# ECONOMICS AS A SCIENCE: INSIGHTS FROM CLASSICAL MUSLIM CLASSIFICATIONS OF THE SCIENCES

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Abstract: This article seeks to emphasise the need to re-examine the foundational assumptions of modern economics, especially in light of the traditional Islamic idea of economic wisdom and Islamic conception of the science of economics as conceived by Muslim political philosophers. As argued by the philosophers and more generally the epistemologists every academic discipline or every science, including economics is structured on the foundation of four epistemic elements, namely, its subject matter, its premises, its methodology, and its objectives. Any attempt to rethink this science in Islamic terms needs to address in particular the issue of its foundational assumptions. These premises include beliefs about the modern homo economicus, what his needs are, and the kind of society best suited to help deliver these needs both at the individual and collective levels. This article will discuss these premises and the classical subject matter of economics by explaining the meanings of the two classical terms for economics, namely, tadbīr al-manzil (lit. 'household governance') and iqtiṣād (thrift, providence, and moderation). It concludes with the assertion that the progress of modern Islamic economics as a true science depends as much on the clarity and solidification of its foundational assumptions as on the building of its necessary institutions.

### Introduction

Every time there is a crisis in the world's economic or financial system and practices, which as everyone knows are basically modern western in origin and spirit, hopes run high in Muslim circles that the world will soon turn to alternative economics for inspiration and practical solutions for its 'societal salvation'. For these Muslim circles the alternative is obvious enough. It could not be other than the Islamic economic and financial system, notwithstanding its varied understandings. After all, it is the most visible and also the most viable alternative – not to mention its spiritual

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and ethical affinities with their Muslim identity. But unfortunately, except for a few voices, which are obviously not sufficient to sustain a true rebirth or 'Renaissance' of Islamic economics, the Muslim responses to one such crisis after another are largely *ad hoc* and superficial in nature. Even then, most of these responses tend to focus on the crisis like the current one at the level of practices alone. Only rarely is the crisis fathomed, as to reveal the more disturbing underlying causes that have precipitated it. The usual response is to be merely content with looking at its symptoms and addressing them instead of treating fully the underlying cause.

In this article, I try to draw an analogy between medical health and economic health. The analogy proves to be quite instructive in a number of respects. One of these pertains to the big difference between attempting to cure a disease by just treating its symptoms and attempting to cure it by treating its root causes. Traditional Islamic medicine is holistic in its view of health and disease. Moreover, it focuses on the treatment of the root cause of the disease. In contrast, allopathic or modern western medicine focuses on the treatment of symptoms. Likewise, Islamic economics is holistic in its view of economic health and ailments. It is primarily interested in addressing the root causes of economic ailments even if we were to grant the necessity of treating them at the level of practices itself. In contrast, modern economics and its related financial system are content with finding remedies to cure what seem to be mere symptoms of its recurring disease.

Keeping our analogy in view, we could then say that the Muslim response to the periodic economic and financial crisis engulfing our modern society – although calling for an Islamic alternative – is likewise generally confined to the treatment of its symptoms that are manifested at the level of institutions and practices. If Muslims, however, have Islamic economics as a serious alternative to modern economics in mind – embodied in western capitalism – then it won't be sufficient for them to delve into the crisis by simply arguing for new institution building or for reforming economic and financial institutions and practices. It would be necessary for them to look deeper into the very foundation of the present world economic system. A veritable Islamic response to the global economic and financial crisis would entail a thorough re-examination of the system at all levels and in all its dimensions.

Apart from the legitimate concern with the institutional weaknesses and shortcomings in ethical guidelines in the present economic and financial system the need to scrutinise the foundational assumptions of the system appears to be no less paramount. However, it is precisely such a scrutiny that is lacking among Muslims right now. Intellectually speaking, what this means is that there has to be a critical re-examination of the epistemology of modern economics and finance. Perhaps this re-examination if diligently and creatively pursued would then help to reveal the weaknesses and shortcomings many intelligent minds have long suspected in some of the fundamental assumptions of modern economics. Perhaps it would even reveal

also the obsoleteness of some of the other assumptions. But given the fact that the intellectual undertaking at hand will take time to bear fruit it needs to be sustained with the right kind of educational and research institutions and with material and moral support from all concerned with the task of realising a veritable Islamic economic and financial system in our contemporary world. Although research into foundational issues is primarily theoretical in nature it should not be shunned since it would be highly rewarding in the long run.

This article is primarily concerned with just one aspect of this major intellectual undertaking I have in mind. It is at once to offer a critique of some of the foundational assumptions of modern economics and to lay an epistemological foundation of Islamic economics. I will attempt to do this by analysing the notion of the science of economics both in its Islamic and modern western epistemological context. This article is partly inspired by the 2008 Hokkaido Science Symposium<sup>1</sup> in Japan in which I participated. This symposium, an interdisciplinary discourse contributed by a small group of participants but representing the major academic disciplines – the natural and social sciences and the humanities – as well as the major cultural traditions of the world, was convened with the objective of re-examining the foundational assumptions of contemporary science in the light of both the new frontiers of scientific knowledge and the new global consciousness of its own pluralistic nature.<sup>2</sup> Elisabet Sahtouris, a convenor of the symposium, has argued that there is a similar need for a critical re-examination of the foundational assumptions of the social sciences, particularly economics in the light of the same new epistemological and cultural realities to which I have referred. She also feels rather strongly that Islam has the potential to make a major contribution to the new science of economics that is now awaiting formulation.3

# Economics as a True Science: an Islamic Epistemological Claim

Economics is a true science. This was the unanimous judgment of classical Muslim philosophers, scientists, and epistemologists or theorists of knowledge. This was certainly the view held by the Peripatetic (*mashshā'ī*) school of philosophy and science, which was noted for its many original contributions to scientific thought as well as to social thought, including its political-economic dimension. Many distinguished and famous Muslim thinkers, philosophers and scientists were known to belong to this school. These include al-Fārābī (870–950), Ibn Sīnā (980–1037), Ibn al-Ḥaytham (d. 1039), 'Umar Khayyām (1048–1131), Naṣīr al-Dīn al-Ṭūsī (1201–1274) and Quṭb al-Dīn al-Shīrāzī (1236–1311). Al-Fārābī himself is generally considered as the most important founder of this school.

The idea of economics as a science first appeared in Islamic philosophical thought in the writings of Abū Yūsuf Yaʻqūb al-Kindī (801–873) in the ninth century, just

about two centuries after the death of the Prophet Muḥammad. In a short treatise on the classification of the sciences al-Kindī reaffirmed the epistemic status of economics as a science as inherited from the Aristotelian tradition and also the latter's intellectual legacy of the division of practical philosophy into the sciences of politics, economics and ethics.<sup>4</sup> Al-Kindī referred to this science of economics by the Arabic term *tadbīr al-manzil* which literally means household governance. Why traditional Islamic economics was named by this term will be explained later.

But what did the Muslim thinkers and scholars mean by economics as a true science? Before going to the specific subject of economics let us first discuss the idea of a true science as conceived by them.

## The Epistemological Basis of a True Science

Traditional Muslim writings on the subject of epistemology<sup>5</sup> tell us that they had a rather well-articulated idea of what a true science is, which was later to influence modern western scientific thought. They were very much concerned with the idea of science ('ilm) understood as an academic discipline or as an organised and systematic body of knowledge that fulfils certain conditions and criteria. They discussed the nature and characteristics of science understood in this sense. In its plural form the various sciences studied by them are referred to in Arabic as al-'ulūm (sciences). They studied the sciences from different aspects and with different objectives in mind. As I have sought to demonstrate elsewhere, a major intellectual concern of Muslim scholars and thinkers of various schools of thought was with the classification of the sciences (taqsīm al-'ulūm).<sup>6</sup>

In their study of science understood as an academic discipline our classical Muslim epistemologists came to the conclusion that all true sciences share at least four common fundamental characteristics. According to 'Umar Khayyām, for example, arguably the Islamic world's most famous mathematician, every scientific discipline "possesses a subject matter ( $mawd\bar{u}$ ) whose properties, essential or otherwise it investigates, and primary principles or premises (muqaddamāt) which it assumes to be true". He further maintains that each scientific discipline seeks to provide "an essential definition to the object and the principles and rules of the art". 8 Following the Aristotelian tradition, what Khayyām and other fellow Muslim philosopherscientists were saying was that, first of all, every science has a well-defined subject matter  $(mawd\bar{u})$ . Secondly, it possesses premises or assumptions  $(muqaddam\bar{a}t)$ that are assumed to be true in that science but none of which could be proved in that science. Thirdly, each science is characterised by its distinctive ways and methods (turuq; sing.: tarīqah) of investigating and studying its subject matter. In Khayyām's terminological expression, these ways and methods are "the principles and rules of the art". And fourthly, it has well-defined objectives (aḥdāf; sing: ḥadaf). As Khayyām puts it, the main goal of a science is to arrive at an essential definition of the object being investigated. Philosopher-scientists of whom he was a distinguished one have generally termed it the perfect definition (*al-ḥadd al-tamm*) or the perfect conception (*al-taṣawwur al-tamm*). This epistemological goal which is analogous to the modern idea of the perfect theory is attained through a gradual process of knowledge accumulation by means of a creative interplay between a progressive conceptualisation and the corresponding empirical and rational verifications.

Let me discuss a bit further each of these four epistemological characteristics of a true science. It is its subject matter which defines the scope and boundaries of a science and which, therefore, among others helps to distinguish it from another science. The subject matter provides the inexhaustible materials for study, investigation, research and analysis in that science. Depending on what kind of science it is, the materials in question could be concrete physical entities such as chemical elements and chemical reactions as studied in chemistry, energy and atomic particles as in physics or living organisms as in the biological sciences. Or, the materials could be abstract entities such as numbers and algebraic concepts as studied in mathematics, the human mind and human thinking as in cognitive psychology or cognitive science, and the divine reality as in metaphysics or theology.

Or again, the materials in question could be a combination of both physical and abstract entities such as human physical characteristics and human beliefs as studied in anthropology, and human behaviour and human intentions as in psychology. As to what constitutes the proper subject matter of the science of economics I will show later that it is very closely related in its meanings to what is implied by the two terms used for economics in Islam, namely, *tadbīr al-manzil* and *iqtiṣād* (being thrifty and provident; adoption of a middle course or moderate position in life).

The second fundamental characteristic of a true science pertains to its epistemological foundation. Every science has to make certain assumptions (*muqaddamāt*) about the natures and realities of the entities that constitute its subject matter. These assumptions are foundational in the sense that they serve as the most fundamental epistemological basis for the creation of ideas and conceptual tools that are needed for the growth, development and progress of the science in question. As an organised, well-defined and systematic body of knowledge, a true science is comparable to a good and beautiful building. Both need a strong foundation and a solid structure not to mention an architectural beauty, which, of course, reminds us of the fact that knowledge also possesses an aesthetic dimension. The main difference between the two is this: whereas in the case of a physical building the construction materials are physical objects, we have intellectual objects as building materials in the case of a science. These intellectual objects are ideas and concepts and derived entities such as definitions, postulates, hypotheses and theories.

The foundational assumptions are also foundational in the sense of their being belief statements that are accepted as true even though their truths cannot be proved in the science in question. We may say that there are epistemological beliefs underlying every science. It is the contention of classical Muslim epistemologists that these beliefs have been adopted as foundational assumptions of the science because they happen to be true, and they are appropriate for the science. Their epistemic status as assumptions in that science does not arise from their being untrue since on the contrary, they are indeed true statements. Rather, they are regarded as such since the proofs of their truths come necessarily from a source external to the science, namely, from another science higher up in the hierarchy of the sciences if we were to use a classical Islamic epistemological expression.

Notwithstanding this dependence on another science for the proofs of its foundational assumptions, it is in the nature of each science to accumulate rational truths and collective empirical experiences (among its practitioners) within its own body of knowledge that tend to confirm the truths of those assumptions. The more rational truths and empirical experiences it accumulates the more apparent it becomes that its assumptions are indeed true. Illustrating our discussion of the second characteristic feature of a true science, namely, its foundational assumptions, with the specific example of the science of economics, we may say that its foundational assumptions pertain mainly to the reality of man considered in relations both to his natural and cultural environments. Both nature and culture serve as important backgrounds to the Islamic understanding of economic life and of the idea of man as *homo economicus* or man as an 'economic being'.

Central to the subject matter of economics is man and his constructed social reality of which economic life is just one though a very important aspect. The conception of man and the conception of human social reality are therefore extremely important to a science of economics especially one that is claiming to be truly well-founded, scientific and all-encompassing. In the modern world in particular, these two conceptions, however, are hotly contested between the different schools of thought. There are not only different but also conflicting assumptions about man and human social reality between these different schools of thought. A true science of economics would conform to Islamic teachings on man and on human society. And such an Islamic economics would contend that there is much to be disputed about the assumptions or beliefs of modern western economics regarding the human reality both at the individual personal level as well as at the collective societal level.

For instance, the modern belief in the idea of man as the product of a historical, evolutionary process both in his physical and cultural aspects is found on many points to be at odds with the traditional Islamic idea of man, <sup>10</sup> which of course forms a foundation of the Islamic science of economics. This modern belief is very much an integral part of modern western economic thought right up to our present times.

The modern ideas of development, progress, technological society and incidentally also the idea of waste are all core elements of the modern conception of man. <sup>11</sup> This modern belief about man is actually philosophical in nature. It should therefore be established and proved philosophically through a higher science such as metaphysics as traditionally understood in and as insisted by, for example, Islamic thought. <sup>12</sup> But instead it is sought to be proved through the empirical sciences of biology and anthropology, both physical and cultural, which from the Islamic point of view is a great epistemological error. Classical Islamic thought on the other hand is based on the metaphysics of man which is thoroughly explained and clarified in a science that may be termed as spiritual anthropology, that is, a spiritual science of man. <sup>13</sup>

The third major characteristic feature of a true science is its well-defined methodology. Islamic epistemology is in agreement with the pre-Islamic Aristotelian methodological principle which may be stated as "only the like can know the like". What is meant by this principle is that there is a one-to-one correspondence between the nature of the object known and the nature of the cognitive instrument used by the knowing subject.14 The nature of the object sought to be known should be similar to that of the cognitive instrument<sup>15</sup> used by the seeker of knowledge in order to know the object in question. Without a strict observation of this methodological principle no acquisition of knowledge by a human being would be possible. For instance, to know physical objects we need to use our physical senses (al-quwwāt al-hassah); to know abstract objects that are rational in nature we need to use our reason ('aql) or the rational faculty (al-quwwāt al-nāṭiqah); to know God who is absolutely spiritual we need to use our cognitive faculty of the spiritual heart (qalb) or intellect ('aql); likewise we would employ our spiritual cognitive organs if we want to know spiritual objects such as the angelic world. And if we want to know the imaginal world ('ālam al-khayāl) and its contents such as the human psyche and the human imaginative powers then we need to use our imaginative faculty (al-quwwah al-mutakhayyilah) which embraces such internal senses (al-hawāss al-bāṭinah) as the faculty of memory (al-quwwāt al-ḥāfizah) and the faculty of estimation (al-quwwāt al-wahm).

Islamic epistemology teaches that there are many avenues open to man to the treasury of knowledge. There are many ways and methods of knowledge acquisition. This Islamic conviction so strong among many Muslims of every generation and age, especially when they were at their best in the pursuit of knowledge, is based on the qur'ānic teaching that God has provided man with different kinds of cognitive instruments and powers that would enable him to know both God and His hierarchy of creation as well as to know himself which is also structured hierarchically. A human being possesses multiple levels of consciousness and also multiple levels of cognitions. With this sort of understanding of the reality of the human microcosm human needs are bound to be perceived as varied and diverse even at the rational and

intellectual levels let alone at the physical and psychological levels. An important corollary of this qur'ānic doctrine is an acknowledgement of the epistemological principle that seeks to affirm a pluralistic scientific methodology according to which each true science would employ ways and methods (sing: tarīqah; manhaj) of study and research that are in conformity with the nature of its subject matter.

This qur'ānic based epistemological position is in great contrast to that presently adopted by the mainstream modern epistemology which seeks to impose a monolithic and uniform scientific methodology on all sciences and academic disciplines. We are now in a position to see a correlation between the foundational assumptions of a science and its chosen methods of study and research. This kind of correlation applies to the science of economics as well. The reality of man assumed in modern western economics is no longer the complete and holistic man with all his human needs encompassing the physical, the psychological, the rational and intellectual, and the spiritual as believed in the world's religious traditions such as Islam but rather the lesser and fragmented human being whose needs have been reduced to merely the physical and the mental. The traditional man assumed in Islamic economics has been subject to successive reductionisms first by rationalism<sup>16</sup> then followed by mechanisation, 17 empiricism 18 and evolutionism. 19 As a result, the reality of modern homo economicus has been reduced to the quantifiable and the measurable, thus confirming as true the claim made nearly a century ago by the French philosopher-mathematician, René Guénon that the modern world has succumbed to the reign of quantity.<sup>20</sup>

The norm in all the modern sciences has been the adoption and application of the kind of scientific methodology based on empirical and experimental studies that would allow for quantification and measurement. The unquantifiable and the immeasurable is at best ignored and at worst rejected as unreal. With this sort of epistemological belief it is only a matter of time before human reality becomes totally impoverished to the point of being content with a vision of a human being who is nothing more than an animal with mere physical needs but who happens to be endowed with reason. This impoverishment is bound to negatively affect the science of economics in how it looks at the issue of human needs and at the larger picture of the meanings and purposes of human existence.

Since the physical and the mathematical sciences are the most successful in producing results on the basis of the above-mentioned criterion of quantifiability and measurability it is not surprising to see widespread attempts by scholars and academics to set up physics as a model science to be emulated by the rest of the sciences. For instance, psychology tries to emulate physics by adopting the latter's quantitative methods of study. Thus we could see that a reductionism in the conception of man was to be followed by a corresponding reductionism in epistemology. Contemporary economics is seen to be falling into the same epistemo-

logical trap. It is in the context of this incompatibility between the epistemology of traditional Islamic science of economics with its methodological pluralism and the epistemology of mainstream contemporary economics that we need to understand why, as of late, there is a growing Muslim criticism of the latter.

The fourth and last major characteristic feature of a true science considered here is its well-defined objectives. It is the contention of classical Muslim epistemologists that each science seeks to know that aspect of reality which is implied by its subject matter. The main goal of a science is to acquire knowledge of the reality of the things under study. A science may have either theoretical or practical objectives or both. This fact is clearly displayed in the Muslim classification of the sciences in which a good number of the sciences are presented as having both theoretical and practical parts. Medical science and economics are good examples of a science with both theoretical and practical objectives, although they themselves are practical sciences. Ibn Sina defines medical science in his celebrated work, *The Canon of Medicine (al-Qānun fī 'l-ṭibb*) as that "branch of knowledge which deals with the states of health and disease in the human body with the purpose of employing suitable means for preserving or restoring health".<sup>21</sup> This definition of medical science incorporates both of its theoretical and practical objectives.

The theoretical objective of medical science, which is the concern of its theoretical part, is to know the reality of health and disease in the human body. It is therefore the aim of theoretical medicine to formulate a comprehensive and sound theory of health and disease, including its physiological basis which is itself based on the foundational assumptions about the human body. In the case of Islamic medicine, its theory of health and disease is based on the Islamic conception of the human body, particularly its physiological dimension. The practical objective of medical science, which is the concern of its practical part (practical medicine), is to secure and adopt suitable measures which would help to preserve or restore the health of the human body. This objective gives rise to the twofold division of practical medicine, namely, preventive medicine which pertains to the task of preserving one's normal state of health and therapeutic medicine which pertains to the task of restoring health in cases where the body has been inflicted with disease.

The science of economics too has theoretical and practical parts, a feature that is quite similar to the division of political science into its theoretical and practical parts as made by al-Fārābī and Ibn Rushd, two of Islam's most famous political philosophers. I have purposely mentioned economics alongside medical science as examples of a science with both theoretical and practical objectives. This is because there is a close analogy between medical science and economics. Both sciences are concerned with the fundamental issues of the health and diseases of the human body. But whereas medical science is mainly concerned with the health and diseases of the individual human body, the microcosm of the human world so to say, economics

is mainly concerned with the health and diseases of the collective human body which we call society. <sup>22</sup> More precisely, so as to distinguish it from political science which is also concerned with the issues of societal health, we should have said that economics deals with that component of the societal body which we normally associate with economic life and thought centred on the production, distribution and consumption of goods and services. The state of wellness of this particular component of the societal body is what we term its economic health. We do use the term quite often as when we speak of the economic health of this or that society or country although we may not fully grasp and appreciate its connotations. In the same vein we speak of its opposite or contrast as when we speak of the economic malaise of a society or country as a result of being inflicted with economic diseases even to the point of being chronic in nature.

Economic health has become a major preoccupation of our times. And rightly so, just like all other types of health, economic health is an issue about which we all should be duly concerned. Islam itself as a religion seeks to emphasise the importance of each of the major kinds of health – political health, economic health, moral and ethical health, and environmental health. It also sees these different types of health as closely interrelated, each needing the rest for its full realisation. We cannot expect to see and experience economic health in the real sense of the word in both our personal and communal life without the presence and contributory role of political, moral, and environmental health. There is therefore a lot of wisdom to be found in the traditional division of practical philosophy into its three major components, namely, politics, economics, and morals and ethics as to be found in the classifications of the sciences by such philosopher-scientists as al-Kindī, Ibn Sīnā, and Qutb al-Dīn al-Shīrāzī. In this division economics is seen as having politics and ethics as two of its closest neighbouring disciplines. One major implication of this view is that the disciplinary proximity in question ought to be well reflected in the learning and research of economics in educational institutions. Students trained in economics need to be well tutored in political science and ethics and moral philosophy as well. It is quite heartening to know that this traditional academic feature in the study of economics is still to be seen in a number of western universities but unfortunately not so in many universities of the Islamic world.

Qur'ānic and *ḥadīth* teachings appear to have anticipated the dominant role economics would play in modern life and civilisation in a number of ways. In illustrating this variety of ways of Islamic anticipation we may mention first of all the fact that there is a substantial economic content in the *sharī ʿah*, Islam's divine law. Quite clearly, there are much more economic teachings in the Qur'ān than in any other sacred scripture. Many qur'ānic verses and *ḥadīth*s deal with issues of wealth creation and distribution and poverty management, wasteful consumption and proper spending, and human activities of economic value such as in agriculture,

business and trade all of which are of concern to the *sharī* 'ah. From the very early period of the crystallisation of Islamic law into its many different branches and legal schools of thought economic jurisprudence (*fiqh al-iqtiṣād*) has emerged and remained as one of the major branches of the science of civil transactions (*fiqh al-mu ʿāmalāt*) thus testifying to the great volume of economic production and transactions in classical Islamic civilisation.<sup>23</sup> For Islam to claim that its *sharī ʿah* is the last of the divine laws to be revealed to humanity it has to possess within its revealed law teachings and practices in all domains of societal life that would serve the contemporary human needs of every century as well as serve as an allusion to the kind of world society yet to come. Divine guidance in Islam indeed extends to the domain of economic life in an extensive way.

Then there is the qur'ānic way of conducting spiritual and moral lessons for human beings by employing parables, metaphors and symbols drawn from the world of economic life such as from agriculture, business and trade. Many verses of the Qur'ān and *ḥadīths* deal with such lessons. One may say that these lessons seek to enlighten us with the different aspects of Islamic spiritual significance of economic life and thought.<sup>24</sup> In viewing the place and role of economic life in the history of Islam one can say that, prior to the modern period, the historical development of the religion and its civilisation was itself a witness to the increasing importance of economic life in the realisation of Islamic religious and social ideals and in the pursuit of "societal salvation" and human progress.

By 'societal salvation' I mean a society's state of health and wellness that is deemed necessary and sufficient to serve as a socio-cultural or civilisational ( $had\bar{a}r\bar{\imath}$ ) context for the ordinary human being or the average citizen of the state to attain his or her posthumous salvation. As I have earlier asserted, economic health is a major component of a society's health and wellness. Given the close relationship in Islamic teachings between human societal salvation in present terrestrial life and posthumous salvation Muslims are expected to attach great importance to the pursuit of economic health in the realisation of both types of salvation.

Given the importance of economic life in Islamic teachings and practices it is only reasonable for us to expect to see Islam's own unique approaches to the issue of economic health.  $Zak\bar{a}t$  (religiously prescribed alms-tax), one of the five pillars of Islam with its unique multi-dimensional institution dealing with taxation issues, and prohibition of usury  $(rib\bar{a})$  are two of the most fundamental principles governing the Islamic idea of economic health and wellness. Very much like in the treatment of medical health and disease which it sees as primarily the consequence of a person's life style and therefore as basically a human issue Islam views economic health and malaise as the product of a collective life style which groups within a particular human community have chosen to adopt. As such, the issue calls for the regulation of human behaviour both voluntary and state-imposed, in accordance

with the injunctions of the *sharī* 'ah within the framework of its ultimate objectives  $(maq\bar{a}sid\ al\text{-}shar\bar{\imath}\text{'}ah)$ .<sup>25</sup>

The most fundamental and also the most universal of these regulatory principles embodied in the *sharī ah* is the qur ānic doctrine of enjoining what is right (*amr bi 'l-ma rūf*) and forbidding what is wrong (*nahy 'an al-munkar*)'. So fundamental and all-encompassing is this principle in its applications that the Qur ān considers it as the foundational principle of community (*ummah*) building and the best formula of societal success ( $fal\bar{a}h$ ) and salvation, and the most important criterion of community or 'ummatic' excellence. Like all other sectors of societal life it is this same prescriptive doctrine that must govern the pursuit of economic life in Islam. However, only a wise, holistic, and efficacious application of this doctrine to economic activities and practices can ensure a balanced and sustained economic development and therefore economic health.

All things considered, the idea of economic health has therefore to prominently feature in the objectives of the science of economics. The main objective of this practical science is to gain knowledge of that aspect of social reality called economic health and also that aspect of it which is its negative contrast, namely, economic illness or malaise. In other words, economics seeks to know the states of economic health and illness in all their dimensions. It also seeks to know their respective causes, how economic health can be preserved, and economic illness avoided. As in medical science which seeks to restore the physical health of a body that has fallen sick the science of economics seeks to know how to treat economic diseases and how to recover the health of the societal body whose economic organs and parts have been inflicted with diseases.

In the light of the foregoing discussion, Islam is seen as having the inner resources – spiritual, religious, and epistemological – to effectively respond to the contemporary need for a new science of economics that will do justice to the total human needs, both individual and communal. In the course of discussing the four major epistemological features of every true science I have not only illustrated them by referring to economics in general but also pointed out what an Islamic epistemology and an Islamic socio-economic philosophy would dictate to the formulation of these features for an Islamic economics. In the following pages I will attempt to further concretise and refine the subject matter of economics as seen in Islamic perspectives.

# Household Governance: the Core Subject Matter of Economics

As asserted earlier, Muslim philosopher-scientists such as al-Kindī, Ibn Sīnā and Quṭb al-Dīn al-Shīrāzī defined economics as the science of household governance ('ilm tadbīr al-manzil). Some people may view this definition as obsolete in the

sense that it is based on the reality of economic life of a bygone era which may be considered as "primitive" in comparison to modern economic life. The purpose of this section is to show, on the contrary, that the classical Muslim definition is still legitimate and defensible. However, what I seek to defend is not the idea of limiting the world of economics to and identifying it with household governance or home economics. It is rather to defend the idea of identifying home management or home economics as the core subject matter of economics and also as a foundational element of "national" economics.

In my view, this is also the standpoint of the philosopher-scientists when they maintained that economics is the science of household governance. But if this is the case then their view of economics is not at all obsolete or "totally out of place" in the modern world. On the contrary, the subject variously referred to as household governance, home management and home economics continues to be taught formally and informally in many societies in an interrupted way. In fact, the subject has gained greater popularity in developed societies in recent decades as more people come to realise that the home and family institution is increasingly under the threat and at the mercy of modern economies.

Many people feel that the complex, technologically-driven modern economies have in cultural terms the devastative impact of depriving human beings of their individuality, identity and freedom to take control of their own lives and the lives of their family dependants. In natural terms, they see their impact on the environment as equally destructive. They are deeply concerned that this destructive impact will deprive the future generations of natural resources needed to support and sustain their life in a decent way. It is not an exaggeration to claim that modern economies have helped to destroy the traditional family and home institution in the developed and advanced countries without being able to offer a better one to replace it just as they have helped to destroy much of the natural environment, which is the larger, common natural home of the human species, which, of course, is irreplaceable.

The mutual influence and impact on each other between the family and home institution and the national economic system is thus not lost on these critics of modern economies. A science of economics and an economic system based on it that fail to define a clear place and role for home economics in the national economic life and even worse that deliberately marginalise or ignore it are bound to develop in a direction that would eventually weaken the family and home institution and put it in a state of crisis. In contrast, an economic system that is based on the fundamental and foundational character of home economics and household governance, as insisted, for example, by traditional Islamic economic wisdom, would likely have the effect of significantly strengthening the family and home institution which Islam and other religions, of course, prize very dearly.

The virtues of household governance are duly emphasised in traditional Islamic economic thought. There are many arguments for this emphasis. It is beyond the scope of this article to provide a comprehensive account of these arguments. I will refer to just a few of them for the sake of clarifying the traditional Muslim justification of conceiving household governance as the core subject matter of economics. First, the religion of Islam views the family as the most important social unit and also the most important social institution. Islam therefore seeks to protect this institution and preserve its health in every possible way. If economic health is one of these ways – and certainly it appears to be so – then its pursuit becomes necessary. It then becomes obligatory on the head of the family and indeed every member of it to cooperate in the management of the household affairs in order to ensure that its economic health is attained and preserved. The idea of the family as the most important social unit and social institution, which Islam teaches, is assumed to be true in economics. It is one of what is called the foundational assumptions of Islamic economics.

Second, insofar as the family or the home is considered as the most important social unit and social institution, it serves as an indispensable nursery where the seeds of the common good in society are being sown. "Every societal good begins at home", says a traditional maxim. According to another traditional maxim, "every charitable act begins at home". This means that all good societal values and virtues, including the economic ones, have to be first nurtured and cultivated within the family institution and the home environment it has created.

Third, the family institution is closely related to at least one of the al- $maq\bar{a}$ sid al-' $\bar{a}mmah$  (general objectives) of the  $shar\bar{\iota}$  'ah, namely, the protection of progeny. I am claiming here that there is an economic dimension to this relationship. The fulfilment of the overall economic needs of a nation, especially in such an economic system as envisaged in this article that seeks conformity with the teachings of Islam, presupposes the existence of a stable and healthy family institution. As an example to illustrate the relevance of my claim, in the modern experience of Singapore as a city-state, the relationship between its family institution and its economic growth needs has been a turbulent one despite its world fame as having the world's most successful state-sponsored social engineering.

Fourth, and the last to be listed and discussed here, is the argument of interdependence of the individual and communal dimensions of economic health and their balanced and mutually reinforcing roles in the development of society. From the point of view of the issues of household management and economic development it makes more sense if I were to understand the individual dimension of economic health as referring to the state of health of the family and home institution in economic matters. This last argument is in a sense related to all the three previous arguments. The idea of interdependence is implied in each of the latter arguments. But for the purpose of emphasis and also for revisiting the bodily health symbolism I have decided to treat the last argument as a separate and distinctive one. I am arguing here that the living societal body is alive and well to the extent that its constituent cells are healthy and functioning normally. For the societal body its constituent cells are none other than the family units.

Now, there is something significant about classical Islam's approach to the anatomy of the economic health of a society. Islam looks upon the family as the most important social unit to contribute to the economic health of a society just as its medical philosophy looks upon each individual constituent cell in the human body as the most important biological unit to contribute to the physical health of the body. Conversely, Islam views the state of economic health or malaise of society as a whole as being able to significantly influence the economic health of every family that is a constituent part of the society in question. This is quite in the same manner that the physical environment and factors external to the human body such as air and food and drinks being consumed can have an important effect on the bodily health.

From the point of view of Islamic social philosophy the real purpose of society having a healthy economy is to enable each individual person to fulfil his or her overall needs as a human being, embracing the material, the psychological, the intellectual-rational, and the spiritual. It would be the central concern of an Islamic economics worthy of its name to seek ways and means of how society could contribute through economic life to the fulfilment of each person's total needs. Generally speaking, it is through the family institution that each individual citizen is able to benefit from a nation's economic development and to share in its economic health. But the converse principle would be even truer in Islamic social thought. Each human individual is not to be seen as merely a beneficiary of the community's societal development. He or she is first and foremost a contributor to society's development and wellbeing. As insisted in several hadīths reported by Bukhārī and Muslim, the upper hand that gives is more honourable than the lower hand that receives.

In my view, the four arguments I have given are more than sufficient for the purpose of understanding the traditional Muslim rationalisation of household governance as the core subject matter of economics.

# Another Term for Economics: 'Ilm al-iqtiṣād

Another term used by Muslims for the science of economics is 'ilm al-iqtiṣād. The Arabic word iqtiṣād conveys the meanings of thriftiness, providence and moderation, all of which are important concepts in traditional Islamic religious thought in general and in Islamic economic thought in particular. These meanings are all related to the idea of human life style. Thus, on the basis of the linguistic meanings of iqtiṣād alone

we already have got the idea that there is a close relationship between economics and life style. An understanding of the Islamic economic philosophy in its broadest sense would help us to see this important relationship in an even clearer manner.

In Islam, it is the *sharī ʿah* that basically addresses issues of human behavioural patterns and life styles. One of the main goals of the *sharī ʿah* is to provide moral guidance and ethical codes of conduct that will enable human beings to lead a decent and healthy life style. A major characteristic feature of a healthy life style as emphasised by Islam is living moderately, which can have many positive implications for economic life. Moderation is the central pillar of the Islamic way of life. So central is the idea of moderation in Islam that it runs as a common thread through the entire gamut of its spiritual and societal teachings. Thus, significantly, the word *iqtiṣād* is used not only as a technical term in the specific sense of economics but also in the general sense of moderation traditionally referred to as the "golden mean" which applies to the whole domain of human life. The well-known theologian-jurist, Abū Ḥāmid al-Ghazālī (d. 1111), titled one of his many works as *Iqtiṣād fī ʾl-i ʿtiqād*, which may be translated as 'The Golden Mean in Belief'. The title implies that it is possible to speak of moderation in matters of belief and, consequently also, of its opposite, namely, "spiritual extremism".

It is fully justifiable to identify the Islamic identity, individual and communal, with moderation. It is the Qur'ān itself which defines the collective identity of the *ummah* or the 'ummatic' identity in terms of moderation (*wasaṭiyyah*)<sup>28</sup> and which at the same time characterises the model human community as one that practises moderation.<sup>29</sup> Further, the Prophet Muḥammad is known to have scolded a number of his companions, including Huzayfah, for displaying tendencies toward a kind of spiritual extremism by vowing to lead an extreme ascetic and monastic life that went against his own spiritual model and life style. He told them that if they persisted in their extreme behaviour then they no longer belonged to his *ummah*, meaning that their behaviour was tantamount to being 'anti-ummatic'. This rebuke by the Prophet of a particular instance of spiritual extremism among his companions only goes to confirm the truth of the claim that Islamic identity is synonymous with moderation.

In the more specific domain of economic life and practices that are of central concern to us here, the Qur'ān is even more vocal and emphatic in its pronouncements on moderation and extreme life styles. Wasting and hoarding of essential goods and extravagant spending are well-known factors that can contribute to economic ailments in society. The seriousness of these "economic crimes" is clearly reflected in the Qur'ān's condemnation of them. Says one verse on hoarding, "[...] and there are those who bury gold and silver and do not spend it in the way of God: announce unto them a grievous penalty". Another verse says: "[...] waste not by excess: for God does not love the wasters". The Qur'ān seems to be insisting on spending as a necessary activity for the economic wellbeing of society when it

praises the righteous (al- $muttaq\bar{n}$ ) as "those who spend whether in prosperity or in adversity".<sup>32</sup> But it should not be just any kind of spending. The spenders praised in the Qur' $\bar{n}$  are "those who, when they spend, are not extravagant and not niggardly, but hold a just balance between the extremes ( $qaw\bar{a}m$ )".<sup>33</sup>

The significance of the usage of both terms for the science of economics,  $tadb\bar{\imath}r$  al-manzil and  $iqti\bar{\imath}ad$ , is perhaps worth noting. While there is an overlapping of epistemological concern as conveyed in the overall meanings of the two terms, they also seem to complement each other in terms of their respective conceptual roles and contributions to what we may refer as a comprehensive Islamic science of economics and to Islamic economic thought and practices. In this respect, ' $ilm\ tadb\bar{\imath}r\ al$ - $manzil\ may\ be\ viewed\ as\ focusing\ on\ theoretical\ economics\ or\ the\ philosophy\ of\ economics\ and$  ' $ilm\ al$ - $iqti\bar{\imath}ad\ as\ focusing\ on\ practical\ economics\ (figh\ al$ - $iqti\bar{\imath}ad\ a$ ).

### Conclusion and Recommendations

In the foregoing pages I have sought to re-examine some of the foundational assumptions of modern economics in the light of classical Islamic conception of the science of economics. This re-examination is being taken with the hope that contemporary Muslim scholars in general and Muslim economists in particular will undertake a far more serious discourse on the need for a new Islamic economics that will succeed in synthesising traditional economic wisdom with the best of modern economic ideas. In my view, the progress of modern Islamic economics as a true science would depend as much on the clarity and solidification of its foundational assumptions as on the building of its necessary institutions.

The various ideas and views presented in this article have many *practical and policy implications* for contemporary Muslim economic thought and practices. Here, due to space and time constraints, I will just concentrate on three of these implications.

- First of all, there is a need for a few research institutes and think-tanks that
  would be doing serious research on conceptual and philosophical issues
  pertaining to economics from the Islamic perspectives.
- Second, the place and role of both home economics and jurisprudential
  economics in various colleges and universities need to be enhanced and
  brought into conformity with the teachings of Islam.
- Third, institutions and individuals responsible for economic planning in Muslim countries need to review their philosophies of economic development and their approaches in the light of the holistic idea of economic health as emphasised in Islamic social philosophy and as I have attempted to explain in this article.

### **Notes**

 The symposium, co-convened by Elisabet Sahtouris, a Greek-American biologist and economist, and Akio Shoji, President and CEO of Aleph, Inc., a Japanese company with a core business in organic farming products, was held at Sapporo on the Japanese island of Hokkaido on 24–26 July 2008. For a brief report on the symposium, see Osman Bakar, "The Spirit of Islamic Science in the Hokkaido Science Symposium", *IAIS Journal of Civilisation Studies* 1, no. 1 (October 2008), 203–7

- According to Sahtouris, in the light of the newfound cultural pluralism the still surviving non-western scientific traditions such as Islamic science should be given all the encouragement they deserve and the necessary cultural and epistemological space for their expressions and contributions to humanity.
- She emphasised this point more than once in her public lectures in Malaysia and Indonesia in December 2008 and July 2009. IAIS Malaysia is now in the process of editing and publishing the lectures as a monograph.
- 4. See Abū Yūsuf Yaʻqūb al-Kindī, Fi aqsam al-'ulum (On the Divisions of the Sciences). For a detailed discussion of this treatise see George N. Atiyeh, Al-Kindi: The Philosopher of the Arabs (Rawalpindi: Islamic Research Institute, 1966), 32–40; later reprinted by Kazi Publications (1977) and Kitab Bhavan (1994).
- 5. For detailed discussions of various aspects of traditional Islamic epistemology see Osman Bakar, Classification of Knowledge in Islam: A Study in Islamic Philosophies of Science in Islam (Kuala Lumpur: Institute for Policy Studies, 1992); later reprinted as Classification of Knowledge in Islam (Cambridge: Islamic Texts Society, 1998, Kuala Lumpur: ISTAC, 2006). See also Mehdi Ha'iri Yazdi, The Principles of Epistemology in Islamic Philosophy: Knowledge by Presence (Albany NY: State University of New York Press, 1992).
- 6. Bakar, Classification of Knowledge in Islam.
- 7. 'Umar Khayyām, Fī sharḥ mā ashkala min muṣādarāt kitāb Uqlīdūs (Concerning the Difficulties of Euclid's Elements), ed. 'Abd al-Ḥamīd Ṣabrā (Alexandria: Munsha'āt al-Ma'ārif, 1961), 2. Khayyām maintains that the premises belong to any of the following three categories: (1) elementary or self-evident propositions (awwaliyyāt); (2) principles which are demonstrated in another science or art; (3) postulates (muṣādarāt). None of these premises is established through the science in question.
- 8. Khayyām, Fī sharḥ, 2.
- 9. It was the modern philosopher-scientist Albert Einstein who once said that a mathematical formula is true, because it is beautiful, a statement evoking the same sentiment for the much neglected aesthetic dimension of knowledge in our modern times.
- 10. For a comprehensive critique of the modern biological theory of evolution and its extension to the socio-cultural domain in the form of such theories as social Darwinism from the perspectives of a number of academic disciplines, see Osman Bakar (ed.), Critique of Evolutionary Theory: A Collection of Essays (Kuala Lumpur: Islamic Academic of Science, 1987).
- 11. For a discussion of the mutual dependence of Darwinian evolution and its contemporary economic life and thought on each other in the furtherance of these key ideas in the modern conception of man and of human society, see Osman Bakar, "The Nature and Extent of Criticism of Evolutionary Theory", in: Osman Bakar (ed.), *Critique of Evolutionary Theory*, 113–36.
- 12. In traditional Islamic thought metaphysics is defined as the science of Reality which is equivalent to theology which is literally understood as the science of God. An Islamic metaphysics of man is discussed in spiritual anthropology where man is presented as the meeting point between God the Real and the Absolute and man the relative and yet reflecting the absolutely Real.
- 13. An Islamic spiritual anthropology deals among other things with the origin, nature and ultimate purpose of man, the meaning, place and role of ethnic identity which seems to find scriptural support in the Qur'an, and also with the holistic concept of human needs. It purports to provide a complete and holistic picture of who a human person is. For an introductory discussion of these ideas and

- issues, see Osman Bakar, "Islam and the Malay Civilizational Identity: Tension and Harmony Between Ethnicity and Religiosity", in: John J. Donohue and John L. Esposito (eds), *Islam in Transition: Muslim Perspectives* (New York and Oxford: Oxford University Press, 2007, 2nd ed.), 480–7.
- 14. For a detailed discussion of this correspondence between the cognitive instruments of the knowing subject and the various levels of objective reality that can be known, see Osman Bakar, *Tawhid and Science: Islamic Perspectives on Religion and Science* (Kuala Lumpur: Arah Publications, 2008, rev. ed.), chapter 2. See also the first edition, published under the title *Tawhid and Science: Essays on History and Philosophy of Islamic Science* (Kuala Lumpur and George Town, Penang: Nurin Enterprise and Science University of Malaysia, 1991) and the UK edition, published as *The History and Philosophy of Islamic Science* (Cambridge: Islamic Text Society, 1999).
- 15. For a detailed discussion of the different kinds of human cognitive faculties and instruments as indicated below see Bakar, *Classification of Knowledge in Islam*, chapter 2, especially 48–64.
- 16. Rationalism seeks to abolish the superiority of revelation over reason and equivalently the superiority of faith over reason. It succeeded in doing so in the history of western thought through the European Renaissance transformation of a God-centric worldview to a man-centric worldview, which may be regarded as the first reductionism to have happened in western thought. With this reductionism the angels were banished from the universe since their presence was no longer felt necessary to the human quest for a better understanding of how the universe works and functions.
- 17. It was Sir Isaac Newton, one of the most notable founders of modern western science, who laid down the foundation for the mechanisation of the universe through his mechanistic physics. The foundational assumption of this Newtonian physics is the idea of the universe as a machine governed by uniform and immutable physical laws that can be discovered by the human mind through empirical studies and that can be predicted in its physical consequences. This mechanisation of the universe may be viewed as another phase of reductionism in the modern western perception of reality. It led to a further depletion of the spiritual content of the universe resulting in a new awareness that the religious vision of the universe and therefore its source as well, namely, God. have become redundant. Deism, an eighteenth-century offshoot of the Newtonian mechanistic world-view has, in fact, taken the unfortunate step of cutting off the hands of God from the world of nature. Mechanisation has not only reduced the universe, the macrocosmic reality, to a machine but also the microcosm, the human body. Consequently, modern medicine as a science began to treat the human body as nothing more than a machine whose organic parts can be easily detached from its parent body for treatment and then quickly assembled back to it. For a good discussion of the reductionistic impact of mechanisation on western thought and on the modern sciences as well, see Fritjof Capra, The Turning Point: Science, Society, and the Rising Culture (New York: Simon and Schuster, 1982). See also the 3rd edition (New York: Bantam, 1983).
- 18. Empiricism is the philosophical belief that the world perceived by the five senses alone is real and that only empirical knowledge based on such perceptions is considered to be true.
- 19. Evolutionism is the philosophical belief that all organisms which constitute the whole of the plant and animal kingdoms that exist or have existed, including human beings, have developed from a few extremely simple forms or from one alone.
- See Rene Guenon, Reign of Quantity and the Signs of the Times (Hilldala NY: Sophia Perennis, 2004).
- 21. For Ibn Sina's discussion of the subject matter and the objectives of medical science, see the first book of his al-Qānūn fī 'l-ţibb which has been rendered into two English versions. See O.G. Gruner, A Treatise on the Canon of Medicine: Incorporating a Translation of the First Book (London: Luzac, 1930), and Ibn Sīnā, The Canon of Medicine: English Translation of al-Qānūn fī 'l-ţibb, vol. 1, adapted by Laleh Bakhtiar (Chicago: Kazi Publications, 1999).
- 22. Both al-Fārābī and Ibn Rushd have referred to human society as the macrocosm of the human world and the human individual as its microcosm.

23. For a good introductory account of the characteristic features of the *sharī ah* and its classifications into many branches see Mohammad Hashim Kamali, *An Introduction to Sharī ah* (Kuala Lumpur: Ilmiah Publishers, 2006), especially chapter 3.

- 24. For a discussion of the spiritual symbolism of man's economic life, see Osman Bakar, "Exclusive and Inclusive Islam in the Qur'ān: Implications for Muslim–Jewish Relations", CISMOR Journal (forthcoming).
- 25. The objectives are many, both general (*al-maqasid al-'ammah*) and particular (*al-maqāṣid al-khāṣṣah*), thus giving rise to many classifications of the *maqasid*. For a discussion of these classifications see Kamali, *An Introduction to Sharī'ah*, 126–31. The most widely and frequently cited classification is the one comprising of the five following general objectives: (1) protection of religion (*al-dān*); (2) protection of intellect-reason (*al-'aql*); (3) protection of life (*al-nafs*); (4) protection of property (*al-māl*); and (5) protection of progeny (*al-nasl*).
- 26. The Qur'ān says: "Let there arise out of you a community (*ummah*) inviting to all that is good, enjoining what is right, and forbidding what is wrong. They are the ones to attain success and prosperity" (3:104).
- 27. In the words of the Qur'ān, "you are the best community (*khayra ummat*) evolved for mankind [because] you enjoin what is right and forbid what is wrong and you believe in God" (3:110).
- 28. The word *wasaṭiyyah* is synonymous with *iqtiṣād*. For a good discussion of the qur'ānic principle of *wasaṭiyyah* and also its etymological and conceptual relationship with the idea of *iqtiṣād*, see Mohammad Hashim Kamali, "The Middle Grounds of Islamic Civilisation: The Qur'ānic Principle of *Wasaṭiyyah*", *IAIS Journal of Civilization Studies* 1, no. 1 (October 2008), 7–41.
- 29. Says the Qur'ān: "Thus We have made of you an *ummah* justly balanced so that you might be witnesses over the nations, and the Messenger a witness over yourselves [...]" (2:143).
- 30. Qur'ān 9:34.
- 31. Qur'ān 6:141.
- 32. Qur'ān 3:133-4.
- 33. Our'ān 25:67.