

Social Choice in an Islamic Economic Framework

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In this paper, the decision-making character of *shūrā*, the consultative democratic concept in an Islamic social order, will be shown to clearly define the determination of both state variables (socioeconomic variables) and policy variables and the simulative interactions between them. These variables will then be shown to configure the consumption, production, and distribution menus in an Islamic political economy. They will thus be shown as clearly defined variables that help to formulate the social choice, the social welfare function, and the institutional decision-making problems in an Islamic politico-economic order.

Shuratic Decision Making in the Perspective of Organizational Theory

The Islamic shuratic (i.e., based on *shūrā*) decision-making process is the centerpiece of organizational behavior in Islamic institutions. The following is a technical explanation of this process in light of modern organizational theory:¹

- (a) *Shūrā* is structured into representative decision makers from various walks of life ("sharees").
- (b) "The abstract nature of each individual task" is carried out by *ijtihad* and the interpretations and implementation of the *Shari'ah* (Islamic law) to various socioeconomic problems.

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¹T. Burns, "Mechanistic and Organismic Structures," in D. S. Pugh (ed.), *Organization Theory* (Middlesex, U.K.: Penguin Books Ltd., 1987). For yet another treatment of *shūrā* in Islamic administrative theory see, I. M. Sharfuddin, "Toward an Islamic Administrative Theory," *American Journal of Islamic Social Sciences* 4, no. 2 (December 1987). For a more detailed explanation of the Islamic ideas relating to the shuratic process, see M. Muslehuddin, *Insurance and Islamic Law* (Lahore, Pakistan: Islamic Publications, 1969).

- (c) “The reconciliation for each level in the hierarchy of these distinct performances by the immediate superiors” is accomplished by preliminary consensus formation in smaller *shūrās*.
- (d) “The precise definition of rights, obligations, and technical methods” is conferred by electing or selecting leaders within each *shūrā* who will be responsible for undertaking designated specialized tasks. Such leaders are called *khalīfahs*.
- (e) “The hierarchic structure of control, authority, and communication” is displayed by strings of *shūrās* extending from the grass-roots level and elementary forms to *shūrās* of higher echelons wherein collective decisions are sifted, sorted, and formed under various levels of consensus. These ultimate levels of *shūrā* represent the embodiment of the “knowledge of actualities.”
- (f) The democratic and decentralized nature of decision making reinforces the vertical integration between *shūrās*.
- (g) *Shūrā* is supported by policy-implementing organizations, such as the organization for the social regulation of the market (*al hisbah*). These two types of organizations together govern the “operations and working behavior” in an Islamic market environment.
- (h) The principle of avoiding “irrelevant preferences” of some decision makers’ subsets in *shūrā* leads to social consensus formation. This state of the decision-making process is a reflection of the need for a high degree of integrity among the sharees in both the ethical cause and the organization.
- (i) The decentralized nature of *shūrā* with its specialized tasks in overall decision making develops an analytical approach to the decision-making process.
- (j) The highly interactive process of shuratic decision making manages to adjust and continually redefine individual *shūrā* tasks. Because *shūrās* are made up of specialized groups, the task contributes “special knowledge and experience” and is “realistic.”
- (k) The nature of Islamic social principles comprehending the grand ecological order emanates from the ethical policies of *shūrā* and is carried through the media of interactions with social state variables.
- (l) The high integrity and the elimination of irrelevant preferences needed in forming shuratic decisions make the members

responsible and accountable for their roles in the total decision-making process.

- (m) The shuratic departure from modern organicistic behavior appears in its replacing the individualistic preferences of the modern organization by a group “commitment . . . to the ‘technological ethos’ of material progress and expansion as reinforced loyalty to *shūrā*.”²

Shūrā is thus a strong representation of a learning-by-doing process through interaction between ethical policies and social state variables. Herein we note that starting with given ethical policies emanating from *shūrā*, their subsequent interaction with the grand social environment creates a new order. Through these interactions a new ethical person is born. Thereafter, such a person’s capacity to undertake newer and unfolding sets of ethical policies grows. The cycles of polity-market interactions repeat themselves until social consensus is formed on specific issues deliberated in *shūrā*.

Social consensus formation represents an important juncture in the Islamic ethicoeconomic transformation process. The individual or group preferences as regards changing ethical priorities are represented by ordinal weights assigned implicitly by the *shūrā*’s participants (i.e., sharees). This assignment process is akin to the one observed for a model organization by Argyris and Schon, who say:

We will give the name ‘double-loop learning’ to those sorts of organizational inquiry which resolve incompatible organizational norms by setting new priorities and weighting of norms, or by restricting the norms themselves together with associated strategies and assumptions.³

The interactive decision-making process of *shūrā* occurring between individuals and groups is shown in figure 1. Decision-making coordination is shown to be moving upwards, arising from the grass-roots *shūrās* and running all the way up to the highest echelon *shūrās*. This latter *shūrā* may be the national or the ummatic *shūrā* of the world-nation of Islam.

In the above-mentioned section we have shown *shūrā* to be far more than simply a political institution, as it is sometimes misconstrued in contemporary Islamic literature. *Shūrā* is here depicted as a conceptual basis of institutions at all levels in an Islamic religious, political, and socioeconomic

²R. Likert, “The Principle of Supportive Relationships,” *Organization Theory*, op. cit.

³C. Argyris & D. A. Schon, “Organizational Learning,” *Organization Theory*, op. cit.

order. The characterization of such an organizational entity is thus nearer to that given by Simon.⁴

The Islamic Social Choice Theory

Consumption, Production, and Distribution in Light of Islamic Economic Principles

When treating the problem of interaction among socioeconomic variables and policy variables and between the sharees, a characterization of Islamic social choice variables must be made. This leads us to consider the Islamic perspectives in the consumption, production, and distribution menus. Such menus are to be viewed with respect to the principal axioms (principles) and instruments of an Islamic economy.

The Qur'an treats the Islamically requisite acts of consumption, production, and distribution in relation to humanity's felicity attained therefrom, first in this life through acts of righteousness and, through this, in the attainment of supreme felicity in the hereafter.⁵ Therefore, these acts are regarded as forms of worship. On the other hand, the Islamically nonrequisite acts in these same areas are treated as forms of disbelief and are equated with sin.⁶ Thus in the relationship among the main principles of an Islamic economy, felicity is attained through acts of labor, production, consumption, and distributive equity. Compliance with the Shari'ah in these directions establishes the principle of the unity of God as the Creator and Sustainer of the universe, with humanity acting as His vicegerent entrusted with the rightful use of the resources. This is the principle of *tawhīd* (unity of God as the Creator, Absolute Owner, and Sustainer of the universe) and human solidarity. It forms the central principle of the Islamic political economy.

The environment of Islamically requisite production and entitlement formation by workers is then established under the institution of cooperation and profit sharing (*muḍārabah*). Moderation in the consumption of Islamically

⁴H.A. Simon, "Decision Making and Organizational Design," *Organization Theory*, op. cit. Muslim political scientists have traditionally held the narrow view of *shūrā* as simply a political organization. See F. Rahman, "The Principles of 'Shura' and the Role of the 'Ummah' in Islam," *American Journal of Islamic Social Sciences* 1, no. 1 (Spring 1984), and M. H. Kamali, "Siyāṣah Shar'īyah and the Policies of Islamic Government," *American Journal of Islamic Social Sciences* 6, no. 1 (September 1989). A more extensive view of *shūrā* and its role is given by Shariati. See M. Yadegari, "Shariati and the Reconstruction of the Social Sciences," *American Journal of Islamic Studies* 1, no. 1 (Spring 1984).

⁵Qur'an 7:32 (tr. Yusuf Ali).

⁶Qur'an 7:33 (tr. Yusuf Ali).

requisite goods is established by the avoidance of waste (*isrāf*). This constraint is equally applicable to the production of Islamically requisite goods. Distributive equity denoting economic justice is established by the mandatory Islamic wealth tax (*zakah*), and the abolition of all forms of financial interest (*ribā*).⁷

Formation of Islamic Social Choices

The Islamic theory of social choice must center around the above-mentioned principles and establish social ordering in terms of them. We now turn to a formalization of this area. The tenets of the Qur'an, the traditions and sayings of Prophet Muhammad (Sunnah), the consensus of the Islamic community (*ijmā'*), and *ijtihad* are the tenets that must govern individual and group preference formation in an Islamic economy. As an aside, it should be noted that *ijmā'* can, under given pressing circumstances, be overruled by a *mujtahid*. Such a shuratic decision is known as *qiyās* and is considered an exception rather than a rule in the shuratic decision-making process.⁸

Consumer sovereignty is now relegated to the above-mentioned tenets in an Islamic social order. The implementation of the Shari'ah is left to an extensive consultative decision-making process. As shown earlier, the consultative body exists at various levels of institutions and society and is structured and integrated all the way up to the highest echelons. In the most ideal case, this highest echelon is the world-nation of Islam (*ummah*). At the most elementary level, it forms grass-roots *shūrās*.

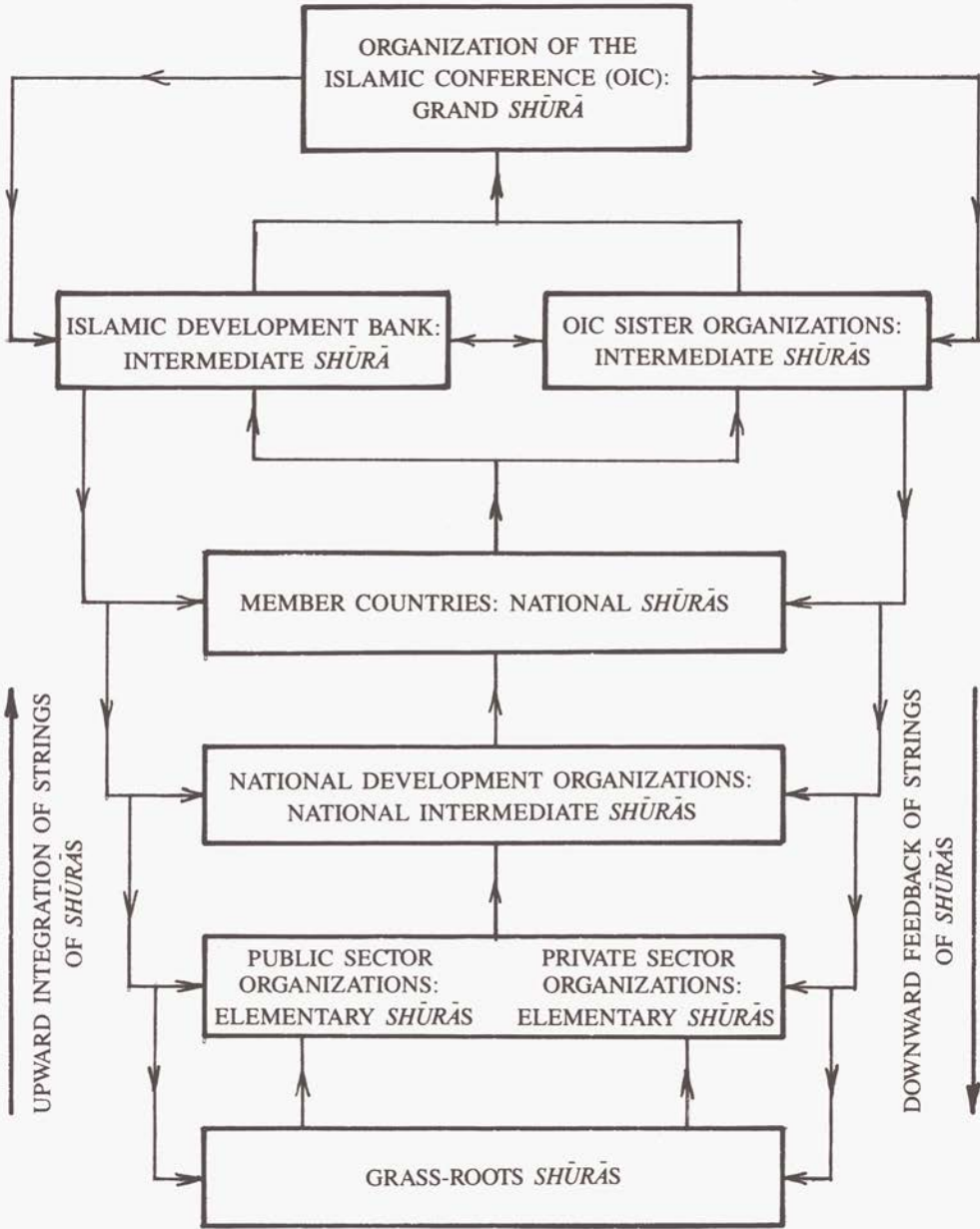
In this way, the process of Shari'ah implementation becomes democratic and decentralized, but the agenda of its implementation is derived from the Qur'an and its exegesis, not from the coercive will of individuals and the state to serve other interests. *Shūrā* cannot legislate new laws; it only implements and secures the Islamic laws together with the findings of *ijtihad* surrounding the interpretation of Islamic laws by *shūrā*.

Since simple consumer sovereignty is ruled out in an Islamic economic system, an Islamic social choice formation would not be based on an

⁷Details of these principles and instruments of the Islamic political economy are developed in M. A. Choudhury, *Islamic Economic Co-operation* (London: Macmillan & St. Martin's: New York, 1989), chap. 1, and his "The Blending of Religious and Social Orders in Islam," *International Journal of Social Economics* 16, no. 2 (1989).

⁸The emphasis on *ijmā'*-based shuratic decisions can be also found in Ibn Hazm. See, A. ibn Aḥmad ibn Hazm, *Al Fiṣāl fī al Milāl wa al Ahwā' wa al Niḥāl*, vol. II (Baghdad, Iraq: Maktabat al Muthannā, undated), and his *Mulakhkhaṣ Iḥbāt al Qiyās wa al Ra'y wa al Istiḥṣān wa al Taqīd wa al Ta'wīl*, ed. al Afghānī (Beirut, 1969). A. Cejne, *Ibn Hazm* (Chicago, IL: Kazi Publications, Inc. 1982).

Figure 1: Integration between Members and *Shūrās* in Islamic Decision Making.



interpersonal comparison of utility. The idea of utility is now replaced by the idea of social felicity. The Islamic democratic voter is thereby induced to decide on the basis of collective preferences formed through shuratic deliberations. Individual preferences are transformed in this milieu of decentralized but collective decision making, inducing thereby the social choices of the nation on given issues. This is not to say that individual choices and freedom are in any way subordinated; rather, the importance of shuratic social preference formation inducing individual social choices lies in the Islamic transformation of the individual and groups to form such preferences collectively under the guiding light of the Shari'ah. In an idealized Islamic politicoeconomic order, all aberrations from such a social choice formation would be comprised in the set of "irrelevant preferences" and would not play a role in the overall shuratic decision-making process. On the other hand, if such a social choice formation based on shuratic consensus formation and collectivity does not occur, then *shūrā* cannot impose its will as a democratic institution. It therefore removes itself from the particular issue. Thus, the premise of an Islamic transformation process through *shūrā* lies in the effectiveness of polity-market integration in an Islamic political economy.

A Comparative View of Social Choice Formulation

The above formulation of an Islamic politicoeconomic framework means that social preferences are of a definite type, and not just simple averages of the preferences of disparate groups within an Islamic state. Such social preferences do not imply subjective interpersonal comparisons of utilities. They cannot therefore be of the von Neumann-Morgenstern cardinalistic type, appearing as "expected" or average preferences over different groups of individuals. The idea of cardinalistic-type social preferences and social welfare function in an Islamic framework is thus based on a measurable form of the social welfare function defined by a set of group-specific critical socioeconomic indicators or welfare indexes constructed by these sets of variables. Also, because of the nonexistence of hedonistic preferences in shuratic preferences, strictly ordinal-type social welfare functions based on individual utilities of consumption or incomes are irrelevant. Consequently, the first order conditions of Pareto optimality do not apply in the case of Islamic social welfare optimization.

The optimization of an Islamic social welfare function takes place in terms of the grand social welfare function. This grand social welfare function evolves from the collective and integrated social welfare indices of group-specific shuratic social welfare functions. This, however, does not imply the maximization of each group-specific social welfare function while maximizing

the grand social welfare function. Consequently, neither the von Neumann-Morgenstern assumptions nor the Harsanyi assumptions on the additivity of cardinalistic-type social welfare functions are viable.⁹

However, because individual or group preferences are now transformed through the shuratic process of decision making to conform to social preferences, the following theorem can be applied to establish the additivity of shuratic social welfare functions into the grand social welfare function: There exists a social welfare function such that its expected value is maximized with respect to preferences conformable with given social preferences. The social welfare function is then unique up to a positive monotonic transformation.

There remains, however, the problem of accommodating interdependent social welfare indexes in the above-stated additive social welfare lemma. In the Harsanyi type additive form, the assumption of extreme egalitarianism that attaches equal probabilities to each social welfare index makes the above possible. In an Islamic economy, the probabilities associated with the additive forms of social welfare indices would mean the occurrence of states of nature and policy variables depending upon the occurrence of given contingencies or priorities/goals. These contingent probability measures provide the linkages among the social welfare indices in the shuratic sense. Such a formulation shows that there are significant differences between the additivity concept of the social welfare function in an Islamic economy and those given by Harsanyi and von Neumann-Morgenstern.

An Islamic Social Welfare Function Form

To summarize, differences in an Islamic social welfare formulation appear because of the following factors: Social welfare indices in an Islamic economy reflect group preferences formed by a mix of socioeconomic variables (which are of the measurable type) and of ethical policy variables that can be attached shuratic ordinal weights.¹⁰ The cardinalistic-type Islamic social welfare function is now redefined as a mathematical relationship of the social group's specific social welfare indices. Pareto optimal conditions of welfare maximization cannot exist in an Islamic economy for reasons we have explained earlier.

⁹These are summarized in P. J. Hammond, "On Reconciling Arrow's Theory of Social Choice with Harsanyi's Fundamental Utilitarianism," in G. R. Feiwel (ed.), *Arrow and the Foundations of the Theory of Economic Policy* (London, U.K.: The Macmillan Press Ltd., 1987).

¹⁰The derivation of such policy rules (known as *aḥkām*) from Shari'ah sources is based on the methodology of syllogistic deductionism. See A. Q. Gorji, "A Brief Survey of the Development of the 'Ilm Uṣūl al Fiqh," *Al Tawhīd*, III, no. 2 (January-March 1986). M. A. Choudhury, "Syllogistic Deductionism and Islamic Social Choice Theory," paper presented at the Sixty-Ninth Western Economic Association International Conference, San Diego, CA, July 2, 1990.

On the other hand, a well-defined interdependent shuratic social welfare function does exist. The interdependence among social welfare indices forming the grand Islamic social welfare function must be explained by contingent probability measures.

The cardinal form (or a measurable form) of a social welfare function in an Islamic economy requires the clear determination of the shuratic socioeconomic indicators in response to the principles and instruments/institutions governing an Islamic economy. In turn, this would determine the index of critical variables. Examples of important state variables that can be chosen are employment (denoted by the increasing number of people employed), income distribution (denoted by the increasing relative income shares of lower-income groups in the population), moderation in consumption (denoted by a declining consumption/investment ratio), profit sharing (denoted by an increasing profit-sharing ratio), and the transformation of wage labor into profit-sharing nonwage labor (denoted by a declining wage/profit-share ratio). Examples of important policy targets that can be chosen are price stability (denoted by low rates of inflation), economic growth (denoted by real-growth rates of output) and, above all, ethical policies (denoted, for example, by appropriate technology, a basic needs regime of consumption, distributive equity achieved through the disbursement of zakah, and the elimination of interest in financial transactions). The process of social consensus formation, an extremely important characteristic of shuratic decision making, requires that there be interrelationships between such sets of state variables and policy variables. Finally, in the intertemporal framework of decision making and over various contingencies of nature, the social consensus formation translates into the principle of ethical endogeneity.¹¹

The principle of ethical endogeneity states that there is an intrinsic two-way relationship between polity (policy variables) and the market system (state variables) in an ethicoeconomic order. In such interrelationships, both policy variables and state variables feed back upon each other in a dynamic labyrinth of social transformations. Such a property of the polity-market interaction generates locally, but not globally, stable solutions for state and policy variables in an ethicoeconomic general equilibrium system.¹²

¹¹This is the central theme around which the journal of *Humanomics* revolves. See various issues of the journal, which is published by Barmarick Publishers Ltd., Hull, England, and is edited by this author.

¹²M. A. Choudhury, "A Mathematical Formulation of the Principle of Ethical Endogeneity," paper presented at the Fifth World Congress of Social Economics, University of York, England, August 1988.

A Comparative View of the Shuratic Process in Light of Other Types of Social Norms and Negotiation Behavior

In modern times, we have other examples of negotiating systems in the mold of social welfare ideology. A good example is that of the Scandinavian social welfare system.¹³ However, we will not delineate this system in the context of a social security program; rather we will examine its philosophy and show how that philosophy forms social norms. The contrast or comparison with the shuratic process can then be established.

The Scandinavian social welfare system is often considered as a model for Western countries. It is based on two complementary premises—rationality and humanitarianism.¹⁴ In this philosophy, a combination of capitalistic ideals and socialistic modes of income distribution are adhered to. The principal goal of the Scandinavian social welfare system is the attainment of equality, which is purchased by the citizens through their payment of progressive taxes. In the milieu of Scandinavia's generous social welfare system, the ideals of alternative forms of work and entitlement formation, such as cooperatives, are upheld. Thus the disabling free-rider effect of social welfare is mitigated in the face of such productive programs in the labor market.

Preference formation in such a social welfare system is essentially of the liberal type, basing the Western concepts of social welfare and rationality on the classical Greek philosophy of society and economy. The concept of rationality is thus based on purely liberal foundations, wherein there is no scope methodologically for forming social preferences through the medium of collective preferences based on primordial norms or laws.¹⁵ Individual preferences reign supreme and feed into social choices.

Shūrā, on the other hand, drives its machinery toward a collective social choice formation. It seeks to establish social consensus on given issues through social choices based on the learning-by-doing process of negotiation, revision, and change.

The concept of rationality for *shūrā* is not based on the primacy of the individual will acting alone, but of acting collectively in conformity with Islamic law, as it can only exist to uphold and apply the Shari'ah. The complete abrogation of the Shari'ah cannot sustain the *shūrā*, and it then dissolves

¹³G. J. Dorrien, *The Democratic Socialist Vision* (Totowa, NJ: Rowman & Littlefield, 1986), chap. 6.

¹⁴H. L. Zetterberg, "The Rational Humanitarians," *Daedalus* (Winter 1984).

¹⁵B. R. Anderson, "Rationality and Irrationality of the Nordic Welfare State," *Daedalus* (Winter 1984).

itself as a democratic organization. Liberal philosophy, therefore, does not have any functional foundation in an Islamic political economy.

Thus in the Scandinavian social welfare system, when the precept of humanitarianism is raised in conjunction with the precept of rationality, all that ensues is a pragmatic approach to social welfare. This does not involve a transformation of the social order on the basis of any epistemological premise. This fact essentially forms a great difference between the seemingly decentralized and democratic negotiating organizations of the Western social order and that of Islam, for the latter strictly recognizes the epistemological base of the Shari'ah as the guiding force for social transformation within which social choices are formed and an Islamic political economy takes shape.

The end result of this fundamental difference between the nature of *shūrā* and that of Western politicoeconomic organizations is the following: The Scandinavian social welfare model, as an example of Western social welfare philosophy, tends to be a fragmentary model that does not have an abiding epistemological base of evolution other than its leaning on liberal political economic philosophy.¹⁶ The Islamic politicoeconomic basis of *shūrā* is strictly founded on the epistemological basis given to it by the Shari'ah. This represents the Islamic worldview and not a time-and-space-bound fragmentary model. Thus the emanation of the shuratic process, and consequently of Islamic social choices, must necessarily lie in the Qur'an and the Sunnah without any space-time restrictions.

An immediate consequence of this fundamental difference between Western and Islamic political economies can be seen in the two approaches to economic cooperation. Social cooperatives are given high value both in the Scandinavian social welfare system cooperatives as well as in an Islamic political economy. Yet the pronounced difference between the two institutional forms lies in the absence of interest-based financing in an Islamic system, the use of cooperatives as the ideal alternative to wage-paying labor market organizations, and the use of cooperatives for forming grass-roots entitlement. The elimination of interest-based transactions is accomplished in an Islamic economy by replacing them with profit-sharing institutions engaged in economic cooperation. We have mentioned above that this key instrument of an Islamic political economy forms an intrinsic link with its principles (axioms). Thus, social choices as regards cooperatives in an Islamic economic framework spring from the premise of its epistemological base, i.e., the Shari'ah.

In the Scandinavian social welfare system, cooperatives, however much applauded, are seen as contingencies for the betterment of the workers. Due

¹⁶L. Emmerij, "The New Conservatism in the West," *Third World Quarterly* 4, no. 3 (July 1982).

to the liberal foundations of the Western social order and its mixed economies in recent times, there exists an inbuilt structure of conflict between the forces of economic efficiency and distributive equity, while cooperatives are promoted for greater equality and participation in the economy. The root of this structural efficiency-equity conflict in the Western politicoeconomic order lies in the intrinsic competitive nature of, and the ethical neutrality of, Western economic reasoning. Western social and economic institutions that rely on these philosophical foundations must then necessarily reflect the underlying conflicting type of social choices.

Formalizing the Interrelationships among State and Policy Variables

We will now formulate the interrelationship among the social state variables and ethical policy variables in the context of maximizing the grand social welfare function in an Islamic economy. We proceed as follows:

Let a decision-set in an Islamic ethico-economic order be defined by:

$$D = ((X, Y): x \in \Omega X_a, y \in \Omega Y_b), \quad (1)$$

where:

$x = (x_1, x_2, \dots, x_n)$ denotes the vector of state variables.

$y = (y_1, y_2, \dots, y_m)$ denotes the vector of state variables.

'a' denotes the number of decision makers involved in consensus formation.

X_a denotes a set of state variables for the a^{th} decision-making group.

Y_b denotes a set of state variables for the b^{th} decision-making group.

The principle of ethical endogeneity gives rise to the following mappings:

$$\Theta_1: \Omega Y_b \rightarrow \Omega X_a, \quad \text{i.e. } \Theta_1 (\Omega Y_b) \subseteq \Omega X_a \quad (2)$$

$$\Theta_2: (\Omega X_a)^{-1} \rightarrow \Omega Y_b, \quad \text{i.e. } \Theta_2 (\Omega X_a)^{-1} \subseteq \Omega Y_b \quad (3)$$

Here the Jacobian $J(X_a) \neq 0$. Thus the differentiability properties of the function, Θ_2 , on the set ΩX_a , establishes the non-zero partial differentials of Θ_2 . However, the mappings being "onto," $\Theta_2 \cdot \Theta_1 \neq 1$ (identity mapping). The significance of the "onto" mappings is that the decision-set can be augmented by a larger set of state variables and policy variables as a society moves towards higher levels of ethical comprehension. In addition, there are interactive relations between these two sets of variables along the

optimal trajectories of social transformation. This optimal social transformation is denoted by:

$$T = T(x, y) \quad (4)$$

Both the ethical target set, ΩX_a , and the ethical policy set, ΩY_b , can be shown to be compact (closed and bounded).¹⁷ This makes the social welfare function, $T(x, y)$, well-defined on the decision-set.

In light of these interactive relations among the state variables and policy variables, their relationships are seen to be of the form:

$$y_i = h_i(x_1, x_2, \dots, x_n), \text{ with } (\partial h_i / \partial x_j) > 0. \quad (5)$$

$$i = 1, 2, \dots, m; j = 1, 2, \dots, n.$$

The well-defined shape of the social welfare function under given inter-relationships among the state variables and the policy variables can be shown in figure 2.

The Question of Social Conflict in Shuratic Decisions

In spite of the internal consistency given to *shūrā* by the principles, instruments, and polity-market interactions in an Islamic political economy, there exist chances of conflict between opposing views and participants. This is true also because of the learning-by-doing nature of the shuratic process. As a result, *shūrā* participants would have to set up ways and means of resolving such conflicts swiftly. This leads us to examine the case of social conflict resolution in *shūrā*, which falls under the principle of the independence of irrelevant preferences in *shūrā*. This is explained in figure 2 in terms of the complements of the decision sets (\sim).

In figure 2 we define the following symbols:

D_a denotes the decision (policy) set for attaining a target state variables or a vector of state variables, 'a'.

¹⁷J. M. Henderson and R. E. Quandt. *Microeconomic Theory* (New York: McGraw Hill Book Co., 1971), chap. 7. Also see M. A. Choudhury, *The Principles of Islamic Political Economy: A Methodological Enquiry* (London, UK: The Macmillan Press Ltd, accepted book manuscript, 1989). For concepts on closedness, boundedness, and connectedness in preference mappings, see, G. Debreu. *Theory of Value: An Axiomatic Analysis of Economic Equilibrium* (New York: John Wiley & Sons, Inc. 1959), chap. 1.

D_b denotes a similar decision-set for the vector of state variables, 'b'.
 $D_a \cap D_b$ denotes the common decision-set for state variables.
 W_a denotes the welfare map of D_a "onto" the social welfare set, S_a .
 W_b denotes the welfare map of D_b "onto" the social welfare set, S_b .
 $W_a \cap W_b$ is then the social welfare map of the common decision-set,
 $D_a \cap D_b$, "onto" the total social welfare set, $S(S_a, S_b)$.

The set $D_a \cap D_b$ is the social consensus set on the policy and state variables influencing the formation of the total social welfare set. Thus, $S(S_a, S_b)$ denotes this total social welfare function under social consensus formation.

The complement of $D_a \cap D_b$ is the conflict set mapped onto a non-consensus social welfare set that is a complement of $S_a \cap S_b$. The consequences of social conflict in *shūrā* have been mentioned earlier. Now the conflict may be resolved by *shūrā*'s recourse to the condition of irrelevant preferences. In an extreme case, i.e., when the Shari'ah is abrogated by certain actions and decisions in *shūrā*, *shūrā* participants remove themselves from the issue.

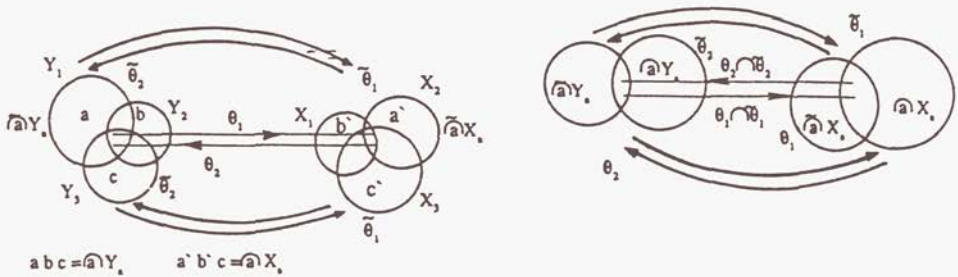


Figure 2: Social Welfare Mapping under Social Consensus Formation and Social Conflict Resolution.

Role of Profit Sharing in Islamic Polity-Market Interactions

Our next point is to investigate how the Islamic interrelationships among the above-mentioned critical state variables and policy variables explain social consensus formation as formalized above. We take the set of state variables to be employment and income distribution under the institution of profit sharing.

In Islam, the institution of profit sharing (*muḍārabah*) is essentially based on cooperation and production of appropriate goods with appropriate technology.¹⁸ This idea was earlier referred to as production and consumption of Islamically requisite goods using prescribed economic instruments. *Muḍārabah* is thus instrumental in an Islamic economy's capital formation. It is accentuated further by the ethicoeconomic conditions of the elimination of interest and the avoidance of economic waste in production and consumption menus. In this way, the attainment of the target growth rate in an Islamic economy is realized by organizing production and consumption around the ethical standards of appropriateness of such menus, the avoidance of economic waste, and the equitable distribution of income.

Income distribution and the direction of wealth and resources toward the productive transformation of human and physical capital among the poor is further promoted by the redistributive role of the Islamic wealth tax (*zakah*). In all of these interrelationships, the great importance of the market process within the overriding presence of the profit-sharing system under cooperation, as well as its social regulation in conformity with the Shari'ah, are maintained. The agency empowered by this overseeing duty is known as *al ḥisbah* (the Islamic social regulatory body for the market place).¹⁹

We have now come to the conclusion of this topic of interrelationships among the selected social state variables and policy variables in an Islamic economy. There are well-defined intrinsic interrelationships among these variables which are capable of establishing a well-defined social welfare function of the form $T(x, y)$ as formalized in the above section. The two-way causality shown by relationships of the type, $y_i = h_i(x_1, x_2, \dots, x_n)$, $i = 1, 2, \dots, m$ and, consequently, those of the type $x_j = g_j(y_1, y_2, \dots, y_m)$, $j = 1, 2, \dots, n$, explain the principle of ethical endogeneity and the simultaneity between efficiency and equity goals of an ethicoeconomy in general and of an Islamic economy in particular.

¹⁸The ideas of basic needs and appropriate technology were used in their rudimentary concepts by Imām Shātibī in *Al Muwāfaqāt fī Uṣūl al Shari'ah* (Cairo, Egypt: 'Abdallāh Drāz al Maktabah al Tijāriyah al Kubrā, undated). See also M. A. Zarqa, "Social Welfare Function and Consumer Behaviour," in K. Ahmed (ed.), *Studies in Islamic Economics* (Jeddah, Saudi Arabia: International Centre for Research in Islamic Economics, King Abdulaziz University, & Leicester, England: Islamic Foundations, 1980.) Since *muḍārabah* happens to be a key instrument/institution in the Islamic political economy, it must therefore attend to those basic needs and appropriate technology regimes in the environment of consumption and production that it promotes.

¹⁹Ibn Taymiyah, *Al Ḥisbah fī al Islām* (Beirut, Lebanon: Dār al Kutub al 'Arabiyah, 1967). For a more recent account of *ḥisbah* and its functions, see A. R. I. Doi, "Re-Islamization of the West African Ummah: A Model for Tajdid?," *American Journal of Islamic Social Sciences* 4, no. 2 (September 1987).

Conclusion

Our discussion above has brought out the following points in respect to Islamic social choice theory and social welfare function: Ethical goals play a primordial role in an Islamic economy in determining the structure of consumption, production, and distribution. These ethical goals and the instruments that mobilize them are based on well-defined principles and policy instruments that guide an Islamic politicoeconomic order. Among these sets of critical social state variables and social policy variables are intrinsic relationships that act in loops of feedback, thereby establishing the principle of ethical endogeneity. It is this principle that finally forms the shuratic social consensus in an Islamic order. Out of this social consensus formation emerges the structure of social preferences, wherein individual preferences are molded through interactive decision-making processes into collective social preferences. These social preferences are measurable and based on critical shuratic policies and socioeconomic state variables. Social welfare functions that so emerge are categorized into types. First, there are the individual or group-specific social welfare indices. Second, there is the grand social welfare function of *shūrā* expressed as an additive form of the individual *shūrā*—or group-specific social welfare indices. The interdependence among the latter type of social welfare indices, which is an important nature of the indices in view of *shūrā*'s interactive decision-making process, is shown in terms of contingency probability measures.

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