



*King Abdulaziz University*

**International Centre for Research in Islamic Economics**

**SCARCITY, CHOICE AND  
OPPORTUNITY COST:  
THEIR DIMENSIONS IN  
ISLAMIC ECONOMICS**

**SCARCITY, CHOICE AND OPPORTUNITY COST:  
THEIR DIMENSIONS IN ISLAMIC ECONOMICS**

**DR. MUHAMMAD ABDUL MANNAN**

**International Centre for Research in Islamic Economics**  
King Abdulaziz University  
Jeddah, Saudi Arabia.  
1402H - 1982.

Printed at King Abdulaziz University Press

**TABLE OF CONTENTS**

1. Statement of the Problems and Objectives and Assumptions .....	2
(a) Islamic economics as a Process .....	4
(b) Islamic dimension of the concept of "Scarcity" and "Wants" .....	10
(c) Choice and Opportunity Cost: Their Islamic Dimensions .....	19
(d) Integrative System of Exchange and One Way Transfer .....	24
2. Summary of discussion in Figures .....	28
3. Scarcity, Choice and Opportunity Cost distinguished diagrammatically .....	31
4. Major Conclusions .....	35
5. References .....	38

## **SCARCITY, CHOICE AND OPPORTUNITY COST: THEIR DIMENSIONS IN ISLAMIC ECONOMICS.**

**M.A. MANNAN, PH.D. (MICHIGAN)\***

### **1. Statement of The Problem Objectives and Assumptions**

The main objectives of this paper is to introduce and explore Islamic dimensions of scarcity and choice and to compare them with modern western economics as the problem of scarcity and choice provide a foundation for the field of modern economics too. Also the paper intends to provide an overview of the general functioning of the Islamic economy through integrated synthesis of Islamic perspectives of scarcity and choice. No longer can we content our self with the statement that "Islamic economics is a social science which studies the economic problems of a people imbued with the values of Islam", or that Islamic economics has to deal with the production, distribution and consumption of goods and services within the framework of Islamic society where Islamic way of life is fully established - a condition necessary for the operation of Islamic economics. These are accurate, but not particularly revealing facts concerning the nature and scope of Islamic economics. In fact, we need a more comprehensive under- standing of the economising

---

(\*) This paper is a slightly modified version of the paper originally published by "*Journal of Social Sciences*" (JSS), Kuwait University: Special Issue: on the fifteenth Hijra Century: 1981; abstracted by Sociological Abstracts Inc., and International political Science Abstracts. The author is also thankful to Dr. Anas Zarqa and Dr. M.N. Siddiqi for their useful comments on the earlier draft of the paper.

problem of Islamic society. To this end, we shall extend and modify the definition of Islamic economics by the use of so-called production possibilities curve and then restate and discuss in some details the economising problem in terms of Islamic values. "It requires a study of the contemporary economic behaviour and socio-economic institutions, comparing and contrasting them with what could be their Islamic alternatives with a view to defining the changes required to effect a transition of behaviour and institutional arrangements conforming to the Islamic norms", (Siddiqi: 1975, p:111-112). In particular, there is nothing wrong in internalising and assimilating western thought into Islamic economics as long as they do not "run counter to basic Islamic ethical values", (Naqvi: 1978, p. 106). This task of assimilation, integration and internalisation calls for a clear recognition and understanding of the factors which constitute the foundation of Islamic economics. This is what we seek to establish.

### **Two assumptions**

The paper is based on the assumptions that there are Islamic responses to the study of economic problem of man. An integrated analysis of economic problem in the light of the principles of Shariah may however lead to the rejection, acceptance or modification of the elements as found in the existing social and economic policies of either capitalistic or socialistic economies. Secondly, the paper assumes a little or no prior knowledge of advanced economics or Shariah. The analytical tools employed in the paper are therefore simple and elementary.

The discussion can however be organised under the following four headings:

- (a) Islamic economics as a process;
- (b) Islamic dimension of the concept of "scarcity" and "wants" ;
- (c) Choice and opportunity cost: their Islamic dimensions;
- (d) Integrative system of exchange and transfer in Islam.

**(a) Islamic economics as a process**

As a first step, it is perhaps not an "unnecessary digression" to discuss very briefly the nature and scope of Islamic economics and significance of some economic variables with which Islamic economy are concerned. For, it would help understanding of the Islamic dimension of scarcity and choice in clearer term.

In my earlier book entitled: *Islamic Economics: Theory and Practice* (1970, p. 3), Islamic economics is defined as "a social science which studies the economic problem of a people imbued with the values of Islam". Although this definition is essentially a good description of the subject matter, it needs substantial modifications and clarifications of certain issues on the following three grounds:

Firstly, it is not just a social science like any other social science (*e.g.*, political science, history, anthropology, religion), it is the composite social science as Islamic economics studies the economic, social and moral consequences of production, distribution and consumption in an integrative manner. A balanced attention is given not only to production of goods and services, which are bought and sold, but also their social and moral

consequences having bearing on the quality of life and human fulfilment. Economy is then submerged in social and ethical foundation of the religion of Islam. In other words, Islamic economics is neither positive, nor normative economics. Generally speaking, positive economics studies economic problem as they are. Normative economics concern what ought to be. Scientific enquiry of modern economics is usually confined to positive questions, not on normative questions which depend on value judgment about what is good and what is bad, (Lipsey: 1975, p. 4).

The separation of the positive from the normative one is not really important in Islamic economics; they are inextricably bound up with the Islamic philosophy of life, cultural and religious positions. In fact, this is true in the case of most economies, for, "value judgment of one sort or another lie at the basis of all the premises of economic reasoning". In many cases, the distinction between positive and normative statements gets blurred. The reason is that when examined carefully, apparently normative propositions reveal positive questions. For instance, unemployment is worse than inflation, because socio economic effects of unemployment tend to be serious than (measureable) effects of inflation. Again, most positive assertions or theories which are based on so called factual evidence or actual observations are not also value-free. In fact most economic arguments or disagreement over positive economics are about value differences, not about analytic techniques. The point is that by recognising the integrated role of normative and positive assertions in Islamic economics, it becomes immediately more relevant to life and is thus capable of explaining the social and moral underpinning of economic problems confronting the Muslim societies.

The fact is that the controversy between positive and normative economics has little importance in Islamic economics because of its uniqueness. The apparently normative principles as reflected in the Shariah have acquired a status of an objective set of standards for the purpose of evaluation of economic problems to an Islamic frame of mind, as an Islamic world view of economics is an attitude to life that a Muslim learns as he grows up. What is stressed however is that we must get rid of the intellectual stranglehold of the capitalistic system and its accompanying framework. It is true though that in every system of thought there will have some assumptions and ideas in common with other systems or thoughts. It is through emphasis or deemphasis or rejection, an identity is established. This brings us to our second point of clarification of issues involved in understanding Islamic economics as a process.

In modern economics the emphasis is given on the understanding of the total metabolic process of the system. "It consists essentially of the transformation of inputs into outputs in accordance with the functional relationship between them. If we know the functions and we are given the inputs, we should be able to predict the output. The problem of what organisms can survive in a self-sustaining system, however, is related very closely to the nature of the production functions which link the inputs and outputs that is, the metabolic process". (Boulding: 1970, p.46). Thus in modern economics, the survival of the firm depends on its capacity to produce outputs of a total value at least equal to its inputs. The overriding principles under which they operate is the principle of profit maximisation based on positive economics.



In Islamic economics also a clear distinction is to be made between the process and the principles, the understanding of both are imperative. Because the normative principles as reflected in the Quran and the Sunnah provide the framework for the process. These principles are not based on the principles of profit maximisation as understood in modern western economics. They are based on the concept of total human welfare and fulfilment of life working through the principles of co-operation and limited competition at both individual and state level. Thus it will not be considered to be an irrational behaviour one part of the Islamic entrepreneur, if "making money" or earning "normal" profit is treated as a means to an end, not an end in itself. This de-emphasis on the profit maximisation motive does not mean that efficiency criteria are to be sacrificed in choosing the socially appropriate technique of production. The productive process must try to avoid wastage, minimise cost and select "optimal plant" in order to achieve both economic and technical efficiency.

The failure to appreciate the distinction between principles and process or the slow recognition of Islamic economics as a dynamic process has been responsible for the slow growth of Islamic economics as a discipline.

As a result "consumption theory sometimes becomes a restatement of the Islamic laws concerning foods and drinks, instead of being a study of the behaviour of the consumer toward the package of available consumer goods, and the theory of production is reduced to a study of the right of

ownership in Islam instead of being focused on the behaviour of the firm as a productive unit". (Kahf: 1978, p.7).

This understanding of the process and restructuring of the principles and the axioms governing the process seems necessary to understand the conditions or structure of "behaviour unit" in Islamic economics at any given moment of time. In modern economics, a good deal of economic analysis uses response functions such as those represented by the study of the behaviour of firm or the house hold. For example, a demand curve of a firm represents a relationship between the price of a commodity and the quantity demanded by people for purchase while the supply function represents a behaviour response to perceived change in the exchange opportunity on the part of the producers. "On the whole, it is the behavior of economic variables that economists study, not the behavior of people at all. Thus if stock prices rise, this phenomenon certainly originates in the behavior of the people who buy and sell stocks and represents a change in their behavior or at least a change in their state of mind. The empirical economist, however, simply looks at time series of prices and asks how they behave. Similar questions can be asked of regions and nations". (Boulding: 1970, p: 73-74).

What makes Islamic economics (IE) distinctive is that it does study the behavior of economic variables in a comprehensive and integrative way. It does not only take into consideration of inputs which immediately get transformed into output but also take into consideration of inputs which are simply absorbed into a behavior unit without producing any immediate output or where the internal activity of a behaviour unit

produces output without any apparent inputs (*i.e.*, imbibing with the Islamic values of social responsibility in respect of obligatory sharing of wealth and income of the rich with the poor and the needy). Modern economics has rather failed to recognize or has been slow to recognize that there is a large class of economically relevant social and moral behaviour unit lying between the firm and the household. The study of consumption and investment loan without interest, supporting the old parents, looking after the poor neighbours and people regardless of their race, colour and religion or orphans comes under the study of Islamic economics also. Viewed from this angle, Islamic economics may be seen as "behaviour science".

Lastly, when we say that Islamic economics studies "the economic problems of a people imbued with the values of Islam", it does not imply that Islamic economics is not concerned with the economic problems of non-Muslims living in an Islamic state.

The main significance of the statement is that the presence of the "Islamic person" guided by solely Islamic rationality of individual and societal welfare is a 'must' for the successful operation of the Islamic socio-economic system; just as the presence of the "economic man" guided solely by self-interest and profit motive enables the classical economists of capitalist economy to make predictions concerning the economic behaviour of individual and firm; just as the presence of "communist man" guided by the Marxian notion of class-conflict and materialistic interpretation of history enables the Marxian economists to justify the dialectical theory of social change.

Because it is people and their belief in a particular ideology that matters for the functioning of any economy. Thus when Islamic rationality is present among the people concerned, it should then be possible to restrain man from serving his pure self-interest or to prevent state from complete collectivisation of the means of production through a set of moral values ensuring individual freedom and social responsibilities.

Let us now discuss in some detail the Islamic dimension of the concept of "scarcity" and "wants".

**(b) Islamic dimension of the concept of "scarcity" and "wants"**

It is argued that the fundamental economic problem of mankind owes its origin to the fact that man has unlimited material wants, and that resources by means of which produces goods and services in trying to satisfy material wants are scarce or limited in supply. In other words, the resources of a society consisting of natural resources such as the free gifts of nature like land, minerals, as well as human (*e.g.*, labour) and non-human resources (*e.g.*, tools, machinery *etc.*), are said to be limited in supply. Had there been no scarcity of means, there would have been no economic problems. Hence the study of modern economics.

In Islamic economics also, the scarcity of means can form the basis of our study although the concept of scarcity and human wants have to be understood in the light of "Islamic rationality" which embody not only economic but also social and moral objectives, thereby emphasising aggregative welfare as opposed to economic rationale based on calculated pursuit of pleasurable wealth".

This notion of scarcity may not be confused with the notion of unlimited "bounties of Allah" which provides the sustenance to all creatures on earth including man. The unlimited "bounties of Allah" should be seen as unlimited opportunities provided to all for proper exploitation of which human efforts are called for. The fact is that the God-given resources between earth and heaven are not always in the form of finished product; the transformation of resources into consumption and capital goods call for human involvement and efforts. Even the notion of free availability of clean air and water for human consumption is no longer valid in the context of present day industrial societies. Human efforts are also needed to improve the quality of environment through pollution control and treatment. But the fact is that there is a limit to human efforts and his capacity to exploit the resources. This obvious limitation of human knowledge and capacity, seen in the light of the Quranic verse which says:

"Man can have nothing but what he strives for" (al-Quran 53:39) brings an insight on this issue in the sense that the concept of scarcity can still form a basis of Islamic economics although its notion and dimension are altogether different from the one as found in standard text books of modern economics.

As we have seen, the scarcity of means is not merely attributed to nature but to human nature as well. The scarce resources can however be put to alternative uses and Islamic economics has something to say as to how such resources can be allocated and a priority is established. In Islamic economics scarcity is an economic experience, human experience

and moral experience. This is economic experience in so far as scarce resources are used to satisfy individual wants. Because the Quran has stressed the need for human involvement and endeavour in the production process to earn an honest and decent living to meet the material wants. This is explicit in the following verse:

"And when prayer is finished, then disperse through the land and seek the bounty of Allah". (al-Quran 62:10)

It is a humane experience in so far as the scarce resources are used to satisfy the needs of the poor and the needy in the form of transfer payment. This has been emphasised several times in the Quran. The following two verses provide outstanding examples of the Quranic exhortions:

"So give what is due to kindred the needy, and way-farer. This is best for those who seek the countenance of Allah, and it is they who will prosper". (al-Quran, 30:38).

"And in their wealth and possessions (was remembered) the right of the (needy), him who asked, and him who (for some reason) was prevented (from asking)".(al-Quran, 51:19).

Such alms of spontaneity, known as sadaqah have been prescribed as a supplementary or complimentary measure against economic misery, in addition to the obligatory tax called Zakah.

This built in social security and co-operative insurance in Islam is intended to ensure social equilibrium, social stability and peace for the

progress of mankind and should not be seen as encouraging "dependence" and creating social parasites which have negative influence on legitimate economic activities. Because both the Quran and the tradition of the prophet (be peace on him) have stressed on "the earning of a righteous living" which is considered next only to the worship of Allah. As the Quran says:

"ye apostles! enjoy (all) things good and pure, and work righteousness; For I am well acquainted with (all) that ye do". (al-Quran, 23:51).

As a matter of fact, Islamic stress on "transfer payment" is highly pragmatic, it reflects realism and is extremely relevant in the so-called civilised world of 20<sup>th</sup> century. The World Bank development indicators (1978:p.7) has already acknowledged the fact that the current disappointment and disillusionment are not merely due to growing international inequality between the rich and the poor countries but also due to national inequality resulting from the rapid increase in the standard of living of the rich in the poor countries. In fact, "the world we live in presents a picture of appalling contrasts. While a few countries are immensely prosperous, nearly two-third of the population of the world subsists on sub-standard incomes. Illiteracy, bad housing, lack of medical care and malnutrition are prevalent throughout most of Asia, Africa, the Middle East and Latin America. These facts can no longer be ignored. Indeed they have come to dominate intellectual thought and political action to an unprecedented degree in our time". (Bhagwati, 1971, p. 9) Thus the need for "transfer payment" can hardly be overestimated.

It is a moral experience in so far as scarce resources are used for the cause of Allah (*e.g.*, time spent in remembrance of Allah, for the propagation of the message of Islam).

These three experiences taken together explain the concept of scarcity. It is the key to the understanding of the dynamics of Islamic society. Viewed from this angle of view, scarcity, as a felt condition can not solely be attributed to nature alone, despite the fact it operates under the universal conditions of diminishing return. If scarcity of nature sets the stage for economic problem, it is the acquisitive behaviour of man that we find in a market society which makes the economic problem dangerously chronic and highly complex.

In "Affluent Society", Galbraith (1962) has argued that advanced industrial societies of today have for the most part gone beyond the level of physiological needs of food, clothing and shelter and that society is under "producer's sovereignty" in the sense that consumers flits from one purchase to another purchase in response to persuasive advertising. Galbraith advocated for more spending on social goods and less on private goods. The similar sentiment is expressed when Heilbroner & Thurow (1975) said "if American today, for instance, were content to live at the level of Mexican peasants, all our material wants could be fully satisfied with but an hour or two of daily labour. We would experience little or no scarcity, and our economic problems would virtually disappear. Instead, we find in America and indeed in all industrial societies - that as the ability to increase nature's yield has risen, so has the reach of human wants. In fact, in societies such as ours, where relative



social status is importantly connected with the possession of material goods, we often find that "scarcity" as a psychological experience and goal becomes more pronounced as we grow wealthier: our desires to possess the fruits of nature race out ahead of our mounting ability to produce goods". (Heilbroner & Thurow, 1975, p. 5).

Remember that when we are talking about Islamic society we do reject the hypothesis about the human behaviour based on economic rationality as postulated in western economic thought. Although it is perhaps possible to make this concept serviceable for Islamic economics by appropriately modifying it through the introduction of non-individualistic elements in the objective function of a consumer or a producer. The Islamic economists' view of man is different; his acquisitiveness is expressed by his desire to better his condition through the betterment of conditions of others. His success is then measured not merely in terms of money but also in terms of his social concern and moral authority he commands by being virtuous.

In an important sense, Islamic economy as noted earlier, is submerged in social and moral relationship and run on both economic and non-economic motives. Once this normative aspect of Islamic economics is properly understood, the constraints on material wants becomes obvious. Islam has stressed on all legitimate consumption of goods and services which can promote individual and social welfare, (al-Quran, 50:168).

The emphasis is always on socially beneficial spending (al-Quran, 268:7) while niggardliness is condemned as a negative and destructive

quality (al-Quran, 63:37), the extravagance is equally discouraged (al-Quran, 81:141). The Islamic stress on "moderation" makes the acts of satisfying wants as a means to an end rather than an end itself. By implication, acts of satisfying wants may not necessarily create new wave of wants for himself in the process. The moral and social responsibility imposed on Muslim as a part of his faith puts a limit to the emergence of more wants requiring satisfaction for himself. The process tends to make an "Islamic person" individually alert and socially concerned and sensitive. The income and budgetary constraints he faces coupled with the problem of moral and social choice makes him pragmatic, thereby enabling him to strike an operational balance between "crude materialism and ultra-spiritualism".

Thus in Islamic society, wants are restricted, because constraints are imposed not only by income but also by social and moral norm.

This raises a fundamental question of our time: are human wants really unlimited? Does human nature never brings us to a point of contentment? The real answer to these questions depends on the form and type of social institution and social control of the means of production and distribution we are really talking about. With the emergence of a market society the new impersonal relationship of man to man arose; also there arose a new form of social control - a pattern of social behaviour which drives one to increase one's income. This "drive for more" material well-being does not seem to diminish as he moves up the economic scale: because his status and success are seen in terms of his material possession, level of consumption and recreation. In such market societies

instability of wants afflicts most people. Thus the acts of satisfying wants does necessarily ends in creating waves of new wants. In a frantic rush to maximise individual welfare, he becomes so engrossed in material persuits that he tends to lose his sense of purpose and inner meaning of life. The process inevitably makes him "selfish, ruthless, unscrupulous and arrogant". "The state of wantlessness which promises perfect bliss, happiness and peace remains n mirage for ever. The more man strives to reach it by his maximizing behaviour, the further it gets away from him". (Ariff, 1978)

In contrast to market societies, Islamic economy does include among its aims moral and social welfare as well as physical goods and services, more time to spend for individual moral welfare through service to one's fellow human being as well as more income to spend for enjoyment of goods, this kind of "drive for more" would inevitably force Muslims to strike a "social balance". At least this seems to be true in societies that encourage striving for status and success not merely in terms of material possession but also in terms of moral and spiritual commitment. viewed from this line of reasoning, wants in an Islamic society seem to be restricted. This hypothesis concerning Islamic behaviour will have tremendous impact on the concept of effective demand and demand curve and consequent policy implications.

As a matter of fact, in Islamic society, human wants can be viewed as a "stock" and "flow" concept. It is a stock concept in the sense that in a given period of time wants tend to be limited, given the difference in income and social structure. It is also a flow concept in that human wants

tends to increase overtime subject to Islamic socio-economic values. The dynamic interplay of these two concepts make the basic problem of economic organisation a permanent feature in an Islamic society. In fact, Islam not only urges its followers to engage themselves in every day "prayers" only but also induces them strongly to work and livelihood (al-Quran, 241:10).

This brings us to the discussion of the nature and scope of economic problem in Islam which arises basically because of scarcity of resources. It is because of our different concepts of scarcity, the concept of economic problem tends to be different as well. Its social and moral dimension makes it unique in itself. The common questions concerning economic organisation will have uncommon answers. Thus common questions of any society whether it is capitalistic, socialistic or Islamic are basically the same as follows:

- (a) What goods and services will be produced ? (b) How they are to be produced ? (c) For whom shall goods be produced ?

Briefly speaking, Islamic responses to these questions are different in the sense that while that "what" questions in the capitalistic society would be determined by the response of customers to the offering of sellers. That is, it is determined by the nature and volume of "effective demand". In Islamic society it is to be guided by "effective need" a wider concept which includes more than "effective demand". It does include the provisioning of the poor and the needy customer who can not afford to buy at a market price.

While "how" question is largely determined by competition among firms in market economy, it is to be determined by limited competition and conscious co-operation among firms in Islamic economy. Lastly "for whom" question in capitalistic economy is resolved primarily by a system of prices and of markets. In Islam it is to be determined by the integrative system of exchange and one-way transfer.

It is perhaps beyond the scope of this paper to discuss in detail the mechanism by which this will be achieved. Perhaps it would suffice to say that Islamic economy can hardly opt for a complete supplanting of the market mechanism to ensure the meeting of the effective need. In fact the transfer mechanisms in an Islamic society serve first to convert effective need into effective demand so that the question of "what to produce" is largely, not wholly answered by the patterns of effective demand. What is needed then is the development of appropriate institutional mechanism through planning so that non-market phenomenon can be dealt with and the spirit of conscious co-operation is fostered. All these questions can, of course be, dealt at a micro or macro-level depending on the nature of the problem in question. This unique approach in resolving the economic problem in Islam has its profound impact on the dimension of choice involving opportunity cost.

### **(c) Choice and Opportunity Cost: Their Islamic Dimensions**

Choices are made among alternatives both in modern and Islamic economics. In modern economics, choices depend mainly on the individual preference function which is supposed to be independent of or indifferent to the welfare of others. Because it assumes selfishness and

independence of individual preference function. In market economy, this preference function becomes "revealed" through the price system. The question is: whether the price offered in the market is a good guide to social welfare? Obviously not, for, it includes the influence of income distribution on the prices offered. The fact is that marginal utility of one dollar for the person who earns ten dollar a day is not equal to that of a person who earns ten dollar per hour.

Furthermore, externalities can arise in the process of individual choice either as a consumer (*e.g.*, additional private cars adding to the crowding of city roads) or as producer (*e.g.*, industries causing water pollution or smoke). Externalities are clearly relevant for social choice and provide a sufficient argument for incorporating social factors into individual choice. In Islamic economics choice is then conditional and inter-dependent based not merely on the legal threat system but on the moral injunctions as reflected in the Quran and the Sunnah.

It also follows that choice in Islamic economics must reflect not only the efficiency but also equity consideration which is neglected by the market economy. As a matter of fact choices depend not only on sound preference but also on equal opportunities as well.

In fact, under the Islamic economic system choice does involve some kind of inter-personal comparison of utility. In fact any decision involving other people involves inter-personal comparisons. In Islam it is made within the moral code of conduct and economic ethics as "revealed" through the Quran. As such the chances of individual exploitation through biased choice has been reduced to minimum.

Thus we see that choice among alternatives must embody what is learned in regard to Islamic values of life. In other words, Islamic values of life need to be internalised within the individual preference functions. This is a human learning process. The process by which one can learn to map one's structure of preference is a fundamental key to the understanding of Islamic social welfare and moral production function.

It is implicit in the preceding analysis that there is always a cost of choosing one alternative over another which is termed as opportunity cost in economics. It describes the fact that "when we employ the resources in a particular way, we are not merely making a decision to produce those goods, we are also deciding not to produce some other goods or services. That which we implicitly decide not to produce is the opportunity cost of what we do produce". Consumers likewise encounter opportunity cost in terms of spending their income. Government is also confronted with opportunity cost in terms of allocation of its scarce resources among various competing demands (*e.g.*, whether resources to be allocated for defense build up or consumer's goods). "The concept of opportunity cost emphasises the problem of choice by measuring the cost of obtaining a quantity of one commodity in terms of the quantity of other commodities that could have been obtained instead". (Lipsey, 1975, p. 52).

So far the concept of opportunity cost appears to be value free. But as a matter of fact this concept is value loaded both from the view point of modern and Islamic economics. The difference lies in its emphasis and dimension. The perspectives of opportunity cost under the sovereignty of Allah tends to be different from one working under consumer's or

producer's sovereignty. Islamic opportunity cost concept is narrow as well as wide at the same time. It is narrow, because choices among alternatives are to be made within the framework of Islamic value system. Many valid economic activities under the capitalistic system (*i.e.*, brewery industry, night club activities) are not permissible under Islamic value framework. It is wide, because options for choosing among alternatives are not merely limited to pure economic activities as understood in the western sense of the term. Many activities involving one-way transfer (*e.g.*, supporting an orphanage, spending money for the poor neighbour) may not be considered to be valid economic activities under western economic system. But it can legitimately be considered under Islamic economics in view of its broader implications for societal welfare, for that matter, economic welfare.

The author is of course fully aware of the fact that donations by profit-maximising individuals and corporations to hundreds of charities, domestic or foreign, amounts to millions of dollars every year and that there exists western economic tools of analysis to explain such donations to charity. Irrespective of the motives of such donations what the author wants to stress is that such donations or "transfer payments" do not constitute the main stream of western economics by its very exclusion in the National Income Accounting. It is treated as "un-productive". This is where the Islamic economics enters by declaring It *i.e.* "productive expenditures". This expanded notion of productive enterprise embracing dual notion of reward or return in this world and the other world has no counterpart in western economics. This is the way it is in the Islamic concept of economics.



Apart from this social dimension, the opportunity cost concept in Islam has its moral dimensions as well. This concept can be illustrated with the help of a concrete example: For instance, in most Muslim countries like Saudi Arabia, there is a "prayer break" within so-called office or business hours. If a person works 40 hours a week, he is considered to be fully employed in Saudi Arabia. The important point is that this 40-hours does include his "prayer break time" which should not be less than five hours in a week. Under western economic system he is underemployed: under command economy this is treated as an irrational behaviour.

In western countries they have "coffee breaks" intended to improve the efficiency of workers. It is not a counterpart of "prayer break". While the former refers to physical need which Islam also recognises, the later to psychological and spiritual need which other systems do not recognise in the context of actual work environment.

A Muslim's option for "prayer break" in lieu of other money earning activities is morally satisfying to him. This very act immediately enables him to establish a link between work and life. He is expected to get the "job satisfaction" in the wider sense of the term. His chance of getting "alienated" is definitely reduced. The long run over-all consequences of his action tends to produce favourable impact on material work.

It is to be recognised that the characteristics of job, technology, amount of autonomy, physical work environment and the quality of interpersonal interactions, among other factors, determine satisfaction or the lack of satisfaction (alienation) toward work.

Some substitution however takes place. Persons doing less desirable jobs who receive substantial compensation, can buy their satisfaction somewhere outside the work environment (leisure). But the Islamic notion of dual compensation in this world and the other world for the efficient and faithful discharge of work would likely to make workers more active towards inequalities and negative aspects of work in so far as they affects adversely their moral and work performance.

Since the phenomenon of exchange, either as a fact or as a possibility is implicit in our discussion of choice involving opportunity cost, it is extremely important that the nature of integrative exchange system under Islamic economic system be explained at some length.

#### **(d) Integrative System of Exchange and One Way Transfer**

In modern economics, allocation of scarce resources is based on the principle of exchange and the institutions of exchange. In fact, Boulding (1970, pp: 17-18) defined modern economy "as that segment of the total social system which deals primarily with exchange and the institutions of exchange and by extension, with exchangeable or the goods and services which participate in exchange".

What makes the Islamic economics distinguished is that scarce resources may be allocated in many ways other than through exchange or the institutions of exchange. The development of integrative economic, social and moral responsibility make the allocation of scarce resources complex in the sense that they may be allocated both by the market and non-market forces simultaneously; that they may be allocated, for

instance, through "fear of Allah" (*i.e.*, moral threat) or through the principle of social and family responsibility as reflected in the Islamic value system. Because the Islamic economy is not solely concerned with "material provisions" although they are clearly an important aspect of it. For instance, the people making contribution or sacrifices in constructing magnificent mosques or for supporting the poor and the needy can hardly be explained by the concept of "rational maximizing". In fact, it is meaningless to apply the word "rational" to pursuits such as these under modern economics.

In Islamic economics they have their place as re-allocation of scarce resources is done through the "integrative system of exchange and transfer". Under the integrative system, the Islamic concept of exchange is clearly not value-free, it has, in fact, social and moral overtones.

For that matter, exchange in market economy is not value free too. Islamic economics deals not only with the provision of exchangeables as understood in modern economics, but also non-changeables (*i.e.*, transfer payment) which frequently takes place under the conditions of relative social concern and moral responsibility as opposed to "indifference" and "selfishness". There is then a substantial degree of "benevolence" in exchange which is legitimate on moral and ethical grounds and operate as a social organiser in Islam. The exclusion of this aspect of benevolence from the rigorous study of the modern economics makes it responsible for the loss of personal identity as well as for failure to develop a broader aggregative concept of general welfare leading to total human fulfilment where he can see a link between work and life in its totality.

"Economists' almost complete neglect of the concepts of malevolence and benevolence cannot be explained by their inability to handle these concepts with their usual tools. There are no mathematical or conceptual difficulties involved in interrelating utility function provided that we note that it is the perceptions that matter. The familiar tools of our trade, the indifference map, the Edgeworth box, and so on, can easily be expanded to include benevolence or malevolence, and indeed without this expansion, many phenomena, such as one-way transfers, cannot be explained. Perhaps the main explanation of our neglect of these concepts lies in the fact that we have concentrated very heavily on exchange as the object of our study, and exchange frequently takes place under conditions of at least relative indifference of selfishness". (Boulding, 1970, p. 127).

### **Exchange and Exchangeables**

While through emphasis on "exchange" and "exchangeables" modern economics takes a narrow view of individual welfare. Islamic economics' emphasis on integrative system of exchange and non-exchangeables makes it immediately relevant to the total welfare of man, thus preventing it from falling into the trap of being purely impersonal, selfish. The whole concept can be illustrated below with the help of an elementary mathematical concept of set.

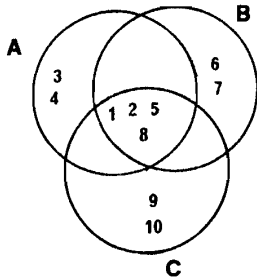


Figure 1:

Islamic economics

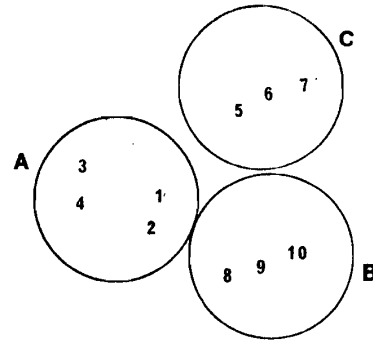


Figure 2:

Secular modern economics

$A \cap B \cap C = (1, 2, 5, 8)$  intersection  $A \cap B \cap C = Q$  (Empty set).

The integrative system of exchange and nonexchangeables in its final analysis is really the problem of "provisioning" of all good things of life. Now if provisioning as a general problem is classified into three sets: "A" representing provision of necessities of life, "B" representing provision of security from threat, civil rights to enjoy the necessities of life and "C" representing provision of social security, social justice and moral welfare etc. At the intersection of these sets  $A \cap B \cap C = 1, 2, 6, 8$  as indicated in figure I, we get the key to the concept of integrative system of exchange and non-exchangeables in Islamic economics. In modern economics they represent an empty set (Q) (Figure II) although the possibility of intersection between A and B sets are not ruled out.

The main purpose of introducing the Venn diagram is to introduce the notion of the limit of the integrated analysis in Islamic economics, as in

Islamic economics we are not supposed to study or make an analysis of *ALL* aspects of *Shariah* involving pure moral and spiritual issues. Intersection shows the key thrust of study of Islamic economics. Intersection also indicates the integrated nature of Islamic economics in which the elements of set B and set C influences the economic problem proper as represented by set A.

## **2. Summary of Discussion in Figures**

The whole discussion can now be summarised in Figure IA and IB as given below:

**FIGURE 'IA'**  
**ISLAMIC ECONOMICS**

(A composite social science in which the distinction between normative and positive economics is not relevant)

**HUMAN BEHAVIOUR**

(Guided by Islamic rationality in which 'economic man' is integrated and submerged into moral and social relationship)



FIGURE 'IB'

MODERN ECONOMICS

(a social science in which emphasis is on positive economics which concern what is, *not* what ought to be)

HUMAN BEHAVIOUR

(guided by rational maximising in which "economic man" is indifferent to social and moral relationship)

UNLIMITED WANTS

Individualistic Acquisitive

SCARCITY OF MEANS

Economic experience social & psychological experience

EMERGENCE OF ECONOMIC PROBLEM

Relative approach (changing the process to maximise profit)

MICRO ASPECT

(e.g. individual firm)

MACRO ASPECT

(e.g. industry)

Solution primarily through competition, price and market

SEARCH FOR ALTERNATIVES

(Opportunity cost in terms of monetary factors only)

CHOICES OF AN ALTERNATIVE

(guided by emphasis on individual concern)

EXCHANGE mainly through market and price system

(guided by)

Economic rationality

Efficiency

Optimality

Individual welfare



### 3. Scarcity, Choice and Opportunity Cost Distinguished

#### Diagrammatically

At this stage the concept of the production possibility frontier (PPF) represented as a simple diagram, can be introduced to clarify the concept of scarcity and choice and Islamic notion of priority concerning the "what", "how" and "for whom" questions.

Figure '2A'

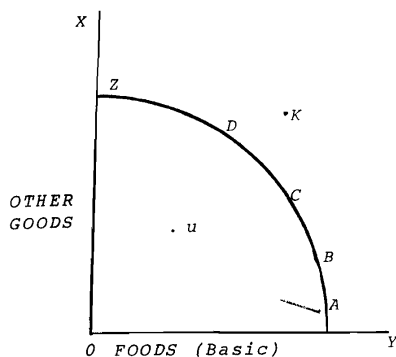
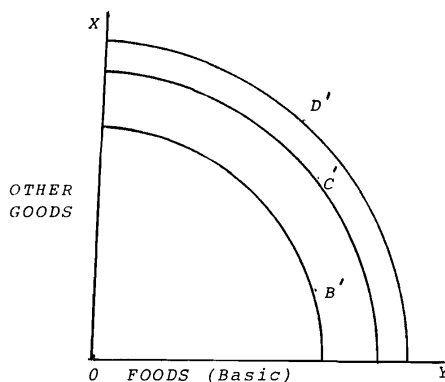


Figure '2B'



In Figure 2A we measure quantity of food (necessities] produced on 'y' axis and on 'x' axis the quantity of other goods. Let us plot all the possible combinations of food and other goods (*e.g.* A,B,C,D,Z) and join these points. The resulting line is called PP-F which immediately brings the problem of choice out or various combination of food and other goods as produced by A,B,C,D,Z.

A and Z represent two extreme choice. That is, if A is chosen, there would be no "other goods produced" and vice versa. This is a problem of

the allocation of resources arising out of scarcity: how many resources to devote to producing "food" and how many to "other goods". The opportunity cost of producing more food as indicated by the downward slope of the PP-F is being measured in terms of the quantity foregone of "other goods".

Any point inside the PP-F such as "u" may denote either under utilisation or inefficient use of resources or a situation where potentially useful resources are lying idle. Similarly, any point outside the PP-F such as 'K' is unattainable combination given the resources and level of technology at a given point of time. Let us now ask a number of basic questions: under Islamic system what combinations of commodities will be produced, and in what quantities? How and for whom goods shall be produced? As noted earlier, at the initial stage of development, most resources are to be devoted to meeting the "effective need" rather than "effective demand" of the society irrespective of profitability considerations. The concern for equity rather than the distribution efficiency became the basis for choice at this stage both at micro as well as macro level. If individual choices do not reflect the social and moral responsibilities the state must intervene and introduce corrective adjustments. Thus in order to meet the effective 'need' of the society, it may be necessary to do one of two things: If production is at point 'u' inside the PP-F, efforts must be made to move the point closer to or actually on the boundary, from U to B in Figure 2A. If the economy is already on the boundary, the necessary steps should be taken to move the boundary outward so that production can expand resulting shifts of PP-F

from B' to C' as shown in Fig. 2B. While the shift from U to B represents a change in the level of economic activity, the movement of the actual boundary from B' to C' refers to economic growth which makes it possible to have more of all commodities. The crucial point to note that choice of movement from a point (say B') to the PP-F to another point along the boundary (say C') will remain restricted as long as the basic and urgent need of the society is not met. This problem of allocation of resources are to be resolved through an appropriate mix by a system of planning as well as by a system of prices and of markets.

In an Islamic economy there is a necessity for planning on a continuous basis to strike a balance between restriction and freedom. It would be a mistake to assume that once the re-distributive mechanism of an Islamic economy are in operation, and the market is freed of un-Islamic practices of monopoly, hoarding and speculation, the free-working of the competitive forces may not conflict with the attainment of the objectives of an Islamic society. By its very internal logic, the free-working of the competitive forces will bring success to those who are relatively more talented and able. We have evidence to support that given complete individual freedom, monopoly economic power is likely to emerge.

The strategy of planning may however involve introduction on a number of policy measures such as the use of income distributional weights in project appraisal, the use of fiscal tools in the form of taxation of luxury goods which reduce the unfavorable effects in the form of consumer externalities and limit the flow of domestic resources. Income distributional weights may be derived from the utility function where the

marginal utility of consumption is dependent on the initial level of consumption and social elasticity of the marginal utility of consumption which is the parameter of the utility function. (Balassa, 1977, p. 218).

The utility function itself is supposed to reflect individual as well as government preferences. It involves value judgment, though.

Since equity consideration will be an over-riding concern at the initial stage of development in an Islamic state, it would not be surprising that introduction of income distributional weights may lead to the choice of a project with a lower increment of output and consequent slower rates of growth and improvements. With the advance of economic growth, the equity consideration must be followed by a study of alternative policy instruments with greater attention given to their effects on efficiency, savings, risk-taking on co-operative ventures. As noted earlier that while Islam has stressed the need to help the poor and the needy, it has equally discouraged wastages.

The apparent conflict between equity and efficiency conditions can be solved by the correct application of the principles of Shariah. In Islamic economics, the equity and efficiency conditions are to be seen within the overall framework of human welfare in its totality. Thus mere satisfaction of so-called efficiency conditions does not ensure an increase in welfare unless we combine it with knowledge of the welfare functions. The tendency to apply the strict paretian economic efficiency criteria for judging the functioning of an economy is not acceptable in Islam. What is important is to improve income distribution *at least cost* in terms of

loss of production and output. The Quran does recognise the differences in talents, differences in income among the different members of the society for the progress and prosperity of the same. (al-Quran, 62:32).

The steps needed to move the PP-F from B' to C' or C' to D' is quite consistent with the Islamic economic values. "The satisfaction of wants, including comforts, adornment and ornamentation of life is permissible and quite lawful in Islam. The Holy Prophet (be peace on him) advised his companions to enjoy the good things of this world which God had created for their use. There are many sayings of the Holy Prophet (be peace on him) which testify to the fact that enjoyment of the beautiful things of life is not repugnant to the teachings of Islam". (Rahman, 1975, p. 26).

What is crucially important is to strike a social and moral balance between money earning and money spending activities both at micro as well as macro level. Both these activities are not end in itself; they are means to an end - an end to achieve the higher quality of individual, social and moral life.

#### **4. Major Conclusions**

The following major conclusions emerge from the preceding analysis:

(a) Broadly speaking, Islamic economics can be defined as a composite social science which studies the problem of production, distribution and consumption through integrative system of exchange and transfer over time and their social and moral consequences in the light of Islamic rationalism. It assumes the presence of "Islamic person".

(b) The distinction between positive and normative economics is not relevant in Islamic economics. They are inextricably bound up with the Islamic socio-economic values. It concerned not only with the economic problem as they are but also as what ought to be. In modern economics emphasis is given on positive economics.

(c) In Islamic economics, the fundamental principles reflected in the Quran and the Sunnah do provide the framework of process of transformation of inputs into output. At times it does take into account of inputs, absorbed into a behaviour unit without producing any immediate output.

(d) The concept of scarcity in Islamic economics can be seen as economic, humane and moral experience depending on whether scarce resources are used to satisfy physical needs, social needs and spiritual needs. Human wants tends to be narrower in scope. The concept of economic problem tends to be different as well. Its social and moral dimension makes it unique. So is the case of choice, opportunity cost and exchange.

(e) Choice involving opportunity cost must reflect Islamic values of life which needs to be internalised within the individual preference function. The process by which one learns to map one's structure of preference is a fundamental key to the understanding of Islamic social and moral welfare function.

(f) There is a substantial degree of "benevolence" in Islamic integrative system of exchange and one-way transfer which is legitimized

on moral and ethical grounds and operate as a social organiser. This is a step forward in search for personal identity as well as for broader aggregative concept of general welfare.

(g) Economic development is permissible in Islam. While equity considerations will be an over-riding concern at the initial stage of development to meet the "effective need" of the people, with the advancement of economic growth, equity consideration must be followed by a study of alternative policy options with greater attention on efficiency considerations. While Islam has stressed the need to help the poor and the needy, it has discouraged wastages as well. What is needed is to strike an operational social and moral balance between money earning and money spending activities.

(h) Lastly, the paper has set the stage for further expanded work through the use of the concepts of utility frontiers, social welfare function, consumption and production box diagrams. It should also be possible to apply a full general equilibrium approach for explaining the integrative system of exchange and one-way-transfer. This would be an easy task, though.

### 5. References

<b>Al-Quran</b>	Translation and Commentary by Allama Yusuf Ali, Lahore (The first number in the paranthesis refers to th. chapter in the Quran, the second to verse ( <i>ayat</i> )).
<b>Ariff, M.</b> (1978)	"Islamic Ethics and Economics" Proceedings of the 7th Annual Conference, Association of Muslim Social Scientists, Indiana, U.S.A.
<b>Balassa, Bela</b> (1977)	"The income distributional parameter in project appraisal" in <i>Economic Progress, Private Values and Public Policy</i> . Ed. by Balassa/Belson, North Hollan, New York.
<b>Bhagwati, J.</b> (1971)	<i>The Economics of Underdeveloped Countries</i> , Weidenfeld and Nicolson, London.
<b>Boulding Kenneth, E.</b> (1970)	<i>Economics as a Science</i> , McGraw Hill, New York, U.S.A.
<b>Galbraith, J.K.</b> (1962)	<i>The Affluent Society</i> , penguin Books, Middlesex.
<b>Heilbronner, R.L. and Thurow, L.C.</b> (1975)	The Economic Problem, Prentice Hall Inc., 4th Edition.
<b>Kahf, M.</b> (1978)	<i>The Islamic Economy</i> , The Msulim student Association of the U.S.A. and Canada, Indiana, U.S.A.
<b>Lipsey, R.G.</b> (1975)	<i>An Introduction to positive Economics</i> 4th Edition, Weidenfeld & Nicolson, London.
<b>Mannan, M.A.</b> (1973)	<i>Islamic Economics, Theory and Practice</i> , Ashraf Publication, Lahore, Pakistan.
<b>Naqvi, N.H.</b> (1978)	"Ethical Foundations of Islamic Economics" in <i>Islamic studies</i> , Vol. XVII No.2, Islamic Research Institute, Islamabad.
<b>Rahman, Afzal-ur</b> (1975)	<i>Economic Doctrines of Islam</i> , Vol. II. Islamic Publications, Lahore, Pakistan.
<b>Siddiqi, M.N.</b> (1975)	"A Survey of Contemporary Literature on Islamic Economics". A paper presented at the First International Conference on Islamic Economics, Holy Mecca, 5-11 April.
<b>World Bank</b> (1978)	<i>World Bank Development Indicators</i> , World Bank, Washington, D.C.

\*\*\*\*\*