International Journal of Business and Management Invention
ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X
www.ijbmi.org || Volume 6 Issue 2 || February. 2017 || PP—41-46

Is Efficient Market Hypothesis Remains the Orthodox Model for Examining Efficiency in the Financial Market? Theoretical Paradigms

Heitham Al-Hajieh[1]
[1](Department of Finance, College of Business- Rabigh/ King Abdulaziz University,KSA

ABSTRACT: *This paper discusses the alternative theoretical paradigms that used to examine the performance of financial markets through an examination of the different approaches. Given the great heterogeneity in paradigms, therefore, the research first considers the standard existing typology based on the initiator of the the dominant paradigm in the Western academic world in respect to financial market behaviour (the market efficiency paradigm). Then, relatively recently, the sentiment and behavioural finance paradigm was developed in the Western academic world as an alternative to efficient market theory. This questions whether or not we should examine markets in the context of market efficiency. This is not questioning this model from an ethical perspective; it questions it from the perspective of examining how individuals actually make financial decisions in practice. While in light of the 2007 financial markets crash, market efficiency approach failed to explain the performance of financial markets, an ethics-based approach may need to be reconsidered as a framework for managing and understanding financial markets. Finally, noting gaps in the literature and other contrasting results, we propose suggestions for future research.*

Keywords: *Behavioural finance, financial market, Islamic finance, Market efficiency, Moral code, Paradigmatic*

I. INTRODUCTION

Throughout the history of economic thought, scholars have examined the ways in which the theoretical frameworks used to study economic activity develop and evolve over time. Kuhn (1962) describes these theoretical frameworks as paradigms. They can possibly also be characterized as being ‘world views’ or the perspective from which an economic issue is examined.

The dominant paradigm in the Western academic world in respect to financial market behaviour can be described as the *market efficiency* approach. The origins of this approach go back to the ‘Chicago school of economics’ and work related to rational expectations by Muth (1961) and others. The paradigm was subsequently extended by financial economists, such as Fama (1970), in a financial markets context and by macroeconomic theorists, such as Friedman (1962), in a macroeconomic context.

We should not lose sight of the fact that financial market behaviour can also be examined from alternative perspectives; three distinctive paradigms or theoretical frameworks can be identified. In addition to the *market efficiency* approach, it can be argued that there is an *ethics* paradigm, as well as a *market sentiment* or *behavioural finance* paradigm. Although these latter frameworks have received less attention from scholars in the literature, it is important to consider them. For example, in light of the 2007 financial markets crash, an ethics-based approach may need to be reconsidered as a framework for managing and understanding financial markets. Next part of this paper analysis and evaluate the three frameworks outlined above this is used to draw conclusions section about how the research in financial market performance has to be examined.

II. ANALYSIS AND EVALUATE THEORIES USED TO EXAMINE THE PERFORMANCE OF FINANCIAL MARKETS

1. Market Efficiency Framework

It can be argued that the *market efficiency* paradigm has only come to dominate Western academic thought relatively recently. After the inflation-related economic crises of the 1970s and the collapse of the Soviet Union and the Warsaw-Pact-related socialism in the world, capitalism became the main economic paradigm in the world. The arguments of Friedman and his fellow monetarists succeeded in influencing politicians such as Reagan in the US and Thatcher in the UK. Simultaneously, models related to market efficiency such as the rational expectations hypothesis (REH) and the efficient market hypothesis (EMH) began to develop a dominant role in academia. Petrochilos (2010) states:

“People in authority liked their political message. Firstly, both REH and EMH were cast in neat mathematical models which however upon testing were found wanting, but that did not lead to their abandonment.”

One of the consequences has been that mathematical models have been used extensively to examine market efficiency. For example, we see the widespread use of tools such as runs tests, serial correlation, variance ratio and GARCH models to examine the level of market efficiency.

The implication of the EMH was that, because investors behave rationally and competitively, financial markets would constantly set prices reflecting all available information and so markets were efficient. Accordingly, the market price would constantly reflect more perfect information than was available to any one individual and, therefore, no one could expect to "beat the market". This included any regulators. This provided extra academic support to monetarist thought, which was also accepted by many governments, particularly in the UK. Constant market price fluctuations were dismissed as meaningless random fluctuations, akin to a random walk. Even though EMH failed to explain five major crises in the financial markets; in stock markets in 1987, bank lending in emerging markets in 1994, currencies in 1998, the new economy dot-com bankruptcies of 2003-2007 and credit markets in 2008 (Petrochilos, 2010), it is still the most accepted theory in the field.

2. Sentiment and Behavioural Finance Framework

Relatively recently, the sentiment and behavioural finance framework was developed in the Western academic world. This questions whether or not we should examine markets in the context of market efficiency. This is not questioning this model from an ethical perspective; it questions it from the perspective of examining how individuals actually make financial decisions in practice. The influences on their decisions may partly be ethics related (their moral code, such as Muslims' attitude to interest) but there are also other important factors, such as investor psychology. Werner and Thaler (1985) label this approach *behavioural finance*. Its origins can be traced back to earlier work on market sentiment.

When psychological thinking is applied to financial markets, it is in search of explanations for behaviour that apparently deviates from what is expected. On the basis of economic theory, and efficient market theory in particular, the applications are often referred to as behavioural finance. While there are several ways of delimiting the field, Statman (1999) clarifies the difference between standard finance and behavioural finance. He says that market efficiency has two meanings. To some, it means that there is no systematic way to beat the market. To others, it means that security prices are assumed to be rationally derived. If rational, price reflects only *fundamental* or *utilitarian* characteristics, which include *risk*. They do not comprise psychological or *value-expressive* characteristics such as sentiment. The psychological characteristics include many aspects of forms from cognitive psychology such as *heuristics*, *biases* and *mental accounting*.

The field of economic psychology covers these phenomena and many more. This does not imply that behavioural finance is necessarily a subdivision of economic psychology. Some differences as well as similarities between the two approaches should be pointed out. In economic psychology, notably financial psychology, more attention is paid to the psychological intricacies of financial behaviour and attempts are made to relate the problems to psychological theory.

Furthermore, there has been steadily increasing interest among psychologists in the problems of financial behaviour. In *cognitive* psychology, judgments and decisions under uncertainty form an important area of study. The problems studied are often close to financial psychology and are sometimes directly relevant to it. The work by Kahneman and Tversky (1973, 1979, 1984 and 1996) has drawn special attention to it and these authors have themselves applied their thinking to financial behaviour. Their ideas of *loss aversion*, *framing* of decision situations and the use of *heuristics* have flowed into economists' attention span in the search for explanations for irrational behaviour, and practitioners have also eagerly seized upon the ideas.

Shefrin (2000), who deals primarily with investment in stocks, discusses behavioural finance as an alternative to efficient market theory and notes that, while it is useful for the practitioners to be well versed in cognitive psychology, there is still much truth in efficient market theory at the aggregate level. He reports on many cognitive psychological concepts developed in the Kahneman-Tversky approach and used in behaviour finance. Fama (1998) downplays behavioural finance as an alternative to efficient market theory and demands a clearly formulated alternative, for example based on the *representativeness heuristic*, before accepting the challenge.

3. The Ethics, Responsibility And Regulation Framework

Both Western and Islamic scholars have argued that markets, market behaviour and the ways in which they operate should be examined from the perspective of the moral codes laid down by society. From a practical perspective, they argue that limits and regulations need to be imposed on markets to ensure that behaviour reflects society's relevant moral codes.

3.1. The Western Ethics Value System

The ethical perspective of examining financial markets found in Western scholarship can be traced back to the ancient Greek philosophers, who were the first to establish ethics (or the philosophy of morals) as a subject for study. This was through the ancient Greek philosophy that economics works together with other sciences in order to serve the body politic and improve the life of society. Ethics was seen as being related to what is morally good or bad, and also what is right or wrong. In effect ethics focuses on what is proper, right or obligatory to do or not to do.

Petrochilos (2004) identifies Greek ethics in terms of *Kalokagathia* or the character and conduct of *kalos Kagathos*. The latter element can be seen in terms of the perfect and just man and it can be interpreted as kindness, honesty, uprightness and just behaviour. *Kalos* has to do with beauty and harmony of the body, while *agathos* is the perfect, virtuous, just and good man. Clearly, in the context of this research, the emphasis is on *agathos*. *Agathoi* must display their *arête* (virtue) in public affairs if the *polis* (city-state) is to run efficiently.

According to ethics approach, of deontology, the actions of people are ethically right depending on the characteristics of the action itself rather than the goodness of its outcome. As a result, people act ethically because it is their duty to do so, irrespective of consequences. This implies that deontological ethics is the opposite of teleological ethics, i.e. utilitarianism, which asserts that the fundamental paradigm of morality is the value (utility) of what the action brings about, and the three major monotheistic religions of Judaism, Christianity and Islam, support formalist ethics, since they all require people to obey God in their daily actions.

Kant (1724–1804) argues that people have to behave ethically out of respect for moral law rather than out of a natural tendency. Therefore, people should act honestly for the reason that honesty is the correct thing to do. If people behave honestly because honesty pays then honesty is cheapened. Therefore, if firms behave ethically out of fear of the law, then they are not behaving ethically at all. Kant's moral law was established in relation to human reason, based on the tenet: *"Act only on that maxim whereby thou canst at the same time will that it should become a universal law."* Kant's view has been criticized on the grounds that he was too concerned with the rational.

In fact, deontology relies on a categorization of rules, which makes it rigid. Petrochilos (2004) says, *"Any ethical uncertainties can only be resolved by constructing even more complicated specific rules and ranking them hierarchically in order for conflict between them to be avoided."* Therefore, the question of what is proper remains open, and it is quite difficult to identify what is good and what is bad, particularly in a business sense.

Another approach to ethics is provided by *utilitarianism*. This is the school of thought based on rationality, established by Hume (1711–1776) and Bentham (1748–1832) and considered the cornerstone of neoclassical economics. According to Hume, moral decisions rely on moral sentiments and their qualities, which are of importance due to their utility or their agreeableness. Hume's moral system aims to achieve happiness for both the person and the society simultaneously; however, his emphasis is with regard to society. The moral sentiment that Hume's moral system claims to find in man is altruism. He traces it to a sentiment for sympathy for one's fellow beings. Bentham argues that the purpose of the law is to reach the *"greatest happiness of the great number"*. Furthermore, he proposed three different options that are still accepted today, which are:

(a) Individual well-being ought to be the end of moral actions.
(b) Each individual is to "count for one and no more than one".
(c) The object of social action should be to maximize general utility or, in Bentham's terms, to promote the greatest happiness of the greatest number.

In fact, happiness and pleasure are equal in Bentham's view, although some modern utilitarians may reject that. Although the influence of utilitarianism on economics and as a moral theory cannot be ignored, it is also important to look beyond the theory and to determine the usefulness of its consequences. Therefore, according to utilitarian theory, any action is considered right if it creates the maximum achievable happiness for all those who are part of it compared with any alternative action.

3.1.1. Corporate Governance and Financial Regulation

One of the practical consequences of an ethical approach to markets in Western philosophy can be seen in relation to corporate governance and financial regulation.

A number of ethical considerations are utilized in practice through corporate governance codes that represent the system and sets of rules by which firms are directed and controlled and which may also incorporate aspects of social responsibility. The Organisation for Economic Co-operation and Development (OECD, 1999) states that: *"The corporate governance structure specifies the distribution of rights and responsibilities among different participants in corporations, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs."*

After the Asian financial crises in 1997, the OECD launched the *OECD Principles of Corporate Governance* to help rebuild investor confidence. The principles set and modify a number of standards of management, based on analysis, and specify the practices for various countries subject to country-specific characteristics, such as cultural norms and legal rules. Its main areas of concern were the rights of shareholders, equitable treatment of shareholders, the role of the other stakeholders in corporate governance, disclosure, transparency, and the responsibilities of the board of directors (Petrochilos, 2004).

In 2004, the principles were reviewed to take into account the new developments in the principles-based approach, which highlights the need to adapt and adjust implementation to varying legal and cultural circumstances across borders. Thus, they can be used as a reference point by various policy makers in government as they formulate legal and regulatory frameworks and by the private sector as they develop their own practices. This could help develop a culture of values for professional and ethical behaviour on which well-run markets depend.

3.1.2. Regulation

The various ethical considerations mentioned above are applied in practice through the regulation that represents the system and set rules by which firms are directed and controlled; therefore, the regulation of the financial system can be viewed as a particularly important case of public control over the economy. The accumulation of capital and the allocation of financial resources constitute essential aspects in the process of the economic development of a nation. The peculiarities of financial intermediation and of the operators who perform this function justify the existence of a broader system of controls with respect to other forms of economic activity. Various theoretical motivations have been advanced to support the opportunity of a particularly stringent regulation for financial markets, banks and other financial intermediaries. Such motivations are based on the existence of particular forms of market failure in the credit and financial sectors (White, 1996).

According to Di Giorgio et al. (2000), the primary objective of financial market regulation is the pursuit of macroeconomic and microeconomic stability. Safeguarding the stability of the system translates into macro-controls over the financial exchanges, clearing houses and securities settlement systems.

A second objective of financial regulation is transparency in the market and in intermediaries and investor protection. This is linked to the more general objective of equity in the distribution of the available resources and may be mapped into the search for *"equity in the distribution of information as a precious good"* among operators (Di Giorgio et al., 2000).

At the macro level, transparency rules impose equal treatment (for example, rules regarding takeovers and public offers) and the correct dissemination of information (insider trading, manipulation and, more generally, the rules dealing with exchanges microstructure and price-discovery mechanisms). At the micro level, such rules aim at non-discrimination in relationships among intermediaries and different customers (conduct of business rules).

A third objective of financial market regulation, linked with the general objective of efficiency, is the safeguarding and promotion of competition in the financial intermediation sector. This requires rules for control over the structure of competition in the markets and, at the micro level, regulations in the matter of concentrations, cartels and abuse of dominant positions.

By contrast, in the 1980s the UK government introduced a policy of deregulation of markets in an effort to unleash the *"animal spirits"* of entrepreneurship. This resulted in, for example, the London Stock Exchange abolishing the distinction between stockjobbers and stockbrokers and changing from open outcry to electronic screen-based trading, which was called the 'Big Bang' or deregulation of the financial market in London in 1986 (Petrochilos, 2010).

3.2. The Islamic Ethics Value System and Economic Activity

Islamic economics, in its modern usage, came into existence in the early 1970s, mainly as a critique of both the capitalist and communist systems. The pioneering figures opined that the failure of economic development in Muslim society was capitalist economic development strategies that ignored the importance of societal well-being. Therefore, the objective of Islamic economics was to develop an economic system that would develop a human-centric development strategy.

Kahf (2003) indicates that Islamic economics cannot be considered outside the main discipline of economics; that perspective neglects the most important aim of an Islamic economics paradigm with its own values, rules and institutions, and its politically orientated 'systemic' understanding. The foundational principles of the Islamic economic paradigm are to achieve the creation of human-centric economics. Ahmad (1980), Chapra (1992), El-Ghazali (1994) and Sirageldin (2002) have presented works that use, in varying degrees, an axiomatic approach to rationalize the existence of an Islamic political economy by treating Islamic ethos as an ideal through which social and economic policies are assessed.

An example of these principles is unity, which indicates the vertical dimension of the Islamic ethical system. God says: "O mankind, we have created you from a male and a female, and made you into races and tribes, so that you may identify one another" (Qur'an, 49:13). Another principle is justice equilibrium, which provides for the horizontal dimension of equity. A third principle is free will, which provides individual opportunities in the economic system to choose between. Additionally, there is the principle of responsibility, which implies that individuals and society need to uphold public good.

The *zakat* and *tazkiyah* principles (meaning both ‘purification’ and ‘growth’) are pillars of Islam. The Islamic system aims at eliminating poverty from society, rather than managing the poor. One of the companions of the Prophet Mohammad and also one of the Guided Successors of Him, Ali Bin Abi Talib stated: *“If poverty were a man, I would certainly kill him.”* Practically, after few years of implementing Islam in Islamic society, the notion of poverty was gone altogether. It is narrated in history that during the era of the Khalifah Omar Bin Adel Aziz there was not a single poor person within the Islamic State who would accept the charity of the *zakat.* Prophet Muhammad said: “*Allah breaks covenant with any group of people living in close vicinity, whereby one of them goes to bed while hungry.”*

Together, these principles define the foundational Islamic economics framework, in which economic and financial activity is intended to take place while incorporating intra- and inter-generational social justice. Moreover, it reveals itself in the methodological framework of the Islamic economic system. In comparing the methodologies of Islamic economics and conventional economics, the points of contrast are unambiguously understood. To highlight those points of contrast, the methodological framework of neo-classical economics is first summarized as follows:

(i) Methodological individualism
(ii) Behavioural postulates: *self-interested individuals* who:
(a) seek their own interests,
(b) act in a rational way, and
(c) try to maximize their own utility.
(iii) Market exchange.

Hence, a conventional economic system is based on a *one-dimensional utility function,* which leads to *homo economicus* or the economic individual in a market system. The methodological postulates of Islamic economics, on the other hand, can be summarized as follows (Asutay, 2007):

(i) *Socio-tropic individualism*: not only individualism but also social concern is a prerequisite.
(ii) Behavioural postulates: socially concerned God-conscious individuals who:
(a) in seeking their interests are similarly concerned with the social good,
(b) conduct economic activity in a rational way in accordance with the Islamic constraints regarding social environment and hereafter, and
(c) in trying to maximize their utility seek to maximize social welfare as well by taking into account the hereafter.
(iii) *Market exchange* is the main feature of economic operations in the Islamic system; however, this system is filtered through an Islamic process to produce a socially concerned and environmentally friendly system. In this process, socialist and welfare-state orientated frameworks are avoided to prevent curbing of incentives in the economy.

Hence, in Islamic economics have the *two-dimensional utility function*, which leads to *homo Islamicus* or, as Arif (1989) names it, *tab’ay* (obedient) human being, where *“to be a Muslim is a necessary but not a sufficient condition to be tab’ay*” (Arif, 1989). Hence, as an implication, to qualify as *tab’ay*, one needs to apply Islamic principles in every aspect of one’s life.

Therefore, Islamic economics aims at a world order where the ontological and epistemological sources, the *Qur’an* and *Hadith*, determine the framework of the ethics and economic value system, its foundational and operational dimensions, and the behavioural norms of individual Muslims. Islamic economics, thus, is an:

“approach to [and process of] *interpreting and solving the man’s economic problems based on the values, norms, laws and institutions found in, and derived from all sources of knowledge* [in Islam]” (Haneef, 2005). This, however, implies both a systemic understanding and a political dimension.

Finally, Islamic economics, like neoclassical economics, suggests an implicit social welfare function, and expects Islamic finance to work towards that objective. However, neoclassical economic theory’s implicit social welfare function was undermined by the discourse and analysis developed by the new political economy and public choice (see Mueller, 2003), which still follows the utility maximizing individual. The very idea that there is a social welfare function, which is assumed to be maximized by a benevolent authority, is no longer a norm. This is so, since each government with its institutions is perceived to consist of individuals who attempt to maximize their own individual utilities in various capacities. In other words, the organic state with the social welfare function objective is no longer a reliable maxim.

III. CONCLUSION

In this paper, three strands of the literature are reviewed. One strand is argued that markets, market behaviour and the ways in which they operate should be examined from the perspective of the moral codes laid down by society. From a practical perspective, they argue that limits and regulations need to be imposed on markets to ensure that behaviour reflects society's relevant moral codes. Another strand of the literature focuses on the explanations for behaviour that apparently deviates financial markets from what is expected. On the basis of economic theory, and efficient market theory in particular, the applications are often referred to as behavioural finance. While there are several ways of delimiting the field, for example some scholar market efficiency means that there is no systematic way to beat the market. To others, it means that security prices are assumed to be rationally derived. A third body of research analyses the link between Western Ethics and Islamic Ethics Value System and Economic Activity, Both Western and Islamic scholars have argued that markets, market behaviour and the ways in which they operate should be examined from the perspective of the moral codes laid down by society. From a practical perspective, they argue that limits and regulations need to be imposed on markets to ensure that behaviour reflects society's relevant moral codes.

This literature review has several implications. First, it reveals that the financial market performance can be mainly explained by ethic value systems analysis; though there is still no econometrics model doing such measurement. Second, financial market performance appears to be an important for corporate governance and financial regulation to reallocate capital in more effective ways, therefore, this questions whether or not we should examine markets in the context of market efficiency. This is not questioning this model from an ethical perspective; it questions it from the perspective of examining how individuals actually make financial decisions in practice. Finally, this review answers two pressing questions for managers, regulators and investors: is efficient market hypothesis remains the orthodox model for examining efficiency in the financial market? and what are the alternative approaches? The issues discussed in the suggested research agenda could help to provide more detailed responses to these questions, which would be useful to stock market authorities, and the policymakers who define requirements and laws.

REFERENCES

[1]. Kuhn, T., *The Structure of Scientific Revolutions*, (Chicago: University of Chicago Press, 1962).
[2]. Muth, J. A. , Rational Expectations and the Theory of Price Movements, *Econometrica, 29*, 1961, 315–335.
[3]. Fama, E., Efficient Capital Market: A Review of Theory and Empirical Work, *Journal of Finance, 25(2)*, 1970, 283–417.
[4]. Friedman, M., *Capitalism and Freedom*, (Chicago: University of Chicago Press, 1962).
[5]. Petrochilos, G. A., Ethics, Responsibility, Regulation and Economics (or Saving Capitalism from Itself), *Business & Economics Society International Conference,(Athens, Greece, 2010).*
[6]. Werner F. and R. Thaler, Does the Stock Market Overreact?, *Journal of Finance, 40(3)*, 1985, 793–805.
[7]. Statman, M., Behavioural Finance: Past Battles and Future Engagements, *Financial Analysts Journal, 55(6)*, 1999, 18–27.
[8]. Kahneman, D. and A. Tversky , On the psychology of prediction, *Psychological Review, 80 (4)*, 1973, 237–251.
[9]. Kahneman, D. and A. Tversky ,Prospect theory: An analysis of decisions under risk, *Econometrica, 47(2)*, 1979, 263–291.
[10]. Kahneman, D. and A. Tversky , Choices, values and frames, *American Psychologist, 39(4)*, 1984, 341–350.
[11]. Kahneman, D. and A. Tversky , On the reality of cognitive illusions, *Psychological Review, 103(3)*, 1996, 582–591.
[12]. Shefrin, H., *Beyond Greed and Fear: Understanding Behavioural Finance and the Psychology of Investing*, (US: Harvard Business School Press, 2000).
[13]. Fama, E., Market Efficiency, Long-Term Returns, and Behavioural Finance, *Journal of Financial Economics, 49(3)*, 1998, 283–306.
[14]. Petrochilos, G. A. , *Managerial Economics: A European Text, Basingstoke*,(UK: Palgrave, 2004).
[15]. Kant, Immanuel [1724–1804], [online] available at http://onlinebooks.library.upenn .edu/webbin/book/lookupname?key=Kant%2C%20Immanuel%2C%201724-1804, [8 October 2011].
[16]. Hume, D. [1711-1776] cited in P. Vanderschraaf, The informal game theory in Hume's account of convention, *Economics and Philosophy, 14*,1998, 215–247.
[17]. Bentham, J. [1748-1832], An Introduction to the Principles of Morals and Legislation, in (J. S. Mill and J. Bentham, *Utilitarianism and other Essays*, with an introduction by A. Ryan, Harmondsworth, UK: Penguin, 1987).
[18]. OECD, *OECD Principles of Corporate Governance*, (Paris: OECD, 1999).
[19]. White, L., *International Regulation of Securities Markets: Competition or Harmonization?, in A. Lo (ed.), The Industrial Organization and Regulation of the Securities Industry*, (Cambridge: NBER, 1996).
[20]. Di Giorgo, G., C. Di Noia and L. Piatti, Financial Market Regulation: The case of Italy and a Proposal for the Euro Area, (*working papers, The Wharton Financial Institutions Center, 2000)*.
[21]. Kahf, M., Islamic Economics: Notes on Definition and Methodology, *Review of Islamic Economics, 13*, 2003, 23–47.
[22]. Ahmad, K., *Economic development in an Islamic Framework.', in K. Ahmad and Z. I. Ansari (eds.), Islamic Perspectives: Studies in Honour of Mawlana Sayyid Abul A'la Mawdudi*, (Leicester and Jeddah: Islamic Foundation and Saudi Publishing House, 1980).
[23]. Chapra, M. U., *Islam and the Economic Challenge*,(Leicester: The Islamic Foundation, 1992).
[24]. El-Ghazali, A. H., *Man is the Basis of the Islamic Strategy for Economic Development*, (Jeddah: IRT-Islamic Development Bank, 1994).
[25]. Sirageldin, I., *The Elimination of Poverty: Challenges and Islamic Strategies, in M. Iqbal (ed.), Islamic Economic Institutions and the Elimination of Poverty*,(Leicester: The Islamic Foundation, 2002).
[26]. Asutay, M., Conceptualisation of the Second Best Solution in Overcoming the Social Failure of Islamic Finance: Examining the Overpowering of Homoislamicus by Homoeconomicus, *IIUM Journal of Economics and Management, 15(2)*, 2007, 167–195.
[27]. Arif, M., *Towards Establishing the Microfoundations of Islamic Economics: The Basis of the Basics, in A. Ghazali and S. Omar (eds.), Readings in the Concept and Methodology of Islamic Economics*, (Selangor Darul Ehsan: Pelanduk Publications, 1989).
[28]. Haneef, M. , Can There be an Economics Based on Religion? The Case of Islamic Economics, *Post-Autistic Economics Review, 34(3)*, 2005, [online] available at http://www.paecon.net/PAEReview/issue34/Haneef34.htm. [18 March 2010].
[29]. Mueller, D. , *Public Choice III, third edition*, (Cambridge: Cambridge University Press, 2003).