

The Micro-Economics Foundations of Islamic Economics: A Study In Social Economics

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I. Objective of this Paper

The main objective of this paper is to show the relevance of ethical or normative elements in economic theory. The paper builds on the exchange mechanism of economics as the ethical basis of the social order and shows that an ethical economic system must be capable of infinitely reproducing this exchange mechanism in the rational working of the total social system through higher and higher levels of social preferences.

In building up this analytical framework of ethical economics, we study the field of social economics in general and of Islamic economics in particular as a field of social economics. Through this we introduce a reconceptualization of ethical economics in terms of the fundamental microeconomic building blocks. The premise of the argument therefore is that since the exchange mechanism is the instrument of transmitting ethical preferences, it is the microeconomic foundation that is capable in the first place of building up the ethical economic order as a whole. The ethical macroeconomic system depends upon aggregations at the microeconomic level.

II. Introduction

As Boulding mentions, economics first started off as a moral science. Adam Smith, who was "both the Adam and the Smith of systematic economics," was professor of moral philosophy. Even long after that, economics continued to be taught as a part of the moral sciences tripos at Cambridge University.

Therefore when an economist turns his questioning glance at the legacy of economics as it has advanced through time, the issue is the epistemological foundation of economics as a moral science versus its study as a social science. Since no social system can function without ethical values and since the human aspect of society looks toward progressive reinforcement of its ethical foundations through economics, the comprehensive definition of economics must return it to its moral-science origins while retaining the scientific methods of analysis applicable to the issues that emanate.

Boulding re-defines economics as the study of that part of the "total social system which is organized through exchange and deals with exchangeables."¹ The exchange sub-system of the total social order touches or crosses over into the other two social sub-systems, namely, the threat system and the integrative system.² The threat system is characterized by dictatorial or authoritarian decision-making; the integrative system is characterized by totally benevolent institutions like family, church, club, etc. The total social system comprises these three sub-systems.

III. Exchange Mechanism as the Instrument of the Ethical System of Economics

The exchange mechanism referred to here as the basis for a re-definition of economics both as a social science and as a moral science is also the centerpiece of ethics in economics. But in order to comprehend this broader definition of economic science one has to identify the central ethical elements not only with the social and moral aspects but also with the scientific aspect of economics. An ethic is here defined as the set of common values upheld by a culture or subculture. Such values can also be transcultural. The above re-definition of economics asserts that an ethic in this sense necessarily underlies the moral, social, and scientific aspects of the field of study. The set of commonly agreed upon values defines society's preferences with respect to economic activities like consumption, production, and redistribution.

The ethics of the exchange basis of economics also suggests the moderating role that economics plays between the purely malevolent preferences of a threat system and the purely benevolent preferences of an integrative system. Economics with its exchange system strikes the balance between these two

¹ Kenneth E. Boulding, "Economics as a Moral Science," *Humanistic Society* eds. John F. Glass & John R. Staude, (Pacific Palisades, Calif.: Goodyear Publishing Co. Inc., 1972).

² K.E. Boulding, *Beyond Economics* (Ann Arbor, Michigan: The University of Michigan Press, 1970).

types of preferences by making its own preferences reduce the conflict between each. In the best state of preferences under the exchange system of economics the system becomes value-neutral. In other words the economic system construed as a purely scientific system is incapable of reproducing the ethical basis that in the first place created the exchange system and the underlying system of social preferences.

It is at this point that a reformulation of economics is necessary, so as to complete the circular loop in the economic system with ethical elements. This means that the economic system as a part of the total social system must be able to use the exchange mechanism to establish its equilibrium state and also recreate higher levels of preferences to regenerate the role of ethical values in the total social system.

All this can be explained by the following diagrams.

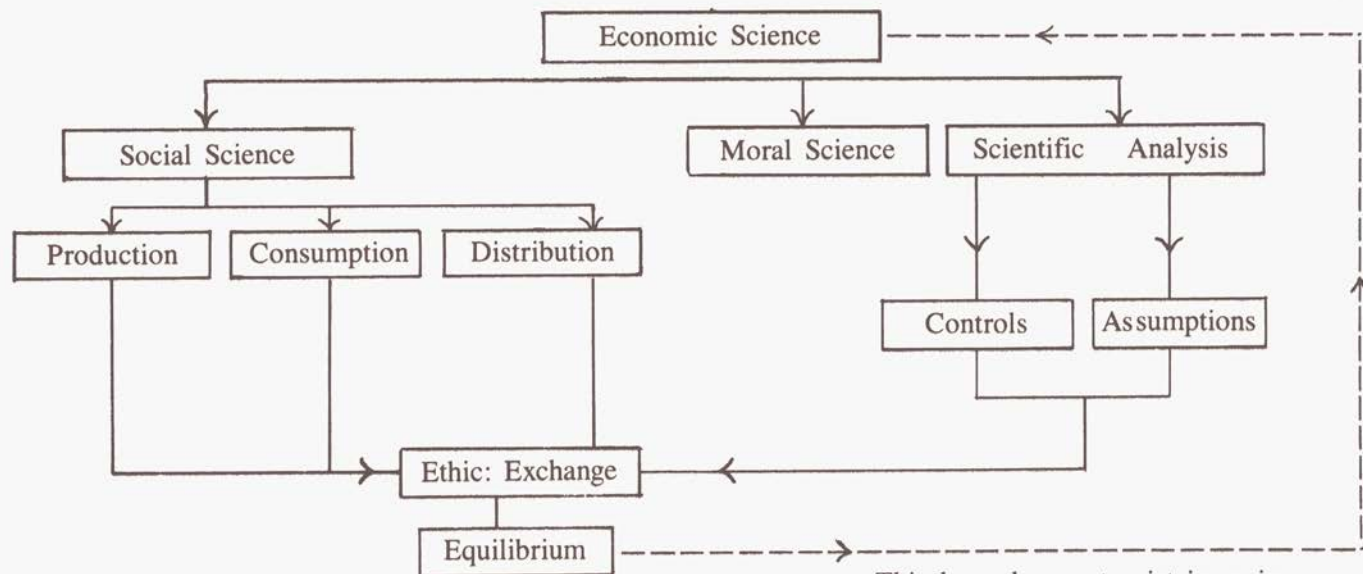
Figure 1 shows that in mainstream economics the ethical basis of the exchange mechanism in the economic system does not reproduce itself. This is the problem of a *wertfrei* or value-free approach to economic analysis. In the social economic system, this gap is filled in by the loop as shown which indicates that the ethical basis of the exchange mechanism reproduces the ethical economic system through higher and higher levels of social preferences. Later on in this paper we show that these higher-order social preferences augment and expand the activities of production, distribution, and consumption.

Figure 2 further elaborates the function of the Exchange System of economics in moderating the malevolent vs. benevolent types of preferences respectively of in the threat system and integrative system in the total social order as conceptualized by Kenneth Boulding. Note, however, that the expansion of any one of these types of preferences over the other is a situation of disequilibrium in the sense of pure exchange because such a situation gives rise to the subjective imposition of one sub-system over the other. Contrariwise, the simultaneous expansion of the malevolent and benevolent types of preferences also leads to a situation of disequilibrium because of the subjective imbalance and conflict between such preferences. The only situation of social equilibrium is associated with the simultaneous breakdown of the conflicting types of preferences by the advance of the pure exchange system of preferences.

The exchange system gains each time it expands the activities of production, and distribution, and consumption. In this way the iterated cycle of higher level preferences reinforce the ethical basis of exchange mechanism, recreates it, and augments the economic activities in a socially desired direction. We therefore have the concepts of social balance in production, social control of production, distributive equity, and moderation in consumption.

FIGURE I

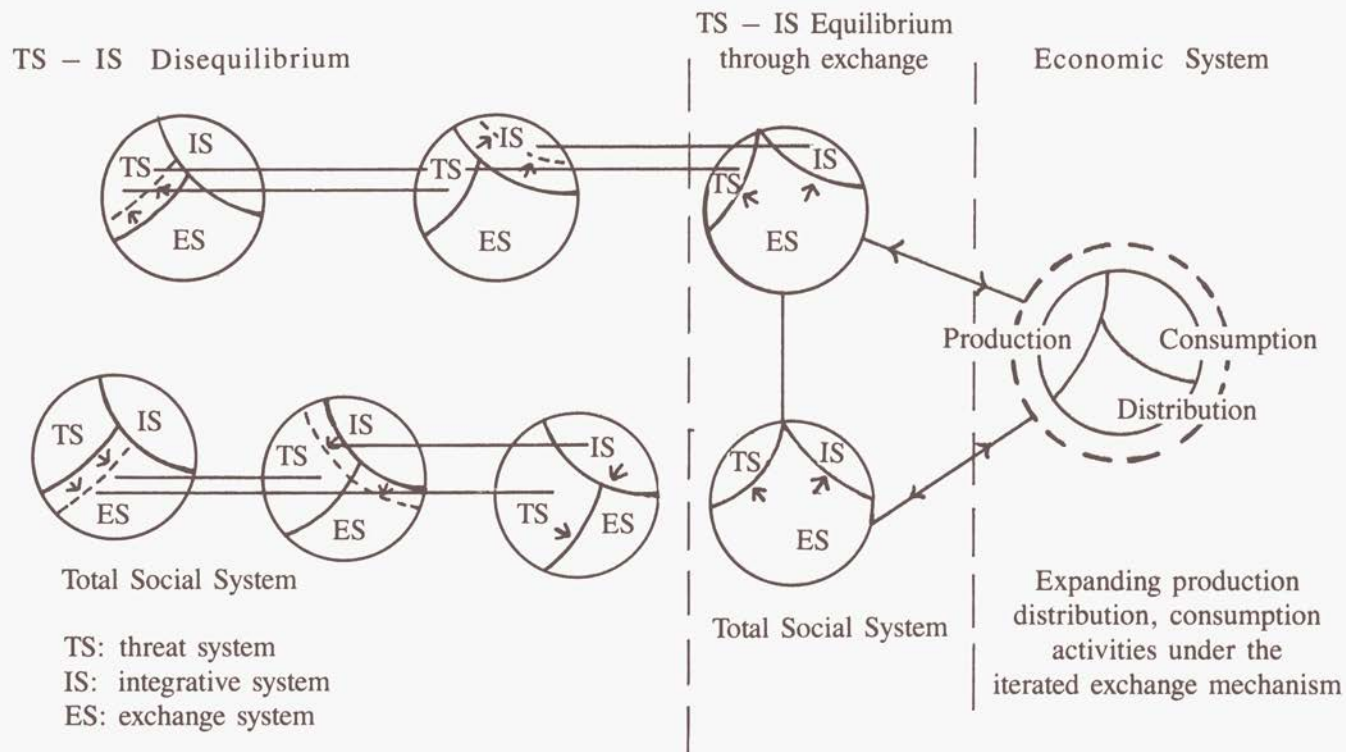
The Exchange Framework of Ethical Economics



This loop does not exist in mainstream economics but should exist in a total social framework to reinforce and re-create its ethical aspects through the exchange mechanism.

FIGURE 2

The Working of the Exchange System
in Establishing Equilibrium in the Total Social System



IV. From Mainstream Economics to Social Economics

Fortunately, it is possible to look into a rational reformulation of economic theory and policy from a holistic, ameliorative, and value-oriented viewpoint. This is the goal of Social Economics as opposed to the goal of Mainstream Economics. The latter adopts the approach of the natural sciences in addressing itself to man's economic woes alone.³ Social Economics has been viewed differently by different economists during the process of its development. The underpinnings are deeply rooted in the dichotomy between the concepts of Natural Law and Positive Law. This can be traced in the economic thought of Quesnay, who clearly differentiated between these two systems of laws working in the economic system.⁴ Schumpeter defines the concept of 'natural law' as the "awareness of the presence of a set of interrelated phenomena that give rise to 'problems' for social analysis." The premise of the natural law is religion, philosophy, jurisprudence, and intuition. The positive law merely reinforced the declaration of the natural law. It took the form of tools of mathematics, logic, and the deductive and policy sciences.⁵ Later Walras viewed Social Economics as a field of inquiry intermediate between social ethics and economics. In this sense, Social Economics is a rational socio-economic study of the application of religious thought to the economic, political and social domain, calling for applied judgements and reforms. Tawney believed that Social Economics as the means of studying society should be guided by a just appreciation of spiritual ends in order to use its material resources to promoting the dignity and refinement of the individual human beings who compose it.⁶ McKee defines Social Economics as an "Economic inquiry that is both related in values and ready to take account of social aspects and consequences of behaviour extending beyond what is usually understood as economic."⁷

The methodology of Social Economics can be well summarized in the words of John C. O'Brien: "The new paradigm would emphasize the importance of the public interest, the idea of community. It would place particular importance on man's quest not only for material progress but also for that ethical progress without which man's material progress cannot even be preserv-

³ R.J. Stephens, "Social Economics: A Budding Scientific Research Programme?", *International Journal of Social Economics*, Vol. 8, No. 3, 1981.

⁴ A. Gray, *The Development of Economic Doctrine* (London: Longmans, 1967), Ch. 4.

⁵ J.A. Schumpeter, *History of Economic Analysis* (New York: Oxford University Press, 1968), Ch. 2.

⁶ R.H. Tawney, *The Acquisitive Society* (New York: Harcourt, Brace & World Inc., 1920).

⁷ A.F. McKee, "Social Economics and Social Values," *International Journal of Social Economics*, Vol. 9, No. 6/7, 1982.

ed. Social economists would have no compunction therefore about making normative judgements in keeping with the traditional code of morality. Ethical considerations would not be excluded from the study of economic problems.”⁸

Now, if this trend in economic theory is brought to bear upon mainstream economics, the result would be a new approach to economic analysis that comprehends a much wider area of social welfare analysis than the neo-classical value-neutral basis of utilitarianism. A new concept of social contract in the exchange mechanism would result. The concept of economic efficiency will change. The patterns of consumption and production menus, of income distribution, resource allocation, and product pricing will all change. A new methodological approach would have to be evolved and a different set of economic objectives maximized in order to treat the ethico-economic problems of micro- and macro-economics consistently and rationally.

The new paradigm of the social welfare model will emphasize a cooperative socio-economic model of development as opposed to a purely competitive equilibrium model. It would seek to optimize the efficiency-equity conditions within the milieu of a self-reliant integrated development. In this approach, human resource development, production of proper types of goods and services, expansion of complementary product needs, attainment of higher employment and productivity, increased incomes and price stabilization, and intercommunal transfer of technology, will lay down the path to a comprehensive well-being and prosperity, for which we may use the term “total welfare” as a synonym.

V. Social Economic Perspectives of Reformulating Economic Theory

Social economics therefore involves a serious reformulation of economic theory in the mould of ethical considerations. The reformulation would have to start by tracking down the entire gamut of the traditional economic assumptions, systems scope, and methodology. The beginning point would be to reformulate the concept of economic rationality not in terms of maximizing individual ethics-neutral utility functions, but rather in terms of economic cooperation among individuals and communities. Economic efficiency will have to be re-cast not in terms of perfect competition, but rather in terms of conditions of cooperation within a competitive market model. Consumer sovereignty and the pure profitability criterion of producing and consuming goods and services would have to be replaced by the idea of social goods

⁸ J.C. O'Brien, “Social Values, Social Goals, and Manpower,” (mimeo.), School of Business and Administrative Science, California State University at Fresno, August, 1983.

and services, that is, goods and services that are not only socially shared but also generate social profitability and consumption/production externalities. The pricing of the product, cost and benefit specifications, resource allocation and choice of production menus would all have to be determined under competitive-cooperative conditions rather than under purely perfect competition. Utility and output maximization would have to be re-oriented to inter-dependent altruistic consumption patterns with external benefits and to differentiated menus of output. Marginal analysis will have to be replaced by average productivity analysis. Indeed, average productivity would have a better approximation of income distribution across the population than the measure of marginal productivity of labour, which denotes the results of undifferentiated self-interest and self-motivation. In this way the role of X-efficiencies in maximizing well-being will play a singularly more important role than sheer allocative efficiencies.

Welfare economics and welfare maximization, in the technical sense of well-being, will have to be figured out in terms of the optimal attainment of central social objectives, such as full employment, price stabilization, economic growth, and socio-economic development goals (income distribution, alleviation of poverty, squalor, etc.).⁹ The Walrasian form of general equilibrium, which caters to multi-market general equilibrium based on relative prices of consumer goods, is inappropriate in explaining general equilibrium as an ethical economic system, the reason being that prices are derived on the basis of Benthamite type utility functions. Besides, under ethical considerations on joint consumption, externalities in production, and altruistic cooperation, excess demand could remain strictly negative in all markets. Yet the supply price will not be necessarily zero in all markets.¹⁰

On the macro-economic side, too, the micro-economic foundations of price, income, and employment analysis, and of dynamic socio-economic development theory will have to be the building blocks. This would differ from the usual institutional form of aggregate analysis. In this new approach, on the macro-economic side the consumption function, the investment function, the production function, fiscal and monetary considerations required to monitor employment, stability, growth, and socio-economic development on the consumption and production sides, must be the weighted average aggregation of the corresponding process going on at the micro-economic level. One approach toward this re-orientation of general macro-economic equilibrium is to specify a social welfare maximization problem through the attainment of the critical social objectives, such as employment maximization, price and incomes stability, economic growth and socio-economic development as these

⁹ R.A. Gordon, *The Goal of Full-Employment* (John Wiley and Sons Inc., 1967).

¹⁰ M. Morishima, *Walras' Economics* (Cambridge University Press, London, 1977). Ch. 1.

emanate from ethico-economic considerations in the social consumption, investment, and production menus. The constraints of this optimization problem will be the lateral aggregation of micro-economic consumption functions, and of the firms investment functions and production functions, along with the aggregate resource constraints. The monetary and fiscal systems would be treated as exogenous to the system, being essentially treated as instruments to gear the system to its desired equilibrium in consumption and production.

These new dimensions in economic theory suggest that the ethical approach to economic analysis would still have to keep the discipline of economics as a self-contained whole in itself. Otherwise, the encroachment of foreign elements in economic theory such as through religion, philosophy, sociology, and value judgements, etc., can destroy the fabric of any self-consistent and well-defined domain of economic analysis as a science. The need for standardizing certain assumptions for internal consistency of the economic system would be fundamental. Otherwise, the study of ethical economies will drift away from its scientifically manageable moorings. Next will come the great importance of methodology in this scientific discipline. There is no doubt that the mathematical approach to economic theory has given to this discipline at least in theory, a vast predictive power and analytical precision. In the new system of Social Economics, too, the mathematical and statistical tools will have to play the major role for analyzing in an integrated way the inter-related systems of economic and ethical elements of the whole. Finally, the development of the new approach to economic theory must proceed along some systematic lines. Since micro-economics would provide the logical building block of the macro-economic system in Social Economics, the proper direction of development for Social Economic Theory would be the reformulation of micro-economics in the first place. This can then be gradually and logically extended to the field of a new macro-economics.

Social economics therefore does not have to dismantle the highly advanced logical structure of mainstream economics. Its challenge is reformulate many of the fundamental assumptions of mainstream economics, necessitated by the integrated treatment in the economic system of both economic and ethical elements. Next, it must develop its own analytical systems to explain the economic relationships in the ethico-economic system.

VI. From Social Economics to Islamic Economics

Islamic Economics is an example of an emerging economic system, one that is value-oriented and capable of formulating a consistent, rational analysis of the ethico-economic system. To summarize, the core of Islamic economics consists of the over-riding impotence of ethical considerations in the economic

system. Naqvi asserts that in the Islamic system of economics it is ethics, "independent of the economic conditions prevailing at any time or in any society that must guide human behaviour for the attainment of social bliss as well as spiritual salvation." Social bliss is explained by Naqvi to mean both economic betterment and spiritual ascension as two elements of a unitary Islamic outlook on what constitutes human happiness.¹¹

Islamic economic doctrine thus lays the foundations of a non-homo-economic society in which individuals would interact and social relationships would be established on the basis of ethical dealings thoroughly pervading the realm of economics. The ethical dealings on which Islamic economic behaviour are founded are not arbitrary in nature. Ethical norms are generated not by majority action on the principle of voting on a given ethical issue (such as society's consensus on abortion, poverty, humanistic education, etc.). Rather they are founded fixedly on the principles of the Qur'an and the traditions of the Prophet Muhammad (SAAS). Then these principles are further extended by analogy but without drifting away from the divine moorings of the original Islamic sources (Qur'an and traditions of the Prophet Muhammad). In this way, both the individual and societal norms of conduct, decisions, and functions are given unique and definitive directions. The degree of arbitrariness in ethical matters is thereby reduced to a matter of difference in interpretation by the doctors of Islamic law and divinity.

The fundamentals of Islamic ethical behavior, however, remain unique and well-defined. That is, man must augment his pure economic actions and preferences by the preferences and actions enunciated on the basis of the basic Qur'anic laws. Thereby, for every individual action in the mundane world, there is a reciprocal reward in the next world and a quantifiable equivalence of that Islamic action today. Man, by accepting this collateral action of the purely economic with the Islamic ethical preferences and actions, establishes what are known as *Taqwa* or God-consciousness and *Idabat* or worship.¹² These two fundamental elements of individual Islamic behaviour in social dealings became the cornerstone of Islamic ethics in economics. When these elements of individual behaviour are fully understood at the micro-economic level, and are fully mobilized by certain basic micro- and macro-economic instruments peculiar to the Islamic economy, then an integrated general equilibrium Islamic system can be formulated.

¹¹S.N.H. Naqvi, "Ethical Foundations of Islamic Economics," *Islamic Studies*, Summer, 1978.

¹²M.A. Choudhury, *An Islamic Social Welfare Function* (American Trust Publications, January, 1983), Preface.

VII. The Micro-Economic Foundations of Islamic Economic Theory

The micro-economic building block and their aggregation to the macro-economic level is essentially the foundation of economic analysis in Islamic perspective. It is also the ethical basis of the exchange system that reproduces itself through higher and higher levels of social preferences. This is due to the fact that it is the individual's ethical and economic behavioural patterns that will ultimately shape the Islamic society. The role of the state is only to promote and monitor the progressive Islamic transformation. We now go on to formalize the micro-economic framework of the ethical system in Islamic economics using the exchange mechanism we referred to earlier.

VIII. Characterization of the Consumption Menu

Endowed with a given exchange mechanism, the individual consumption menu is completely characterized by a set of preferences along each of which the consumer remains indifferent among alternative combinations of consumption. The restriction imposed in the Islamic consumption set is the condition of a satiation point set by the constraint of avoiding *israf* in consumption.

The total consumption menu for society is then defined by a lateral aggregation of individual consumption menus. Here, too, the limits of avoiding *israf* imply mathematically that the social consumption menu given the constraint of *israf*, meaning wasteful consumption, for each individual consumer will be closed and bounded,¹³ with a great number of consumer preferences tending to concentrate about an average consumption level in society as a whole. Clearly, the greater the number of individuals who have their consumption preferences centering around this social average consumption, the more the problem of *israf* is reduced and also the more the community is made equalitarian. Finally, mathematically speaking, the closed and bounded nature of the consumption menu makes the individual and social consumption preferences concave to the origin.

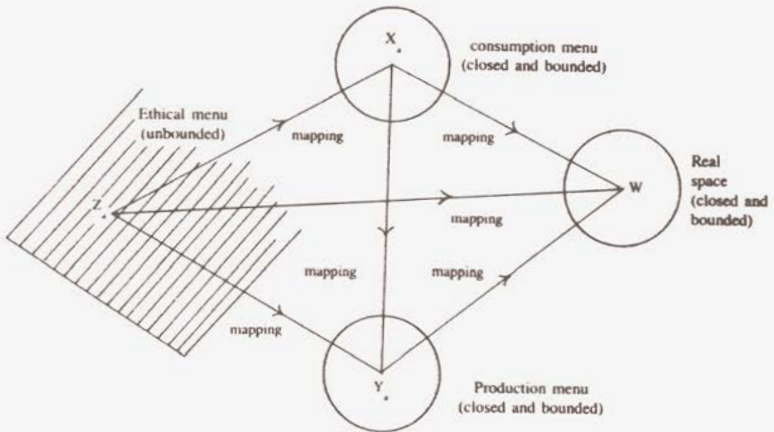
¹³For mathematical concepts here, refer to G. Debreu, *Theory of Value: An Axiomatic Analysis of Economic Theory* (New York: John Wiley & Sons Inc., 1965).

IX. Characterization of the Production Menu

Formalization on the production side suggests that individual production menus would have their isoquants compatible with the requirement of meeting a minimum level of production so as to contribute adequately toward satisfying the acceptable social production level, that is of meeting both the current consumption needs as well as the social welfare needs of society now and in the future. Under-utilization of capacity is thus ruled out in the production menu facing society as a whole. The social production menu is the lateral aggregation of individual production menus.

FIGURE 3

Measurable Mappings in the Ethico-Consumption-Production Framework Establishing a General Equilibrium State



On the other hand, limitations of resource availability, technological change, inventory considerations, and other variables could constrain production levels within given limits. This, however, is not a result of under-utilization of existing production capacity, for the latter is to be avoided in a social context.

In an Islamic production menu the above two conditions—of sustaining production levels to meet social needs, and abiding by lights by conditions of technology and consumption demand but not by under-utilization of existing production capacity) may be said to be aspects singular in nature. They stem from the underlying constraints of *isrāf* both on the consumption side and the production side and by the binding need for distribution and equity.

The bounded and closed nature of individual production menus laterally aggregated to the society level imply mathematically the existence of an average level of production which every producer must satisfy or be out of the market. This average level of production is what would guarantee the attainment of a social production level. Thus, unlike the case of free entry and exit of firms found in classical and neo-classical economic thought, the exit and entry of firms in an Islamic market are determined by conditions of meeting a minimum socially required level of production of goods and services. Consequently, at the worst only natural monopolies could coexist with smaller producers.

X. Characterization of the Ethical Menu

The ethical menu is characterized by a set of exchange contraventions endowed in society for setting the value of the goods and services being consumed, produced, and distributed in a socially preferred way. The goal of the exchange mechanism in mainstream economics is to set an equilibrium state of price-quantity relations; its goal in social economics is to attain this equilibrium state in terms of the production of socially acceptable consumption and production menus and also to reinforce and re-create the social choices through higher and higher levels of social preferences. This idea was explained by figures 1 and 2.

In an Islamic society, the fundamental ethical considerations in consumption, production, and distribution centre around God-consciousness, social justice, and individual responsibility toward Allah and one's fellow beings. Since consumption and production menus are basically guided by constraints of *isrāf* and distributive equity, the ethical element here plays the *pri mordial* role of replacing the hedonistic preferences to be found in utilitarian thought by social preferences. In this way we say that the consumption and production menus in the ethical economic system in general and the Islamic economic system in particular are augmented by ethical preferences. The *pri mordial*

nature of these ethical preferences working in the total social system referred to earlier makes the ethical menu unbounded. The ethical preferences and menu cannot be bounded, for in that case the exchange mechanism would not be able to recreate and reinforce social choices through higher and higher levels of preferences. In the Islamic system, holding the ethical level fixed would mean that there are segments in the population on whom the Islamic ethical elements have not had sufficient effect. It might mean that individuals are practicing only their basic required Islamic duties and are not expanding upon them. It might mean that firms by increasing investments today, in order to avoid the incidence of *Zakah* (wealth-tax paid in an Islamic state by individuals and businesses after allowable exemptions), would the total benefits of *Zakah* to a future period (benefits being purification and growth).

The mathematical property of the ethical menu is that it may not be cardinal but rather ordinal in nature. Being ordinal in nature it would still be possible to have a well-defined pre-ordering of ethical preferences. Therefore although the ethical menu is unbounded, not closed, but pre-ordered, so it is mathematically possible to establish a well-defined mapping of the ethical variables onto both a consumption menu and a production menu. This mapping is the mathematical essence of ethical augmentation.

XI. Ethical Equilibrium in the Consumption and Production Menus

Ethical augmentation, by mapping the ethical menu onto the consumption and production menus, although well-defined, is not one-to-one. That is, any one of the social choices, such as the Islamic preference to avoid prodigality in consumption and thereby the wasteful production of any kinds of goods, necessities, comforts, or luxuries, could stem from both God-consciousness and social justice. An ethical consumption menu and an ethical production menu therefore exist and are well-defined though not unique in the sense that they are multi-valued.

The ordinal nature of ethical preferences and the well-defined existence of an ethical consumption menu and an ethical production set imply that every set of ethical preferences can augment a consumption preference such that the resulting ethically augmented consumption preference has a cardinal value in the real world. The same is true of the ethical augmentation of production. More than one ethical consideration can give rise to such a real value. Ethical mapping is thus capable of establishing a general equilibrium in the ethico-consumption-production universe. These mappings are shown in figure 3 in the context of the ethical general equilibrium system referred to here.

XII. Conclusion

In conclusion, we can see that an ethico-economic equilibrium is a conceptual reality but requires appropriate social instruments to bring it about. In the case of the total social system as viewed through the lens of social economics in general and Islamic economics in particular, the media of ethical transformation is exchange, no longer in the *wertfrei* economic sense, but in the sense of an ever-evolving system of exchange to equilibrium and of further exchange to higher levels of equilibrium through higher and higher levels of social preferences.

The social preferences that so evolve both at the individual ethical level and culminate thereafter at the societal ethical level make possible the study of ethico-economics in terms of a new approach to social welfare analysis and the study of macro-economics in terms of aggregations taking place at the micro-economic level. This is clearly an affront to established traditions that took shape after Keynes' General Theory. This re-thinking is necessitated by the fact that ethical transformations fundamentally occur at the micro-economic level. The aggregation of ethically oriented activities occurring at the micro-economic level is the logical passage toward an ethical orientation to macro-economics.

One way to work on such a bottom-up translation of ethical elements in macro-economics would be to construct a macro-economic version of the social welfare function taking into consideration the principal macro-economic indicators, i.e. unemployment, growth, price-level, aggregate consumption, and aggregate savings (investment), which could be reconstructed through their ethical micro-economic foundations. The bottom-up approach to an ethical macro-economics also suggests that only when ethical economic relationships are first formed and progressively reinforced at the micro-economic levels, can the state thereafter promote the ethico-economic foundations of an Islamic society. The Islamic transformation of a society is therefore a highly democratic process. It calls for the grassroots development of the individual, which then progressively culminates into a social order.