system are neither necessary, nor sufficient for banks to do a good job in intermediation.

Interest is, as Schumpeter describes it, a tax. Islam prohibits it. What about other taxes?

D. The Economics of Taxation in Islam

The taxation system of Islam includes but is not limited to, *zakat*. An understanding of the economic underpinnings of *zakat* should prove helpful on how to go about imposing other taxes, whenever necessary. At the end of a fiscal year, *zakat* is imposed on residual money holdings that could have been spent (but were not), on the pecuniary value of items that are intended for trade (but were not traded), and (in-kind) on durable agricultural

products and livestock. Consumption items intended for personal use such as one's own house or car, assets that are means of production but are not capable of growing themselves, such as buildings, machines and equipment, are all exempt from *zakat*. It can be concluded then that *zakat* is an inventory tax on the items subject to it. It is a tax on some stocks of the balance sheet. This is in contrast to other flow taxes in the Western economic system such as the income tax and the sales tax. A tax on a flow may impair it while tax on a stock may mobilize it. It can be shown that the full incidence of *zakat* as a tax falls on producers, with no welfare loss associated with it. Unless it becomes necessary, the Islamic system of taxation avoids in rem taxes (taxes on objects or activities). *Zakat* is imposed on asset-holders, and such imposition relates payments of taxes to the taxpayers' ability to pay and provides for more equity in the tax system (Uthman, 1997).

Zakat is not a tax on savings. It is a tax on hoarding, be it monetary or physical. Savings that are invested, let us say in financial stocks and are intended for keep, are not subject to *zakat*, while if the stocks are for trade, they are taxed like any trade object. Garadawi (1969) warns that trade for the purpose of *zakat* requires two conditions. First, intent, and second actual, active work on trade. A person who bought a car for his own use, but thought he may sell it, if he is offered a mark up, is not considered a trader, and thus the object kept is not subject to *zakat*. If it is sold however, and the money kept until the end of the year, money balances that are equal to, or exceed *nisab* (the minimum tax exempt) will be subject to *zakat*. The anti-hoarding principle implies that neither income from salary nor invested savings are subject to *zakat*. Idle money balances are. It may be argued that *zakat* on livestock is a direct tax on some form of capital. Why not tax other forms of physical capital such as buildings and factories? The answer is that a livestock is a kind of capital that reproduces itself with very little or no effort from the owner. An excess supply, which reduces its prices and return, can be reduced much more easily than other forms of physical capital. The amount of work and degree of risk is usually (much) less with livestock capital than with physical capital. Also, in primitive economies, livestock represents a major form of wealth, and thus the need to tax it is greater. In advanced economies, livestock is much less important and nevertheless can be more easily and more abundantly produced, and thus can afford more taxes. The more advanced the economy is the more specialized and specific the physical assets are, and the more risky they become. They should never be taxed directly.

The importance of *zakat* goes beyond its fiscal and distributive aspects. The spiritual dimension is very important as it promotes the values of sharing, caring, and altruism. The Islamic economic system is one, and probably the only one system that combines moral values, economic policy, and economic theory as three non-separable elements of the system.

The Islamic concept of consumption and wealth can be illustrated by two *Hadiths*. The Prophet Muhammad said, "You have (actually own) of your wealth none but what you ate and (thus) destroyed, what you wore and depreciated, or what you donated and kept (as a good deed)." In another *Hadith*, he stated, "Whoever became secure in his neighborhood, healthy in his body, and acquired the needs of his day, verily has acquired everything in the world." The intuition or implications of the two *Hadiths* is that one's actual wealth (and income) is what he actually consumes of it. It is for this that *zakat* does not tax income, consumption, or invested wealth. What is being taxed is idle, or potentially idle, and hoarded wealth. The problems associated with the taxation of income, consumption, and savings are well known in the economics literature. One of the expected effects of such taxes is their impact on work incentives. *Zakat* on inventory, or hoarding does not seem to affect work incentives. It encourages consumption, investment or both (see Uthman, 1997).

The timing of all *ibadat* (worship) in Islam follows a lunar calendar. For example, the time period between any two prayers in the day is not fixed by the hour, but rather by the length and shortness of the day and night. This is related to the movement of the moon around the earth. The fasting month, Ramadan, starts with observing the new moon of the ninth month of the lunar year. Hajj (Pilgrimage) falls on the twelfth month of the lunar year. While the timing of these worships is fixed relative to a lunar year, it is variable relative to the solar year. The production mode of basic economic products such as livestock and agriculture follows basically a solar calendar, even though technological advancement now made it possible to produce plants and animals out of the regular seasons. The timing of these *ibadat* being at times close and at times different from the times of production, influences the time of economic exchange.

Zakat is also to be paid on a lunar calendar basis. It is usually argued that taxes act as built-in stabilizers of economic activity. Tax proceeds rise with high income and fall with low income, thus helping to reduce the excessive moments of the aggregate demand curve. Tax payments, in magnitude and timing, are to the taxpayer procyclical, and help to stabilize the economy in that sense. In the same sense, *zakat* has the same economic impact; rising with high "income" and decreasing with low "income." It is well known that the beginning of the lunar and solar year coincide every 33 years and that every one hundred solar years are equivalent to 103 lunar years. This implies that the timing of paying *zakat* coincides at times and diverges at others from the production mode of basic goods that follow a solar calendar. It is possible during this astronomical cycle that negative supply shocks, due to

drought for example, may take place. It is at this time when government revenues need to be increased to support people on welfare. Since incomes at a negative shock are low, taxpayers will not be hurt in terms of how much they will pay. Tax dues go in line with their wealth and incomes. But the timing of the tax payment becomes so crucial that it should help to stabilize tax revenue and incomes of the poor. This should help to sustain demand and prolong the business cycle. The length of the cycle is prolonged on the other side of the cycle when the economy is booming. If *zakat* payment falls due before the peak, it helps to restrain the excessive upward shift of aggregate demand. If it is due after the peak, it helps to sustain demand. In both cases it prolongs the business cycle. In short, the payment of *zakat* may coincide, predate, or post-date the turning points of a business cycle, helping to smooth out and prolong the cycle.

In other words there are two concepts of timing in the payment of taxes. The first is timing relative to the ability of the taxpayer. The second is timing relative to the need of the tax recipient. The payment of taxes in the western economies is fixed on specific dates on a solar calendar. The choice of the beginning of a fiscal year in Islam is the decision of the taxpayer on a lunar calendar. Furthermore, the government can borrow from people their tax dues for the next two or three year, if needed.

IV. CONCLUSION

Islam is a very comprehensive and integrated code of life. It guides man in every sphere. Islamic economics is part of that integrated system, the purpose of which is the betterment of life on the basis of the teachings of the Lord. While the contributions of the Islamic civilization in the areas of science, medicine, and philosophy have been recognized by many historians, it is curious why the contributions of Muslims to economics are rarely mentioned in books of the history of economic thought, if ever.

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Note: Reference to Laidler, 1991 and Hicks are taken from Aschheim and Tavlas, 1996, mentioned above.