

## The Methodology of Islamic Economics

Seyed Kazem Sadr\*<sup>1,2</sup>

Received: 2018, May 29

Accepted: 2018, July 19

### **Abstract**

This paper investigates the conformity of market participants' decisions with the Islamic codes of conduct from the economic and philosophical perspectives. At the outset, the contributions of the renowned contemporary Muslim philosophers on the epistemological issues between the "is" and the "ought" are presented. Subsequently, a synthesized construct that would resolve the dichotomy between the normative and positive economy is outlined. The approach and the conclusions of this paper are expected to alleviate the dissatisfaction expressed by many Muslim economists for the sole application of the normative or positive economic methodology in the field. Furthermore, the paper validates arriving at conclusions in line with Islamic ethical norms by an empirical study of the actual economic behavior of market participants. The conclusions of this paper are not limited to economics but are expected to be applicable to all Islamic social sciences where similar issues are disputed.

**Keywords:** Islamic Economics, Economic Methodology, Epistemology of Science, Philosophy of Economics, Normative versus Positive Economics, Is and Ought Copula, Virtue and Vice Concepts, Context of Discovery and Justification.

**JEL Classification:** A12, A13 B41, B15.

### **1. Introduction**

Many Islamic economists contend that the economic study of private and public sectors of the economy should incorporate Islamic rules and ethics with the actual observable performance of the agents. The study should ascertain if the behaviour of the participants is in conformity with the Islamic moral norms. If not, the inquiry should identify the deterring impediments of misconduct and suggest policies to bring

---

1. Faculty of Economics and Political Sciences, University of Shahid Beheshti, Tehran, Iran (Corresponding Author: k-sadr@sbu.ac.ir).

2. The author is indebted to Dr. Hasanali Ghanbari and Dr. Hamed Tabatabaei for reviewing the original draft of this paper and providing valuable comments to improve it.

participants' behaviours close to Islamic norms. In this way, the Islamic economists appeal for a synthesis between the normative and positive analyses.

The feasibility of such integration is in essence an epistemological question about the possibility of integrating of the "is" and the "ought" concepts. To investigate the possibility of this integration, we need to analyse the ontology of the "is" phenomena that actually exist in the economy, as well as the "ought" concepts as manifested in ethical values that motivate the participants' decisions. Then we should focus on the interaction between the "is" and the "ought".

Philosophical understanding of the interaction between the "is" and the "ought" helps us understand descriptive and normative economics. Although all economists are concerned with policies that change the prevailing economic *status quo* to an efficient level, and contend that policy prescription is the task of normative economics, the methodology of normative economics is rarely elaborated. The question is how to motivate the participants' economic decisions to comply with the prescriptions of economic policies. Correspondingly, Islamic economists ask how to direct the actual market participants and public official decisions to be in line with the Islamic ethics and norms of business and governance.

The posited issues are critical for conducting any Islamic economic study and this paper aims to investigate those from the contemporary Muslim philosophers and economists' perspectives. At the outset, the epistemological views of a few renowned contemporary Muslim philosophers, namely, Mohammad Hosain Tabatabaei, Mehdi Hairi Yazdi, Morteza Motahhari, and Mohammad Baqir Sadr will be presented. Then, these epistemological views will be used to suggest a solution to the economic problem presented above.

The approach and the conclusions of this paper are expected to alleviate the dissatisfaction expressed by many Muslim economists for the sole application of either normative or positive economic methodology in the field (Zaman, 2006 & 2012). The conclusions are also expected to be applicable to all Islamic social sciences, where the researchers dispute similar issues.

## **2. The Essence of Islamic Economics**

Although many Muslim economists and scholars have devoted efforts to introduce the Islamic economic ethics and institutions as well as the characteristics of an Islamic economic system (e.g. Ahmad, 1994; Iqbal, & Mirakhor, 2007; Askari, Iqbal & Mirakhor, 2009 & 2015; Chapra, 1992; Toutounchian, 2009; Sadr, 2003 & 2016) no consensus has yet emerged about the methodology of the Islamic economics discipline. Some scholars have questioned if such discipline is at all a meaningful kind of knowledge, and pressed that economics is a scientific discipline alien to Islamic judicial and philosophical discourses. As there are no Islamic physics or chemistry, the sceptics question if there is Islamic economic science. The debate continued until the renowned reverend, Martyr Seyed Mohammad Baqir Sadr (1982) resolved the debate. He expounded that Islam endorses and encourages the use of all physical and social sciences including economics to solve the problems faced by Muslims in their daily lives. Nevertheless, it embodies an economic school that is not a science, but prescribes certain codes and rules of economic conduct. The goal of this school is to provide a comprehensive system of thought and worldview, to introduce incentives for individual and collective behaviour, and to institutionalize property rights and policy prescriptions that would elevate the prevailing undesirable economic conditions to an optimal just state (Sadr, 1969 & 1982). According to Sadr, Islam offers a normative economic school that sets the goals and rules of economic behaviour and proposes an ideal state to which any economic system should ultimately transform and evolve. Although in this view Islamic economics is described as a normative discipline and not an empirical science, Sadr believes that an economic science could emerge in the future that is based on Islamic normative economic principles.

Martyr Sadr agrees with the general view that scientific knowledge is acquired by empirical studies. However, he sees a way that this can be merged with the Islamic normative principles. Suppose an ideal Islamic economic system is established where all the rules of exchange and property rights are along with Islamic values and Islamic moral norms constitute the business ethics and objectives of participants in the private and public sector of the economy. Then such a market provides a platform for empirical investigation and testing of the proposed

hypotheses and presenting economic theories. However, prior to realization of such a perfect Islamic state, only hypothetical models can be formulated (Ibid).

Proposing an ideal system is not unique to the Islamic school of thought; all other schools also suggest ideal states of economies, which are at discrepancy from their real world counterpart. Yet, economists do engage in studies that would change the existing state towards what is taken as an optimal system in their models. The conversion of actual economic phenomena to what they ideally ought to be is in fact a universal challenge in economics.

### **3. Normative versus Positive Economics**

Philosophers classify knowledge into pure reason and practical reason (Hairi, 1982). The former investigates ontology and causal relationship among the phenomena that exist, while the latter deals with those phenomena that are made by human beings. The former is concerned with the “*is*” whereas the latter with the “*ought*” statements. The relation between these two classes of knowledge should be clarified. Is there a logical relationship between the “*is*” and the “*ought*” statements as put forth by Hume (1888), or is there a complete dichotomy between normative and positive economics as claimed by Robbins (1935) and Friedman (1953)?

This discourse is philosophical in nature; to answer these questions both the ontology and the epistemology of these two categories of knowledge should be considered. However, to relate the discussion to economics, the economists’ views will be first reviewed. Next, the philosophical discourse will be presented to discover the essence of the debate.

John Neville Keynes (1917) is frequently cited with reference to the importance of separating the two kinds of economics. He considers that normative and positive economics are bodies of systemized knowledge being concerned with the ideal and the actual phenomena, respectively. The object of the former is determination of ideals, and that of the latter, establishment of uniformities. “The problem whether political economy is to be regarded as a positive science or as a normative science, or as an art, or as some combination of these, is to a certain extent a question merely of nomenclature and classification” (Keynes, 1917: 34-35).

Note that Keynes does not argue about the two economic categories having no mutual relationship. However, as D. W. Hands indicates, the importation of logical positivist ideas led to the adoption of strong version of the dichotomy by the economists (Hands, 2012: 721). In this tradition, not only it was necessary to distinguish that the two kinds of economics are fundamentally different, “it was argued that the normative was scientifically illegitimate and should be prohibited from proper economic science” (Ibid: 722).

One of the influential economists that emphasized separation of the two kinds of economics was Lionel Robbins, who maintained “the two fields of inquiry are not on the same plane of discourse” and there is a logical gulf between them (Robbins, 1935, p.148). The views of Robbins were followed in the next few decades by many; among them is Milton Friedman (1953). Although the methodological views presented by Friedman differ from those endorsed by Robbins, Friedman’s views of the dichotomy in economics was essentially similar (Hands, 2012: 722).

After reviewing the stances of modern economists regarding the debate, and the use of value-loaded efficiency criteria, such as Pareto optimality, by positive economists, Hands (2012) concludes that strict dichotomy between the two concepts cannot be endorsed. He argues that not all normative statements are ethical. For example, when one is advised that he ought to do more exercise or ought to study seriously, it is not meant that if he does not follow those recommendations, he is an unethical person. Further, Hands cites cases that in fact “*is*” does imply “*ought*”. If it is a fact that decision A causes more pleasure than decision B, then for a Utilitarian, A ought to be done. On the other hand, there are also times that the “*ought*” determines the “*is*”. Sociologists argue that people are sociable agents and they share common values. Therefore, majority of people do what they *ought* to do and what they do forms what the social norms are. Some other times, according to Hands, moral “*ought*” implies “*can*”. For example, After John Maynard Keynes showed that boosting aggregate demand by government expenditure could increase output and employment; it became an acceptable economic policy. It implied that in recession periods, the government *ought* to increase expenditure for increasing employment. Prior to Keynes such possibility were not perceivable. However,

subsequent to him, the impact of fiscal policy on aggregate output and employment was recognized, and reducing unemployment was possible by fiscal policy. Thus, it became a policy that governments *ought* to adopt. Hands, however, emphasizes that none of the examples given imply that “*ought*” is deductible from “*is*” or vice versa, but the two categories are extremely intermingled together and the dichotomy should be disinflated (Hands, 2012).

#### **4. Pure Reason, Practical Reason and Ethics**

What are the domains of pure reason and practical reason and the relation between these two segments of the knowledge? According to Avicenna, pure reason deals with the being of objects that are independent from human volition while practical reason examines the being of events that are made by human will (Hairi, 1982). Prior to him, Farabi (2016) has stated that pure reason enables man to discover and investigate the being of real objects that are outside the scope of his action, whereas practical reason allows man to recognize and investigate the being of the products of his own decisions.

Hairi (1982) follows this classification and states that ethical judgment and the events that are created by human volition all belong to practical reason. On the contrary, objects that are independent from human action and the relationships between such objects belong to the pure reason. Following Farabi and Avicenna, he argues that people do not immediately make a decision when they wish to do something. The process of decision-making starts with appetite for something and feeling its utility. Unless this desire is boosted to become a zeal and the person becomes assured that he “*ought to*” make a choice, the process of decision-making will not be completed.

To elaborate the exposition, he classifies the concepts that we imagine into two kinds. First are the images and perceptions that their corresponding real counterparts are found outside our mind in the real world and we can directly discern their match. For instance, when we see a tree or a building and obtain its image in our mind, we realize its reality and discern the perception and say: this is a tree or that is a building. These concepts that have real correspondence outside our mind will be conceived directly and their perception requires no other mental analysis. They are called facts.

The second category of concepts includes those, which do not have real correspondence outside the mind but are abstracted from the real objects. Concepts like above and under, motherhood and fatherhood, although derived from real external objects, do not have real correspondence outside and cannot be pointed to. These two groups of concepts are discussed in philosophical deliberations. There is a third type of concepts, called pure conventions that is excluded from philosophical discourse, because it is neither directly elicited by nor is it extracted from real objects, but it is arbitrarily made by legal bodies or scientists. Concepts such as proprietorship, government, wedlock, slavery etc. are of this type.

According to Hairi, the “ought”, “must” or “necessity” concepts belong to facts and not to the imaginary concepts. They are derived by logical judgments and are therefore included in philosophical studies. They indicate the intensity of being. When they are included in describing phenomena that are volitional, they are called “ought or necessity” copula. When they are applied in non-volitional descriptions, they are “is” predicate. Both usages are discussed in philosophy and will be expounded further below. Clearly, all ethical statements fall in the “*ought*” category.

To explain the relation between the “*is*” and the “*ought*” statements further, Hairi refers to Hume’s (1888) objection to concluding the *ought* or ethical judgments from pure reason or *is* statements. He in fact implies that in any syllogism, the consequence must have logical and casual relationship with the major and minor premises. If the two premises are deductive in nature and are of the “*is*” type, they cannot produce an “*ought*” conclusion. This objection is not specific to ethical judgments and is likewise applicable to non-ethical statements, examples of which were given by Hands. This also applies to pure reason problems, according to Hairi (1982: 50).

The “*ought*” phrases in both ethical and pure reason propositions are modalities that explain the relationship between the subjects that exist. Thus, they are existential modalities. The difference between the ethical and non-ethical “*ought*” phrases is that intelligent subjects capable of entertaining ethics, whereas the latter are generated by non-intelligent beings, express the former events. Therefore, the only element that attributes the real beings to ethical facts or beings is the performative

will that creates them. In other word, it is the choice and the will of the efficient cause of their creation that is expressed by *ought* statements. Making and doing are the attribute of the human, which is accompanied by responsibility and obligation (Ibid, 51). Actions and events of intelligent persons that become actual beings after they are emanated or made, are described by *ought* statements before their happening. In other words, the “*ought*” statement describes the options for action up to the moment that the action is performed by the responsible and intelligent subject. After it is done, the action is out of the control of the responsible person and the *ought* or the *shall* statements are converted to beings (Ibid: 53).

### **5. Logical Reciprocity between “*is*” and “*ought*” Statements**

Hairi argues that Hume’s objection is twofold: one refers to the type of conjectures that “*is*” and “*ought*” are, and the second regards the conclusion of *ought* statements from that of *is*. The first part was already dealt with above and the second will be dealt with here.

The “*ought*” statements are derived from those of “*is*” by two logical deductions. The first deduction is a general apprehension related to the pure reason as stated below:

Minor premise: Poverty reducing policies are viable economic policies.

Major premise: All viable economic policies deserve adoption.

Consequence: Poverty reducing policies deserve adoption.

In this deduction, the two premises and the conclusion are general and belong to pure reason, not the practical reason as far as the form and conditions of syllogism is concerned. To arrive at a specific deduction stemmed from this general deduction, we constitute the following deduction:

Minor premise: Investment promotion policies reduce poverty.

Major premise: All poverty-reducing policies deserve adoption.

Consequence: Investment policies deserve adoption.

The conclusion of this latter deduction, which is derived from the previous one, implies that governments should boost investment activities. As this conclusion stems from a general pure theoretical premise, it belongs to pure reason and is an intellectual inference. However, this special deduction has a practical consequence that falls

under practical reason. Thus, practical reason outcomes and events are logically derived from pure reason.

The concluded facts of the pure reason deductions and the concluded decisions of practical reason are both necessary beings. The only difference between the conclusions of the deductions of practical reason and those of pure reason is that the actual being or occurrence of the conclusion of the practical reason is conditioned to the will of intelligent agents who entertain them. Ethical *ought* or *must* refer to the power and decision of persons. That means when they wish and decide to do something they make their decision happen, or in other words, bestow necessity of being to their decisions. As soon as the agents' will is determined, the agent does that decision, and the decided event becomes a necessary being. Thus, "*ought*" deeds are volitionally necessary beings whereas logical "*is*" facts are non-volitional necessary beings. The former phenomena belong to normative ethics, the latter to meta-ethics or pure reason.

It should also be noted that on top of above-mentioned decisional beings that stem from the agents' will, there are also legal or juristic necessities that emanate from the will of legislative and juristic authorities. The rules and orders that authorities issue affect the will of abiding agents and their conducts. Therefore, the behaviour that legal maxims and regulatory codes impose upon agents is emanated in the will of law-abiding agents. Such legal actions become beings only if agents decide to perform them (Hairi, 1982: 105).

## 6. The Volition Process

The process of decision-making is composed of the following stages (Al-Farabi, 2016):

1. Imagination of the good to be consumed or the action to be taken.
2. Acknowledgment or affirmation of the benefit of what is imagined.
3. Determination to make a choice and finally
4. Making the decision.

This process is described by both Farabi and Avicenna. Allameh Mohammad Hosein Tabatabaei has added an element to the above process: the judgment of the self, or the command that *one must do this*. This is not a theoretical judgment or confirmation of the usefulness of

the decision. It is rather an excogitative opinion or command. Tabatabaei believes that in all optional choices there is an excogitative command that orders: this must be done or must not. It is this command or must that makes the person follow his intrinsic and natural aims (Motahhari, 1981: 388).

Tabatabaei's argument starts by the observation that the human body, like that of plants and animals, needs food to empower itself. Unlike the plants that automatically absorb nutrients and animals that by their instincts, human beings rely on two devices: to satisfy their basic needs; the natural device, and the deliberative and volitional device. The latter is always employed by the former to satisfy the natural needs or aims of the body. The soul feels the need to fulfil the natural needs by natural causes. After the termination of the volition process and emanation of the excogitative command, the decision is made (Ibid: 388).

It should be noted that will and volition are different from desire. In Avicenna's terms volition differs from fervour and appetite. Volition refers to that state of self where intellect is present and calculates, rationality has the primal place. The more calculus and rationalization by the mind, the stronger is the will (Ibid, p. 416).

Hairi, however, as described above, considers the process of decision making to be a logical process. He states that unless valid causes are deployed and are put in logical order, the hesitation by the subject to make a decision will not be overcome and a conclusive decision will not be taken. The subject is relieved from the dubious state of mind when the causes and means of being reach a decisive state and create a determined decision. When the choice is made, the action would necessarily appear. Thus, the events that are made by agents are the results of the intellectual calculus the agents make in advance. Mere desire to do something is not sufficient for arriving at a decision. Unless the will would reach the determined state, the deliberative events will not happen. It means that the events come into being when the decision is made and the "*shall or ought to do something*" will become real being when the will for making it becomes decisive and affirmative. In fact, all real objects are necessarily affirmed to be; being is equivalent to necessity and vice versa (Ibid, p.195).

In conclusion, the behaviour that we ought to perform emanates from

judgements that we make logically. These judgements create willingness in our conscious to make a decision. Our decision will end up in action when that willingness for doing it becomes so intense that we get determined to perform the action. Our performance is a factual reality after our decision is made. Thus the “*ought*” statements or ethical or volitional actions that follow those are all emanated from logical judgements and reasoning. The causes and means of all these inferences are real external objects. Therefore the “*ought*” term in practical reason has the same implication as does the “*is*” term in pure reason. The only difference is that the *ought* is associated with phenomena that are realized willingly by the human via deliberation while the *is* belongs to events out of the scope of man’s volition.

Now that the succession of thought and practice are discerned, the identity of the substance of both are realized, and the process of decision-making is well specified, we may ask about the essence of the good that our mind is rationally seeking. Are there real good and evil that our minds seek to identify, or all the virtue and vice concepts are conventions and do not have genuine existence?

### **7. Goodness and Badness**

Plato believes that ethical good is a genuinely real object, independent of human deliberations. Humans must discover and recognize the good, similar to all other facts of reality that they must endeavour to discover. Bertrand Russell disagrees, and like most other philosophers, believes that goodness and badness are hypothetical and relative. He argues that the essence of beauty and evil are relative and dependent on the relations of man and the world. When we seek an objective, the means that facilitate its attainment are supposed to be good and what hinders its attainment is supposed to be bad. Thus, the concepts of good and bad are defined according to our aims. Honesty helps us reach our ends and thus, is perceived as good. Lying prevents the individual or the group from achieving their aims, so it is considered as bad. In this way, goodness or badness are extracted from the “*ought*” and the “*ought not*” that we form in our minds (Motahhari, 1981: 389).

Martyr Morteza Motahhari (1981: 392) raises the question that whether there are general and absolute ethical principles or “*musts*” that all human beings altogether excogitate and admit? If there are such

principles, how can we justify and explain their existence? The discussion of metaphysics and epistemology of ethical norms is not complete unless we address the above question.

Motahhari believes that humans have a magnificent and celestial soul. When a person says “I ought to do this,” he tries to base this claim on dictations of his soul. He may not consciously and explicitly bear this aim, but he bases his statement on the principles of that magnificent soul that are the common good among all human beings. Humans always feel a kind of “*must*” or “*ought*” to seek those principles. Motahhari propounds that humans possess two selves or two “*I*”s. One is the animal spirit, like that of all other animals, and the other is a celestial “*I*” or self. The latter is the Divine essence bestowed in man. Due to this celestial being and personality, humans embody real and authentic prominence, not imaginary. Humans possess both body and soul; any activity that helps promote the spiritual mentality of man would be honourable and ethical (Ibid).

Motahhari further explains that acknowledgement of the conception of good or bad by both Tabatabaei and Russell depends upon what is liked or disliked by man. However, which constituent part of man’s selves does the liking is crucial: the celestial or terrestrial “*I*”? What the celestial “*I*” likes become value and morality. The fact that humans feel part of their being is eternal and celestial, and that, this celestial part is the source of all ethical values denote that human normative values are not imaginary nor dependent on the whims and wishes of individuals. Honesty, integrity, beneficence and benignity are examples of these authentic and real values.

Because human beings are gifted with an intrinsic source of magnificence that is the Divine embedment in them, they inattentively feel a state of magnificence and dignity. While deliberating their wishes and deeds, humans recognize which specific action or attribute is in conformity with their dignity and ones are not. They embrace what is in conformity with their innate magnificence as virtue, and dispose the rest as vice. Human beings are all endowed with the magnificent soul that gives all of them a common ethical taste. Humans are dissimilar with respect to their physical needs and material wants, but because their Divine souls are the same, their ethical attributes and preferences are similar, permanent and universal (Ibid, pp. 417-418).

According to sociologists, every person has two identities, an individual and a social identity. In their personal life, individuals follow their personal desires, but as community members, they follow social priorities. Economists also argue that consumers have two different sets of time reference rates, when they choose private and public goods or when they invest in short- and long-term projects, respectively. The former individual choice entails high time preference, but the latter embodies low social time preference rate.

Despite endorsing this dualism, Motahhari comments that these dual types of identities and choices as stated by sociologist and economists, do not explain ethical decisions such as embracing patience and perseverance. Another dualism, i.e. the celestial and terrestrial natures of man and his devotion to seek perfection and excellence due to his celestial nature better explains the authenticity of virtues and goodness as well as the fact that they are common, universal and permanent goals for humanity (Motahhari, 1981: 417-418). In the same line, Hairi (1982: 87) also contends that people have an orderly and magnificent world system in their minds, which is real and authentic. They try to set their decisions and behaviour according to this mental system.

In addition to general ethical principles that are shared by all human beings, some motives emanate from the natural instinct such as that for food, clothing and shelter. These desires are common among people and consequently affect their will. Tabatabaei (1954) argues that these needs and decisions bestow perfection to the individual. The feeling of hunger and motivation to seek food relieves him from the weakness caused by hunger, and thus, eating food makes him a more viable individual. Empowerment is similarly gained by the needs for shelter, education, marriage and socialization. The empowerment and perfection state enhance by the human nature employing all body organs and mental capacity to fulfil the physiological and mental needs. The task of philosophers and scientists, it follows, is identification of human needs and formulating ways to facilitate and enhance the empowerment and perfection-seeking process.

As mentioned above, Hariri (1361/1982) contends that in addition to concepts that are abstracted from the outside world, there are some conventional concepts such as laws, regulations, cultural habits and social customs that mould individuals' decisions. They all affect the

process of decision making by individuals. These concepts are derived from that orderly state of rights and social order which is in the mind of legislators and anthropologists. The causal relationship between these concepts and the outcome of the decisions are of interest to social scientists. There is no diversion in methodology when the process of individual behaviour, which is led by divine or material motives or legal and cultural norms, is studied in the social sciences. The discussion of logical relationship between the pure and practical reasons and equivalently between the context of discovery and context of justifications, which is formulated by philosophers of science, and that which will be presented below, provides further support to the validity of the method used.

### **8. Context of Discovery and Context of Justification**

Every scientific theory is composed of three parts; axioms, fixed observable conditions and a predictable event (Silberberg, 1990). Scientific models based on existing or assumed external conditions will figure out the optimal event or behaviour. The optimum state or behaviour will change only if one of the assumed constant conditions changes. The help of the model will derive the change in the behaviour logically. The hypothesis that is thus derived, at optimal state of the model, will be tested empirically. If the tested results verify the hypothesis, it will be accepted; otherwise, it is refuted.

Reichenbach (1938: 6-7) classifies the process of scientific theory formulation into two contexts of discovery and justification. In the former, the researcher tries to identify the factors that affect the event or the behaviour under study. By abstracting the outside world, the scientist formulates a model of it, which establishes logically the causal relationship between the effective exogenous determinants and the endogenous variable. The purpose of the model construction is to explain how the change in exogenous conditions affects that of the optimum state. An observable and testable hypothesis that predicts the direction of the change will then be derived. The process of inquiry is considered to be under the "Context of Discovery" up to this stage. The empirical testing of the hypothesis and its refutation or verification constitutes the "Context of Justification." The essences of the two contexts are different; one is theoretical, the other is empirical.

However, the latter necessarily follows the former. No scientist starts experimentation without having a hypothesis in mind. What distinguishes scientific studies from the philosophical deliberations or artistic creations is the empirical justification context. To illustrate the significance of the contexts of discovery and judgement for both scientific inquiries and Islamic economic studies, the methodology of positive economics that has been analysed and described by Milton Friedman (1953) will be reported briefly here. It exhibits how theoretical ideal types will logically predict applied market behaviour for market agents and how the two theoretical and practical contexts are interconnected. In other words, how the volitional actions are logically derived from pure ideal state of the world, the state that Hairi referred to (see above). Further, it illustrates how actual market behaviour of believers can be derived and predicted from an ideal Islamic economy that M.B. Sadr considered as a prerequisite for empirical Islamic economic investigations.

The assumptions of perfect competitive markets imply such markets are rarely identifiable in the world. Yet the prolific market model that economists deploy to analyse the behaviour of consumers and producers is the perfect competitive market. Friedman states that, in such analyses, consumer is assumed to purchase goods *as if* he is in a competitive market (the discovery context). If the hypothesis based on ideal competitive market is not refuted, it implies that consumer is behaving *as if* he is in such a market. If the hypothesis is refuted, it certainly implies that the assumed prevailing conditions and variable factors do not explain the actual behaviour of market participants (the justification context). Friedman (1953) emphasizes that, in oligopolistic markets, sellers may sometimes exhibit competitive behaviour. Therefore, he argues that the assumptions used to build ideal models need not be realistic, if the theory can explain and predict the real events. He cites the vacuum model that physicists apply to study the motion of particles. In reality, there is no vacuum. The assumption that the particle falls as if it does in vacuum, however, helps scientists derive the relationship between the distance the particle paves and the time it takes to do so. When the experiment is performed with solid objects and the hypothesis is not refuted, the researchers infers that the air pressure at experimental condition is so low that can be neglected and the particle falls as if it does in vacuum.

Nevertheless, when the experiment is repeated with a piece of paper, the assumption of vacuum does not hold and the hypothesis is refuted.

It seems that the same procedure could be applied in Islamic economic studies. An ideal Islamic market where all the rules of transactions apply and property rights are assigned according to *Sharia* standards will be envisioned. Then, hypothetical demand behaviour will be derived for consumers who are purchasing goods in this market. Subsequently, the hypothesis will be tested in actual performing markets in Muslim countries. If the hypothesis is not refuted, it may be claimed that the actual behaviour of the participant is not at variance with the ideal and rightful behaviour of a true believer in a legitimate Islamic market. The fact that all Muslim jurists opine that markets organized by Muslims are genuine Islamic markets and the goods and services that are offered are *Halal* and permissible to purchase provides support for the above claim. Therefore, following the scientific methodology would extend the doctrine of Martyr Sadr to be applicable to real world condition prior to the period that they are completely identical with a true Islamic state. Thus conducting empirical economic research on Muslim markets is scientifically legitimate. The conclusions may even be applicable to non-Muslim countries where the market rules of exchange are not significantly different from *Sharia* rules. The fact that jurists permit doing trade with non-Muslims or even non-believers further supports this conclusion.

What remains to be discussed is the conformity of the empirical observation with the theoretical hypotheses that are derived from the ideal models, i.e. the pure reason. Whether experimental studies and induction can create certainty for researchers also needs to be dealt with here.

### **9. The Validity of Induction**

Is experimental testing adequate and valid to provide certain knowledge for the researcher, let alone its validity to prove or disprove the hypothesis? It is the consensus that induction, if performed completely, can prove a proposition. Otherwise, it does not generate certainty of knowledge.

Evidently, all scientific experiments are based on limited experimental trials or sampling, i.e. an incomplete induction. Therefore, empirical testing can be used only to refute a hypothesis (Popper, 1959).

Since any general theory can be falsified by one contradicting observation, the hypothesis will therefore be refuted in case experimental testing produces results that contradict hypothetical predictions. Else, the hypothesis is not proved, but it is verified. As long as further experimental testing does not contradict the hypothesis and will be supported by new observations, the theory will be promoted to a scientific law.

Sadr (1999) raises the question that if empirical search continues to support the theory and no contradicting evidence is found, does the induction inquiry, which results in a firm conjecture according to Motahhari, create assurance for the researcher? Sadr states that there are two types of confidence states: objective and subjective (Soroush, 1988). Repeated experiments that verify the theory increase the probability of the occurrence of the events predicted. The common practice among scientists is to admit the theory as long as it is not refuted, and as long as alternate theories with fewer restrictive assumptions or wider scope of applications are not proposed. As the level of probability approaches 100 percent, the researcher becomes confident of the successive affirmation of the tests and obtains a subjective confidence. Indeed the customary scientific research is based on mental satisfaction with successive affirmative trials; the theory is accepted if it is not repeatedly contradicted. The demand law is the best example to cite.

## **10. Conclusion**

The review of epistemic expositions made by a few renowned contemporary Muslim philosophers clarifies many important issues that are encountered by researchers in social sciences in general, and in Islamic economics, in particular. First, there is a logical relationship and reciprocity between the two categories of knowledge, namely pure reason and practical reason. In both categories, the conception of knowledge is abstracted from the real external beings. The only difference between the two is that pure reason investigates real beings whose existence does not depend upon the human volition while practical reason deals with phenomena created by human volition. The analysis and method of inquiry in both pure and practical reasons are logical and theoretical. Both discuss the creation and alteration of real

beings. The practical reason outcomes are logically derived from pure reason. In other words, the “*ought*” propositions are derived fully and logically from the “*is*” statements. The “*ought*” statement expresses the existential relationship between the subject and the predicate. It exhibits the incumbency and necessity of the outcome of the decision when the subject is no more sceptical and is determined to make a decision.

Second, the ethical principles or norms that are the focus of debate in practical reason deliberations are not relative and subjective, but are universal and unanimously endorsed among human beings. Further, they are permanent and do not vary by time and place. They are in fact the divine truths that are imprinted in human soul. This inspiration, however, does not deny that every individual possesses a different taste and preference that emanate from his physical needs at various times and environmental conditions. These wishes and tastes are personal, are common at best among certain groups, and are the subject of social sciences. The aims and values that are common among all and are sought by all human beings are the general ethical principles.

Based on reciprocal relationship between the pure knowledge and practical knowledge, social scientists can study the factors that stimulate individuals’ decisions as well as the phenomena and policies that are the outcome of such decisions. Labelling the latter studies as positive and the former as normative does not contribute to the process of acquiring knowledge, since both studies are analytical and deal logically with real beings created or occurred with or without human participation. In fact, positive and normative economics are not dichotomous, but are connected and intermingled.

Solid and authentic Islamic scientific studies are feasible when a perfect Islamic state will be established. Prior to establishment of this system, concrete and logical models can be constructed with Islamic ideal types. This endeavour is feasible by following the process of scientific inquiry, which is composed of two contexts of discovery and justification. Islamic model building will constitute the former context and the effects of Islamic ethical principles and rules of conduct can be legitimately analysed and predicted at this stage of scientific discourse. The latter context, which encompasses the empirical testing of the hypotheses, will reveal the conformity of the participants’ behaviour with that of the ideal. In case of disconformities, the deterring factors

will be identified and policies for their alleviation will be proposed.

Empirical testing which is an incomplete inductive inquiry does not provide proof for any proposed judgment. However, it can disprove any general proposition if a single contradiction is found. Continuous and repeated verification of a theory will create subjective certainty. Scientists make prediction when they obtain this type of certainty from their empirical research.

There are conventional norms that affect the decision-making process of individuals. Legal and juristic rules along with social norms of behaviour are examples of these concepts. Although the ontology of the set of conventional norms is quite different from genuine ethical principles, they are still derived and abstracted from an orderly state of rights and social relations perceived by legislators and administrators. Therefore, the impact of these norms on the will of agents can also be studied analytically like the influence of the real objects.

### References

Ahmad, K. (1994). *Islamic Approach to Development*. Islamabad: Institute of Policy Studies.

Askari, H., Iqbal, Z., & Mirakhor, A. (2015). *Introduction to Islamic Economics*. Singapore: John Wiley and Sons.

----- (2009). *New Issues in Islamic Finance and Economics*. Singapore: John Wiley and Sons.

Chapra, M. U. (1992). *Islam and the Economic Challenge*. Markfield, UK: The Islamic Foundation and the Institute for Islamic Thought.

*Al-Farabis Psychology and Epistemology*. (2016). Stanford: Encyclopaedia of Philosophy.

Friedman, M. (1953). *The Methodology of Positive Economics*. Chicago: University of Chicago Press.

Hairi Yazdi, M. (1982). *Practical Reason*. Tehran: Cultural Studies and Research Institute.

Iqbal, Z., & Mirakhor, A. (2007). *An Introduction to Islamic Finance*. Singapore: John Wiley and Sons.

Hume, D. (1888). *A Treatise of Human Nature*. In L. A. Selby – Bigge (Ed.). Oxford: Oxford University Press.

Hands, D. W. (2012). *The Positive-Normative Dichotomy and Economics; Handbook of the Philosophy of Science*. Amsterdam: Elsevier.

Keynes, J. N. (1917). *The Scope and Method of Political Economy* (4<sup>th</sup> Eds.). London: Macmillan & Co.

Popper, K. (1959). *The Logic of Scientific Discovery*. London and New York: Rutledge Classics.

Reichenbach, H. (1938). *Experience and Prediction*. Chicago & London: The University of Chicago Press.

Robbins, L. (1935). *An Essay on the Nature and Significance of Economic Science* (2<sup>nd</sup> Ed.). London: Macmillan and Co.

Sadr, S. K. (2016). *The Economic System of the Early Islamic Period*. New York: Palgrave-Macmillan.

----- (2003). Understanding the Organic and Interactive Relationship between Economic and Islamic Economic School. *Discourse*, 4(3-4), 67-110.

Sadr, M. B. (1982). *Iqtisaduna - Our Economics*. Tehran: World Organization for Islamic Services.

Silberberg, E. (1990). *The Structure of Economics* (2<sup>nd</sup> Ed.). New York: McGraw Hill.

Soroush, A. (1988). *The Logical Premises of Induction in Ayatullah Shahid M. B. Sadr's View*. Tehran: Soroush Press.

Tabatbaei, M. H. (1954). *Ravesh Realism (The Principles of Philosophy and the Realism Methodology)*. Qum: Sadra Publication.

Toutounchian, I. (2009). *Islamic Money and Banking*. Singapore: John Wiley and Sons.

Zaman, A. (2012). Crisis in Islamic Economics: Diagnose and Prescriptions. *JKAU Islamic Economics*, 25(1), 147-169.

----- (2006). Problems and Prospects. *Journal of Management, Information and Technology*, 2(1), 46-53.