Exploring New Frontiers in Islamic Economics

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I would like to thank the International Centre for Education in Islamic Finance, all the participants, as well as sponsors of this Seminar. Thank you very much. I am also grateful, indeed, to Professor Dr. M. M. Al-Awan, the Dean of the Faculty, who by his kind invitation, gave me the privilege of making this presentation here.

Gatherings of this kind create opportunities for a number of Muslim scholars to exchange their ideas and research findings. The provision of this opportunity gains more significance when we consider the fact that the beginning of the third Millennium has seen the rapid growth of Islamic finance as an integral part of Islamic economics.

Let me take the issue of “thinking”, “reason”, “wisdom” or “conscience” and the like, as my departure point. Most of us, if not all, in the Muslim world have been trained in the capitalistic environment and our thoughts have taken forms and contents similar to that of a typical Western economist. Perhaps an occasion arises whereby the question of getting rid of those thoughts, as an acquired thinking pattern, becomes a necessity. By this I mean the relative freedom of human beings, as individuals as well as groups, to think differently. I firmly believe in what Keynes, (1964), had to tell us, that:” The difficulty lies, not in the new ideas, but in finding ways to escape from the old ones”. These aged, context-dependent ideas implicate every corner of our minds, the minds that have been brought up in a different normative context, as compared to that of a Western economist. In fact the philosophical basis of liberalism is the fact that all human beings are endowed with the power of “reason”, and that freedom and reason are indispensable.

Perhaps the act of portraying the above description would automatically endow my speech a comparative overtone. Nonetheless, it should be noted that: there are technical aspects of “economics” which are fixed and universal like production function, law of diminishing returns, production costs, law of demand, etc. We shall call these the “hardware” part of economics which are fixed and well-accepted in the discipline. However, when it comes to human actions and decisions made by her we enter yet another aspect of economics, which we may call the “software” of economics. It deals with beliefs, religion, philosophy of life, history, culture, and the like. It is this part of the
economics which produces different schools. Professor Joan Robinson divides economics differently by saying, (1964), that: “whether [it be] Marxian or orthodox, is partly scientific study of society and partly a vehicle for propagating ideology”. My concern is, therefore, focused on the software part which is about our religion, Islam, and the philosophy of life we learn from it. I have divided my paper into the following parts:

1- Philosophical Foundations: The Place and Ultimate Goal of Man
2- The Trinity Criteria of Islamic Economics
3- Principles of Islamic banking Derived from Islamic Economics

The above-mentioned parts can also be divided into two broad categories: (a) Challenges, and (b) Prospects. Whether the paper is divided into three phases or two broad categories it follows a brief account of the comparative systems of the orthodox and Islamic economics. By orthodox economic system we mean the mainstream economic teachings of the west. It is preferable to follow the three parts option.

1- The Philosophical Foundations: the Place and Ultimate Goal of Man:

1-1 The neo-classical economists believed that they had discovered a truly scientific method of argument, embellished by mathematics. They purported to diminish the moral problem by showing that, if every individual pursues his own interests, the maximum benefit is attained for all. This view somewhat ignores the society, not as a sum of individuals, but as totality of social interests. However, it is well-understood that a man’s individual behavior alters when he or she is alone, as compared to the situation when the same person is at the presence of others. The interaction of behaviors of different individuals does not necessarily result in a behavior in harmony with each and every individual’s behavior of which the group is composed. Thus, individual differences naturally produce conflicts between self-interest and social interest. Hence, a moral code becomes necessary for any kind of society. Economics itself always being partly a vehicle for the ruling ideology of each period as well as partly a method of scientific investigation makes it necessary to resolve conflicts.

As mentioned earlier, every economic doctrine brings with it a specific ideology. It is the soft-ware part of an economic system. The ideology behind self-interest is individualism, in a sense that society is of no relevance as long as each person pursues his own interest. “Without ideology”, says Professor J. Robinson,” we would never have thought of [any] question”. The relevant question, here, is whether individuals are the best judges of their own welfare and choose what is best for themselves and the society of which they are members of? Serious doubts have been cast that many individuals (not to mention children) do not necessarily know what is best for themselves in all circumstances. Further, granted that they do realize what is best for themselves, it does not necessarily mean that it is also best for the society. Every society is run by her own value judgments; without them society becomes meaningless. For Vilfredo Pareto there is no society above and beyond individuals.
So, he believes, in making value-judgments, we should only be interested in the welfare of individuals and nothing else.

Another interpretation of his assertion is that social welfare can be said to have increased if at least one person’s welfare increased and no-one else’s fell. What happens if a rich person’s welfare had increased? Is this in conformity with justice? The answer, at least, according to J. Rawls, is no. Much of the modern welfare economics is based on Pareto’s value judgments. Surprisingly enough, this part of economics is basically constructed on “justice” and equitable distribution of income and wealth.

Professor S.K. Nath asserts, (1976), “…Pareto optimum ignores the fact that the distribution of incomes is relevant to social policy decisions. After all even according to Pareto-type welfare function, all Pareto optima are not equally desirable; nor is a Pareto optimum better than each and every non-optimal allocation”. Based upon Pareto efficiency, then, justice becomes a man-made code which changes through time and place. This necessitates having “justice” defined as an “absolute truth” where it could hardly be changed. In order to make it as a universally-accepted criterion it shall not logically come just from the wisdom of an individual of a society of which he/she is a member. This absolute justice, we as Muslims believe, should come from Divine guidelines. If this is properly done then the conflict between self and social interests would not emerge in the first place. This is because Allah (SWT) knows what is good and what is bad for us without Himself having any interest in either. Hence, in Islamic economics we have both wisdom and Divine Rules. Allah (SWT) is, then, “the” best source to get these rules and guidelines for construction of an economic system. There might arise circumstances in which wisdom and Divine Rules conflict. We, again, as Muslims, further believe that Divine Rules have the veto power over wisdom. This power stems from the generality of the Divine Rules over the peculiarity of wisdom. A question arises here that why should we follow Divine Rules, in the first place? The question is a legitimate one and hard to answer in this short essay, however, we try our best to find a very brief answer. Needless to say, answers to such questions can be found in Islamic philosophy, per se.

Based upon Quranic teachings, we are supposed to please Allah (SWT). The easiest way, or probably the most difficult task, is to follow His advices and guidelines for our own benefit. He will, definitely, be pleased by following His rules and not any man-made rules; specifically when they are in conflict with His. In other words, wisdom is a subset of Divine Rules. Logic tells us that specifics are not supposed to be in contrast with generals.

At first glance it might appear to be difficult, but at this point it might be useful, to give a very simple definition of “just behavior”. Treat others the way you want to be treated. Another guideline is about the treatment of others. We have learned from religious scholars that equal treatment of unequals is unjust, which is certainly based on Quranic teachings. We have further been taught that the permitted (Halal), and the prohibited (Haram) actions are based on justice. Halal actions are those
which entail justice and Haram actions are in conflict with justice. Obviously, justice goes parallel with society in that without society there can hardly be found justice.

Let us return to the most fundamental question of whether society exists in the first place? Answer to this question is adopted from M. Motahhari, (1985). He properly believes that: Society is a real compound like the natural compounds. But the synthesis here is of minds and thoughts and of wills and wishes; the synthesis is cultural and not physical…individuals…, who enter into social life with their gifts acquired from nature and their inborn abilities, spiritually merge into one another to attain a new spiritual identity, which is termed “social spirit”. This synthesis itself is unique and special, with no parallel in the universe. Since the components do affect and influence one another and are transformed by mutual effects it acquires a new personality. This synthesis is a natural and real synthesis…in the synthesis of society and individual, though an actual synthesis takes place---because, the constituents, the individuals, as a result of their interaction, attain a new form and identity---the plurality of individuals is not converted into a unity. In other words, individuals preserve their own identity while belonging to a bigger set, called “society”.

1-2 the Place and Ultimate Goal of Man:

In order to fully understand where “man” stands in the traditional economics, we need to briefly glance over its place as was taken him to be. It would not be fair to judge this system without considering how it is linked to the past. Not until the 18th century did speculation about economic phenomenon begin to emerge as economic analysis rather than economic thought. There is much to be learned about the history of economics by examining the reasons why the focus of intellectual inquiry was on ethics and theology but not on economics qua economics.

The view of the Churchmen, like that of Aristotle before them, was that it is essential that human affairs be conducted in accordance with the principles of distributive and commutative justice. Distributive justice is concerned with the criteria for allocating honors, income, and wealth to particular persons or classes. Commutative justice is concerned with equity, or fairness, in transactions among individuals.

While modern economists are not interested in, Says Professor I.H. Rima,(1991), such theological considerations, the *Summa Theologica* (1269-1290) survives as a masterwork of economics because it confronts the co-existence of ethical and economic questions in human behavior as a seminal issue.

Saint Thomas Aquinas (1225-1274), gave his attention in *Summa Theologica* in order to provide guidance for Christian behavior under circumstances that arose as a result of expanding commercial activities. Aquinas’s studies had their basis in theology or, more precisely, Christian ethics. In contrast with modern economics,
which seeks to explain economic phenomena, Aquinas and the schoolmen sought to lay down rules of conduct for Christian behavior and salvation.

Modern philosophy, Protestant Reformation, and modern science which brought about a wholly new intellectual climate had common origin, which was the thesis that human reason, as distinct from divine revelation, was sufficient to discover truth. This thesis destroyed the nexus between faith and reason, and thus between theology and philosophy---a nexus forged by the Scholastics and of the Middle Ages. To Aquinas, knowledge was the product not only of reason (philosophy) but also of revelation (theology). All branches of learning (logic, ethics, politics, and economics) were welded together into one great whole through theology. The union between philosophy and theology was, however, far from permanent, and over a period of centuries it was challenged from within the church itself. The consequence of the eventual divorce between reason and faith was secularism. In essence, this so-called intellectual revolution asserted the primacy of the individual as capable of reason and in possession of an individual will. These principles became fundamental to the spiritual revolution inherent in the Protestant Reformation. The Renaissance and the Reformation gave birth to the idea of the “masterless man”, the autonomous individual created the image of God and therefore inherently good, but individually responsible for salvation. Only one essential prerequisite of capitalism, at this time was absent: an ethical standard that was compatible with accumulation of wealth.

Martin Luther’s attack in the 16th century combined with the reform movements of John Calvin, John Knox, especially Max Weber’s Protestant Ethics and the Spirit of Capitalism took the lead. Protestantism considers acquisition a virtue rather than a sin, and instead of merchants being considered un-Christian because of their activities for profit, they came to be regarded as pillars of the church and community. Their pursuit of gain became as integral a part of Protestant ethics as the autonomy of the individual. Joined with the notion of the dignity and moral worth of work, Protestant emphasis on frugality served the capitalistic system well for it stimulated thrift and capital accumulation, (I.H. Rima, 1991).

The new intellectualism during the century of the Enlightenment brought with it a quest for new knowledge, new techniques for its acquisition, and new bases for its evaluation.

Just as Isaac Newton,(1642-1727), sought to discover the regularities governing the behavior of the physical universe and give them expression in a system of natural laws, the Physiocrats of France and the Scottish moral philosophers, among them David Hume, Franches Hutcheson, and his most eminent pupil, Adam Smith, sought to identify the natural laws ruling the behavior of society. Development in natural sciences, physics, and, in particular, astronomy thus were influential in establishing the point of view and methodology for studying the behavior of the economic system.
Smith dealt at length with the ethical values of life in The Theory of Moral Sentiments, (1759), before turning his attention to subjects that today constitute the major concern of economic enquiry; that is, the self-interested behavior of people engaged in market activity. Self-interest is thus seen as directing every aspect of human behavior and activity. Standing at the center of his system are individuals who follow their own interests while promoting the welfare of society as a whole, for such is the nature of natural order. The end result is that a beneficient social order emerges as the unintended consequence of individual actions.

The idea of self-interest has traditionally been taken to the extreme culminated in the idea that essence belongs to the individual and that nothing exists as society. This leads to a position whereby self-interest takes the central role to the neglect of social interest. Individuals have apparently been promoted to be “masterless”; while the emphasis on self-interest has converted the individual into a “machine of happiness” which derives happiness solely from self-consumption. Self-desire has eventually made the “masterless man” to become master of the “man”. His desires have become his new master. The slave has to serve his master endlessly. Self-desires take the individual wherever they wish, of course, as long as there is no harm to others’ wishes. Western economists had, most likely, the intention, not to degrade the individual but rather to free man from “slavery”. However, the end result was to relocate his “master” at much lower level. Isn’t it a huge relief to be at the service of a Master Who has no need to be served; and the one Who wants human beings free from earthly masters?

The dominant idea, as described above, has made man to follow animal spirit as his sole motivation. This kind of social animal is eventually transformed into a being with no desire to interact with others. The social welfare function in this system, \[ SW(c) = \sum U[i]; i=1, 2, 3...m \] (1)

Pareto principle says if \( U[i] \) rises then \( SW(c) \) rises, no matter whose well-being has been raised. This implies that individuals have no sense of empathy, sympathy, jealousy, hatred, and love... despite the bulk of factual evidence pointing to the contrary. In such a utopian environment where there is no externality, negative or positive, and no increasing return, perfect information, among others, pure competition makes sense. Further, market mechanism works and efficiency is obtained. Nevertheless, it should be noted that optimum conditions and perfect competition, it has been argued, to be different subjects. Professor Mishan says perfect competition is neither a necessary nor sufficient condition for meeting the optimum conditions. Additionally, Professor Nath emphasizes that the propositions about the relations between a Paretian optimum and the perfectly competitive model apply only when the system is at equilibrium.
The above view is, in many aspects, very different from the Islamic view of man and his behavior on earth. Instead of the individuals serving their own interests they serve “The Highest Master of All”; i.e., Allah (SWT).

In a human society, interaction among individuals is inevitable; at least in the sense that people have to meet exigencies of the general condition of living under one roof. When it comes to consumption, in such a condition, that is, in an imaginary situation where a man and his wife are under one roof, interaction might come to zero. The inevitable reciprocal marginal externalities are necessarily reduced to the degree of freedom of each individual in observance of others’ freedom. In some instances interaction produces positive externalities and in others, negative externality. All these facts prove the necessity of having a society beyond and above individuals. In other words, it is the total sum of the interactions of individual behavior, in Venn diagram, that we call “society”. Using such a diagram to show the impact of either type of externalities leads one to conclude that a Paretian optimum, asserts Professor Nath, is not necessarily superior to any non-optimum.

The formulation of social welfare function is not independent from ethical considerations. Professor Bergson believes that only ethical considerations could determine the particular functional relationship between economic welfare of a society and the individual ordinal indicators. In other words, only ethical considerations can determine any social welfare contours.

In the conventional economics the place of “man” is ambiguous in the society in that it works as an instrument whose ultimate goal is “self-consumption”. Islamic economics, based on Quran and Shariah, is designed to give “man” the dignity and the status he deserves. He is given the potentiality to enhance his spiritual life parallel to his physical life. Islam provides rules and regulations of making him to have the option to select between vice and virtue. This option, if appreciated, elevates him to the place he is created for. Without having the option, like the rational man in capitalism, there is no way for spiritual elevation. Unlike the capitalistic system, comfort and happiness come from both spiritual and material elevation.

Islam teaches us that one aim of life is to put man to test: “Blessed be He…who created death and life, that He might try you which of you is fairest in work…” (67:2). Life is a test through which we do not go equally prepared, and justly enough, we are not questioned equally on the Day of Judgment. Allah (SWT) endowed people differently and in many ways: in mental or physical ability, in material and social environment, in power, knowledge, wealth, etc. Some of these ways an individual is born with; some are acquired by effort, and still others come by circumstances, but each individual is accountable to Allah (SWT) for all the ways in which he has been preferred over others. Everyone, on the Day of Judgment, shall be questioned concerning: …his life, how he expended it, and his youth, how he used it up, and his wealth, from whence he did earn it and whereto he did spend it, and what use he did make of his knowledge.
“It is He who has appointed you vice-regents in the earth, and raised some of you in rank above others, that He may try you in what He has given you…”; (6:165). We are then in agreement with both Dr. Anas Zarqa and Dr. Ahmad Al-Naggar, that nothing that a man uses (as a consumer or as a producer) is morally free, even if it is economically free. It must be paid for by being thankful to its Creator an Owner, i.e., we must be mindful of Him in its use, and share some of its fruits with other rightful claimants.

If we come up with the appropriate answer to the basic philosophical questions that “what man is” and “what his duties are” on earth our task of constructing an economic system becomes easy. Attempts have been made by people, of course, scholars and prominent thinkers to find answer to this question in capitalistic countries. The father of analytical economics be it Adam Smith, or according to some findings, Sir William Petty, the questions still remain unanswered. Logically, a person, whoever he is, cannot judge what man is on the grounds that he himself is a member of the same set and his judgment cannot be final but is almost invariably biased. We, as Muslims, have to avoid such a misleading practice. As was mentioned above, we ask the question from our Creator, Allah (SWT), Who knows, in absolute terms, who we are and why He has created us.

The misleading answer given by some thinkers of the West has made “man” to pursue his highest happiness, utility. Under his budget constraint, he attains the highest level of own utility by consuming more and more without any regards to the well-being of the society he is a member of. Again, unlike capitalism the ultimate goal of man is to please Allah (SWT) by following His orders as well as His guidelines and recommendations. Man, by becoming the Vicegerent of Allah (SWT) on earth changes him from pursuing just his own happiness because he has been held responsible to his society. At every stage of his life he owes to many individuals whom he does not know exactly but given that he has made use of many opportunities his society has provided for he should understand the reciprocity of actions between individuals and his society. He owes not only to the existing society of his own but also to all societies and people who have made contributions to the present state of knowledge and technology.

The doctrine of Vice-regency indicates that wealth is not the ultimate but just a means to be elevated. Material and spiritual comfort work as wings of a bird which take him to the place he is destined to. The doctrine, further, implies that wealth exists to serve the people who are Allah’s Vice-regents, so that they may make use of it and benefit from it. To keep balance between material and spiritual comfort is probably one of the most valuable lessons we learn from Islam.

At the same time, the responsibility of Vice-regency demands that people work and toil unceasingly to invest this wealth so that it will continue to increase until the Day of Judgment. The work expected of Man is “the good work”, the work which purifies the soul, upholds morality, increases charity, deepens piety, and protects
faith, body, mind, property, and progeny. We, therefore, come to full agreement with Professor A.H. El-Ghazali that this work is that which leads to peace of mind through the quest for the good of this world and the good of the next world.

The foregoing philosophical foundation of Islam, however brief, seems to have paved the way to construct social welfare function, (SW), accordingly. Unlike the orthodox economic system in which utilities of individuals are independent of one another, that is:

$$U[i] = f[X (i)]; \ X = [x (1), x (2), x (3)… x (n)]$$  \hspace{1cm} (2)

And also that:

$$\frac{\partial U[i]}{\partial U[j]} = 0; \ i \neq j \quad \text{for } i=1, 2, 3…i, j…m$$  \hspace{1cm} (2-1)

Where X is the vector of commodities and I and j refer to the individual I and j. The type of utility function in Islam for the same individuals might look like:

$$\frac{\partial U[i]}{\partial U[j]} > 0$$  \hspace{1cm} (3)

In other words, the utilities of Muslims are interdependent; hence the Islamic social welfare function, SW (i), might resemble:

$$SW (i) = \sum U[i] + \sum U[i] U[j]$$  \hspace{1cm} (4)

The assumption of the interaction between individuals i and j exhibiting positive externality in consumption, $U[i] / U[j] >0$, implies that the Islamic social welfare function, SW(i), is higher than that for the corresponding society, with all other characteristics assumed being the same, in capitalism SW(c):

$$SW (i) > SW(c)$$  \hspace{1cm} (5)

Putting the above relation in a different language, equation (1) is a zero-sum game and equation (4) is an increasing-sum game.

Implication of above analysis shows: given a capitalistic society with m individuals comprising the society, if the individuals convert to Islam and practice Islamic injunctions and recommendations the social welfare increases an people, individually and in group, feel happier. This result can be obtained without having to resort to war, invasion, exploitation or any other vice behavior. This result is also the outcome of changing the “rational man” in capitalism to “ethical man” in Islam.
this new feature our “ethical man” unceasingly observes a balance between his own interest and that of the society without having to sacrifice one for the other.

While keeping the balance seems, apparently, to be beyond the capabilities of an ordinary person, factual evidences show the contrary. More importantly, taking effort in this direction by each citizen not only benefits both him/her and the society he/she is a member of, but also lessens the burden on the shoulders of state by making a self-regulating and self-correcting Islamic economic system. This system is the prospective world which might be decades or centuries away but this is the projection of the rapid growth trend of the past which has started not long ago. At first blush it might seem like a whim of some Muslim scholars who have invented their own utopia. Instead, Islamic economic system is constructed out of history, past and present. It takes account of where we have been and shows where we might be going. It is going to replace another system which has failed to accomplish its mission and carry out the promises human beings have waited for decades. Our claim reminds the statement that: it takes a theory to kill a theory.

Whoever thinks that Islamic economic system is impossible to conquer the world in (say) about 230 years, is asked to consider: If you were a citizen of (say) Scotland in 1776 and someone described to you the world economy as we know it today, would you have believed it?

If globalization has any gift for the man-kind, any step taken towards above direction produces happiness and prosperity for all, given that each and every individual country of the world moves in this direction. The Message of Allah (SWT) is not, of course, restricted to Muslims in that every human being is the Creature of Him. He loves His creatures more than anyone else without demanding anything for Himself because everything in the universe is under His absolute possession and control. Whatever we do according to His mandates and guidelines is for our own sake; He does not need to see us observing His rules and recommendations. This addresses both questions: how ethics and morality will evolve and whether it will solve “many objectionable features of capitalism”. There are always imperfections put, by human-beings, into economic systems unless we follow rules and guidelines of Allah (SWT) because only He is perfect.

2- The Trinity Criteria in Islamic Economics:
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The foregoing analyses, unintentionally and for long, made it easy for us to develop other features of Islamic economics in brief. Western economists’ reaction to the theory of Islamic economics, in general, and to the Islamic banking, in particular, has been somewhat deficient both in character and vigor. I attribute such a benign reaction to the existing differences of perspective and approach among Muslim economists, which is, partially, normal. Yet the remaining part of reason for such a reaction is due to the fact that many Muslim economists have concealed capitalistic economics under the guise of Islamic lexicon. We are in full agreement with Professor Joan Robinson (1964), that even the orthodox economic terminology
is colored. Bigger is close to better; equal to equitable; goods sound good; disequilibrium sounds uncomfortable; and sub-normal profits, rather sad. All the same, taking a particular economic system as given, we can describe the technical features of its operation in an objective way. But it is not possible to describe a system without moral judgments creeping in. We cannot escape from making judgments and the judgments that we make arise from the ethical preconceptions that have soaked into our view of life and are somehow printed in our brains. These preconceptions have had their overwhelming effects on most, if not all, of us especially those of us who have been educated and trained in Western universities.

The problem with Islamic economics is much deeper than colored terminologies. It goes far beyond using one terminology for a different content. Not much of the literature has analytically incorporated essential recommendations and rules derived from Quran and Hadith. On the bases of such Islamic original texts, my findings show that justice is “the” ultimate goal of an Islamic economic system; something rarely can be found in those writings. We tried, earlier, to make it clear the impact of justice in a society which puts everything in its own place. It further alleviates poverty. Universe, says Quran, has been created on the basis of justice. Society is no less important than universe. Unlike Pareto, we believe that society is a real compound derivable from individuals. Individuals affect society and are affected by it. It is in society that justice makes sense and gives it a different interpretation. It needs an instrument to make it happen. The most powerful instrument, we believe, is co-operation among and within individuals wherever they are and whatever they do. Society and co-operation are the two pillars that ensure justice. Schematically, it is of the form drawn below.

![Diagram](image)

Fig. (1): The Ultimate Goal of Islamic Economic System and its Two Essential Pillars.

We strongly believe that any economic system in an Islamic framework has to incorporate above components. It is so important that any Islamic economic system without either one of the three elements, shown in above figure is far from being called “the” Islamic in that every component is derived from Quran and Islamic teachings derived from Hadith. Every one of these criteria has its own important role to play. We might call these components “The Trinity Criteria” of Islamic economics.
When co-operation takes place in every aspect of economic life the “Grand Co-operative” system of Islam emerges. Each and every one of the factors of production is also entitled to receive its contribution in the co-operative entity it belongs to. Co-operation produces significant synergy, unaccounted for in the orthodox system, which might be called positive externality. The higher the degree of co-operation the higher would be the positive externality. The emerging synergy eliminates the free-rider problem and other similar deficiencies. It also guarantees both efficiency and equity. This proposition is in conflict with Ricardo’s doctrine of economic rent which produces free riding for inefficient producers. Our model is designed to promote the most efficient producer with full consideration of equity as a result of co-operative feelings among laborers. There is still another criterion which is derived from within above model and that is one of minimax problem in the context of Islamic teachings. That is to maximize positive externalities and to minimize the negative externalities, simultaneously.

Co-operation is not limited to production. When it comes to consumption, after production, another co-operation is formed. Muslims are supposed not only to protect their own families but a larger family called Ummah. There are different modes of protecting Muslim brothers like: alms, Qard-ul Hasan, Infaq (philanthropic contributions), etc. In the bottom line both production and consumption are supposed to be operated in a co-operative environment. In brief, each and every one of the members of Ummah is responsible for the remaining member. This is not only directed towards easing the burden on the shoulder of the state. The important point lies on the co-operation among and between Muslims, be it in our own family or else.

Are there reasons, other than Islamic teachings that much emphasis is put upon co-operation and society as the two essential pillars to bring about justice. Professor D. Gauthier, (1998), strongly asserts that where the invisible hand fails to direct each person, mindful only of her own gain, to promote the benefit of all, co-operation provides a visible hand. Co-operation is also the rational response to market failure …co-operative interaction is the domain of justice. Co-operation has another important effect on the society. Again, co-operation ensures the elimination of the free-ridership and parasitism endemic to our natural condition, so that we may identify justice with the rational disposition to co-operative behavior. We also find ourselves in agreement with the most influential contemporary theorist of justice, the late Professor John Rawls when he says (1971): the circumstances of justice may be described as the rational conditions under which human co-operation is both possible and necessary.

Our model has additional features such as: (a) It is in sharp contrast with consequentialism which holds that anything, as long as it does not harm anyone else, is acceptable. Or concerning the outcome, it asserts that the benefit of social choices should be evaluated by their outcomes and not by the process by which they are reached. In Islam, we need both just outcome and just process. This means in Islam end does not, in anyway, justify means. Niyyah (or intention) is more important than
action itself. The man-made logic used in capitalism is sometimes misleading. As an example, take the truth table in which:

\[ P \rightarrow Q \] (P implies Q)

If both P and Q are false (F) then P → Q has been asserted to be true (T). On the basis of such an operational criterion we can further take the case of Las Vegas whose development is geared with P as gambling, drinking, etc., which is provided for in Q composed of casinos and bars. The end result is the development of Las Vegas which is good, (T). This raises an important question whether Allah’s logic is in correspondence with the man-made logic? The answer is definitely NO. Why is that so? It is because in Islam we need both process and outcome to be just, (b) it also has implications to the problem of social justice put forward by Professor Arrow as Impossibility Theorem. Whereas if this theorem requires dictatorship process to make things go ahead, in cases where co-operation exist among individuals of a society the problem of social choice reflected in conflicts would be removed. Furthermore, this theorem shows that, in general, to create a coherent social choice function requires interpersonal comparisons of well-beings. Existence of such a function is guaranteed only when the individualistic behavior in capitalism is foregone and interdependent, not independent, utility functions are constructed.

(c) Unlike the dominant view holding that market economy is restricted to segmented markets with conflicting goals interdependent markets, incorporating co-operation among them, can be thought of as a different market in which the share of individuals and markets in the final product can be justly calculated. Certainly, the promising results of the Grand Co-operative System cannot be attained in capitalistic framework described by Professor S.Weintraub (1966), as being the one in which labor is hired by business firms in the expectation that the output of labor will be saleable later in the market. He adds:” Unfortunately, this simple proposition is overlooked and economic mischief propounded in the theory of the price level…the wage-earning process is simply overlooked”. Our view has been elaborated by Professor F. Wilken, (1982), as follows:

For firms, the targets are:

<table>
<thead>
<tr>
<th>No.</th>
<th>Target</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>production of goods</td>
<td>to be as high as possible</td>
</tr>
<tr>
<td>2</td>
<td>sales</td>
<td>to be as much as possible</td>
</tr>
<tr>
<td>3</td>
<td>profits</td>
<td>as high as possible</td>
</tr>
<tr>
<td>4</td>
<td>prices</td>
<td>as high as possible</td>
</tr>
<tr>
<td>5</td>
<td>wages</td>
<td>as low as possible</td>
</tr>
</tbody>
</table>

For employees, the following are the demands:

<table>
<thead>
<tr>
<th>No.</th>
<th>Demand</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>incomes (wages)</td>
<td>as high as possible</td>
</tr>
<tr>
<td>2</td>
<td>work</td>
<td>as little as possible</td>
</tr>
<tr>
<td>3</td>
<td>time off</td>
<td>as much as possible</td>
</tr>
</tbody>
</table>
And for consumers, the trend is analogous:

1- incomes……………………………………………as high as possible
2- consumption…………………………………………as much as possible
3- prices…………………………………………………as low as possible

A good example of the failure of segmented markets with conflicting goals is the endeavor made by Professor M. Weitzman, (1984), in his “The Share Economy (Conquering Stagflation)”. Despite the fact that the idea presented by him is alien to the principles of capitalistic system there are two important points which beg attention: (i) the title of the book shows his plain confession that capitalism produces stagflation, and (ii) he believes that the share economy is a robust natural enemy of unemployment and inflation. Another conflict that he observes is as follows: “A share system…has some tendency to be unstable social institution under individualistic decision making…Wherever there is a significant externality, there is a prima facie case for collective action to encourage everyone to do what is in their joint interest but not in their selfish private interest”.

Equity has other important implications which we deal with, in brief, as follows:
(a) The more equitable the distribution of income and wealth the less likely, cet. par., for the degree of general rise in the price level. Given that all goods (and services) are, to different degrees, substitutes and complements of each other it can be shown that price elasticity for every commodity is not the mere sum of instances of elasticity for the individuals who consume goods. There has to be a factor of proportionality which is the share of income spent on that commodity, that is:

\[ E = C(1) \times E(1) + C(2) \times E(2) + \ldots + C(n) \times E(n) \]  

Where \( E \) total price elasticity and \( E(i) \) price elasticity for individual \( I \), and \( C(i) \) is the share of the income of individual \( i \) spent on the commodity. This equation exhibits our claim said above. In other words, income distribution is an important factor determining price elasticity of commodities.

(b) The share of labor in profit increases the investment multiplier. This conclusion is readily reached in co-operative scheme. Derivation of this result is left as an exercise for economics students.

(c) We asked ourselves whether profit maximization is compatible with Islamic principles. This question was posited to see if the value of marginal product of labor, \([VMP(L)]\), is to be paid to the labor would it be compatible with equity. The answer we reached was no. The reason we found to be is as follows: Profit maximization is the dual of cost minimization and cost minimization requires paying factors of production as least as possible. Further, given the technicalities of the production function since average product of labor, \([AP(L)]\), is almost always higher, in stage two of the production, than the marginal product of labor then it would be closer to
equity to use \([AP(L)]\) with a factor of proportionality for the remuneration of labor. In other words, labor deserves, ignoring the problem of measurement, to be paid more than its value of marginal product. Again, the factor of proportionality is left as an exercise for economics students.

(d) In one of the graduate term papers, a student of mine was directed to see whether a full-fledged Islamic economic system produced different consequences from that of the conventional system with exactly identical characteristics in other aspects. In order to make comparison meaningful, it was suggested to assume that war had destroyed part of capital and some of the skilled labor force, of the same magnitudes, in both systems. This was performed using the software MATLAB with same hypothetical data for both systems. Surprisingly enough, the conclusions revealed that to get the two economic systems back to the pre-war situations it would take three periods in case of Islamic system while for the capitalistic system it would take seven periods.

(e) In a recent research project we were asked to search for the problem why Iranian co-operative producing firms have declined both in value added and employment. Given the rule of “one head one vote” in co-operatives which is ill-founded and contrary to any logical principles, we used one of the justice rules that:” Equal treatment of unequals is unjust”. We proposed a different rule, in compliance with justice, to replace the old and illogical one. Given that firms have different labor skills ranging from unskilled to highly skilled; we used some index for Intellectual Property Rights as the basis for voting. That is, the higher the Intellectual Property attached to higher skill the higher should be the number of votes cast. We believe that this criterion based on equity is expected to solve the problems of co-operative firms by giving more incentive to more skilled labor which would raise efficiency in two ways. One is to increase output, and consequently revenue, and the other is to reduce costs. The higher incentive would also provide further chance for the labors of higher skills to buy more shares. It is important to note, here, that our rule does not bear any resemblance with the existing voting rights of corporations. Voting system in corporations is based on money-wealth while ours is based on intellectual-wealth.

4- Principles of Islamic Banking:

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*The most powerful force in the universe is compound interest.*

*Einstein*

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Capitalistic system, confessed by some prominent economist, is fraught with “many objectionable features”, to use Keynes’s assertion, (1964). While these objections have not been made explicit, nevertheless some of the most important ones are targeted towards interest rate and the ills that emerge from it. Professor M. Friedman has asserted (1969), that zero nominal rates of interest
are necessary condition for efficient resource allocation. This is known as Friedman Rule. It was further demonstrated by H.R. Cole and N. Kocherlakota, (1998), that Friedman Rule is not only necessary but sufficient for efficient resource allocation.

Our assessment of capitalism is that rate of interest, (Riba), and its derivatives are economic evils of the system. We can go even further to assert that it is “the prime fallacy” which perpetuates itself to further fallacies. Based on our judgment Einstein’s assertion can be paraphrased to read: The most destructive force in the universe is compound interest. At least one thorough and instructive study was performed by H. Creutz, (1378= 1999), which shows that from every Mark a German consumer spends one-third goes to interest charges. For exposition purpose, assume that every German consumer works nine hours a day. What Creutz’s result would amount to is that each and every German consumer should work three hours a day just to pay the interest charges on the commodities he/she consumes.

3-1: One of the major determinants to attain sustained growth is equitable distribution of income and wealth. It is a well-known finding that there is conflict between efficiency and equity in capitalistic system. Islamic teachings tell us that wealth is not supposed to be concentrated in the hands of a few. To reach this conclusion specific sanctions and guidelines have been introduced to us through Islamic teachings. The conflict is, surely, removed through co-operation in the Grand Co-operative System of Islam.

Capitalism has proven to be incapable to reach above-mentioned goal. Recent statistics about the US economy shows that 1% of the population owns 50% of everything. Additionally, Gini coefficient of wealth is 0.82 which is close to perfect injustice.

3-2: Some Western economists are admittedly, Professor M. Weitzman, among others as mentioned earlier, on the belief that capitalistic economy is unable to increase Aggregate Demand, (AD), and Aggregate Supply, (AS), simultaneously. The reason, not explicitly mentioned in Western literature, being that their monetary and fiscal policies cannot depart from inflation and/or unemployment. In the co-operative system where labor shares part of the profit combined with Islamic banking has, as we believe, the ultimate answer to this long-persisted anemia.

Profit and Loss Sharing (PLS) as a principle and also as a powerful symbol of co-operation constitutes the backbone of Islamic banking. The expansion of this principle throughout the community transforms that community into a large co-operative within which every individual Muslim would try his/her utmost efforts and thereby benefiting others, he/she would gain benefit. This will not only remove but also does not allow conflicts between economic agents to emerge in the first place. Additionally, if the
interaction of individual efforts were utilized in a proper manner then the community’s welfare would be high enough not to let these interactions to be mutually exclusive. This is also true of workers’ remuneration through which they can share the profit gained by the Islamic bank’s contracts made with productive firms whose investment projects have been financed. Sharing profit by workers would partially take care of the demand deficiency Keynes was much worried about. PLS also reduces the price of manufactured goods due to two reasons. On the one hand the price decrease is due to the omission of interest (Riba) charges and on the other is due to decrease of wage expenditure brought about by workers’ participation in profit. Pursuing such a policy, accompanied by participation of Islamic banks with productive firms and, further, by proportionate distribution of profits among the depositors, simultaneous achieving an increase of Aggregate Demand and Aggregate Supply will be made possible.

3-3: Distinguishing money, (M), from capital, (K), is not an easy task. This is exactly what Professor Joan Robinson has warned us about so that we do not get misled. In his paper, Toutouchian, (2006), has made an attempt to take the problem one step ahead. Unlike the conventional banking the major task of Islamic banking is to transform $M(1)\rightarrow C\rightarrow M(2)$, where $M(2)\geq M(1)$, relation to proper $C\leftarrow M\rightarrow C$. We believe that it is through this transformation that money plays its most important role as the medium of exchange. In the former relation, a conventional bank plays no role in the economy but being a monetary intermediary. Furthermore, such banks can be described as the ones which start from $\Delta M$ and is hoped to lead to change in output, $(\Delta Q)$. In an Islamic setting banks are directed towards playing an active role in the economy through PLS contracts and the causality chain is reversed from $\Delta M\rightarrow\Delta Q$ to $\Delta Q\rightarrow\Delta M$. In other words, unlike the conventional system in which supply of money is exogenous it changes to endogenous variable in case of Islamic banking. This will incorporate monetary sector into the real sector in order to make a unified system. This seems to be in perfect conformity with the ideas put forward by Professor P. Davidson, (1972), and that of Professor R.Teigen, (1976), both of them assert that the supply of money ought to be made endogenous. In this new model as long as there are justifiable investment projects supply of money can be safely increased without being worried about inflation. Every piece of money coming out of this system is supposed to be project-backed. Specifically, in PLS contract the legal aspect of money, the potential capital, in conjunction with labor, (L), changes to actual capital, K, as shown below:

$$M\Leftrightarrow L\rightarrow \text{Actual } K; \text{ where } \Leftrightarrow \text{ stands for “legal transformation”}.$$  

The proposed system has several important implications briefly named below:

(a) Islamic banks change from being monetary institutions to financial institutions.
The policy followed by Islamic banking is financial policy far from being policy. Required reserve ration can be lowered safely down to zero. No other monetary policies are valid here. The only and the most effective financial policy that shall be followed by Islamic banks are to change the profit ratio relative to the capital ratio put into PLS contracts. This ratio varies depending upon the priorities given to different investment projects with an eye on their impacts on value-added or employment. Another seemingly strange implication is about the opportunity cost of capital. In the conventional system this cost for all investment projects is the going rate of interest, \( r \); ignoring some valid objections I have for accounting cost and against economic cost. The existing conclusion is based on the logic that internal rate of return, \( \text{IRR} = \rho \), is independent from the rate of interest. That is the covariance, \( \text{Cov.} \), between \( r \) and \( \rho \) is:

\[
\text{Cov.}(r, \rho) = 0 \quad (7)
\]

In other words, rate of interest is always there whether an investor chooses to invest or not and IRR is always compared with a fixed and predetermined rate of interest. With removal of all rates of interest, on any durable commodities and their derivatives, from the system all investment projects become interdependent. This means that covariance between any two projects like \( i \) and \( j \) is different from zero:

\[
\text{Cov.} \left[ \rho(i), \rho(j) \right] = 0; \text{ for all } i \neq j \quad (8)
\]

This conclusion has been demonstrated by I. Toutouchian, (1365 = 1988), to be also true for capitalistic system but as soon as money market is deleted from the system, for any one of the investment project it is a matter of “to be or not to be” part of the investment opportunities that an investor chooses from. If, in the conventional system, he/she chooses to be in business his/her cost of capital is the rate of interest because it is the least available return that can be gotten from the money. Whereas, in an Islamic framework the supposition is that “there is no such a thing as a free lunch”. This means that all investment projects compete with each other. Additionally, the IRR of any one project, if chosen, is going to change the entire alternatives open to investors. Whereas in the conventional system, due to monetary market being separated from the real sector, any decision on the part of investors is not supposed to change the rate of interest resulting from speculative activities in the money market. This, further, means that despite the differences in the definitions and terminologies that exist between accountants and economists, [See Iraj Toutouchian (2006)], there should neither be any cost according to economists’ view nor historical cost according to accountants’ point of
view. The ultimate outcome is lower price level in the Grand Co-operative system of Islamic economic system compared to that of the conventional one.

(g) All in all, we are going to have three markets in an Islamic economic system. These are labor market, (LL), capital market, (KK), and commodity market, (CC). These three markets in the rate of return and NNP plane can be used in a unified manner to reach general equilibrium in the system. This again is left as an exercise for economics students. With the abolishment of interest, and therefore, money market, the conventional LM curve loses its total validity and becomes not only redundant but also misleading. Money, then, performs its universal function as the medium of exchange but not store of value (or wealth). In this sense we come very close to Adam Smith’s strong assertion that: “money is not wealth” which also corresponds to Professor Soddy’s notion of virtual, not real, wealth. This will provide the underlying logic behind the usual practice of putting “currency held by public” in the credit side of all central banks’ balance sheets. It can be used, in turn, to easily prove the Quantity Theory of Money.

(h) When it comes to the role of the Central Bank in Islamic banking, [See I. Toutouchian (2004)], as was mentioned above no monetary policy tools is valid any more. The unique and powerful tool of financial policy is to determine the share of profit relative to that of capital for all investment projects submitted to Islamic banks. This is, most likely, the most important and unique role of a central bank can play in Islamic banking. There are many factors underlying the determination of this share, especially in the face of natural risk inseparable from investment decision making. This share, if effectively used and monitored, would make banks’ sources of finance being properly channeled into asset building processes of the firms without worrying about money whirlpool from emerging. To determine equilibrium in this market the relative profit rate of the Islamic bank, call it “financier”, on behalf of depositors, to that of the investor, call it the “financee”, can be constructed based on the priority list of investment projects mentioned earlier. The profit ratio of the financier-financee shall not be necessarily the same as their share in capital. This makes the rate a powerful incentive for potential investors. This rate is especially useful in cases where different risks are involved. To prepare a list of different risks involved in various investment projects is another important task of the Islamic Central Bank. The role of the central bank in determining arrays of IRRs for different sectors and various activities is highly valuable in channeling resources into proper projects. After the feasibility and profitability of the projects have been confirmed by Islamic banks’ qualified personnel, the projects become eligible to obtain finance. The projects themselves
become collateral for finance. Central banks’ role in providing guidelines about both of these aspects will certainly be appreciated by Islamic banks. Islamic Central Bank’s task is also to instruct Islamic banks to give priority to those projects which are more compatible with the country’s economic plan. To determine the degree of risk in different sectors and regions throughout the country is the task of research institutions independent from the central bank. However, these risks are to be utilized by Islamic Central Bank which provides a uniform procedure for all Islamic banks for various sectors located in different regions of the country.

If Islamic banks are prohibited to lend on interest and if constant and effective supervision is conducted on a random basis by the Central Bank the chances are very slim a money market, which could be outlawed, to be developed. This is, most likely, the reason Professor Friedman in his paper (1966), addressing the problem of stabilization policy has advocated the Required Reserve Ratio to be raised to one-hundred percent.

It is hoped the fact was demonstrated that the kernel of Islamic banking is PLS. Nonetheless, different modes of contracts are also available as auxiliary to finance needs of both firms and individuals upon their proper requests. By preparing accurate information and making them available to the general public, Central Bank in Islamic setting would be able to provide symmetric information and, thereby, to prevent moral hazard to a great extent.

Let me admit that the monitoring cost of Islamic banking compared to that of the conventional banking is relatively high. However, the potential benefits as to its strong impact on reducing unemployment and keeping prices constant would undoubtedly overshadow the cost. Most important of all, distribution of income and wealth is expected to be more equitable than otherwise. Such a scheme of distribution guarantees sustained economic development. With the abolishment of interest and the absence of any expectations as to its future trend induced by speculators in the money or any other durable good markets provides a counter-cyclical environment in the system. These advantages have received little, if any, attention. More research is needed in this area. Most, if not all, Muslim scholars have concentrated on how to remove interest (Riba) from the system to the neglect of above advantages. Thus, these recommendations are hereby offered to be put in the forefront of the agenda for further investigation. While many profound researches have been undertaken by competent scholars, we still have a long way to go.
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