



As Value-based Economics, How Does Islamic Economics deal with Scientific Method in Disruptive Era of Digitalization?

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ABSTRACT

Purpose: This study aims to analyze philosophically how Islamic economics, as a value-based system, engages with the mainstream scientific method.

Design/Methodology/Approach: This research uses a qualitative approach through literature review and content analysis of economic, philosophical, and Islamic economic sources.

Findings: The study finds that Islamic economics may employ scientific methods and analytical tools as long as they do not conflict with the Islamic worldview. These methods function as instruments to observe human behavior as an expression of free will granted by Allah.

Practical Implications: Islamic economists can adopt empirical methods selectively to strengthen the relevance and practical development of Islamic economics without compromising its ethical foundations.

Originality/Value: This study provides a philosophical justification for integrating scientific methods within Islamic economics as a value-based discipline.

Keyword: Scientific Method, Value-free, Islamic Economic

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A. INTRODUCTION

Since the early of 20th century, economic and financial crises occurred periodically. The disasters came with various shape and size, spreading very fast with no recognition of borders of the country. Moreover, they accost us faster than before. Immediate and comprehensive policy is required to be implemented with aim of overcoming the storms. Since the end of the golden currency system in 1915, the financial crises have happened more than 10 times in global scale. Began with great depression in 1920s, the crises continuously hit the economy in every decade (Luik & Fatoni, 2018). Then, the world suffered the economics recession because of the COVID-19 pandemic impact.

The phenomenon raises the suspicion against the mainstream economics theories which become foundation for the practical economic system. Numerous scholar question; is economics education failing? Taking the latest economic crisis before pandemic as an example, the recovery of 2008 has been unexpectedly slow. The tools of macroeconomics like quantitative easing, and financial contraction have not worked correctly to recover the consequences of the subprime mortgage crisis in USA yet. Skidelsky used word ‘secular stagnation’ to describe how the tools which proposed by economist and policy

makers does not work. Instead, before 2008 most of economists stated that everything is under control despite apprehension over a bubble in the housing market. Economists argue that the main cause of the meltdown of 2008 in the United States, spreading globally is the use of derivatives to hide credit risk from third parties with the intention of protecting counterparties of derivative (Skidelsky, 2020).

It is becoming worse in the disruptive era of digitalization. Digitalization creates new economic realities that mainstream theory may not fully capture. However, digital technology could be potential pillar to diversify the economy to be more inclusive and sustainable growth. This is because digital financial inclusion becomes more important due to digital divide and the risk of a K-shaped recovery after pandemic. The immense convenience of digitalization including promoting market expansion, bringing operational efficiency and cost reduction, fostering product and innovation benefits both consumers and producers (Heather Stewart, 2021).

Meanwhile, other some scholar diagnose that the problem of economics is deeper than such practical aspect, which is the philosophical foundation. Skidelsky (2020) stated that studying philosophy, history, politics, and psychology nowadays are not obligatory for most of economics students. They are only taught economic models which are based on unreal assumptions, and tested on their competence in solving mathematical formulation. They are never given the mental tools to picture the whole social phenomenon. Skidelsky quoted John Stuart Mill' statement, a prominent philosopher and economist, that nobody can be a good economist if he or she is just an economist. The two most famous Austrian economists of the last century, Joseph Schumpeter and Fredrich Hayek, also attack economics modelling, (Skidelsky, 2020)

According to zaman (2014), to be accepted as a 'science', Economics attempts to adopt scientific method which is applied in natural science. This phenomenon occurred because of the misconception about sciences, which have been believed historically among western society. It is stated that scientific methodology of science is based solely on observation and logic. Therefore, science is the only valid source of knowledge. The view has three worsen consequence in the development of social science like economics discipline. The deteriorated implications are non-acknowledgment of value in scientific research implicitly resulting loss of morality, abandoning liberty to choose or free-will which treat human like robot and implementing simple universal laws in human behavior by modeling them in the mathematical formulation (Zaman, 2014).

Through his book, a renowned Harvard philosopher, Hilary Putnam (2012) predicts that economics which is merely calculation and model without value infusion will be ended. Putnam (2012) invalidates Robbin's demarcation line between ethics and economics, where Economics deals with ascertainable facts; ethics with valuation and obligations. He took income and wealth distribution and welfare as a proof for the present of morality in economic analyses. This value/fact dichotomy becomes the deterrence for conventional economics, especially neoclassical thought as a mainstream economics school of thought, to bring value in formal economics discussion, (Putnam et al., 2012).

Instead, Economics discipline has to integrate a richer concept and formulation. Klein proposed religious thinking to be integrated in economics in order to broader the horizon of the discipline (Klein, 2014). Clark also added that the great economists are

required to have a much deeper understanding of human nature instead of currently used by mainstream economists. Economists could turn to the higher discipline of theology, (Clark, 2014).

This is welcome opportunity for Islamic economics to progress rapidly. This is because since the birth of the discipline from Islamization of Knowledge (IOK) project, Islamic economics is free from value/fact dichotomy due to its nature which is value-laden knowledge, (Mahyudi & Abdul, 2017). In stark contrast to mainstream Western sciences, ethics and morality are the unique noticeable features of Islamic economics (Chapra, 2000), (Chapra, 2008) (Mirakhor, 2014) (Mahyudi, 2016). As a matter of fact, it is undeniable that the scholarly works contributed by Muslim scholar during the golden age of Islam like Fakhṛ Al-Dīn Al-Rāzī (d. 1209), Al-Ghazālī (d. 1111), Ibn Ḥazm (d. 1064), Miskawāh (d. 1030), Al-Farābī (d. 950), Al-Kindī (d. 866) and Al-Ḥasan Al-Baṣrī (728), are the legacy of theories of ethics combined with economics matter as an invaluable support for this endeavor of discipline progress, (Mahyudi & Aziz, 2018)

However, as a new-born discipline in the present-day Islamic scholarship, the existence of Islamic economics is being questioned among economics scholars. The campaign of Islamic economics as a scientific discipline faces some challenging issues. Chapra (2005) believes that Islamic economics did not move on the right track to assist countries with a majority Muslim population in accomplishing welfare in its comprehensive impression. Zarqa (1986) asserts that there is an ambiguity about the origin of research in Islamic economics between fiqh and contemporary economics problem. Those scholars and writers with a background in Islamic sciences, in particular fiqh discipline, dominated Islamic economics research in the early phase, (Haneef, 1997), (El-sheikh, 2011). Yalcintas (1987) added that Islamic economics is a modern version of fiqh al-muamalah, (Yalcintas, 1987). Instead, Islamic economics has to go beyond juridical discussion scrutinizing human behavior in the economic system.

Other than that, Discipline of Islamic economics is criticized as replication of neoclassical economics in some topics and misconception of the practical model in others aspect. In research in Bibliometric studies in Islamic Economics and Finance, deliver that the majority publication on indexed Scopus journal using the approach adopting from conventional models that already exist, (Rusydia et al., 2021). To develop Islamic economics as a discipline, Islamic economics cannot reject all modern economics instead of undertaking a critical evolution of mainstream economics from an Islamic perspective.

Another concern is that research in Islamic economics is more concentrated in Islamic banking and finance. In Bibliometric studies in Islamic Economics and Finance, Islamic economics and finance research still dominated by Islamic banks and finance themes. Other areas of economics need to be captured, (Tijjani et al., 2020), (Rusydia et al., 2021). Restoring a more balanced development of Islamic economics is essential. The discipline's foundation must get greater emphasis, including more work on the theoretical studies in economic theory. To be accepted as a science, Islamic economics must have its unique organized body of knowledge.

The objective of this paper is to philosophically analyze how Islamic economics as value-based economics deal with believed mainstream scientific method in current scientific community. In a way, this study will comprise of 5 sections. Section 1 will

introduce the topic and deliberate the research question. The elaboration on scientific method, Science and value dichotomy and Islamic epistemology will be investigated on section 2-literature review. Section 4 is the main part of the study that will discuss the Critical review on value free economics and introduce Islamic economics as future leading economics thought. Section 5 concludes the discussion.

B. THEORETICAL STUDY

1. Scientific Method

As commonly known that based on its observation, science is divided into two, namely; natural science and social science. Natural science deal with deal with the examination of natural phenomena, such as matter, the earth, celestial object, or the human body, for example; physics, chemistry, astronomy, medicine, etc. Meanwhile social science deal with the individual or collective behavior of people or groups of people, communities, firms, societies, and economies. Social sciences attempt to determine the existing cause and effect relationships among phenomena in an objective manner, both in specific areas of social life, as well as in society as a whole of all social relations, (Radović-Marković & Alecchi, 2016). Both have noticeable differences. The endeavor of study in social sciences is to seek universal laws of social phenomena within nature and the practical application of theoretical models. The objective is to understanding and explaining certain aspects of social reality. Meanwhile, there are certain patterns of relations that occur with such regularity that they are considered principles in natural sciences.

In order to acquire the knowledge, both natural and social science have to apply scientific method, which means *the search for truth through logical considerations, i.e., it is trying to achieve an ideal combination of experimentation, observation, and logical arguments*" (Ostle and Mensing, 1975, p. 2). *"The scientific method refers to a standardized set of techniques that are used to zoom in on scientific knowledge, such as how to conduct a valid observation, how to interpret the results, and how to generalize these results"* (Bhattacharjee, 2012, p. 5).

According to Duhs (2006), Economics is considered as the queen of the social sciences, promoting and driving of the other social sciences development. The notion that the economic as a science should follow the other scientific disciplines in their development can often be recognized in formal discussion of economics. This primarily refers to the natural sciences and their principles of development, (Radović-Marković & Alecchi, 2016). The scientific method should meet four criteria:

- a. Replicability: the opportunity of repeating a scientific study and finding similar results, even though not identical.
- b. Precision: Theoretical concepts must be defined with such precision that others can also use them as definitions for measuring those concepts and test theories.
- c. Verifiability: A theory have to be stated in a way that it can be tested. Theories that cannot be tested are not considered scientific theories.
- d. Simplicity: When there are several explanations of a phenomenon, scientists must always accept the simplest and the most logical explanation.

The use of the scientific method is the most important tool in the study of the social sciences. The logic of these scientific method the requirements have to be applied.

The theories have to be proved empirically, which are based on practical application in social life. It facilitates learn lessons from certain social sciences and understand their synthesis as well.

However, to understand how this structural thinking dominates in current western scientific life, we must scrutinize the historical relation between religion and science in western experience. Back to the middle age, sixteenth and eighteenth centuries witnessed the dramatic movement of European way of thinking because the failure of Christianity dogma as a political identity, (Zaman, 2013). This failure was denoted by domination of secularism in daily life of people in west. Secularism may be defined as the separation between the governing authority of region and its religious authority, (al. Abdullah, Adam, et, 2018) . Philosophically, Secular thinkers reject the religious teaching completely, and seek to produce a novel approach to understand the world, without any reference to God. The church actively repressed the scholastic movement (1100-1700) as it sought to main political superiority. As secularism gained more attention, this phenomenon led to the relegation of religion to a micro-domain which is individual as only a private and personal right of liberty, (Zaman, 2013).

This required a complete rejection of all traditional beliefs, and re-construction thought on an entirely new basis. Separation of church led to scientific revolution took place and materialism developed. Materialism is the idea that something only truly exists when it can be proven through sense experience or scientific observation. The revolution led to the development of philosophical disciplines such epistemology and methodology to occur on a purely empiric foundation. The scientific revolution facilitated materialism as it was the basis on which the very existence of an entity was established. This means that religion, which could not be empirically measured had immaterial (metaphysical) identity, and could not be included in scientific domain, (al. Abdullah, Adam, et, 2018).

Lately, a prominent British economics who redefined the economics, Lionel Robbins stated that;

“It does not seem logically possible to associate the two studies [ethics and economics] in any form but mere juxtaposition. Economics deals with ascertainable facts; ethics with valuation and obligations. The two fields of enquiry are not on the same plane of discourse. Between the generalisations of positive and normative studies there is a logical gulf fixed which no ingenuity can disguise and no juxtaposition in space or time bridge over.” (Robbins, 1932).

Because of this demarcation line, mainstream neoclassical economics school of thought is hampered to carry value in proper economics discussion. It is proven that during centuries of its scientific development; mainstream economists appear to follow and respect with what Robbins drawn.

2. Islamic Epistemology

On the other hand, epistemology is derived from Greek 'episteme' which means inquiries into the nature of knowledge and justification of belief. Epistemology is the theory of knowledge (Merriam-Webster, 2004). To Ghazi (2019), Epistemology is the branch of philosophy concerned with knowledge, truth and how we know, (Muhammad, 2001).

In Islamic philosophy human being consists of three main elements, namely; a spirit (*ruh*), a soul (*nafs*) and a body (*jism*), where each element has its own source of knowledge. Human body can acquire knowledge through sense of perception. The body recognize the information from physical realities by its physical sense and then transfer it to the soul. It sees via eyes, hears thorough ears, smell through the nose taste through the mouth and feel through the skin, (Muhammad, 2001).

Meanwhile, as a subtle entity, human's soul has three main subtle sources of knowledge. Those are intelligence, will, and sentiment. In modern psychology, those are known as cognitive, behavioral, and affective system respectively. While the intelligence is created by God to understand the true, the will is to express the freedom of choice, and the sentiment is made for loving the good and the beautiful. In other word, man's soul recognizes an understanding of realities through willing the good and through virtuous feeling. True knowledge is not merely mental comprehension, instead of feeling and willing for truly understand what is good, beautiful, and noble means to love it and wants it, (Muhammad, 2001).

When it comes to the spirit, the other sources of knowledge for this element are revelation, the inspirational, subtle heart, intellect, and visionary dream. Revelation is the highest source of knowledge. Inspirational (*Ilham*) is the source of knowledge for spirit and is ultimately from God of from God's presence(*ladun*). As mentioned on Quran chapter 18 verse 86:

"Then found they one of Our slaves, unto whom We had given mercy from Us, and had taught him knowledge from Our presence."

The next source of knowledge is heart. Heart has two meanings. The first one is physical heart that pumps blood to entire human body. The second one is subtle heart as spiritual knowledge describe as a bridge between the soul (*nafs*) and the spirit (*ruh*).

Then, intellect is the spiritual knowledge that is accessible to all human being. According to Arabic, world 'aql at least has three different meanings. The first quite simply means (*adh-dhin*) is general term referring to the general intelligence, consciousness, and comprehension of soul of the term used in the hadith quoted:

"The intelligence of the unbeliever is half the intelligence of the believer"
(Sunan An-Nasi, Al Qosamah, 38)

The second meaning of the world 'aql is specifically the faculty of logic in the soul. The third is the sense which a ray of knowledge or intelligence that comes ultimately from the spirit, through the heart down through the depths of soul even to the very body. The last source of knowledge for human's spirit is visionary dreams. It is not only to the prophets but also by ordinary believers like prisoners in jail (12:36), to king (12:43). The prophet said *"the visionary dreams the truly believing Muslim is one forty-sixth of prophecy"*. (Shahih Bukhari, Kitab At Ta'bir,4)

However, it should be noted that not all dream are visions. The majority are confused psychic dream" (12:44). This is only a kind of mental "playback" and information processing including the memories, emotions, and associations that happen daily. In other words, Al Ghazali in his book, the Deliverance from Error (*Munkidh min*

al-Dalal), explained why human can not relies on his observable observation and or rational thinking. He stated that the human sense could be misunderstanding. Logical reasoning might be misperception. In his confusion, he said that God guides him to recognize the truth, as he mentioned:

God at last deigned to heal me of this mental malady; my mind recovered sanity and equilibrium, the primary assumptions of reason recovered with me all their stringency and force. I owed my deliverance, not to a concatenation of proofs and arguments, but to the light which God caused to penetrate into my heart---the light which illuminates the threshold of all knowledge. To suppose that certitude can be only based upon formal arguments is to limit the boundless mercy of God. Some one asked the Prophet the explanation of this passage in the Divine Book: "God opens to Islam the heart of him whom he chooses to direct." "That is spoken," replied the Prophet, "of the light which God sheds in the heart." "And how can man recognize that light?" he was asked. "By his detachment from this world of illusion and by a secret drawing toward the eternal world," the Prophet replied, (Abu Hamid al-Ghazali, n.d.).

C. METHODOLOGY

This study adopts a qualitative research design grounded in philosophical inquiry and systematic literature-based analysis to examine the compatibility between Islamic economics as a value-based discipline and the mainstream scientific method. The qualitative approach is considered appropriate because the object of inquiry is not empirical measurement of variables, but rather the epistemological, ontological, and methodological foundations of economic thought. This research positions itself within interpretive and critical traditions of social science, aiming to uncover underlying assumptions, value structures, and paradigmatic tensions embedded in both mainstream economics and Islamic economics.

The primary method employed is a systematic literature review, encompassing classical and contemporary sources from economics, philosophy of science, Islamic epistemology, and Islamic economics. The literature selection process follows clear inclusion criteria: (1) seminal works discussing scientific method and value-neutrality in economics; (2) critical philosophical contributions addressing fact–value dichotomy, positivism, and methodological reductionism; and (3) authoritative texts in Islamic epistemology and Islamic economic methodology. Sources include peer-reviewed journal articles, scholarly books, classical Islamic texts, and policy-relevant academic discussions. This ensures both theoretical depth and conceptual breadth in capturing diverse scholarly perspectives.

To analyze the collected texts, this study applies qualitative content analysis with an analytical–thematic orientation. Content analysis is conducted through a multi-stage procedure. First, relevant texts are read intensively to identify key concepts, arguments, and methodological positions related to scientific method, value neutrality, and epistemological assumptions. Second, the identified concepts are coded into thematic categories such as scientific method in social science, value-free economics, Islamic epistemology, sources of knowledge, and methodological pluralism. Third, these themes

are interpreted comparatively to reveal points of convergence, tension, and contradiction between mainstream economics and Islamic economics.

In addition, this study employs a critical–normative analysis to evaluate the underlying philosophical assumptions of mainstream economics, particularly positivism and empiricism, against the Islamic worldview. This analytical step allows the research to move beyond descriptive comparison toward normative assessment, examining whether and to what extent scientific methods used in conventional economics can be epistemologically justified within Islamic economics. The analysis does not aim to empirically test economic hypotheses, but to assess methodological legitimacy and conceptual coherence.

To enhance analytical rigor and trustworthiness, this research ensures consistency through cross-referencing arguments across multiple authoritative sources and maintaining transparency in interpretive reasoning. Rather than claiming universal generalization, the study emphasizes theoretical validity and philosophical plausibility, which are central criteria in qualitative and philosophical research. By integrating systematic literature review, thematic content analysis, and critical philosophical reasoning, this methodology provides a robust framework to address the research objective of situating Islamic economics within contemporary scientific discourse. The conceptual image of the research is as follows:



Figure 1. Conceptual image of the research

D. DISCUSSION

1. Critical review on value free economics

As mentioned above that Economics as science should be free from value infusion, the idea is being criticized by contemporary economists. Hilary Putnam, a Harvard philosopher, has different view on it. He argues that the value-free economics would be ended. He states that there is a moral side in various crucial economic deliberations, (Putnam et al., 2012). On the other words, economics is constructed under

certain doctrine which is a complex of assumptions including social existing reality economists accepted by economists either uncritically or unconsciously, (Wisman, 1992).

Later on, Putnam introduces the idea of the entanglement of fact and value to replace Robbins' demarcation line, (Putnam et al., 2012). He asserts in his book, *"Every term and concept in economic theory is a socially constructed term, and every economic 'reality' is a socially constructed phenomenon; within these constructions are layers of value judgement and thus the constructions are in no way morally neutral"* (p. 137).

In the same picture, Zaman criticizes mainstream economics due to its simple universal laws dan mechanization of human behavior. Beginning with admission of Newton's theory of gravity by scientists worldwide in modern era, this phenomenon of a simple law influenced the methodology of science universally, including economics. The prestige of physics led neoclassical economists copied many symbolic terms from physics to economics. This idea causes destructive implications for social science. This is because physics implements simple laws that are identic across time and space, while economics is invariant. The laws in economics might be different due to a historical phenomenon. For example, the dramatic failure of law of supply and demand caused the great depression and high unemployment rate. Then, Keynesian came with the new design of real wage downward direction, (Zaman, 2014).

Zaman adds neo classical economics as mainstream economics enforces scientific method to humans who have their essential freedom and unobservable impetus. He also takes theory of revealed preference from Samuelson, replacing unobservable preference and satisfaction with the observable choice and theory of transitivity which is not relevant for certain terms. Therefore, Economics becomes poor at explanation of human behaviour, (Zaman, 2014).

2. Islamic Economics and Scientific Method

As mentioned above, the source of knowledge in Islam is not only trough observation and logic, but every human element has its source of knowledge. Knowledge could be absorbed from metaphysical elements which are not admitted by mainstream scientific communities. Therefore, among numerous definition of Islamic Economics from various scholars, Abdullah, Adam, et (2018) concluded that, Islamic economics could be defined as :

"a social science that studies the economic problem of humanity, and evaluate their solution from the perspective of Islamic world view and values, as well as human reasoning and experience"

From such definition, we can conclude that Islamic Economics studies the economic problem from an Islamic perspective. Islamic economics consist of postulates of the Qur'an and Sunnah and those sources are divine in nature which are unable to be tested. Islamic foundational teaching like Tauhid (unity), obligation of Zakah (alms), and prohibition of Riba (interest) are God order that man cannot them. economists can only deliver limited interpretive flexibility, (Hasan, 2016). Those mentioned area can be legitimately termed as theology.

However, as a social science, Islamic economics needs to adopt genuine social science method in order to be accepted by wider intellectual community, (Khan, 2017).

Those theological root could be reformulated into verifiable or falsifiable postulates. Akram Khan epitomized as followed:

For example, the law of zakah presents various limits and rates. Once the law is enforced, economists can come forward and frame postulates in the following manner: (a) the enforcement of zakah has led to a more (or less) equitable distribution of wealth in the economy; (b) enforcement of the zakah law has reduced (increased) the incidence of poverty; (c) zakah has encouraged (discouraged) investment in the economy; and so on. Such postulates can be tested and verified by empirical evidence, (Khan, 2017).

In this regards, Ismail (2016) underlined the limitation of using such method. As long as such methods and tools are not in conflict with logical structure of the world view of Islam, Islamic Economists could utilize them, (Ismail, 2016). In the literature survey conducted by Abdullahi (2018). In early phase of Islamic Economics, scholars explained economics which was closely related to jurisdiction method, (Haneef, 1997), (El-sheikh, 2011), Yalcintas (1987). Therefore, it brought about an ambiguity between *fiqh* and economics. The use of scientific method which is translated into mathematical model in Islamic Economics raised in the second phase of Islamization of economics. Abdullahi listed some scholars like John R. Presley, Masdul Choudhury, Mohsin Khan, Syed Naqvi, M. Metwally, Mabid Ali Al-Jarhi, Tag El-din, Zubair Hasan, A. Mirakhor, Monzer Khaf and others who use mathematical model in explaining Islamic economics phenomenon, (Abdullahi, 2018). Taking Metwally as an example, He utilized mathematical rigor to explain Islamic fiscal policy, particularly to include Zakah as one of the its instruments, (Metwally, 1983).

As a matter of fact, in this contemporary phase Islamic economics is criticized as his older siblings, mainstream economics, due to the overuse of empirical works. This phenomenon is owing to inclining numbers of Islamic financial Institution, providing empirical data. Professional trained economists in this research area like Muhammad K. Hassan, Habib Ahmed, Zubair Hasan, Abdul Ghafar Ismail, Abdel-Hameed M. Bashir and others trained in econometrics, (Abdullahi, 2018). Muqorabin (2008) argued that in the short run, Islamic economics cannot entirely discard conventional economic analysis and method. However, Islamic economics could be independent with its own approach in the long run.

Even though Islamic economics is value-based science, it must have its unique organized body of knowledge in causality analysis, (Hasan, 2016). Some scholars shared unique methodology of Islamic economics, which differentiate with its counterpart. Furqani and Haneef (2012) introduced the idea that methodology of Islamic economics would not commence from the scratch yet use the relatively more advance development than mainstream economics. Doctrinal, factual integrity and logical are determined the reliability and soundness of theory. This calls as Tawhidic methodology, (Furqani & Aslam Haneef, 2012).

Furthermore, to develop the discipline of Islamic economics, adopting mathematical model plays a significant role, (Abdullahi, 2018). The mathematical model is the only tool that can be utilized by whoever. As long as the tools do not contradict with the principle of Islamic teaching either explicitly or implicitly, we can adopt them to

develop the discipline, (Herman, 2021). As a social science, Islamic economics is an avenue to observe the free-will's expression that Allah assign to mankind. This could be done by studying pattern of human behavior in the major existing realities, (Herman, 2021). As Siddiqui (2011) stated that Economics from Islamic viewpoint of Khaldunian as follows:

“Economics may be defined as the study of human behaviour, individually and collectively, in order to understand the patterns and modes of this behavior, its motives and incentives, as well as its goals and objectives and responds and reactions, with and without being confined to a specific situation, norms, set of moral values or legal, political, religious framework” (Siddiqui, 2011)

Meanwhile, the assumption of economic rationality does not necessarily represent a universal generalization of individual behaviour. Since Economics as social science is uncertain and relative. After a long period of study and observation, some of the prepositions could be either verified or falsified. Those passing the proses of verification can reach the highest science position, which is the law, like law of diminishing marginal utility and the law of demand and supply. In fact, many of prepositions cannot achieve that status. Those only have been proven as theory. Even many more are the only hypothesis. However, economists can still utilize them as long as applicable, (Herman, 2021). In Islamic Economics, after deriving from Qur'an and *sunnah* teaching Islamic economists can utilize same method of its conventional counterpart to observe human behavior, (Necmettin Kizilkaya, 2015). When the results can describe closer to practical reality, it will be verified and support the development of Islamic economics itself.

In the context of digital era, it offers new tools for data collection and analysis, which Islamic economists can leverage for research. For instance, big data analysis can be used to assess the impact of economic policies on income inequality. The digital era has fundamentally changed how people interact with the economy. There can be tension between the rigidity of some interpretations of Islamic principles and the dynamic nature of the scientific method. New technologies like cryptocurrencies and FinTech require careful analysis to ensure compliance with Islamic principles like *riba* prohibition.

E. CONCLUSION

Economic crises occurred periodically raises the suspicion against the mainstream economics theory, becoming foundation for the practical economic system. Some scholars question; is economics education failing? They diagnose that the problem of economics is deeper than such practical aspect, which is the philosophical foundation. Skidelsky detected that solving mathematical formulation in economics realities is not enough to be an economist, while Zaman criticizes the root of believed misconception about sciences which have implications in the development of social science including economics. Putnam invalidates Robbin's demarcation line between ethics and economics. Klein and Clark suggest economists have to have a much deeper understanding of human nature. Economists could turn to the higher discipline of theology. This phenomenon is the welcome opportunity for Islamic economics to progress rapidly as ethics and morality are the unique noticeable features of Islamic economics. Nevertheless, the existence of

Islamic economics faces some challenging from philosophical issue to methodological aspect.

As value-based economics, Islamic economics, deriving from immutable sources is questioned on using scientific method which should be tested. As a result of the discussion, we argue that as long as such methods and tools are not in conflict with logical structure of the world view of Islam, Islamic Economists could utilize them. This is because Islamic economics is an avenue to observe the free-will's expression that Allah assign to mankind. This could be done by studying pattern of human behavior in the major existing realities. When the results can describe closer to practical reality, it will be verified and support the development of Islamic economics itself. On another side, digitalization presents a significant opportunity for Islamic economics to expand its reach and impact. However, addressing the challenges related to Sharia compliance, regulation, and financial literacy is crucial for its successful integration.

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