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Islamic Research & Training Institute (IRTI)

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"The Genesis of Islamic Economics" Revisited

ABDUL AZIM ISLAHI•

Abstract

The present paper is an attempt to correct Timur Kuran on various issues related to the genesis of Islamic economics. It demonstrates that "Islamic economics" is not a product of twentieth century. The term may be new but its origins go back to early period of Islam. Its evolution up to the present state of a distinguished discipline can be divided into six distinct phases. The paper argues that the modern Islamic economics was never a sectarian subject. Nor was it developed for Muslims' identity and protection purpose. Scholars of different regions and of diverse affiliations promoted it and its propounders aimed at the well-being of all.

Keywords: Islamic economic thought,
JEL Classifications: B59, P51, Z12
KAUJIE Classification: D0, H14

Introduction

The context of this paper is an article by Timur Kuran entitled "The Genesis of Islamic Economics: A Chapter in the Politics of Muslim Identity"[1] **(**Kuran 2004). The author complained in his article about non-existence of a research "on the origins of Islamic economics" and tried to fill this gap. But due to targeting the issues of Islamic 'fundamentalism', 'clash of civilization' and looking into the matter in the perspective of subcontinent's partition, while ignoring a good deal of related works on the subject that appeared in India itself and in Hyderabad state

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[1] The article was first published in *Social Research*, Vol. 64, no. 2 (Summer 1997) and reproduced with minor editing in Kuran's collection of his papers under an irritating title: *Islam & Mammon – The Economic Predicament of Islamism*.

and the Arab world, he went on a wrong track and could not fill the gap he complained of. Although the origins of Islamic economics go back to the earliest period of Islam he denies existence of Islamic economics in earlier centuries and considers antiquity of the doctrine as "a myth" (Kuran, p. 83). In his opinion "Islamic economics" is a product of twentieth century. He is right so far the 'term' is concerned but the ideas existed from early centuries of Islam. It is also not supported by facts that "the doctrine emerged in late-colonial India as an instrument of 'identity creation' and 'protection'" (p. 82) as the present paper is to substantiate this.

Supposedly Kuran gave the whole 'credit' of promotion of Islamic economics to one person – Sayyid Abul-Ala Mawdudi (d. 1979). In his opinion Mawdudi prescribed the main objective of Islamic economics to support and strengthen "political Islam," "Islamic fundamentalism," or simply "Islamism" (P. 82).[2] This writer feels that both assertions need correction. The present paper, by giving full account of the genesis of Islamic economics from its original sources, attempts to put the record straight and note the facts missed by Kuran. It also aims to eliminate possible misunderstandings and negative impact on the reader's mind that his article might have created.[3]

Kuran has excuse for missing the relevant data as he lacks knowledge of Urdu language in which early literature on Islamic economics appeared and which is the language of the region (i.e. Indian subcontinent) considered by him the birth place of Islamic economics. He also seems to be unaware of Arabic the language of another region where modern Islamic economics developed. Except Baqir al-Sadr's *Iqtiṣādunā* (Our Economics) a work of early 1960s, and Qutb's *al-ʿAdālat al-Ijtimāʿīyah fi'l-Islām* (Social Justice in Islam) (1948), contributions of other Arab writers are unknown to Kuran due to the language barrier. He could rely on works which were translated into English. He seems to have missed even some of the early writings in English, for instance, works of Hamidullah (1936), Datta (1939), Qureshi (1947), Shaikh Mahmud Ahmad (1947), and Siddiqi (1948). Interestingly all these works are the first in their areas of Islamic economics.[4] In this paper we

[2] To Kuran IE is to serve "political Islam," "Islamic fundamentalism," or simply "Islamism". Use of these types of terms in any serious scholarly economic discussion is not considered appropriate by many as they are politically motivated expressions.

[3] See, for example, El-Gamal (2006, p. 137), Visser (2009, pp. 1-4, 5,), etc.

[4] Hamidullah's paper is first from Hyderabad State and first time on labour problem, using first time the term "Islam economics". Jitindra Mohan Datta's (1939) article has also many firsts. It is first related to economics of "Zakat"; first time by a Hindu writer and perhaps first time a note published in a prestigious journal *The Economic Journal*, under the editorship of John Maynard Keynes. Qureshi's (1947) is the first work on theory of interest in Islamic perspective. Shaikh Mahmud

mainly concentrate on Islamic economic literature development in the first half of the twentieth century. In the second half of the twentieth century Islamic economics got recognition as a discipline. Not only Muslims, a number of non-Muslims are also showing interest in the subject. But in the opinion of Kuran once it was fully developed "various actors found it a convenient vehicle for advancing political and economic aims" (Kuran p. 101). This writer thinks that reading the intention is not always safe and sound. Opposition to Islamic economics could equally prove an effective vehicle to fulfill similar objectives. May be, more widely and conveniently.

Islamic Economics is not a Sectarian Discipline

No doubt, one of the purposes of Islamic economics, for some of the early writers, was 'to identify and establish an economic order that conforms to Islamic scripture and traditions' (Kuran, p. 82). That is because the basic sources of Islam – Qur'ān and *Sunnah* – consist of a number of economic teachings and principles applicable to economic life and being Muslims they are ordained to practice them.[5] They felt religiously obligated to shun interest, pay zakat and manage *awqāf* and follow Islamic instructions in their daily economic life. But that does not mean that the promoters of Islamic economics wanted to establish Islamic economics on sectarian basis. They believed that Islam is mercy for the entire human being and its economic system is better substitute to all other systems. For example, Mawlana HifzurRahman Seoharwi (d. 1962) the author of the first complete book on Islamic economics, strongly emphasized on need to prove benefits of Islamic economics to his country fellows and convince them on its virtues. He showed high optimism in this respect (Seoharwi, 1969, 1939, pp. 393-94). The same feeling was expressed in 1946 by Shaikh Mahmud Ahmad (d. 1990) in the preface of his work (1952, p. vi). He says:

> if Islamic economic order is something which can and ought to be practiced today by the Musalmāns, it should recommend itself to non-Muslims with almost equal force, because the problems that confront the world today in the economic sphere are the same for Musalmāns as for any other religious group.

Ahmad's (1947) book is the first work on Economics of Islam in English. S. A. Siddiqi (1948) authored first work on Islamic public finance.

[5] For such teachings refer to Kahf (1999) who has compiled a full volume on economic teachings in the Qur'ān and the *Sunnah* and Khan (2005) who has compiled the Prophet's economic teachings in a volume.

And this objective is still in front of the Islamic economists. In the 7th International Conference on Islamic Economics held at Jeddah in 2008, Islamic Economics Research Center (IERC), King Abdulaziz University, announced: "Let Islamic economics be for each and all, declaring their problems to be its problems, taking up the causes of humanity as its causes" (IERC, 2008, p. 41). Islamic economics "relies on an integrated role of moral values, market mechanism, families, society, and 'good governance' *to ensure the well-being of all*" (Chapra, undated, p. 4, emphasis added).

Unaware of this, Kuran (2004 p. 99) wants to take development of Islamic economics as conflict between the West and the East. The present writer, with his specialization on history of Islamic economic thought, finds that it provides a basis for civilizational dialogue and a meeting point and sharing values in the history of the two civilizations of the world (Islahi, 2014 [a]).

Islamic Economics' Course of Development

It is interesting to note that evolution of Islamic economics experienced a course of development similar to the one seen by the main discipline of conventional economics. The history of mainstream economics is generally traced back to Greek philosophical discourses, Roman jurists and administrators, and early Christian fathers. Then there was the so-called 'great gap' for about five centuries.[6] During the twelfth century Scholastic Economics emerged which dominated the scene for about four centuries. Then came 'mercantilism' to rule about two and half centuries (roughly from sixteenth century to the mid eighteenth century) to give way to 'physiocracy' for a short period till the appearance of *the Wealth of Nations* in 1776 by Adam Smith – known in the West as the father of Economics. It is said that his work marked the incarnation of economics as a separate and independent discipline. But this does not mean that there was no economics before "Economics".[7] In any branch of knowledge all ideas do not develop in one stage. They are gradually evolved.

[6] Joseph Schumpeter (1997, pp.73-74) talked of 'the great gap' in evolution and development of economic thought in his monumental work *History of Economic Analysis*, first published posthumously in 1954. Many writers have refuted Schumpeter's thesis of "great gap". Reading Ghazanfar (2003) will be sufficient.

[7] Economics was 'evolved historically from many minds and temperaments' and economic thought is 'a cumulative accretion of human knowledge' (Ekelund and Hebert, 1983, p. 3) and history of economic thought is 'a continual progression of ideas made up of epochal contributions of new list of knowledge added to the accumulated legacy of the past' (Ekelund and Hebert, 1983, p. 4).

The same happened to Islamic Economics. Although the term is twentieth century product, parts of ideas existed since the advent of Islam which enhanced with the time. It gradually developed as an interdisciplinary subject (Chapra, 2001, p. 43). Only an ignorant of Muslim intellectual history can claim that "such category of knowledge did not exist in the intellectual heritage of Islam". The economic teachings and maxims formed a considerable portion of Qur'ānic verses and *Sunnah* (the Prophetic traditions). The jurisprudential literature developed in early centuries of Islam had a number of chapters dealing with matters that formed the component of economics. Nonexistence of term does not necessarily mean absence of the idea. Specialized works on economic problems also started in early centuries of Islam as noted below under the 'first phase'. The existence of the essence of a subject is important, not the terminology. Terminology is generally formed later. Moreover, details of a subject and emphasis are always changing. That is the reason behind emergence of schools and streams in every discipline including economics. The economics of twenty-first century is not exactly the same as that of the twentieth century, and that was different from the one in the nineteenth century and so on.

It may be noted that at various stages of history there has been convergence and divergence between the European West and the Arab-Islamic East, and either of the two benefited at the time of convergence. This is shown below in second, third and fifth 'phases of Islamic economics'.

Phases in Development of Islamic Economics

Right from its beginning up to the twentieth century, development of Islamic economics can be divided into six distinct phases.

The first phase (first century of Islam[8]/seventh century CE): It may be called formation period. After the advent of Islam, for about a century the Muslims mainly depended on their own sources for dealing with the socio-economic problems.[9] Since the Qur'ān and *Sunnah* – contained a number of economic principles and many detailed economic teachings in addition to use of reason to decide matters in the best interest (*maṣlaḥah*) of people, there was no pressing need to look for guidance from outside sources. Thus early Islamic economic thought

[8] Islamic calendar is called "Hijrah". Generally there is gap of six centuries between the two. This difference is decreasing by three year in each century.

[9] Commenting on works of *Kitāb al-Kharāj* Spengler says that they 'reflect Islamic thought about 800 C.E. at which time the influence of Greek thought had not yet made itself felt' (Spengler 1964, p. 270, footnote No. 8).

was based on its basic sources. The economic teachings found in the Qur'ān and *Sunnah* were expanded by the Muslim scholars using *qiyās* (analogical reasoning) and *ijtihād* (fresh original thinking) and through their own perceptions and experiences. Muslim economic thinking in this period presented a fine combination of revealed knowledge, creative thinking, and existing economic traditions.[10] Very soon writing on economic problems started: In early centuries of Islam we find Abu Yusuf (d. 798) and al-Shaybani (d. 805) who authored *Kitāb al-kharāj* (the book of taxation) and *Kitāb al-kasb* (the book of earning) respectively;[11] al-Qurashi (d. 818) compiled traditions of the Prophet related to taxes and other financial obligations, while Abu Ubayd (d. 838) and later his student, Ibn-Zanjawayh (d. 893), authored *Kitāb al-Amwāl* (the book of finance); al-Muhasibi (d. 857) wrote on importance of economic activities; Ibn Abi al-Dunya (d. 891) on *Iṣlāḥ al-māl* (Betterment of Wealth), al-Kinani (d. 901) on *Aḥkām al-Sūq* (rules of market), Abu Bakr al-Khallal (d. 923) on business and economic activities in general; al-Mawardi (d. 1058) on good governance and al-Ghazali (d. 1111) on nature and functions of money, and al-Dimashqi on virtues of commerce (lived in the 12th century), etc. Interestingly, they were in the period termed by Schumpeter as the 'great gap' in the evolution of economic thought.

The second phase (eighth–eleventh centuries): It may be called translation period. The second phase began with the translations of the Greek and Persian scholarly heritage into Arabic language. The translation activity started by the end of the first century *Hijrah* corresponding early eighth century, although it took two more centuries to make its influence felt among the Muslim scholars. With this they got an opportunity to benefit from alien intellectual and practical works. They learnt and developed Greek economic ideas and made improvements over them by their commentaries and additions.[12] This continued for a few centuries. Greek economics was confined to a few aspects of life such as, 'wants and their satisfactions', 'economy of self sufficient households', 'division of labor', 'barter', and 'money'. According to Schumpeter (1997, p. 60): "This – presumably the extract from a large literature that has been lost – constitutes the Greek bequest, so far as economic theory is concerned". Muslim scholars extended this branch of knowledge 'far beyond the household, embracing market, price, monetary, supply,

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[10] Siddiqi (1992, p. 69) has rightly defined Islamic economics as "the Muslim thinkers' response to the economic challenges of their times. In this endeavor they were aided by the Qur'an and the *Sunnah* as well as by reason and experience."

[11] Shemesh (1967, pp. 3–6) who translated three early works on taxation gives a list of twenty-one works from various sources that were written on the subject during the early centuries of Islam.

[12] Lewis admits: "Muslim scientists added greatly to the material transmitted to them, through their own researches and through practical experiments and observations in fields as diverse as medicine, agriculture, geography, and warfare" (Lewis, 1982, p. 221).

and demand phenomena, and hinting at some of the macro-economic relations stressed by Lord Keynes' (Spengler, 1964, p. 304). The movement of translations from alien sources came to an end in about eleventh century, but 'the development of Islamic science continued for some time beyond that' (Lewis, 1982, p. 221).

The third phase (twelfth-fifteenth centuries): It is retranslation and transmission period. Greco-Arab Islamic ideas (additions and commentaries of the Muslim scholars over the Greek philosophy) were translated from Arabic to Latin and other European languages (Durrant (1950, p. 910). We have reports regarding translation activities from Arabic to Greek by the end of fourth century *Hijrah* in the Byzantine capital Constantinople (Sezgin, 1984, p. 119). So much so that the period before Western renaissance is termed as the 'translation age' (Myers, 1964, p. 78).

As it is well known, in the pre-modern economics period economic discussions formed the part of ethical and philosophical discourses, so economic ideas of the Muslim scholars were also translated and transmitted along with their philosophical works and commentaries. Knowles admits, "Beside acting as agents in the long process of transmitting Aristotelian thought from Syrian and Persian through Egypt to Spain, the Arabian thinkers handed over a legacy of their own to the Latins" (Knowles, 1963, p. 195).

Thus, Greek economic ideas which formed starting point of the European economic thought reached the West mixed with Muslim scholars' commentaries and additions. Since the Muslim scholars based their ideas on both the revealed knowledge and human reason, they were more suited to Christian scholastic scholars who benefited from them to a greater extent which is clear from the gap found between their voluminous body of thought on economic issues and almost no contribution of their predecessors who could not have access to the Arabian sources (Islahi, 2014 [b], pp. 63-66). This gave the birth to scholastic economics in the West and formed the connecting link between Greek philosophers and scholastic economists. In this way they played vital role in the evolution of mainstream economics and influenced the scholastic doctors and mercantilists (ibid. pp. 82-83).

The fourth phase (sixteenth–eighteenth centuries): It may be called dormant phase which continued for almost three centuries. In the opinion of this author the fifteenth century was the peak of Muslim intellectual scholarship that produced Ibn Khaldun (d. 1406), al-Maqrizi (d. 1442), al-Asadi (fifteenth century), Ibn al-Azraq (d. 1489) and al-Dawani (d. 1502). In the sixteenth century we could not find a work on socio-economic problems that could be matched with the works produced by scholars mentioned above. Repetition of previously formulated ideas, and commentary on their predecessors' works became the main characteristics of Muslim scholarship. The Muslim civilization and its intellectual and political power, after reaching its zenith, had by the early sixteenth century begun to show clear signs of decadence while the Western renaissance was in full swing. It was the time when writings on how to achieve economic progress and strengthen the country through foreign trade took the form of a movement in the West, known as *mercantilism* in economic literature. At that stage of history, the Muslim scholars, after transmitting Greek ideas along with their own additions and interpretations, to the world at large, gradually receded into oblivion. The West took over the torch of sciences from them and kept it burning even with greater brightness.

In the succeeding two three centuries many voluminous works on the exegesis of the Qur'ān, commentaries on *ḥadīth* (the Prophet's tradition), and detailed notes (*shurūḥ*) on earlier *fiqh* literature appeared but because of imitation and lack of originality they lost significance. Books written on *al-siyāsah al*-sharīʿah and *al-ḥisbah* (the two types of works that consisted economic ideas of Muslim scholars) merely presented summary of earlier works (Islahi, 2009). Scholars of the period wrote on economic issues such as price, money, land management, public finance, etc. But there were hardly new ideas. Exception may be granted to Fadl-Allah Khunji's (d. after 1512) *Sulūk al-Mulūk* and Abu'l-Fazl's (d. 1602) *A'īn-i Akbarī*, both in Persian language. Especially Khunji has discussed the Islamic provision of public finance in much detail in his work *Sulūk al-Mulūk* (1966). This is perhaps the most comprehensive treatment of the subject in the sixteenth century and presents many insights on the Islamic theory of public finance (ibid.).

The seventeenth century was also very closely related to the sixteenth century in the sphere of Muslim education and intellectual input. Economic condition decayed and corruption increased.[13] Scholars of the period paid attention to arrest decaying socio-economic structure and sought solution in revival of old system. For instance, in the wake of wide spread corruption and deteriorating economic condition the Ottoman thinkers advocated an adherence to the old system, and argued for the revival of *tīmār* (grant of land tenure to the troop or *sipāhī*) and called for the return to the old order. In that context Defterdar (d. 1720) says: 'The ancient law must be respected' (1935, p. 143). They emphasized on justice and fairness in taxation and public expenditure, removal of corruption and exploitation, elimination of economic evils such as hoarding, monopoly, briberies, adulteration,

[13] For details refer to Islahi 2011[a]).

etc. But what positive steps should be taken to develop various sectors of the economy – agriculture, industry and trade – and how to equal or surpass the rival economies was hardly discussed.

During the eighteenth century, decaying forces in the great Muslim civilization speeded up and Western colonization of Muslim lands began. At the same time, some sort of awakening, soul-searching and efforts at renovation by Islamic thinkers was also initiated. It produced three great scholars in three different parts of the Muslim world, Shah Wali-Allah Dihlawi (d. 1762) in the Indian Subcontinent, Ibn Abd al-Wahhab (d. 1792) in the Arabian Peninsula, and Uthman dan Fodio (d. 1817) in West Africa – each of whom brought about a revolution in intellectual thinking and religious puritanism that marked the beginning of the modern period in the Muslim world.[14]

Fifth phase (nineteenth century and early twentieth century): It may be called Awakening Phase. In the nineteenth century political circumstances provided new opportunity of convergence which culminated into the re-birth of Islamic economics.

In this period a new type of intellectual and economic awakening started, and economic problems began to attract the attention of a large number of Muslim scholars and intellectuals in different parts of the world.

Khayr al-Din al-Tunisi (d. 1890) from Tunisia; al-Kawakibi (d. 1893) from Syria; al-Tahtawi (d. 1873) and Abduh (d. 1905), from Egypt, al-Afghani (d. 1897) from Iran and Sayyid Ahmad (d. 1898) from India all had to say something on economic issues. They were practical men, not theoreticians. Their purpose was to improve the economic conditions of their peoples within the framework provided by Islam.

Factors that Led to the Revival of Islamic Economics

During the nineteenth century the Arab masses and people of Indian subcontinent got first public exposure to European thought and modes of practice which opened their eyes and made them realize just how laggard they had become. They saw establishment of modern educational institutions. They also saw the development of many new economic establishments, never heard of before, such as insurance, banking, joint stock companies, stock exchanges, and so on. The

[14] For their economic ideas refer to Islahi 2011[b]).

nineteenth century can be rightly called as the century of awakening for Muslim world. This awakening can be classified as intellectual awakening, economic awakening and Islamic awakening. The cumulative effect of these three types of awakening was revival of Islamic economics as we see below:

Intellectual awakening in which use of printing press, publications of classical Islamic works, issue of journals and newspapers and translation of scientific and economic works played vital role. Perhaps, for the first time in history, an Egyptian educational mission was sent to study at European universities. They witnessed the benefits of science in economic, social, educational and intellectual spheres. Influenced by the Western system, Muslim scholars advocated the modernization of their own system to match Western educational and economic institutions and establishments.

Economic Awakening. The most important manifestation of development during this century was the economic awakening that took place in the Arab world. They witnessed the manifestations of wealth and civilization in Europe and realized that the development of industry, agriculture, and commerce depended on the development of the sciences and technology (al-Tunisi, *The Surest Path*, pp. 137-51; al-Tahtawi, *Manāhij*, pp: 327-28, Abduh (*al-Waqā'iʿ al-Miṣrīyah*, No. 1079, 5 Jumada al-Ulā 1298 / 4 April 1881).

Those who visited Europe saw the rich economic condition of European cities and the goods and services people enjoyed. Al-Tahtawi wrote a complete section in his work *Takhlīṣ al-Ibrīz* on employment and skills in Paris, in which he talked about industry, commerce, and communication, and which he viewed as the main reason for the riches of the French people. Al-Tunisi also dealt with the same subject in Chapter Three of his work *Aqwam al-Masālik* (*The Surest Path*, pp: 134-36; 164-69).

The bank was established for the first time during the nineteenth century. But the Muslim scholars did not try to legalize bank interest. Al-Tahtawi and al-Kawakibi expressed their dislike of interest based banking. Some of the others remained silent. Ironically, Abduh's student and friend Rashid Riḍa reported that the former permitted the interest offered by the post office on investment deposits. In fact no such statement made by Abduh has been traced, and even Riḍa's report is ambiguous.[15] As far as banking without interest is concerned, no one hinted at its possibility and procedure. This innovation was developed in the twentieth century

[15] For a detailed analysis of Riḍa's report and its ambiguous content see Badawi, 1964, pp. 223-39.

when it became clear that the Western banking system was not acceptable for Muslims.

Muslim scholars addressed various issues which were related to the development of economy in the modern period. Here are two examples of scholars from Egypt, Rifāʿah al-Tahtāwī and Muhammad Abduh. They had been for sometimes in Western countries and directly or indirectly studied Western thought and institutions which are reflected in their economic ideas. For instance, al-Tahtawi's emphasis on significance of industry which he calls *al-manāfiʿ al-ʿumūmīyah* (1912, 79). He discussed productive and unproductive labour (ibid. 104), foreign trade, competition, etc. Abduh addressed poverty, abolition of bonded labour (1993, I: 549-51), need for relevant education (*al-Aʿmāl al-Kāmilah*, Vol. 1: pp. 165-66), economic problems faced due to lack of effective demand (*Ḥubb al-Faqr wa Safh al-Fallāḥ*, *Tārīkh*, Vol. 2: p. 56), etc.

In India Sayyid Ahmad Khan was extremely perturbed by the worsening economic condition of Indians in general and Muslims in particular. To him, national decay is cumulative effect of individuals' idleness, dishonesty, dishonour, selfishness and evils (Khan, 1292 AH. P. 205). In this way he advocated for value-based economic uplift. In the nineteenth century the most important task before Muslim thinkers was to visualize to the masses importance of economic improvement.

Islamic Awakening and Solution under Islamic Guidance

Citing a few names of 19th century Muslim scholars, Kuran observes: "But the notion of identifying or rediscovering economic practices that were distinctly Islamic was absent from their campaigns - to say nothing of cultivating an economic doctrine grounded in Islamic teachings" (p. 90). In fact economic thinking of Muslim scholars of nineteenth century has not been fully explored. One cannot get true picture just depending on a few English translations. Many examples of "identifying or rediscovering economic practices" can be presented "that were distinctly Islamic". Al-Tunisi repeatedly wrote that the reason behind Muslim governments’ backwardness was the emancipation of their rulers from the Sharīʿah, (*The Surest Path*, 1968, pp. 134-6).

Al-Kawakibi criticized various policies of the Ottoman sultans. About Sultan ʿAbd al-Majid, he said that he legalized many prohibited things, *ribā* being one of them, to strengthen the administration of his government, (*Ṭabā’iʿ al-Istibdād*, p. 310). Perhaps he meant the establishment of a Western type of bank based on interest during his reign in 1850. He said: "This (practice of riba = interest) endears idleness which spoils morality; it also has the sense of earnings or profit, without undertaking the risks involved in trade, agriculture and properties. *Ribā* thus creates the gap between the rich and the poor" (ibid. p. 48). In his work *Umm al-Qurā* (pp. 175-76) he observes:

> If Muslims live really as Muslims, they will be safe from poverty. They will live an organized, common sharing way of life, the kind of which is desired by most civilized countries of Europe but who still do not know how to achieve it, although they are striving to achieve it through various associations and organizations, having millions of members, such as communism, feminism, nihilism, socialism, and so on. All of them aim at achieving equality and equity in rights and economic conditions, something which is required in Islamic society by religion through *zakāh* and *kaffārāt*. The suspension of *zakāh* and the non-fulfillment of *kaffārāt* are the reasons for various deficiencies about which we are investigating.

Al-Kawakibi thought that *zakāh* and *waqf* would take care of socio-economic justice. Instead of supporting intervention in social and economic affairs, he appealed to the religious responsibility of the rich towards their poor brethren, (*Ṭabā'iʿ al-Istibdād*, p. 56).

Here is another scholar al-Tahtawi. At the time when he visited Paris in 1826 there was no modern bank in Egypt; the first being established in 1855. Inevitably, then, the existence of banks in France attracted his attention. In this respect he observes: 'Know that the greater businesses are those of tradings, and the most famous of them is the banking business. … people can deposit with their bank whatever they want to deposit, and take the legally fixed profit which is not considered by them as *ribā* (usury) unless it exceeds the limit fixed by the law'(al-Tahtawi, *Takhlīṣ*, p.149). He did not approve of their practice of interest, remarking: 'Had their earnings not been mixed with interest (*ribā*), they would have been the best people from an earnings point of view' (ibid. p. 152). Al-Tahtawi also cast a critical view on the French economy: 'Their economy would have been the best among the nations' he observed, 'had it not been involved with *ribā*.' (ibid., Chapter Three, Section Eleven cited by Imarah 1973, pp. 101-102).

Al-Tahtawi suggests the rich community of his country to establish commercial establishments based on the principle of '*al-salam*' (an advanced sale at a deferred date but with immediate payment) to facilitate economic transactions and abolish *ribā* and relieve the needy from borrowing on interest. Even bankrupt traders might be helped through them (*al-Murshid al-Amīn*, Chapter 1, Section 1).

Both al-Tahtawi and Abduh examined Western ideas on the criteria of Islamic sources before adopting any of them. In many cases they did not find any contradiction between the two except that the Muslims had lost and forgotten them, while the West adopted and developed them. The two scholars urged their people to regain their lost wisdom. They touched on some of the topics which became main issues of Islamic economics during the twentieth century, such as a value-based economic system, the role of the state in economic life, taxation and public borrowing, banking and interest, the Islamic way of business, insurance, the elimination of poverty, the Qur'ānic terms of *fī sabīl-Allāh* (in the way of Allah) and *al-ʿafw* (surplus), and so on (Islahi, 2015 [a]). In this way, they prepared the ground for the development of the discipline of modern Islamic Economics. Thus there is no surprise if "Certain economic ideas and practices now characterized as inherently Islamic are new creations; others, while not new, acquired religious significance only recently" (Kuran, p. 83). This is an outcome of awakening mentioned above and exercise of *ijtihād* (fresh and creative thinking) in the modern period. One should accept that there are host of shared values, tools and techniques.

Sixth phase (20th century): The modern development of Islamic economics is the sixth phase. It is resultant of three types of awakening mentioned above which were seen in the previous century and in the early twentieth century. A fourth factor also worked – the struggle between the two leading economic systems – Marxism and Capitalism - that fought to dominate each other. When Muslim scholars examined them closely they were convinced that Islam presents a middle economic path that combines the virtues of the two and eliminates their extremism, through divine prescriptions found in the Qur'ān and *Sunnah*. They were not satisfied with the Western economics that has materialistic bend, and value neutrality. They realized that self interest was not always helpful to serve the social interest. The Muslim's belief in the Hereafter gave him different outlook towards economic activities. In this search, no doubt, the desire to live according to Islamic code of life has played important role. According to Siddiqi (2008, 5) "the whole thing about Islamic economics is an offshoot of the movement towards Islamic living that the second and third decades of the last century witnessed".

Historically it is not correct that the 'core positions' of Islamic economics 'took shape in the 1940s'. The first complete and comprehensive work on Islamic economics appeared during 1930s by Seoharwi. But the writings on topics that constituted elements of Islamic economics began from early 20th century. Here are a few names: in the Arab world Rashid Rida (1901, 1907), wrote on *zakāh*, financial difficulty, and interest, Mijawi and Burayhimat (1904) on economic teachings of Islam, Salih, (1933) on Arab-Islamic thought in the fifteenth century, al-Hashimi, (1937) on al-Biruni's economic thought, Ali (1939) on *al-ḥisbah* (market supervision), Shaltut (1940) on *zakāh* and taxation in Islam, al-Sawi (1942) on Islam and economic activities, etc. In the non-Arab world Aghnides (1916) did his Ph D. on *Mohammedan Theory of Public Finance*; Nadwi (1924) wrote on prohibition of interest; Ahmad (1924) on principles of wealth distribution and Islam); Nizami (1925) on *zakāh or* Divine Income tax; Khan (1928) obtained Ph D. on *Usury and the Principles of Mohammadan Law* from University of Oxford; Naqi (1933) on Commerce and Islam; and Datta (1939) on "Zakat: The Economic Basis of Islamic Tithe". Zakir Husain (d. 1969) who became thirds President of India in 1967 introduced economic ideas of some past Muslim scholars in 1932 in his lectures entitled *Maʿāshīyāt: Maqṣad aur Minhāj* (Economics: Purpose and Methods). These types of writings were non-existent in previous centuries. They created an environment to revive writing on Islamic economics.

Iqbal, the poet philosopher of Islam provided food for Islamic economic thinking through his poetry. Many elements of Islamic economics exist in his various couplets which were used as foundation for the later development of Islamic economics.[16] He authored the first book in Urdu on Economics called *ʿIlmul-Iqtiṣād* (Science of Economics). It was an assignment from the Punjab Textbook Committee (Tahir, 2001, p. 1167). Naturally he had to follow the syllabus of the College during the British rule.[17] There is no surprise if he had not introduced elements of Islamic economics in that textbook. It is also possible that his attention to the elements of Islamic economics was drawn after personally viewing the flaws of western economics during his stay in Europe for the expression of which he used his poetry an effective instrument.

From outside the Indian subcontinent, Kuran could not present any work on Islamic economics in the first half of the twentieth century except one by Sayyid Qutb (1906-66) of Egypt, entitled *al-ʿAdālat al-Ijtimāʿīyah fi'l-Islām* (Social Justice in Islam) – a topic partly related to economics. More focused economics works were authored by Imam (1941), Nash'at (1944), al-Ghazali (1947), Taman (1948), Makhluf (1948), al-Nabahani (by the end of 1940s), etc.

[16] Siddiqi (2009) has provided such a short selection from his Urdu and Persian poetry.
[17] There is difference of opinion regarding exact date of its publication. According to Tahir it is confirmed that it was published in 1904. He supports this by the fact that Urdu magazine *Makhzan* of April 1904 announced it was 'recently' accomplished and published.

As far Qutb is concerned, he concentrated on matters of social justice. It will be extreme simplicity to think that "Under Mawdudi's influence, Qutb characterized Islam as a comprehensive and self-sufficient system" (Kuran p. 98). When Qutb authored his book in 1948, to the best of my knowledge none of Mawdudi's translations reached the Arab world. Mawdudi's influence did not cross the national boundaries yet. Kuran does not present any proof of this influence. In fact Qutb's work is independent of any outside influence.[18] The perception that "Islam is a comprehensive and self-sufficient system" is common among the most of knowledgeable Muslims. But that does not mean that in the worldly affairs they cannot benefit from the wisdom and experiences of others.

The Pioneer Writers on Islamic Economics

There is no doubt that credit goes to Urdu language for producing first and second complete and exclusive book on Islamic economics in the modern period. The first book entitled "*Islām kā Iqtiṣādī Niẓām*" (the Economic System of Islam" was by HifzurRahman Seoharwi who was a graduate of Deoband's Darul-Ulum (College of Sharīʿah sciences), an institution always opposed to Jamaat-e Islami ideology. Before authoring it in 1939, Seoharwi (d. 1962) was with Abul-Kalam Azad (d. 1958) in 1934 in Calcutta (now Kolkata) the capital of Bengal which was center of the follower of communism. It is reported that students who used to visit Azad asked him "Is there no economic system of Islam?" For their guidance Azad suggested Seoharwi to write on economic system of Islam (Usmani, 2001, p. 18). It may be noted that Seoharwi was a member of Jam`iat al-Ulama, a party opposed to Jamaat-e Islami and he was elected Member of Indian Parliament two times on the ticket of Indian National Congress. Azad, at whose behest Seoharwi wrote the book, himself was a nationalist leader. He was the face of communal harmony in modern India, renowned scholar and an active political leader and freedom fighter. In 1923, he was elected as the Congress President, thus becoming the youngest man ever to hold the post. He lived long not just to witness Indian Independence and the subsequent Partition, but also served as free India's first Education Minister.

While advocating the Islamic economic system Seoharwi criticizes socialism, capitalism and the other systems (Seoharwi, pp. 18, 19, 60, 324, 370, 381-82). He asserts that Islamic system is based on religious and ethical values (p. 25). It

[18] I had also got this verified from a top Islamic economist who had translated Qutb's work in Urdu and who is expert of Mawdudi's writings as well.

consists of virtues of all the other systems and avoids their shortcomings (p. 39). It is blessing not only for Muslims but the entire humanity (p. 393). Involved in practical life, his emphasis is on applied aspects of Islamic economics.

The second most important text on Islamic economics was also authored by a scholar of the same school and ideology to which Seoharwi belonged. It was Manazir Ahsan Gilani (Guilani) (d. 1956) – a professor of Islamic studies at the Osmania University, Hyderabad (Hyderabad was a Muslim state at that time) in 1945. It is a dense volume which spreads over 566 pages. The title of his work is "*Islāmi Maʿāshiyāt*" (Islamic Economics). Gilani being a teacher the thrust of his book is theoretical aspect of the economy. He got the idea of writing a book on Islamic economics during his supervision of a Ph. D. candidate Yusufuddin on similar topic "*Islām ke maʿāhī Naẓarīye*" (Economic theories of Islam).[19]

The first book in English on a subject related to Islamic economics entitled *Islam and the theory of Interest* was authored by a professional Economist Anwar Iqbal Qureshi professor and head of the Department of Economics at the Osmania University Hyderabad. It has an interesting story:

It was in December 1938 that the annual Conference of Indian Economic Association (lEA)[20] was held at Nagpur. One of the Subjects of discussion in conference was the theory of Interest. Dr. Anwar Iqbal Qureshi, the then head of Economics Department, Osmania University participated in the discussion and pointed out the defects of prevailing theories of interest and ventured to suggest that "interest had done more harm than good to society as a whole; and you would lead to a better world if interest was altogether abolished" (Qureshi 1947). At this Mr. Findlay Sherras was annoyed and alleged that Dr. Qureshi was influenced by "the orthodox Muslim's Point of view" on the subject of interest. Qureshi responded him saying that he was speaking at the conference in his capacity as academic economist but he would be prepared to present the Islamic point of view with regard to interest at some late occasion. This event led him to author his famous work *Islam and the Theory of Interest* (Urdu 1945, English version in 1947).

Qureshi was never a member of Jamaat-e Islami. The foreword of book is written by a Hindu economist Professor Gyan Chand. Thus some major early works on Islamic economics were completed in Hyderabad State where Muslims were not facing the problem of 'identity' or

[19] Yusufuddin's Ph D was completed in 1945 and was published in two volumes in 1950 consisting of total pages 750.

[20] The IEA is an association of academic and professional economists, which does not subscribe to any particular economic or political ideology. At the best, it provides a forum for professional economists and others working in the same field with the sole object of stimulating interest in the economic problems so as to help the development of sound and correct economic thinking with particular reference to the problems of this country.

'protection'. Their concern was search for a balanced just economic system embedded in Islamic teachings and values.

Another work in English on Islamic economics before the Partition of India in the first half of twentieth century was authored by Shaikh Mahmud Ahmad. The title of his work is *Economics of Islam: A Comparative Study*. Its first edition came in 1947. From its Preface it is known that the book was completed in 1946. He has acknowledged Abul-Kalam Azad and P. N. Dhar of Delhi University who helped him understand some problems (1952, p. vi). Dhar (d. 2012), a professor of Economics in Delhi University for many years, was one of the founders of the Delhi School of Economics. He served as the United Nations Assistant Secretary General, Research and Policy Analysis, in New York from 1976 to 1978. He also served as Principal Secretary to Prime Minister Indira Gandhi in the 1970s. This is a proof that Islamic economics was not developed to support and strengthen "political Islam," "Islamic fundamentalism," or simply "Islamism".

Hamidullah is also one of the pioneer writers on Islamic economics. He started writing on Islamic economics since early 1930s and authored many papers in English and Urdu on the subject.[21] He lived in Hyderabad, then a Muslim state. He did not belong to Mawdudi's ideology, nor was in sight that the Hyderabad state will be annexed to India after a decade or so. Therefore for him also there was no question of "identity and protection".

The above mentioned pioneer works outside the circle and influence of Mawdudi and Jamaʿat-e Islami are enough to establish that it was not Mawdudi *alone* who promoted Islamic economics. In fact in the first half of twentieth century we could find only one tract of Mawdudi which has the adjective 'economic' – *Insān kā maʿāshī mas'alah aur uskā Islāmī ḥall* (*The Economic Problem of Man and Its Islamic Solution*). But it was not on "Islamic Economics". It was a speech delivered before a gathering of students at the Aligarh Muslim University in 1941, in which he stressed that 'only holistic common sense approaches are worth pursuing in seeking solutions' (Zaman, 2013).

Who did Coin the Term "Islamic Economics"?

Before we conclude it is worthwhile to answer this question. Many writers attributed the term "Islamic Economics" to different authors. Without any proof Kuran claims that it was Mawdudi who coined this term. He observes:

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[21] For Dr. Muhammad Hamidulla's pioneering works on Islamic Economics see Islahi (2015 [b]).

> In addition to "Islamic economics," Mawdudi coined or popularized many other terms that quickly became key elements of Islamist discourse, including "Islamic ideology," "Islamic politics," "Islamic constitution," and "Islamic way of life" (Kuran p. 84).

This is absolutely not correct. A contemporary author, who is expert of Urdu, Arabic and English in addition to economics, after a survey of Mawdudi's works concludes that he never used the term economics (in Urdu *maʿāshīyāt* or *iqtiṣādīyāt*). He says:

> The nouns economy and economics, and the adjective, economic, that can refer to either, translate the ambiguous Urdu words *maʿīshat*, *maʿāshīyāt*, and *maʿāshī*, Maulana [Mawdudi] used *maʿīshat* (economy), and *maʿāshī* (economic) not in the sense of English words, but based on their Arabic sense of livelihood, as a metonym[y] for livelihood arrangements. Even though *iqtiṣād*, *iqtiṣādīyāt*, and *iqtiṣādī*, respectively translate the three English words in their modern sense unambiguously, Maulana consistently used *maʿīshat* rather than *iqtiṣād*; with his firm command over all three languages, his choice cannot be attributed to carelessness. His intent clearly, given the context of his discourse, his disdain for academic economics, his intimacy with the Qur'ān, and his customary attention to language, was to use *maʿīshat* and *maʿāshī* (economy and economic) in their Arabic, rather than English, sense. A failure to appreciate this semantic ambivalence has misled many an English-speaking reader of texts in Islamic Economics (Zaman, 2011, p. 305).

It is clear from this that what Mawdudi wanted was change in the economic life of people, not 'economics' and he never used the term 'Islamic economics'. This makes the whole thesis of Kuran redundant. But the question remains to be answered who has coined this term? Following is my investigation in this respect:

In one of his articles, Kahf attributes it to Gilani. He says: "It [the term Islamic Economics] dates back to the late 1940s when it was used for the first time by a professor of Islamic studies in Osmania University, in India the late Sayyid Manazir Ahsan Gilani in an Urdu language book published in 1947 that he gave the title "Islamic Economics" [*Islāmī Maʿāshīyāt* in Urdu].[22]

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[22] http://monzer.kahf.com/papers/english/methodology_malaysia.pdf

But earlier than that in 1939, Mawlana HifzurRahman Seoharawi published his book *Islām kā Iqtiṣādī niẓām* (Economic System of Islam) and used the term "*Islāmī ma`āshīyat* (Islamic Economics) at several places (for example see 1969, pp. 35, 36). As noted earlier Seoharawi's work is *the first book exclusively on Islamic economics in modern period in any language.*

In fact it was Dr. Muhammad Hamidullah (1936, pp: 213-33) who coined this term first time in English in his paper "Islam's Solution to the Basic Economic Problems – the Position of Labour".

This is the earliest record which I came across during my studies. Possibility of even earlier use cannot be ruled out. It remains to be purposely investigated.

Concluding Remarks

Origins of Islamic economics go back to early period of Islam. Starting from the first century *Hijrah* (7th century CE), we find a chain of scholars who dealt with the economic issues like government revenue and expenditure, land management, the functioning of market, money and prices. Interestingly the Muslim scholars' contributions belongs to the period termed by Joseph Schumpeter (1997) as "Great Gap" in the evolution of economic ideas in his encyclopedic work *History of Economic Analysis*. Discovery of Muslim economic thinking is discovery of *the missing link in the history of economic thought*. Islamic economic doctrine passed through six distinct phases before it developed as a distinctive discipline. These phases are early formation period; translation of Greek ideas, commentary and additions; transfer and transmission of Greek ideas along with their own additions and commentaries through retranslation of Arabic sources to European languages; followed by a long period of repetition and imitation; then awakening as a result of mass contact with the West; and finally articulation and development of 'modern' Islamic economics.

Exclusive writing on the subject of Islamic economics is a twentieth century phenomenon. Writing on economic thought of Islam and economic problems with Islamic perspective started mainly as a result of interaction with the West, establishment of modern institutions, availability of translations of Western works in native languages, and publication of classical Islamic sources and non-satisfaction with the prevailing economic systems of the time – capitalism and communism. Modern Islamic economics developed mainly in two regions – Indian subcontinent and Middle East – as the two regions confronted similar situations, although Indian scholars played the leading role. It is not a product of any single person or party. It was also not for the sake of 'identity' or 'protection'. Scholars from the Arab world faced no such problem. Some major early works on Islamic economics were completed in erstwhile Hyderabad State where Muslims were not facing the problem of identity or protection. Their concern was search for a balanced just economic system embedded in Islamic teachings and values. Even the term "Islamic economics" was coined by a Hyderabadi scholar.

Again it was not a sectarian economic system. Writers on the subject presented it as the best alternative to the existing systems, and best solution to economic problems of humanity. It is this reason that now Islamic economics is not confined to Muslims scholars and practitioners. A number of non-Muslim are also academically involved and many advanced non-Muslim countries are using its various products related to banking and finance.

In one of his articles the eminent British economist Rodney Wilson exposed the intention of the opponents of Islamic economics and finance. He remarks: "The main impediments to the growth of Islamic banking in North Africa have been political, as it has been wrongly associated with Islamist political parties, notably the Muslim Brotherhood."[23] If this is so, one can easily perceive the motive behind wrongly ascribing Islamic economics to 'Mawdudi', 'Jamaat-e Islami', 'fundamentalism', 'Islamism', 'political Islam', 'identity creation', 'protection' and what not. We have seen in the preceding pages that all these assertions are baseless.[24] Modern Islamic economics is product of the existing socio-economic and intellectual environment in early twentieth century. It was developed by scholars of diverse ideologies and affiliations. The propounders aimed at blessing for the entire human beings.

[23] Cited from Wilson's IDB Prize Laureate Lecture entitled "Islamic Finance and Economic Development: Lessons learnt" (2014). The same point he has elaborated in his earlier work *Islamic Banking and finance in North Africa: Past Development and Future Potential*, African Development Bank, Tunis (2011), 1-52.

[24] For a full exposition of Kuran's biased style and negative attitude towards Islamic economics refer to Alamasi (2000). See also Mirakhor (2007, pp. 26-27).

References

Abduh (*al-Waqā'iʿ al-Miṣrīyah*, No. 1079, 5 Jumada al-Ulā 1298 / 4 April 1881).

Abduh, Muhammad (1993), Imarah, Muhammad (editor), *al-ʻAmāl al-Kāmilah li-Muhammad Abduh*, Beirut and Cairo: Dar al-Shuruq, vol. 3.

Abduh, Muhammad, "*Ḥubb al-Faqr wa Safh al-Fallāḥ*" (Love of poverty and the foolishness of the farmer) in Rashid Rida (editor), *Tarīkh al-ustādh al-imām al-shaykh Muhammad Abduh*, 3 vols. (Cairo: al-Manar Press, 1931).

Abu-Ubayd (1986), *Kitāb al-Amwāl*, Beirut, Dar al-Kutub al-Ilmiyah.

Abu-Yusuf (1392), *Kitāb al-Kharāj*, Cairo, Dar al-Matbaʿah al-Salafiyah.

Aghnides, Nicolas P. (1916), *Mohammedan Theories of Finance***,** New York, Columbia University Press.

Ahmad, Mumtaz, "Islamic Fundamentalism in South Asia: The Jamaati Islami and the Tablighi Jamaat of South Asia," in *Fundamentalisms Observed*, ed. Martin E. Marty and R. Scott Appleby (Chicago: University of Chicago Press, 1991), pp. 457-530.

Ahmad, Nazeer (1924) *Uṣūl-e Taqsim-e Dawlat aur Islām* (Principles of wealth distribution and Islam), *Ma`ārif*, 14:2 pp. 130-32.

Ahmad, Shaikh Mahmud *Economics of Islam*. Lahore: Sh. M. Ashraf, 1952 (1947).

Alamasi, Adnan Mustafa (2000), *Critiques of Islamic Economics, an Assessment of Some Major Themes with Special Focus on the Writings of Timur Kuran*, Ph.D. Thesis, the University of Birmingham.

Ali, Muhammad Kurd (1921), *al-Hisbah fi'l-Islam* (Institution of Market supervision in Islam) *Majma` al-Ilmī al-Arabī*, vol.1, No. 9, 257-62.

al-Asadi, Muhammad b. Muhammad b. Khalil (1967), *al-Taysīr wa'l-Iʿtibār wa'l-Taḥrīr wa'l-Ikhtibār fī mā yajib min Ḥusn al-Tadbīr wa'l-Taṣarruf wa'l-Ikhtiyār*, (edited by Abd al-Qadir al-Tulaymat) Cairo, Dar al-Fikr al-Arabi.

Attaullah, Sh., *Revival of Zakat*. Lahore: Rippon Printing Press, 1949, 110 p.

Badawi, Ibrahim Zaki al-Dīn (1964), *Naẓarīāt al-Ribā al- Muḥarram fī al-Shariaht al-Islāmīyah*, (Cairo: Dar Matabiʻ al-Shaʻb.

Chapra, M. U. (undated), "Islamic economics: what it is and how it has developed over the centuries", A paper written for EH. NET's Online Encyclopedia of

Economic and Business History: http://eh.net/encyclopedia/eh.net/encyclopedia/whaples@wfu.edu

Chapra, Muhammad Umar (2001), *What is Islamic Economics*? Jeddah: IRTI/IDB, 2nd ed.

Datta, J. M., (1939), "Zakat: The Economic Basis of Islamic Tithe", *The Economic Journal*, London, (XLIX:4), June, pp. 365-369.

The Defterdar, Sari Mehmed Pasha (1935), *Naṣīḥat al-Wuzarā' wa'l-Umarā'* (Ottoman Statecraft: the Book of Counsel for Vezirs and Governors) Turkish Text with Introduction, Translation and Notes), prepared by Walter Livingston Wright, Princeton: Princeton University Press.

al-Dimashqi, Abu'l-Fadl Ja`far (1977), *al-Ishārah ila Maḥāsin al-Tijārah* (The guide to the virtues of commerce), edited by al-Shorabji, Cairo, Maktabah al-Kulliyat al-Azhariyah.

al-Djazairi, S. E. (2005), *The Hidden Debt to Islamic Civilization*, Oxford: Bayt al-Hikma Press.

Durrant, Will (1950), *The Story of Civilization: The Age of Faith*, New York: Simon & Schuster, Vol. 4.

Ekelund (Jr.), Robert B. and Hebert, Robert F. (1983), *A History of Economic Theory and Method*, New York, McGraw-Hill.

El-Gamal, Mahmoud A. (2006), *Islamic Finance: Law, Economics and Practice*, Cambridge and New York: Cambridge University Press.

Farooqi, Abdullah: 'Islamic Socialism and Iqbal', *Iqba1 Review*, (Karachi) 15(1) 1974, pp.1-7.

al-Ghazali, Abu Hamid (n.d.), *'Iḥyā' ʿUlūm al-Dīn*, Beirut, Dar al-Nadwah.

al-Ghazali, Muhammad (1987), *al-Islām wa'l-awdā` al-Iqtiṣādīyah* (Islam and Economic Conditions), Cairo: Dar al-Sahwah,. First published in 1366H/1947.

Ghazanfar, S.M. (ed.), (2003), *Medieval Islamic Economic Thought*, London and New York, RoutledgeCurzon.

Gilani, Sayyid Manazir Ahsan (1947), *Islāmī Maʿāshīyāt* (Islamic Economics), Idarah-e Ishaat-e Urdu, Hyderabad (Deccan), First ed.

Hamidullah, M. (1936), "Islam's Solution to the Basic Economic Problems – the Position of Labour", *Islamic Culture*, Hyderabad (Deccan), 10(2), April, pp: 213-33.

Hamidullah, Muhammad (1948), (1955) Haidarabad's contribution to Islamic Economic thought and practice, *Die Welt des Islams*, IV: 73-78.

Hamidullah, Muhammad (1948), Interest-free Cooperative Lending societies, *the Muslim Year Book, India and Who's who with complete information on Pakistan, 1948-49*, Compiled by S. M. Jamil with the assistance of Moinuddin Khan, Bombay: The Bombay Newspaper Co., Limited, pp. 491-96.

al-Hashimi, Muhammad Yahya (1937), "Naẓariyyat al-Iqtiṣād `ind al-Birūni" (Economic Views of al-Biruni), *Majallat al-Majma' al-ʿIlmī al-ʿArabī*, (Damascus), Vol. 15, Nos. 11-12, pp. 456-465.

Husain, Zakir (1932), *Maʿāshīyāt: Maqṣad aur Minhāj* (Economics: Purpose and Methods), Allahabad: Hindustani Academy, U.P.

Ibn Abī al-Dunyā, 'Abd Allāh ibn Muḥammad (1993), *Iṣlāh al-māl*, Beirut: Muàssasat al-Kutub al-Thaqafiyah.

Ibn al-Azraq (1977), *Badā'iʿ al-Silk fī Ṭabā'iʿ al-Mulk*, Baghdad, Wazarat al-Iʿlam.

Ibn Khaldun (n.d.), *Muqaddimah*, Beirut, Dar al-Fikr.

Imam, Abd al-sami` Ahmad (2012), *Naẓarāt fī Uṣūl al-buyū al-mamnū`ah fi al-Sharīʿat al-Islamīyah wa Mawqaf al-Qawānīn minhā* (Reflections on principles of Prohibited trades in Islamic *Shariah* and role of the Laws), Kuwait: al-Wa`y al-Islami, Ph D dissertation completed in 1941.

Imarah, Muhammad (ed.) (1973), *al-Aʿmāl al-Kāmilah li al-Tahtāwi*, First Edition, 2 vols. Beirut: al-Mu'assasat al-Arabiyah.

Iqbal, Shaikh Muhammad (undated/1904), *ʿIlmul-Iqteṣād*, Lahore, Khadim al-Taʿlim Strean Press of Paysa Akhbar.

Islahi, Abdul Azim (2009), *Muslim Economic Thinking and Institutions in the 10th AH/16th AD Century*, Jeddah: Scientific Publishing Centre, King Abdulaziz University.

Islahi, Abdul Azim (2011[a]), *A Study of Muslim Economic Thinking in the 11th AH/17th AD Century*, Jeddah: Scientific Publishing Centre, King Abdulaziz University

Islahi, Abdul Azim (2011[b]), *Islamic Economic Thinking in The 12th AH / 18th AD Century With Special Reference To Shāh Walī-Allāh Al-Dihlawī,* Jeddah: Scientific Publishing Centre, King Abdulaziz University.

Islahi, Abdul Azim (2014 [a]), The Economic Ideas of Muslim Scholars and Christian Scholastics: Linkages and Parallels, *Islam and Christian–Muslim Relations*, Vol. 25, No.1, pp. 49-66.

Islahi, Abdul Azim (2014 [b]), *History of Islamic Economic Thought*, Cheltenham, UK and Northampton, MA, USA, Edward Elgar.

Islahi, Abdul Azim (2015 [a]), *Economic Thinking of Arab Muslim Writers during the Nineteenth Century*, London: Palgrave Macmillan.

Islahi, Abdul Azim, (2015 [b]), *Muhammad Hamidullah and His Pioneering Works on Islamic Economics*, Jeddah: Scientific Publishing Centre, King Abdulaziz University.

Islamic Economics Research Center [IERC] (2008), "A Proposed Strategic Vision for Future Research in Islamic Economics", in *The 7th International Conference in Islamic Economics*, Jeddah: King Abdulaziz University. pp. 39-52.

Kahf, Monzer (1999), *al-Nuṣūṣ al-Iqtiṣādīyah min al-Qur'ān wa'l-Sunnah* (Economic Text from the Quran and the Tradition of the Prophet), Jeddah: Scientific Publishing Center, King Abdulaziz University

al-Kawakibi, ʿAbd al-Raḥmān (1387 A.H.), *Ṭabā'iʿ al-Istibdād wa Maṣāriʿ al-Istiʿbād*, Cairo: al-Kutubi

al-Kawakibi, ʿAbd al-Raḥmān (1970), *Umm al-Qurā*, in Imarah, Muhammad (ed.) *al-Aʿmāl al-Kāmilah li-ʿAbd al-Raḥmān al-Kawākibī ma*'*Dirāsāt* '*an Hayātihi wa Afkārihi*, Cairo: al-Hay'at al-Misriyah.

Khan, M. S. Ali (1928), Usury and the Principles of Mohammadan Law, Ph.D. Thesis, University of Oxford.

Khan, Muhammad Akram, 2005, *Economic Teachings of Prophet Muhammad* PBUH, Islamabad: Institute of Policy Studies.

Khan, Sir Syed Ahmad (1292 AH), "Apni madad aap" (Self help), in Siddiqi, Atiq Ahmad (ed.) *Muntakhab Mazamin-e-Sir Syed*, Aligarh: Sir Syed Academy A.M.U, 1988.

Khan, Sir Syed Ahmad (1873), *Causes of the Indian Revolt*, Benares: Medical Hall Press.

Kinani, Yahya b. Umar (1975), *Ahkām al-Sūq*, edited by Abd al-Wahhab, Hasan Hasani, Tunis, al-Shirkah al-Tunisiyyah li'l-Tawzi'.

Knowles, David (1963), *The Evolution of Medieval Thought*, London, Longmans.

Kuran, Timur. "The Genesis of Islamic Economics: A Chapter in the Politics of Muslim Identity", *Islam & Mammon*, Princeton University Press (2004): 82 – 102. First published in *Social Research*, Vol. 64, no. 2 (Summer 1997), pp. 301-338.

Lewis, Bernard (1982), *The Muslim Discovery of Europe*, London: Weildenfeld and Nicolson

Makhluf, Hasanayn (1948), *Fatāwā Shariah fī Shu'ūn al-Iqtisādīyah*, Cairo: al-Halabi

al-Maqrizi, Muhammad Ali (1940), *Ighāthat al-Ummah bi Kashf al-Ghummah*, Cairo: Lajnah al-Talif wa'l-Tarjamah.

al-Mawardi, Ali (1973), *al-Aḥkām al-Sulṭānīyah,* Egypt, al-Babi al-Halabi.

al-Mawardi, Ali (1979), *Adab al- Dunyā wa'l-Dīn*, Beirut: Dar Iḥyā' al-Turath al-Arabi.

Mawdudi, Sayyid Abu'l-Ala (1941), *Insan ka ma`ashī mas`lah aur uska Islamī ḥall* (*The Economic Problem of Man and Its Islamic Solution*), *Tarjuman al-Qur'ān*, 19:1-3, September-November, pp. 154-182.

Mijawi, Abd al-Qadir and Umar Burayhimat (1904), *al-Mirṣād fi Masā'il al-Iqtiṣād*, Algeria: Fontena.

Mirakhor, Abbas (2007), *A Note on Islamic Economics*, Jeddah: IRTI/IDB, pp. 26-27.

al-Muhasibi, Harith b. Asad (1984), *al-Rizq al-Ḥalāl* edited by Muhammad Othman, Cairo: Maktabat al-Qura'n

Myers, Eugene A. (1964), *Arabic Thought and Western World,* New York, Fredrick Ungar Publishing Company, Inc.

al-Nabahani, Taqi al-Din (third ed. 1953, first edn. by the end of 1940s), *Niẓam al-Islam al-Iqtiṣādī*, al-Quds: Hizb al-Tahrir.

Nadwi, Abdus-Salam (1924), *Tahrīm-e Sūd* (prohibition of interest), *Maʿārif*, 14:1, 2 pp. 9-31, 93-128.

Naqi, Ali (1933) on *Tijarāt aur Islām* (Commerce and Islam), Lucknow: Imamiyah Mission.

Nash'at, Muhammad Ali (1944), *al-Fikr al-Iqtiṣādī fī Muqaddimat Ibn Khaldūn* (Economic Thought in the Prolegomena of Ibn Khaldun), Cairo, Dar al-Kutub al-Misriyah.

Nizami, Khawajah Hasan (1925), *Khudai income tax* (Divine Income tax – Issues about *zakāh*), Delhi: Dilli Printing Works.

Qurashi, Yahya b. Adam (1987), *Kitāb al-Kharāj*, Cairo and Beirut: Dar al-Shuruq.

Qureshi, Anwar Iqbal (1947), *Islam and the Theory of Interest*, Lahore: Sh. M. Ashraf.

Qutb, Sayyid *al-ʿAdālat al-Ijtimāʿīyah fi'l-Islām*, First published 1948

Rida, Muhammad Rashid (1900), al-Zakāh wa'l-tamaddun, wa'l-Iman wa'l-Insaniyah (*Zakāh*, civilization, faith and Humanity) *al-Manār*, 2:45, pp. 705-13.

Rida, Muhammad Rashid (1907), al-`Usr al-mali, wa'l-riba wa'l-bunuk (Financial contingency, Interest, and Banks) *al-Manār*, 10:6, pp. 430-34.

Salih, Muhammad Zaki (1933), "*al-Fikr al-Iqtiṣādī al-Arabī fi'l-Qarn al-Khāmis `Ashar*" (Arab Economic Thought in the Fifteenth Century), *Majallat al-Qānūn Wa al-Iqtiṣād*, Cairo, March, Vol. 3, No. 3, pp. 315-360 and October, Vol. 3, No. 6, pp. 755-809.

al-Sawi, Ahmad Mahmud (1942), al-Islam wa'l-Nishaṭ al-Iqtiṣādi (Islam and economic activities) *Majallat al-Azhar*, vol. 13, pp. 322-24.

Schumpeter, Joseph Alois (1997), *History of Economic Analysis*, London, Routledge (first published in 1954 from New York: Oxford University Press).

Seoharwi, HifzurRahman (1969), *Islam ka Iqtiṣādī Niẓam* (Economic System of Islam), Delhi, Nadwatu'l-Musannifin (first published 1939).

Sezgin, Fuat (1984), *Muhādarāt fī Tarīkh al-ʿUlūm al-ʿArabīyah wa'l- Islāmīyah*, (Lectures on Arabic and Islamic Sciences), Frankfort, IGAIW.

Shaltut, Muhammad (1940), *Makān al-Darā'ib wa'l-Kharāj* (Place of *zakāh*, taxes and land tax) *Majallat al-Azhar*, vol. 11, pp. 150-51.

al-Shaybani, Muhammad b. Hasan (1986), *al-Iktisāb fi'l-Rizq al-Mustaṭāb*, Beirut: Dar al-Kutub al-Ilmiyah.

Shemesh, A. Ben (Tr.) (1967), *Taxation in Islam*, (Vol. I), Yahya ben Adam's *Kitāb al-Kharāj*, Revised Edition, Leiden, E.J. Brill.

Siddiqi, Muhammad Nejatullah (1992), History of Islamic Economic Thought in Ausaf Ahmad and Kazim Raza Awan (editors) *Lectures on Islamic Economics*, Jeddah IRTI/IDB, pp. 69-83.

Siddiqi, Muhammad Nejatullah (2008), Obstacles to Research in Islamic Economics, *The 7th International Conference in Islamic Economics*, Jeddah: King Abdulaziz University, pp. 3-12.

Siddiqi, Muhammad Nejatullah (2009), *Maqāṣid-e Sharīʿat*, New Delhi: Markazi Maktabah-e Islami.

Siddiqi, S. A. (1948), *Public Finance in Islam,* Lahore: Sh. M. Ashraf,

Spengler, Joseph J. (1964), "Economic Thought of Islam: Ibn Khaldun", *Comparative Studies in Society and History*, (The Hague), Vol. VI, pp. 268-306.

Tahir, Pervez (2001), Introducing Iqbal the Economist, *The Pakistan Development Review*, 40: 4 Part II (Winter 2001) pp. 1167–1176.

al-Tahtawi, Rifaʿah (1973), *Kitāb Murshid al-Amīn li'l-Banāt wa'l-Banīn*, in Imarah, Muhammad (ed.) *al-Aʿmāl al-Kāmilah*, Beirut: al-Mu'assasat al-Arabiyah.

al-Tahtawi, Rifaʿah Badawi Rafi` (1834), *Takhlīṣ al-Ibrīz fī Talkhīṣ Bārīz* (Customs and Manners of the Modern French), Boulaq (from Cairo in 1905)

al-Tahtawi, Rifaʿah Badawi Rafi` (1912), *Manāhij al-Albāb al-Miṣrīyah fī Mabāhij al-Adāb al-ʿAṣrīyah* (The Path of Egyptian Minds in the Joys of Modern Arts), 3rd Ed.

Taman, Ali Fahmi (1948), *al-Fikrah al-Islāmiyah bayn al-Shuyu`iah wa'l-Isti`mār*, Cairo.

al-Ṭarasusi, Ibrahim b. Ali (1992), *Tuḥfat al-Turk fī mā Yajib an yuʿmal fi'l-Mulk*, edited by Radwan al-Sayyid, Beirut: Dar al-Taliʿah.

al-Tunisi , Khayr al-Dīn (1967), *The Surest Path*, (English translation of *Aqwam al-Masālik fī Maʿrifat Aḥwāl al-Mamālik* by Leon Carl Brown, under the title *The Surest Path*) Cambridge, Massachusetts, Harvard University Press.

Usmani, Muhammad Shah, "Mawlana Hifzur-Rahman", *Monthly Zād-e Safar*, August 2001, pp.17-25).

Visser, Hans (2009), *Islamic Finance: Principles and Practice*, Cheltenham, UK, Edward Elgar.

Wilson, Rodney (2011), *Islamic Banking and finance in North Africa: Past Development and Future Potential*, Tunis: African Development Bank, 1-52.

Wilson, Rodney (2014), *Islamic Finance and Economic Development: Lessons learnt*, Jeddah: IRTI/ IDB.

Yusufuddin, Muhammad (1950), "*Islām ke Ma`āhī Naẓarīye*" (Economic theories of Islam), Hyderabad (Deccan): Ibrahimiyah Press.

Zaman, Arshad (2011), Sayyid Abu'l-Ala Maududi on Islamic Economics: A Review Article, *Islamic Studies* 50: 3-4, pp. 303-323.

Zaman, Arshad (2013), Mawlana Mawdudi and the Genesis of Islamic Economics, Paper presented to The Ninth International Conference on Islamic Economics and Finance (ICIEF), held at Istanbul during 9-11 September 2013.

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Instability of Interest Bearing Debt Finance and the Islamic Finance Alternative[1]

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Abstract

Evidence has been mounting that the interest-based debt financing regime is under increasing distress. Evidence also suggests that the financial crises, whatever title they carried - exchange rate crisis or banking crisis – have been debt related crises in essence. At present, data suggest that the debt-to-GDP ratio of the richest members of the G-20 is expected to reach 120% mark by 2014. There is also evidence that out of securities worth US$ 200 trillion in the global economy, no less than three-fourth represent interest-based debt. It is difficult to see how this massive debt volume can be validated by the underlying productive capacity of the global economy. This picture becomes more alarming considering the anemic state of global economic growth. There is great uncertainty with regard to interest rates. Although policy-driven interest rates are near-zero level, there is no assurance that they will not rise as the risk and inflation premia become significant. Hence, a more serious financial crisis may be in the offing and a general collapse of asset prices may occur. This paper argues that the survival of the interest-based debt regime is becoming less tenable, as is the process of financialization that has accompanied the growth of global finance over the last four decades. The above has resulted in an unprecedented increase in economic risks; generating (adverse) non-

[1] The study is an expansion of the base papers by Abbas Mirakhor and Mughees Shaukat (2012, 2013) and by Mughees Shaukat, Abbas Mirakhor and Noureddine Krichene (2012, 2013).

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linearities in system's behavior. Such a behavior is nothing but a demonstration of the verse, "Allah obliterates ribā ...." of the Qur'ān. *As a result, the search is on for a paradigm shift towards a less volatile and more resilient financing regime. The paper proposes and advocates risk sharing based Islamic financing as a suitable alternative and further supports the claims by demonstrating empirically the better growth and stability characteristics of risk sharing based financing, using advanced dynamic heterogeneous panel techniques.*

Keywords: *Financial fragility, Financialization, Islamic finance, Risk-Sharing, Equity financing, Institutional and incentive structure, Dynamic Heterogeneous Panel Techniques.*
JEL Classification: B59, E44, G01
KAUJIE Classification: I0, Q6, Q91

1. Introduction

Evidence has been mounting that the interest based debt financing regime is under ever increasing distress. The aftermath of the latest financial crisis has added fresh impetus to the claim. Both the old as well as the current intellectual pedigree, qualitatively and quantitatively, submit that debt and leveraging are the main sources of financial instability in the current system (see, for example Reinhart and Rogoff, 2009). Consequently, the system has become a source of 'financialization' of the economy where the financial sector has assumed an independent identity; delinking itself from the real sector. As a result, the system has become increasingly fragile and the culture of risk transfer and risk shifting has increased the risks to the global economy. This appears to be a demonstration of the validity of verses 275-276 of chapter 2 of Qur'ān as it can be argued that this is the result of the existence of an *ex-ante* fixed rate of return in the form of 'interest'; turning debts into unmanageable and unsustainable super cycles. The current scenario reveals that the present debt-to-GDP ratio of the richest members of the G-20 threatens to touch the mark of 120%-300% with interest rates on debts projected to be as high as 27% (BIS, 2010). The picture becomes more disconcerting when the ensuing disequilibrium is realized. While the global GDP is growing at 3%, the debt is increasing at 7%. It would take 24years for the global GDP to double itself while a mere 10 years for the global debt to get twice as large. *It is thus difficult to imagine how this massive debt volume can be validated by the underlying productive capacity of the global economy*. Given the unprecedented levels of debt, the IMF (2014) expresses fears of contagion and the possibility of an even bigger crisis (IMF, 2012). Such contagion is already evident in Europe, threatening the institutional integrity of the eurozone – key to the architecture of modern Europe (Shaukat et al, 2014). As a result there is increasing uncertainty surrounding the survival of the system. Thus far the search for ways and means of reducing the instability of the system has focused only on improving regulatory/supervisory structure of financial system. Much less effort has been devoted to find a more suitable financing regime. The study argues that Islamic finance, with its core characteristic of *interest-free risk sharing based financing,* may well serve better the global economic needs, providing a much more stable economic growth. The sources of this stability are the operational characteristics that remove major sources of volatility and instability. Moreover, based on Qur'ān and *Sunnah*, the Islamic financial system is supported by a complimentary institutional framework that further assures the better growth and stability attributes.

To achieve the given objective, the section two of the study aims at providing an understanding of the underlying causes that make the present system inherently unstable and susceptible to recurring crises. It will be argued that the cardinal cause that necessarily directs the system towards disorder and chaos via increased uncertainty is its interest-based debt financing mechanism. The result is an intensification of the process of 'financialization': causing a decoupling of the financial and the real sectors where the former appears to have taken an independent identity. The risks to global economy has increased so much that the system has become extremely fragile and sensitive to 'black swan' events. It will be argued that such outcomes are a clear demonstration of part of the verse 276 of chapter 2 of Al-Qur'ān. Section three then puts forward the idea of risk sharing based financing, as the Islamic finance alternative. However, it first discusses the pivotal understanding of Islamic position on money and finance. While analytically and deductively advocating the proposed regime, with reference to the Qur'ānic verses, the study then empirically demonstrates the better growth and stability characteristics of risk sharing based financing in section four. Section five concludes the study.

2. Interest-Based Debt as the Underlying Cause

Over the past few decades, a consensus had emerged suggesting that expansion of credit and debt is detrimental to the stability of developed as well as developing economies (Mirakhor and Krichene, 2008). Mirakhor and Bacha (2012) argue that regardless of where these crises originate from, whether developed or developing country, they all seem to have a single root cause, (interest bearing) debt. With high debts interest payments also increase, thus increasing both the burden and servicing of debt. Evidence surveyed in many studies showed that every economic and financial crisis was preceded by an expansion of credit (e.g. Fisher, 1933). Askari et al. (2012: 3) argue that the financial system is inherently unstable, often shaken by periodic crisis and require massive bailouts for essentially two reasons: (i) it is a Debt and interest-based system; and (ii) it creates excessive debt and leveraging through credit multiplier (see also Hasan, 2011b) while being backed by some form of government guarantee to reduce liquidity crisis and bank failures. Debt– that is the transfer of risk– and fixed interest rate they argue is at the foundation of financial crisis in the past and will likely continue to do so in the future, unless a radical change in the financial structure is introduced.

In the modern banking system, a bank can simply create credit ex-nihilo by simply crediting the account of its customer for the amount of credit. An often sighted cause is the implication of credit and the ability of banks to create an inverted debt pyramid–through credit multiplier a 'house of cards', to such a degree that it becomes vulnerable to even small shocks, such as changes in expectations of entrepreneurs or the collapse of a speculative bubble in a stock or housing market. In fact the banks have a great ability to multiply credit and attain excessive leverage in relation to their capital or reserve basis, since credit is created by a stroke of pen. Theoretically, credit may expand in relation to created deposits according to the reserve requirements ratio. If a bank creates a credit of US$ 1,000 and if the reserve requirement ratio is five percent, then total money creation is equal to US$ 20,000 – a multiple of 20[2] (see Askari et al., 2010, 2012). Such credit becomes deposits for the borrower, on which it may issue orders for payments. Since, every bank does the same thing, credit expansion can be very fast, and credit far exceeds real savings in the economy. The excess of credit over savings is called fictitious credit by Henry Thornton (1802). It is called counterfeiting by Allais (1999). Askari et al., (2010) suggests that "It is not the expansion of credit as such that leads to an economic bust but the expansion of credit out of thin air, since it is through un-backed credit that real savings are diverted from productive activities to non-productive activities, which in turn weakens the process of real wealth expansion".

Similar doubts about the sustainability of a system based on the interest bearing debt financing had been expressed by John Maynard Keynes and later by Maurice Allais (1999) among others. Focusing on the interest rate mechanism, Keynes in as

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[2]The credit ratio has varied from country to country, demonstrating the ability for banks to create multiple loans. Before the recent crisis, the credit to GDP ratio stood at 254 percent for Japan, 223 percent for US, 164 percent in UK, 108 percent in Norway and 128percent and 122percent in Thailand and Korea (Askari et al. 2010 ; Mauldin and Tepper, 2011 and IMF, 2010). The higher the ratio of credit in comparison to the underlying capital and income levels, the higher the probability of default.

early as 1930s in his book *The General Theory of Employment, Interest and Money* (1936) argued that market capitalism, if left to it-self, would create two major problems. These are (i) poor income and wealth distribution and (ii) the fact that this system is incapable of creating full employment. A major cause of these problems, he asserted, was the interest rate mechanism which constituted *"the villain of piece"* (see Mirakhor and Krichene, 2009)**.** Keynes solution was the *"euthanasia of rentier"* by socializing financial resources through which financial capital would be provided for investment without the intermediation of the rent seeking class of the money lenders. Keynes's claims of poor income and wealth distribution could be further validated by a recent study which showed how high leverage and crises can arise as a result of changes in the income distribution (Kumhof and Ranciere, 2010). The authors empirically showed that the periods 1920-1929 and 1983-2008 both exhibited a large increase in the income share of the rich, a large increase in leverage for the remainder, and an eventual financial and real crisis.

Much earlier, Karl Marx (1867, 1885 and 1894) had already put forward his understanding of the innate fragility of capitalism. While recognizing that the system may create economic growth, Marx argued that the growth will never be sustainable and the system will collapse on its own; taking back much more than what it gave. Hayek, (1945) contented that it is the price setting of money i.e. the interest rate and the manipulation of it by the policy makers that is at the root of generating crisis.

Nevertheless, to Schumpeter though, the ensuing instability is an essential part of the creative process of capitalism, by which capitalism develops new products and new institutions. Schumpeter famously termed such instability as 'creative destruction'. Janeway (2012) in his book *'Doing Capitalism in the Innovation Economy'* argues that the 'Innovation Economy' is driven by financial speculation and this is part of the Schumpeterian creative process of capitalism. "Occasionally, decisively, the object of speculation is the financial representation of one of those fundamental technological innovations – canals, railroads, electrification, automobiles, airplanes, computers, the internet – the deployment of which at scale transforms the market economy and indeed creates a 'new economy' from the wreckage of the financial bubble that attended its birth" (see also Keen, 2012). While Schumpeter was fond of role of technology in driving capitalism, Minsky (1986, 1992) considered the financial instability to be endogenous to a conventional financial system. An adherent of Keynes, Minsky was influenced by Keynes' notion of the fundamental instability of market expectation as well as Schumpeter's notion that capitalism renews itself through competition and innovation–"Creative destruction". While putting forward his 'Financial Instability Hypothesis' (FIH), Minsky (1992), focused upon the tendency for the instability to lead to excessive debt and, ultimately, a Depression. Minsky hence concluded that the destructive instability was endemic to capitalism, as much as the creative instability was, because finance necessarily had to be destabilizing. "Finance's destructive tendencies arise because we let the banks finance Ponzi schemes -- bubbles in real estate and shares -- that add to debt without adding to the capacity of society to finance that debt" (Keen, 2012).

The result is an increasing trend of 'financialization' in the global economy; leading to increased non-linearity and fragility of the financial system.

2.1. Financialization of the Global Economy

Scholarship has argued that the ensuing credit expansion has contributed to the financialization of the economy[3] (Shaukat et al., 2013). To Askari et al., (2012: xii), "when risk transfer is combined with high leverage, the growth of interest-based debt contracts and there pure financial derivatives–those with little or no connection to real assets–outpace the growth of the real sector leaving the liabilities in the economy a large multiple of real assets needed to validate them. This phenomenon has been coined as "financial decoupling" or "financialization", whereby finance is no longer anchored to the real sector". Argitis (2010) has termed it as a wave of 'Neo-liberalism'; suggesting that policy structure has increased the share of national income and profits going to rentiers, bankers and other groups of financial capitalists. Consequently, it has become more a 'rentier economy' than 'value addition economy' (Bogle, 2012). According to Bogle (2012: 6), *"trading in S&P 500-linked futures totaled more than $60 trillion in 2011, five times the S&P 500 index total market capitalization of $12.5 trillion. The credit default swaps alone had a notional value of $33 trillion. Add to this total a slew of other derivatives, whose notional value as 2012 began totaled a cool $708 trillion. All this in comparison to $150 trillion: the aggregate capitalization of the world's stock and bond markets"*. The loss of J P Morgan of about US$ 5.8 billion in July 2012 is a gain of hedge funds who bought its structured products.

The above developments validate the presence of what the noble laureate James Tobin (1984) termed as 'paper economy'. Tobin (1984) suggests "we are throwing more and more of our resources into financial activities remote from the production

[3] See also Epstein (2002), Askari et al., (2011, 2012), Hasan (2008, 2010a, b, 2011a, b) and Mirakhor (2010, 2011a).

of goods and services, into activities that generate high private rewards disproportionate to their social productivity: a 'paper economy', facilitating speculation which is short-sighted and inefficient" (see also Mirakhor and Bacha, 2013). Bogle (2012: 4-5), in his latest book titled *"The Clash of Cultures: Investment v/s Speculation",* has described this unprecedented surge in financialization and speculation as Capitalism's 'mission aborted'.

> "The general mission of the markets was/is capital formation, involving allocation of investment capital to most promising industries and companies, both existing and upcoming. However, out of $33 trillion stock trading in financial markets, only 0.8% or $250 billion of the financial activities fulfill the original mission and the rest 99.2% or $32.73 trillion, some 130 times the volume of equity capital, aborts it".

Hans Tietmier, the former President of Bundesbank, warned in international fora that "financial decoupling" was increasing the risks in global finance, (Menkoff and Tolksorf, 2001). These warnings were not attended to and consequences followed (Epstein, 2006). According to Turner (2012), both economic history and theory make it close to certain that we could not have achieved the economic transformations of the last 200 years without the development of modern financial systems. It is hence argued that financial deepening has an important role to play in the economic development process. However, the fact that 'financial deepening', is beneficial across some range of increasing financial intensity, does not mean that it is limitlessly good.

The above can be supported by a recent study, (Cecchetti and Kharroubi, 2012) that investigated 'if finance really good for growth', regardless of the size and growth of the financial sector? For an answer, the authors came to two important conclusions. First, with finance you can have too much of a good thing. At low levels, an increase in the size of the financial sector accelerates growth of productivity. But "there comes a point - one that many advanced economies passed long ago - where more banking and more credit are associated with lower growth." Second that when the financial sector accounted for more than 3.5% of total employment, further development of finance tended to damage economic growth[4].

[4]The study also contended that finance, literally bids rocket scientists away from the satellite industry". It competes for people with high qualifications as well as for buildings and equipment. "The result is that people who might have become scientists, who in another age dreamt of curing cancer or flying to Mars, today dream of becoming hedge fund managers". See also Sheng (2009) and Caldentey and Vernengo (2010) for similar conclusions as well as for the effects of such developments.

Consequently, the study stressed to a pressing need to reassess the relationship of finance and real growth in modern economic systems. Already, financialization has oriented the economies from a *saving-investment-production-export* to *a borrowing-debt-consumption-import* orientation (Askari et al., 2012). To Rajan (2005), such dynamics have indeed made the world more risky and the system in turn has become highly sensitive to register events that can be termed as the 'black swan' events (Taleb, 2007/2012a).

2.2. The Black Swans and the Non-Linear[5] destructive Debt Dynamics

When risks become high, so does the lack of ability to understand, control and mitigate the risks. This is a situation where risks get transformed into their stronger cases of 'uncertainty' and 'ambiguity'. Frank Knight explained that, at times, decisions are made based on available probability distribution of expected events. This is decision making under risk. Unlike risk however, uncertainty describes a situation where a known probability distribution is not available but it is still possible to make decisions with some subjective estimates of probability of outcomes of actions or decisions (Knight, 1921). In the 1960s this view was modified to cover circumstances under which human cognitive ability and information availability are so constrained that even subjective assessment of outcomes was not possible. Ambiguity arises under such circumstances where the intensity of "ignorance" can create paralysis in the decision making (Ellsberg, 1961; Erbas and Mirakhor, 2007 and Mirakhor and Shaukat, 2012).The result is an ideal recipe for the occurrence of those events which were deemed as highly improbable or never occurring. As a result an important concept has been added to the economic vernacular; termed as 'Black Swan' events. Taleb (2007/2010) the inventor of the term refers to them as those events which (i) usually lie outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility. As a result, the probability of the occurrence of such events is extremely low (ii) even though they have a low probability of occurrence, however, when they do occur, the events carry an extreme impact (iii) lastly, in spite of its outlier status, human nature makes us concoct explanations for its occurrence after the fact, making it explainable and predictable.

[5]In 'Nonlinear dynamics', the systems that depict non-linearity may be thought of as any collection of parts whose interactions and connections are described by nonlinear rules or equations. That is to say, the equations' variables may be multiplied together, raised to powers, and so on. As a consequence the system's parts are not necessarily linked in a proportional manner as they are, for example, in a bathroom scale or a thermometer; doubling the magnitude of one part will not double that of another—nor will outputs be proportional to inputs. Not surprisingly, trying to predict the precise long-term behavior of such systems is often futile (see Paulos, 2003: 172-174).

Recently, the global system has experienced events that would have been thought of as low probability events not long ago. These include, inter alia, the down grading of U.S from its 'AAA' rating, the looming collapse of the much hailed Eurozone, the effort by Switzerland to convince the world that Swiss franc is not a safe haven, the Brazilian suggestion of bailout of advanced economy by emerging markets, China's contemplation of buying Italy's debt, and the Libor rate fixing. Cyprus's provocation of removing deposit guarantees on certain amounts of deposits. The list can go on. However, looming in the back ground of the present uncertainties in the global economy, there is a potential event termed as *"the mother of all black swans"* the effects of which may be chaotic to global economy: contagion-riddled events of *sovereign default.*

It can be observed that the occurrence of black swans and non-linearity of the debt dynamics is a pure demonstration of the Qur'ānic concept of "YAMHAQ". Allah swt tells us about the debt dynamics in Verse 276 of Chapter 2 of the Qur'ān: "*Yamhaqhu Allah o ar-Ribā wa Yurbias ṣadaqāt"* (Allah swt annuls, obliterates ar-*Ribā* and increases *ṣadaqāt*). The part that is most relevant here is the first part of the verse "*Yamhaq*hu Allah o ar-*Ribā*". Reference, for example, to Al-Mu'jam Al-Waseet, Maqayees al-Lughah and Mufradaat al-Qur'ān **r**eveals that "Yamhaq" that makes the 'Mahq' of *ribā* means to Decrease, to Destroy completely, to take away the blessings from a thing, to negate or cancel out the positive impact of a thing, or to erase suddenly. It is thus a state of sudden and rapid decline, with the speed of destruction picking up acceleration (Shaukat, 2013).

In order to give evidence of the adverse and non-linear debt dynamics, that is to signify the Qur'ānic *'Mahq'* in full operation in the global economy, the findings of Reinhart and Rogoff (2008, 2009a, b, 2010a, b, 2011, 2012) and Kaminsky and Reinhart, (1999) put forward among the most finely textured, historical, analysis of the financial crisis[6]. The data covers seventy countries in across all regions. The range of variables encompasses external and domestic debt, trade, GNP, inflation, exchange rates, interest rates, and commodity prices. The coverage spans eight centuries, going back to the date of independence or well into the colonial period

[6]The authors introduced a comprehensive new historical database for studying banking crises, inflation, currency crashes and debasements−unsurprisingly, currency and inflation crisis go hand in hand. Default through inflation has been more prevalent since World War I, as fiat money became the norm and links to gold eroded. Median inflation rates before World War I were well below those of the more recent period: 0.5 percent for 1500–1799 and 0.7 percent for 1800–1913 versus about 5 percent for 1914–2009 (see Reinhart and Rogoff, 2011).

for some countries. The authors showed that crises whatever label they carried− exchange rate crisis or banking crisis – have been at root debt crises (Reinhart and Rogoff, 2009).

The authors refers to the non-linearity of such consequences as the *"Deadly Ds"***:** Sharp economic '*downturns'* follow banking crises; with government revenues dragged down, fiscal '*deficits'* worsen; deficits lead to more '*debt';* as debt piles up rating '*downgrades'*[7]follow and '*defaults'* ensue; the result of a vicious '*debt circle'* (see also Mauldin and Tepper, 2011). The studies revealed that three years after a financial crisis, central government debt increases, on average, by about *86 percent*; implying that the fiscal burden of banking crisis extends far beyond the common cost of the bailouts. Moreover, real housing price declines average *35 percent*, stretching out over six years. Equity price collapses on average *56 percent* with the downturn spanning around *4 years*. Similarly profound are the unemployment rates which rises an average of *7 percent*, lasting over four years. In some cases these unemployment levels reach as high as in the range of *20 percent* to over *50 percent* including youth unemployment. Such scenarios are presently pervasive in a number of European centers, for example, the case of PIIGS nations[8]. Moreover, real GDP per capita falls (from peak to trough) an average of over *9 percent* or more, the duration of the downturn averages at least two-three years and production levels decline exponentially.

Thus far the search for ways and means of reducing the instability of the interest-based debt system has focused only on improving regulatory/supervisory structure and few reforms of financial system. Much less effort has been devoted to finding an alternative paradigm. Askari et.al, (2012: ix) suggests:

> reforms are little more than a "bandaging" of the current financial system: higher levels of capital; breaking up of financial institutions; regulation to include all financial institutions; measures to limit risk taking and to increase transparency, and more. But it is difficult to see how any of these changes will eliminate the likelihood of future financial crises. Higher capital requirements would reduce bank lending, money creation and leveraging, but there is always a chance that bad loans could still wipe out a bank's capital. Similarly, limiting the size of financial institutions would reduce, but not eliminate, systemic risk and the need for bailouts. Increasing transparency in the packaging, pricing, and

[7]For a detailed discussion −based on historical evidence− on how a debt defaults translates into increasing country risk and eventually rating downgrades see Reinhart et al., (2003).
[8]Eurozone as a whole has an unemployment rate of 12% (World Economic Report, 2013).

settling of derivatives would afford investors more information on pricing and reduce, but again not eliminate, systemic risk. And on and on.

Question arises as to whether there is such an alternative to the present dominant global finance system. *Perhaps a more practical alternative would be to step back from targeting the interest rate mechanism and focus on the incentive structure that has rendered the interest rate based debt financing such a destabilizing force in the global system. This can be accomplished by reorienting the system from relying on risk transfer and risk shifting to risk sharing- the essence of Islamic finance.*

Before explaining 'risk sharing' based financing as a more reliant financing mechanism, it is important to first gain a brief understanding of the Islamic approach towards money and finance. To this an understanding of the Islamic position in distinguishing between capital, money, profit, and interest is pivotal[9].

3. Islamic Approach to Money and Finance

Two different strands of thought have dominated the definition of capital: capital as physical good or real assets; and capital as a pool, or fund of money or financial assets (Askari et al., 2010 and Hasan, 2011b). The notion of capital has been dealt extensively in Qur'ān and *Sunnah* (see for example chapter 89 verse 20; chapter 24 verse 33 and chapter 3 verse 8). Islam recognizes capital as physical asset, whether produced or a natural resource. Capital as money fund also apply to Islamic finance where money capital is fully anchored by real capital and where overlap between profit and interest is non-existent (because interest is forbidden). The role of capital in economic growth is fully recognized by Islam. Capital is to be invested and not lent for consumption or speculative finance. The most efficient use of capital and admonition of wasting of capital are the basic principles of Islamic finance Askari et al., (2010). Growth cannot be achieved without capital accumulation. Investing in capital is the only way for achieving profits, growth and employment.

The distinction between physical and money capital has its counterpart in the concepts of profit and the rate of interest. While explaining the nexus between money, interest, capital and profit, Shaukat (2014) suggests that interest is the price for loaning money and not a return on it, loaning money is not necessarily investing money. It is thus money and loaning money that generates and drives

[9] For a detailed discussion on the distinction between the above concepts, see Askari et al., (2010) and Toutounchian, (2002).

interest while profit is solely a generation of capital when invested. Toutounchian (2002) argued "When money is converted into some form of capital or investable funds, any profit is legitimized else it is 'money begetting money". This he rendered as the essence of lending with interest.

In the conventional frame of thought, the notion of interest rate overlapped with the notion of profit (Hasan, 2011a). The clash of interest rates inevitably led to the theory of two interest rates in the writings of Marx, Thorton, Wicksell, Hasan and others. A distinction was made between the *market or money interest rate*, which can be directly influenced by monetary authorities and the availability of loanable funds, and the non-observed *natural rate of interest*, which equates saving and investment; "corresponding to capital market equilibrium" (Askari et al., 2010). In summary, they argued that if the market rate is below the natural rate, there will be bank credit expansion, commodity price boom and inflation. A speculative bubble invariably reaches a bursting stage and when the bubble bursts financial instability is the end result. However, if the market rate is above the natural rate, there will be a credit contraction and fall in commodity prices leading to recession.

Referring to the distinction between interest as a charge for money and a yield from investment of capital, Khan and Mirakhor, (1994: 5) assert: "it is an error of modern theory to treat interest as the price of, or return for, capital. Money is not capital, not even representative capital. It is only 'potential capital' which requires the service of the entrepreneur to transform the potentiality into actuality; the lender has nothing to do with the conversion of money into capital and with using it productively".

There is a general consensus among Muslim scholars in considering money as a medium of exchange, a standard of value, and a unit of account but they reject its function as a store of value for which money could be sought as an end in itself. Money was considered as an "intermediary" among assets that reflects the value of other commodities. It fulfils the double coincidence of wants (Hasan. 2011b). "Hoarding money was considered an act of injustice because it was 'exactly like imprisoning a ruler where his ruling cannot be reached". Lending with interest was prohibited because "whoever uses money in *ribā* practices becomes ungrateful and unjust" since money is not created to be sought for itself but for other objects (Al-Ghazali 1955; Khan and Mirakhor 1994).

Different theories were advanced in order to explain interest in terms of the productivity of capital, abstinence, and time preference (Askari et al., 2010). Islam prohibits any form of giving and taking of interest/*ribā* (see for example, chapter 2 verse 275-276). “The prohibition of interest in Islam is not based on economic theory but on fundamental religious sources which view the charging of interest as an act of injustice” (Khan and Mirakhor, 1994). A number of Islamic scholars[10] argue that there is not a single satisfactory theory justifying the rationale for the existence of interest rate[11]. As suggested above most arguments that appear to rationalize the giving and taking of interest are based on either ‘abstinence/reward for saving, productivity of capital or on grounds of time preference. To the argument that interest is a reward for saving or abstinence, Islamic scholars argue that such payments could be rationalized only from an economic position,

> if savings were used for investment to create an additional capital and wealth. But the answer to the question of whether there is an increment of wealth corresponding to the savings of the individual seldom depends on what he does with the money he saves by refraining from consumption. He may hoard it or use it to buy a financial asset without there being an increment of capital wealth created as a result of his saving. When an individual saves, his saving gives rise to creation of an asset or a debt. But, as a rule, he has no power to decide which it will be. According to these scholars, in the absence of simultaneous increment of new investment, either a debt is created or an asset will change hands, but there will be no increment to wealth. Hence, the mere act of abstention from consumption should not entitle anyone to a reward (Khan and Mirakhor, 1994: 5).

The assertion is that when funds are used to loaning money, either a debt or an asset is created (if there has been an investment). If former is the case then there is no justification for a lender to receive a return or nor there is any justification for the state to impose an unconditional promise to pay interest (with a rationale for the smooth functioning of the economy, irrespective of how the borrowed sum is used). If on the other hand there has been an additional wealth creation, then why should the lender be entitled for a small fraction in form of interest rate. “It is then

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[10] Uzair (1982), Siddiqi (1982, 1983). Chapra (1985) and Ahmad (1987), Khan (1986), Khan and Mirakhor (1994), Mirakhor and Krichene (2008), Hamid and Mirakhor, (2009), Mirakhor (2010), Hasan (1992, 2008, 2011), and Askari et al., (2010) among others.

[11]To Mirakhor (2011a: 2-7), all, so called, theories of interest from the classical economists to contemporary finance theories explain interest rate as the price that brings demand for and supply of finance into equilibrium. This clearly implies that interest rates emerge only after demand and supply forces have interacted in the market and not ex-ante prices. In fact, in some theoretical models there is no room for a fixed, ex-ante predetermined rate of interest. For example, introducing such a price into the Walras or Arrow-Debreu-Hahn models of general equilibrium (GE) leads to the collapse of the models as they become over-determined.

just that he/she should be remunerated to the extent of involvement of his financial capital in creating that incremental wealth" (Khan and Mirakhor, 1994: 5-6). To the argument which attempts to justify the charging of interest on grounds of productivity of capital, the Islamic position states that although this may enter as one factor in the determination of interest rate, interest per se has no direct relation with capital productivity. It is paid on money and not on capital. It has to be paid regardless of the productivity. To Keynes, had it not been to the existence of interest rate, the financier would have to share in all the risks that the entrepreneur faces in producing, marketing and selling a product. All the returns would necessarily be driven by the marginal productivity of the capital which in turn is generated from the real sector activities (see also Mirakhor and Krichene, 2009).

In reply to the assertion that interest arises as an inevitable consequence of the difference between the value of capital goods at present and in the future, Islamic scholars respond that this only explains its unavoidability and not its rightness. "It explains why borrowers are willing to pay interest and why lenders are able to exact it" (Khan and Mirakhor, 1994: 5). While they do not deny the difference between present and future valuation of goods (see Hasan, 1992 and 2011b), they argue that a theory of interest based upon this notion is immaterial. The scholars maintain that even the rate of interest which theorists often refer to as return on 'riskless assets' is as a return on debt and not on capital assets; the existence of which is contingent upon past and current profits (Askari et al., 2010). "Even if the basis for time preference is the difference between the value of commodities this year and the next, Muslim scholars argue, it seems more reasonable to allow next year's economic conditions to determine the extent of the reward" (Khan and Mirakhor, 1994: 5).

As suggested earlier, while interest rate could be considered unequivocally as contractual income from loan capital, applicable both to consumption loan yielding no additional product and a production loan yielding additional product, profit is an ex-post concept that applies only to an enterprise in trade or production. Defined as residual concept, profits arise to the owner of the enterprise and may be seen to reward factors which are not accounted for in the computation of cost, such as entrepreneurship, risk and uncertainty (Askari et al., 2010). 'Profits' in Islamic finance stand unequivocally as reward to capital after allowing for capital amortization. They are distributed in form of dividend to the shareholders. It is important to note that there appears a general consensus among Muslim scholar suggesting that Islam has no objection to profit as a return to entrepreneurial effort and to financial capital (see, for example, Hasan, 2008 and 2011b). Islam is not against profit but interest; in fact in Islam profit is encouraged. It is further argued that an amount of money advanced for the purpose of trade and production can be contracted to receive a part of profit because its supplier becomes part-owner of capital sharing in the risks of the effort and hence legitimizing any share in the accruing profits. He is partner in the firm and not a creditor.

There is a difference between someone who is a partner/ordinary shareholder in the firm−liable of all the firm's debt to the extent of his investment and receives only dividends at times of profit− with someone who is a creditor, loaning money without the risk of participating in the process of wealth creation, but claiming interest regardless of situation of profit or loss to the firm. "The creditor runs the risk, but this risk is not related to the profit of the enterprise, rather to the solvency of the borrower with the additional backing in form of collaterals or guarantees" (Khan and Mirakhor, 1994: 6). To Mirakhor (2011a) although the creditor does take a risk by loaning money i.e. the risk of default, but it is not risk taking per se that legitimizes any return; it is what is done after taking the risk. The risk(s) can be either transferred or shifted or the risk(s) can be shared. The former two has become the order of the day in the present interest bearing debt financial system. The later however, seems on the drive towards oblivion. As suggested by Mirakhor and Krichene (2008: 4-5):

> Much of the financial structure of modern economies consists of interest-based debt contracts. In a debt contract, a borrower promises to repay the principal plus an additional sum, the interest, over a stipulated time frame. This, in effect, cuts off the relationship between the project for which funds are needed and its financing since a debt contract establishes the legal right of a lender to receive more money in the future in exchange for a given amount of principal today—it is an exchange of spot money for more future money—regardless of the outcome of the project undertaken by the investor entrepreneur. Indeed, if the risks of informational problems and associated monitoring costs are priced into the loan contract, then all risks are shifted to the entrepreneur.

Islamic finance, being based on sharing the risk of an activity rather than on interest rate driven debt contracts, contributes efficiently to capital accumulation and is immune to financial instability and speculation. As will be argued later, it is based on growth solely and allows no wealth redistribution via interest rate based debt contracts. It insulates an economy against banking failure and stock market crashes that have had a constant presence in the conventional system[12]. It will be

[12] For the proof of existence of a stable non-inflationary economy operating in a non-interest rate environment, see Mirakhor (1990, 1992).

argued that through its economic rules, Islamic finance precludes economic volatility because in this system the close relationship between the real and financial sectors pre-empts misalignment of rates of return to finance, the rates of real growth of the economy and net rate of profit. The underlying framework that renders such stability in the economy is based on risk taking and risk sharing.

3.1. Islamic Finance is Risk Sharing and a Rule-Based System

Driven by the Qur'ān and the *Sunnah*, the Islamic economic system is a rules-based system. There is network of prescribed rules that governs the socio-economic-political life of the society. Compliance with these rules renders the society a union of mutual support by requiring humans to share the risks of life. The adoption of these set of rules are expected to lead to a dynamic and growing economy, without which the higher objectives of Islam cannot be achieved (Shaukat et al, 2014). The objective of Islamic finance is to promote sustained growth and full employment thus contributing positively to poverty alleviation and, ultimately, to economic and social justice. The epistemological root of risk sharing, as the organizing principle of the Islamic financial system, is discernible from chapter 2 verse 275 of the Qur'ān. This verse, in part, decrees that all economic and financial transactions are conducted via contracts of exchange (*al-bay'*) and not through interest-based debt contracts (*al-ribā*). It can be argued that risk sharing – the crux of Islamic finance – serves as one of the most important desiderata of Islam i.e. the unity of mankind.

Since in the Verse the contract of exchange appears first and the prohibition of *ribā* thereafter, it can be argued that requiring contracts to be based on exchange constitutes a necessary condition and "no-*ribā*" the sufficient condition of existence of an Islamic financial system. Together, these conditions constitute the organizing principle of that system. The necessary condition (*al-bay'*) and sufficient condition (no *ribā*) must be met for a contract to be considered Islamic. "A careful consideration of all the permissible contract modes that have reached us reveals them to be basically risk sharing contracts. The instruments designed to financially empower them must also be risk sharing instruments" (Mirakhor, 2010, 2011a, b).

Classical Arabic Lexicons of the Qur'ān define contracts of exchange (*al-bay'*) as contracts involving exchange of property rights claims in which there are expectations of gains and probability of losses[13]. By entering into contracts of exchange, parties improve their welfare by exchanging the risks of economic undertakings, thus allowing division of labour and specialization (see Mirakhor, 2011a). The understanding of *al-bay'*, the exchange of one set of property rights claim for another, as the necessary and "no-*ribā*" as the sufficient condition has important implications. Exchange requires the freedom to contract for the parties involved and this implies freedom to produce, which then calls for well-protected property rights to allow and facilitate production. For exchange to take place, there is a need for markets and then for rules that govern behaviour of market participants. Rules need enforcement and regulation to keep the flow of information smooth thus reducing transaction costs.

Over the past three decades an important field of enquiry has developed in economics, called the 'New Institutional Economics' (NIE), that has made significant contribution to understanding how economic system function. Most importantly, the NIE has focused on reasons why some economies perform strongly while others lag behind with substantial margins. The reasons, the NIE explains is the "institutional scaffolding" of the economy. NIE defines institutions as rules and norms governing economic behavior in the society. Accordingly how well the economy performs depends crucially on the rules governing economic behavior. Principles among these are: rule of law, well defined property rights, and a high degree of trust, efficient contract enforcement, and good governance.

An economic expertise-dominated view of the relevant verses of the Qur'ān reveals a comprehensive set of rules governing the structure and operations of an economy; including rules that extend well beyond what the NIE would consider needed for a well-functioning economy. The Qur'ān makes clear that the compliance with the prescribed rules is the guarantor of: better socio economic justice and cohesion, unity and order in any human collectivity and economic growth and stability (see for example chapter 5 verse 2; chapter 3 verse 103; chapter 8 verse 46). The promise made in the verse 96 of chapter 7 of the Qur'ān (see also chapter 65 verse 2; chapter 65 verse 3; chapter 5 verse 65-66; chapter 12 verse 90' chapter 5 verse 66; chapter 8 verse 53; chapter 10 verse 9; chapter 2 verse 25; chapter 16 verse 97; chapter 24 verse 55; chapter 40 verse 40). Conversely all prohibited behavior are those that ultimately lead to social injustice and disintegration. Central among the rules that constitute the full institutional

[13] See, for example, Al-Tahquiq Fi Kalamat Al-Qur'ān Al-Karim; Lisan Al-Arab; Mufradat Alfaz Al Qur'ān, Arabic Lexicon, among others. These sources define *al-bay'* as *"mubadalati al-maali bi al-maal."* In English this can be rendered as *"the exchange of one set of property rights claim for another."*

framework of an Islamic economic system, alongside the application of sharing risks and no *ribā*, are rules governing:

- Full and transparent observance of Property rights. In Islam, there are only two ways in which individuals can gain legitimate property rights. Individuals can gain property rights through a combination of their own creative labour and other resources or through transfer—via exchange, contracts, grants or inheritance—from others who have gained property rights title to an asset through their own labour (see chapter 53 verse 40; chapter 17 verse 26; chapter 24 verse 22; chapter 30 verse 38; chapter 4 verses 11-12). Fundamentally, therefore, work is the basis of acquiring rights to the property[14]. The fourth rule governing property rights forbid instantaneous property rights claim without commensurate work. The exception is transfer via gifts from other who have gained legitimate property rights claim on the asset transferred. The prohibition covers theft, bribery, gambling, interest from money lent, or, generally, income and wealth obtained from sources and activities not permitted by Sharīʿah (see for example chapter 5 verse 38; chapter 2 verse 188 and 275; chapter 5 verse 90).
- Faithfulness to terms and conditions of contracts. Islam forcefully anchors all social-political-economic relations on contracts. More generally the whole fabric of the divine law is contractual in its conceptualization, content and application. Its very foundation is the primordial covenant between the Creator and the humans (Mirakhor, 2011a) [see chapter 7 verses 172-173]. The covenant imposes the obligation on humans to remain faithful to its affirmations that they recognize the supreme Creator as its Cherisher Lord. In verse 152 of chapter 6 the Qur'ān urges the believers to fulfil the covenant of Allah. This is extended to the terms and conditions of all contracts through another clear verse of chapter 5 verse 1 in which believers are ordered to be faithful to their contracts. They are ordered to protect faithfulness to their covenants and what has been placed in trust with them as a shepherd protects sheep (see chapter 23 verse 8; also chapter 17 verse 34; chapter 2 verse 2; chapter 16 verse 91-92; chapter 3 verse 61). So much so that the Qur'ān has dedicated the longest verse on the importance of contracts and their fulfilment (see chapter 2 verse 282), thus believers do not treat obligations of contracts lightly. They will take on

[14]The concept of work in Islam (called *'amal)* is far broader and has different characteristics and objectives than that understood in the Western economic tradition. In Islam, work ethic is defined by the Qur'ān itself, which mentions the word *'amal* in 360 verses. A closely related concept of *fi'l* (also translated as work) is mentioned in an additional 109 verses. All these verses stress the need for work and action by human beings (Islamreligion.com, accessed on 10, August, 2013 at 15:45).

contractual obligations only if they intend fully to fulfil them[15]. Hence, their commitments are credible (Mirakhor, 2010).

- Sharīʿah approved sources of factors and products before they enter the market;
- Provision of full information regarding qualities, quantities and prices of factors of production and product to all buyers and sellers—before the start of price bargaining process;
- "There is no 'Ghash' meaning there should not be any kind of misrepresentation of the product.
- No Gharar and 'Maisir' and a strict prohibition of speculative activities;
- Full and transparent Information". Everything about the product must be known and nothing should be hidden. Anyone who enters the market is informed fully of prices and products.
- As well as rules on distribution and re-distribution. This is in consideration of the inequalities that are created due to the fact that some members of the society may be physically or otherwise unable to access resources to which they are entitled to as per the property rights rules of Islam (see chapter 6 verse 165; chapter 43 verse 23; chapter 16 verse 71). The inequalities could also arise due to the presence of the idiosyncratic risks which when materialize play havoc with people's income and wealth (Mirakhor and Shaukat, 2012; Mirakhor et al., 2012. 2013 and Mirakhor and Shaukat, 2013). The most important economic institution that operationalizes the objective of managing any ensuing inequalities is that of the distribution/re-distribution rule of Islamic economic paradigm. For example, the Mechanism for redeeming the rights of the less able in the income and wealth of the more able are the network of mandatory and voluntary payments such as Zakat (2.5% on wealth) and payment referred to as '*ṣadaqāt*' (see chapter 9 verse 60; chapter 22 verse 41; chapter 2 verse 110, 261; chapter 34 verse 39; chapter 57 verse 18; chapter 73 verse 20).

Among the other main reasons given in defense of the existence of interest bearing debt system are that of (i) 'Moral hazard' due to asymmetric information where one side of transaction has information which the other side does not have. (ii) 'Cost of monitoring'. For example if borrowing money is required, the creditor has a problem of trusting on the information which the borrower puts forward as a reason to borrow or even if he does not explain there is still a risk. Collateral is asked, worth more or less the amount borrowed and further if whatever profits are

[15] This has implication for the cost and efficiency of transactions as it eliminates informational problems as well as moral hazards and adverse selection (see Mirakhor, 2011a: b).

made, a fixed amount is asked over the principle when the money is returned. Because of moral hazard interest rate is justified. Then comes the cost of monitoring where even though the money is loaned, the creditor still worries and may need to monitor the activities of the borrower for the safe return of the loaned money (with interest). Since monitoring is costly, sometimes called as 'costly state verification', it is hard for creditor to verify the state or monitor. The monitoring is thus delegated called 'delegated monitoring'[16].

In an Islamic system, there would be no problem of 'Moral hazards. First, due to property rights protection as well as clear exchange of property rights alongside the rule of being 'faithful to contracts', the occurrence of moral hazard will be diminished if not completely cured. In fact adherence to all the rules discussed above assures against any mal-practices. All in all, any form of conduct leading to instantaneous property rights without commensurate equity created by individual's own labour is prohibited. This type of market that complies with the prescribed rules produces price for factors and outputs that are just as a result of free and informed bargaining process. The absence of the internalization of above rules makes contracts very costly to form, verify, negotiate, renegotiate and implement. "A further implication of the compliance with the above rule is the possibility of coming up with a contract where the parties to a contract trust each other. They can agree to enter into a simple contract and commit to revising its terms and conditions as contingencies arise" (Mirakhor, 2011a: 17).

3.2. Enhanced Coordination and Predictability

From the above discussion, it can be summarized that the institutional framework of the Islamic economy is composed of a collection of institutions–rules of conduct– to deal with allocation of resources, production and exchange of goods and services, and distribution/redistribution of resulting income and wealth. The main objective of these institutions is to achieve social justice and unity alongside economic prosperity. Important among their functions is the reduction in uncertainty for members of the society; allowing them to overcome the obstacles to decision making caused by paucity of information. Rules specify what kind of conduct is most appropriate to achieving just results when individuals face alternative choices and must take action. They impose restrictions on what the society's members can do without upsetting the social order on whose existence all members count. This also helps them in deciding on their own actions and forming

[16] The banks are the one to whom this delegation is made to as they have 'economies of scale' which is their job and they can get such information easily.

their expectations of other's responses and actions when in situation of uncertainty or facing risks.

Risk and uncertainty are undeniable facts of life. As was discussed earlier, uncertainty stems from not only the lack of information but also from ignorance of knowing the response and behaviour of others under such conditions. The question arises as to why risk and uncertainty exist. This question becomes more acute for those who believe in the Supreme Creator of all things. Since it is believed that existence of risk and uncertainty is a source of difficulty for humans, a Creator-centric question also arises: why create risk and uncertainty for humans? Bartholoemu (2008: 230) argues that *"a plausible argument for the necessity of risk is that it serves as an important ingredient in the recipe of full human development. It provides the fertility and diversity of experience to develop our skills and personalities."*

The Qur'ān, on the other hand, provides a more compelling explanation: humans are subjected to tests throughout their lives to allow them a sense of the degree to which they, individually and collectively, are rule compliant (see for example, chapter 2 verse 155; chapter 7 verse 130; chapter 76 verse 2; chapter 29 verse 2; chapter 9 verse 126; chapter 11 verse 7). Without risk and uncertainty, testing would not be possible (Mirakhor, 2009). To ease the intensity of anxiety in dealing with tests and, therefore, reduce uncertainty and demand on humans' cognitive ability, compliance with the (economic) behavioral rules prescribed by Qur'ān reduces risk and uncertainty. The result is better coordination in society's behavior. It can be stated that such rule compliance while promoting coordination in actions, determines the degree of certainty in the formation of expectations, prevents conflict, reconciles differences, facilitates cooperation, promotes social integration and solidarity and strengthens social order. *The result is that the behavior of the society as a whole immediately becomes increasingly predictable in all aspects; making the system simple to manage and control.* As will be argued later, similar to the physics, the mechanics of a risk sharing system also provide the dynamics that warrants a much stable and progressive economic order.

3.3. Islamic Finance and Equity Financing

Considering the aspects of an Islamic financial system based on risk sharing, where there is no room for any return that is determined ex-ante to the contractual outcomes, independent of any profit or loss, the system becomes one that is based on no risk free assets, where all the financial assets are contingent claims (Mirakhor and Krichene, 2009). It can be stated that shares or equity issues of corporations appear to best fit the criteria. In a typical risk sharing arrangement such as equity finance, parties share the risk as well as the rewards of a contract. Assets are invested in remunerative trade and production activities. The return to assets are not known at the instant assets are invested, and is therefore a random variable making equities risky. In equity investment, the income is random and depends on the performance of the equity investment.

To Mirakhor and Krichene (2008), unlike a debt contract, shares of common stock of open corporations are not redeemable and the payoffs are contingent upon a certain state of occurrence; Akin to Arrow-Debreu securities. They are “proportionate claims on the pay offs of all future states” (Fama and Jense, 1983). “The notion of Arrow-Debreu securities is built on Adam Smith’s idea of a decentralized market economy, supporting optimal risk sharing” Mirkahor (2010, 2011a, b). Thus, contingent payoff, non-redeemability, and risk sharing are characteristics that distinguish a sharing contract from a debt contract.

Risk sharing via equity financing is not novel to economic endeavors[17]. Historical accounts suggest that equity financing has been a centuries old phenomenon in the Muslim world as well as in Europe of the Middle Ages. Enterprises were established with share ownership and were recorded as share owned or anonymous enterprise. Among the most used instruments were the ‘*muḍārabah*’ and ‘*mushārakah*’ partnership contracts. Borrowed from the Muslims and later came to be known as ‘Commenda’ and ‘Maona’, such financing modes were commonly used for financing long-term trade and investment in Western Europe (Brouwer 2005; Udovitch, 1970 and 1967). Further historical research submit that Commenda’s contribution to industrial development of Ruhr Valley in Germany and in building railroads in Europe were particularly pronounced” (Mirkahor, 2010: 13). Mirakhor (2003) while sighting the Goitein (1954, 1955, 1962, 1964, 1967) examination of Geniza records suggest that (i) trade in Middle Ages was both extensive and intensive, financed by risk sharing partnerships; (ii) partnerships were used in industrial, commercial and public administrative projects; (iii) trade were largely not based on cash benefits or legal guarantees, but on the human qualities, mutual trust and friendship. Given the recent times, venture capital firms in the Silicon Valley of the U.S are reaping enormous benefits from risk sharing/equity based financing[18].

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[17] For a detailed Historical account of risk sharing based financing, see Askari et al., (2012) *“ Risk sharing in Finance: The Islamic finance alternative”.* John Wiley & sons.

[18] According to Cybercities (2008), in 2008, Silicon Valley was the third largest high-tech centre (cyber-city) in the United States, behind the New York metropolitan area and Washington metropolitan area, with 225,300 high-tech jobs. The Bay Area as a whole however, of which Silicon

It is often argued from those who favour debt financing that the unprecedented development particularly in the last fifty years is essentially an outcome of the capitalistic system, based on interest bearing debt financing. “To them the reduction, let alone elimination, of debt financing and bank money creation would reduce economic growth” (Askari et al., 2012). The latter is an empirical issue that needs careful estimation alongside considering the social cost and benefits under such a regime. However, while not denying the development and overlooking the aspect of sustainable development, question arises as to how much of the ensuing development has only been through debt financing. It can be safely argued that most of the advances that seemed to have changed the dynamics of the world—particularly in the technological arena—have been through risk sharing modes than debt financing (see Shaukat, 2014 and Taleb, 2012a, b). To Askari et al., (2012), “much of the assumed contributions of finance over the last 30 or so years, and thus debt financing and leverage, have only been a mirage”, given also the pro tax and legal support. In Qur’ān, Allah has ordained the believers, not to get discouraged by the apparent well-being of the non-believers (see chapter 43 verse 33-35).

While highlighting the growth benefits of a system predominantly based on equity financing, Toutouchian (2002) asserts that the world could have indeed seen much more growth and development had it resorted more on equity financing. Einaudi (2006) suggest “A modern market economy needs financial contracts. In theory these could all take equity form, and if they did economies would suffer less macroeconomic instability”. Similarly, Taleb (2012) also argued that for a financial system to avoid fragility and the occurrence of black swans, the system needs to get rid of debt financing and resort to equity financing instead. With equity financing all stake holders will have more *skin in the game*. In other words, nobody should be in a position to have the upside without sharing the downside, particularly when others may be harmed. This would necessarily constrain and even diminish moral hazards and agency problems; aspects that will always be pervasive in a debt based system (see also Hellwig, 1998).

It is argued that risk sharing financing is trust intensive (Shaukat et al. 2014) and given the history of wars and crusades the world over, “the upheavals of the

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Valley is a part, ranked first with 387,000 high-tech jobs. Silicon Valley has the highest concentration of high-tech workers of any metropolitan area, with 285.9 out of every 1,000 private-sector workers. Silicon Valley has the highest average high-tech salary at $144,800. [Cybercities 2008: An Overview of the High-Technology Industry in the Nation's Top 60 Cities].

Middle Ages in the 14^{th} and 15^{th} centuries, including the Black Death, strife within the Church and between the Church and hereditary rulers" (Asakri et al., 2012: 248), there has been a breakdown in the required trust among and within the societies. This validates the existence of an economic order based on interest-based debt financing. It was assumed that such a system would provide the remedy for the lost trust, translating into better serving the economic needs. As argued by Einaudi (1934/2006), in the real world fixed debt contracts (and indeed fixed-wage contracts) have arisen to meet human desires for greater trust over future income than would be delivered in a world where all contracts took an equity form. Therefore we have debt contracts[19].

Question arises, if the deficiency of trust, among the societies, was among the main reasons for the dominance of debt financing, the functioning of such a system, requires even more trusteeship and the maintenance of that trust. The cycle of trust starts from the moment money is deposited in the banks, to the events when money is contractually loaned out, on interest. Further support is gained by government guarantees and deposit insurance schemes in safeguarding the deposits[20]. As can be discerned from the earlier chapters, it is the last two phases where an innate incentive structure is created that severely threatens and eventually collapses the societal trust in the system. Financial crisis and bank runs are a clear example. It can thus be concluded that the system ends up breaking down more trust than what it remedies for. It appears that had it not been for government guarantees, deposit insurance schemes as well as the supportive tax structures, the present interest bearing debt financing regime can barely survive[21] (Shaukat, 2014).

While comparing the features of debt and equity contracts, Stiglitz (1989) argues that from the perspective of the entrepreneur, equity has two related distinct advantages. Risk is shared with the provider of capital, and there is no fixed obligation for repaying the funds. Thus, if times are bad, payments to the providers

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[19] Luigi Einaudi, *Debts*, in Luigi Einaudi, Selected Economic Essays, Palgrave Macmillan 2006. First published
as *'Debiti'*, La Reforma Sociale XLI, volume XLV No 1, January 1934.

[20] Government deposits insurance itself is an evidence of the fragility of trust. To stiglitz (1989) government deposit insurance lies at the heart of creating moral hazard problem since it implies as a free license to banks to take excessive risks. "Banks which undertake greater risk can offer greater interest rates to depositors, who can, with impunity, turn over their funds to the bank. These banks attract funds away from more prudent banks. A kind of Gresham's Law works with a vengeance". He further argues that this alongside debt friendly tax policies further impede governments to indulge in risk sharing through equity financing.

[21] According to (Askari et al., 2010: 84), "Based on historical evidence, each credit crash would wipe out more than 50 percent of conventional banks in the absence of government bailouts".

of capital are suspended. The firm will not face bankruptcy, and will not be forced to take the extreme measures intended to stave off bankruptcy. From a social point of view, equity has a distinct advantage: because risks are shared between the entrepreneur and the capital provider, the firm will not normally cut back production as much as it would with debt finance, if there is a downturn in the economy (see also Greenwald and Stiglitz, 1986). In addition, debt contracts need to be continually rolled over: as a result new credit supply is vitally important to the economy. Equity instruments are typically permanent; they do not need to be continually replenished each year; an economy could function for a period with new equity issue markets completely closed. Debt contracts in contrast have finite terms. Without continual refinancing, many otherwise solvent firms would go bankrupt (refer to chapter 2). Oscillations in new debt supply are therefore potentially far more harmful than oscillations in new equity supply (Turner, 2012). Mirakhor and Krichene, (2009) argue that "equity based finance is stable as assets and liabilities adjust to shocks; making the system immune to banking crisis and disruptions in payments mechanism".

3.4. Islamic Finance a Two Tired System

Based on the above discussions—with risk sharing and no-*ribā* based financing as its chief tenants[22], an Islamic financial system can be envisioned as a two-tier financial system[23]:

- A 100 percent reserve depository and safekeeping banking system for domestic and international payments.
- Equity based risk-sharing investment banking that places real saving directly in private or public projects or indirectly via the stock market. Investors are shareholders.

The first sub-system keeps money deposits in trust and settles payments via clearing, withdrawals and other forms of payments. The second part of the system receives savings, which it invests in productive projects or in more liquid investment such as mutual funds or stocks. Depositors receive transferable or marketable shares that enable them to liquidate their investment if they chose to do

[22] Although interest-free lending, called '*qard hassan'*, is permitted (see Askari et al., 2010; Mirakhor, 2010, 2011a, b, Askari et al., 2012; Mirakhor et al., 2012 and Mirakhor and Shaukat, 2012, 2013 among others).

[23] For a detailed discussion and demonstration of how the system would operate, see Askari et al., (2010).

so. Returns from the funds invested are ex-post and are distributed to the depositors as to the shareholders of equity capital. As a result, they share in profits and losses as well as in capital gains and losses. Islamic capital markets intermediate between saving units and investing units through risk sharing. They would include investment banking, stock markets, mutual funds, exchange-traded funds and other forms of intermediary risk-sharing institutions.

A number of influential scholars[24], in the past, proposed reforms that would abolish the credit system and replace it by an equity-based investment system. For instance, Walker (1873); von Mises (1953); Carrol (1965), Simons (1948); Friedman (1969) and Rothbard, (1994), opposed fictitious credit creation by banks and favoured the creation of joint stock companies which use savings to buy equities. Among the most celebrated proposals along these lines was the plan formulated in the University of Chicago, 'Chicago Memorandum' in 1933 which called for 100% reserve money and for an equity-based investment system. Irving Fisher (1936) claimed the following advantages for this plan: (i) Much better control of a major source of business cycle fluctuations, sudden increases and contractions of bank credit and of the supply of bank-created money (ii) Complete elimination of bank runs. (iii) Dramatic reduction of the (net) public debt (iv) Dramatic reduction of private debt, as money creation no longer requires simultaneous debt creation. A recent IMF paper titled "the Chicago Plan Revisited", studied the claims made by Fisher and others in favour of the Chicago Plan'. By embedding a comprehensive and carefully calibrated model of the banking system in a DSGE model of the U.S. economy. They found robust support for all of claims made in support of the proposed plan (Benes and Kumhof, 2012). Moreover, Kotlikoff (2010) also made a proposal on similar lines suggesting "Limited Purpose Banking". LBP would essentially transform all financial intermediaries with limited liability into mutual fund companies, with a single regulatory agency the "Federal Financial Authority" taking care of the regulatory and supervisory roles. LBP would maintain a close link between the real and the financial sector where the former will drive the later.

Askari et al. (2012: 11) in their book titled *"Risk Sharing in Finance"* suggest that:

> One way to ensure the stability of the financial system is to eliminate the type of asset-liability risk that threatens the solvency of all the financial institutions,

[24] See also Haque and Mirakhor, (1987); Khan and Mirakhor, (1989, 1994); Mirakhor et al., (2012, 2013); Mirakhor and Krichene, (2013) among others.

including commercial banks. This requires commercial banks to restrict their activities to two: (i) cash safe keeping; and (ii) investing clients' money as in mutual fund. Banks would accept deposits for safe keeping only (as, for example, in a system with a 100 percent reserve requirement) and charge a fee for providing this service and for check writing privileges. In their intermediation capacity, banks would identify and analyze investment opportunities and offer then to clients; they would charge a fee for this service much like a traditional investment bank. In this way the bank would not be assuming any asset-liability exposure, just a potential loss of some (but not all) of its capital, which would not endanger the bank's solvency. In other words, in such a financial system, there would be no debt financing by institutions, only equity financing; and there would be no risk transfer or risk shifting, only risk sharing.

A pivotal feature of the above dynamics is that the Islamic financial system is protected from un-backed credit expansion since banks do not contract interest bearing loans and do not create and destroy money[25]. It is thus assumed that in an Islamic bank there will be a maturity match between deposits and investment (with no need for asset and liability management). "Short-term deposits may finance short-term trade operations, with bank purchasing merchandise or raw materials and selling to others companies; liquidity is replenished as proceeds from sales operation are generated. For longer-term investment, longer-term deposits are used" (Askari et al., 2010). There is hence greater interdependence and close relationship between investment and deposit yields, since banks primarily accept investments on the basis of profit-loss sharing. The funds to the enterprise are also provided on the same basis (Khan and Mirakhor, 1994). An Islamic bank is a direct owner of the investment process. It identifies investments opportunities based on due diligence process and evaluates them to minimize risks; participates directly in the management, monitoring and execution of the trade and investment operation (see also Kazem, 1999). The funds are further released for the purchase of goods and services as required for the completion of these operations.

The above dynamics would in turn not only translate into a coordinated asset/liability maturity structure, but the real values of assets and liabilities −of

[25]There is no credit creation out of thin air in Islamic finance. However, under conventional fractional reserve banking, deposits at one bank can be instantaneously loaned out or used to purchase a financial asset and become reserves and a basis for a new loan at a second bank. The credit multiplier is determined by the reserve requirement and could be high. In case of securitization and over-leverage, the credit multiplier is theoretically infinite, leading to violent asset and product price fluctuations.

financial institution− would be equal at all points in time such that the value of both sides of the balance sheet move simultaneously and in the same direction in response to changes in asset prices. In addition the prospect of instantaneous equilibrium between the asset and liability sides of the banking system, there would also be asset/liability risk matching. While the individual financial institutions engaged in investment activities face the given risks, in and of themselves, these are not systemic and do not impact the overall stability of the financial system, as this system is immune to speculative mania, liquidity expansion, and instability of returns. The latter is due to the fact that there is no value or maturity mismatching between assets and liabilities of the institutions. If asset prices decline, so will the liabilities, unlike what happens in a system dominated by interest-based debt contracts[26]. "Due to the fact that the returns to liabilities will be a direct function of the asset portfolios and also assets are created in response to investment opportunities in the real sector, the return to financing is removed from the cost side and relegated to the profit side, thus allowing the rate of return to financing to be determined by productivity of the real sector[27]" (Khan and Mirakhor, 1994). Immediately, the system renders a tight coupling between the financial and the real sectors and the financial sector is found fulfilling its real aim i.e. *serving the real sector*. It will hence be the rate of return to the real sector drives the economic outcomes.

Given the importance of credit in the Western financial and economic model, if credit supply is constrained by increasing its price i.e. increasing interest rates, then a reverse of the above dynamics is achieved. High interest rates lower investments which in turn lower consumption leading to a build-up in inventories and lowering growth in national output. Fallout is an increase in unemployment. If the decline in employment is more pronounced, consumption and investment decline further which further affects the national output. "In case this decline continues for more than two consecutive quarters, then an economic recession is upon us" (Askari et al., 2010). It can be observed how the dynamics of the economy would change for better if it is driven by the rate of return to the real sector. The economic functioning will be in complete contrast to the present system. As suggested, there would be one to one mapping of both the real and financial sector where the increase in investments, consumption, employment and hence economic growth

[26] It is also to note that since interest rates are an economy-wide variable and therefore systematic, their risk does not get diversified away like other *idiosyncratic* risks of a stock would. This would also translate into a higher portfolio beta (see Bacha and Mirakhor, 2012).

[27] As discussed earlier such a notion was also backed by Keynes in the absence of interest rate mechanism.

would be in direct proportion with the increase in the rate of return to the real sector. An ensuing feedback process further adds impetus to the growth cycle.

In consideration of the given growth and stability characteristics of risk sharing based financing, recently, a group of elite Sharīʿah scholars as well as economic experts has passed two 'Declarations' (namely the Kuala Lumpur and the Jeddah Declarations) asserting that risk sharing based financing is the only way forward and that financing must move away from debt and rely more and more on equity financing. The declarations further suggested governments (particularly Islamic governments) to essentially adopt risk sharing modes when devising the monetary and fiscal policies. Similar conclusions were reached in IFFS (2013), asserting the adoption of risk sharing and equity financing and less reliance on interest bearing debt.

4. Economic Growth and Stability: Risk Sharing Based Financing: An Empirical Support

In order to seek empirical support for the hypothesis that risk sharing finance promotes better growth and stability better, than interest-based finance, we use production function the tool so frequently used in order to assess the efficacy of factors claimed as contributing to economic growth. The present study adopts the augmented production function approach as put forward by Cowen and Tabarrok (2011). The basic growth model[28] takes growth in GDP "Y" as a function of capital 'K' and labour 'L', with ideas/technological shifts 'A' as exogenous to the model (see, for example, Solow 1957).

Although the model could explain the differences in economic development based on capital investment and the saving rates, while keeping labour growth constant, nevertheless it failed to fully explain the large magnitudes in the difference of income levels of individual countries. A study by Mankiw et al., (1992) tried to further enhance the explanations for the large differences by

[28]The basic growth model takes growth in GDP "Y" as a function of capital 'K' and labour 'L', with ideas/technological shifts 'A' as exogenous to the model (see, for example, Solow 1957). The model is also presented in the Cobb-Douglas formation. The basic model in essence remains the same as in the Solow's version i.e. Y= f (K, L). However, the main difference between the two is that for the former's version, there is an addition of 'α' on both 'K' and 'L' suggesting the proportion of each variable's contribution to economic growth (the notion of diminishing return). The given model would then be $Y= A K^{\alpha} L^{1-\alpha}$. Moreover, assuming the labour as constant in an economy, the Cobb-Douglas model has further evolved to its reduced form of $y = Ak^{\alpha}$. Nevertheless, Hicks-neutrality' is the assumption often used by economists to neutralize the effect of 'α' for each variable (see later).

introducing the notion of 'human capital' in the production function[29]. The authors suggested that labour's share is not all about payments or return to pure labour, it also represent the payments or return to human capital i.e. the labour which through education takes time to produce. Therefore human capital is ought to be considered a type of capital. Given the assertion, this increases the share of capital in the model and could explain the large differences in incomes. With empirical support, it was emphasized that the saving rates and abundance or lack of capital, which includes the human capital, are at root of explaining the comparative growths. The more capital intensive the economy is, the more the capital accumulation, leading to more savings and hence investments and growth.

As a result, it was argued that the economies with lesser capital stock and human capital can match up to the growth of more developed provided the rate of savings can go up, since the return to capital and human capital is excessive — the notion of convergence hypotheses[30]. In theory the process should start naturally as higher rates of return should attract more savings as well as the flow of global capital, increasing capital stock and economic growth. However, evidence fails to fully support the convergence. For instance, the Soviet Union under Stalin saved a higher percentage of national income than the US. Given the higher savings rate as well as a lower level of capital, the Soviet was expected to have caught up very rapidly. However, it did not. The dynamics are found true on most less developed

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[29] "The paper examined whether the Solow growth model is consistent with the international variation in the standard of economic growth and living. It showed that an augmented Solow model that includes accumulation of human as well as physical capital provides an excellent description of cross-country data. The paper also examines the implications of the Solow model for convergence in economic growth and living standards, that is, for whether poor countries tend to grow faster than rich countries. The evidence indicates that, holding population growth and capital accumulation constant, countries converge at about the rate augmented Solow model predicts". However, while presenting their latest augmented version of the growth model, Cowan and Tabarrok (2011) has argued that the contribution of Mankiw et. al., (1992) fall short in fully explaining the reasons necessitating the divergence from the convergence hypotheses. As explained, to Cowan and Tabarrok (2011) more than the lack or abundance of capital and human capital, what importantly derives the best utilization of these basic factors, is the institutional and incentive structure present in an economy. Among these is the financing mechanism in built in an economy. We are grateful to Prof. Dr. Zubair Hasan, for his deduction and perseverance on the relevance of Cowan and Tabarrok's augmented growth model.

[30] Simply put, the idea of convergence in economics (also sometimes known as the catch-up effect) is the hypothesis that poorer economies' per capita incomes will tend to grow at faster rates than richer economies. As a result, all economies should eventually converge in terms of per capita income. Developing countries have the potential to grow at a faster rate than developed countries because diminishing returns (in particular, to capital) are not as strong as in capital-rich countries. Furthermore, poorer countries can replicate the production methods, technologies, and institutions of developed countries. However, It does not explain why in general nations have failed to converge and even had zero growth for many decades (e.g. in Sub-Saharan Africa).

countries. It appears that, in general, the less developed are struggling to catch up to the developed. Indeed, in many cases, the gap is increasing. Moreover, the flow of global capital, on the contrary, is constantly directed towards wealthier nations—even the richer individuals of the poorer regions tend to invest outside. Additionally, there is also a relentless 'brain drain' severely tilted towards the more developed parts.

Given these facts, the growth models hence fail to properly explain the reasons necessitating the dynamics. However, a crucial contribution by Cowen and Tabarrok (2011), akin to the findings of NIE, essentially held institutional arrangements and the incentive structures in an economy as the most vital in explaining the above. The authors argued that the convergence hypothesis is a 'conditional convergence hypotheses'[31]: conditioned crucially on the most suitable and efficient institutional and the ensuing incentive structure in the economy. As a result, the theoretical perceptions can only be put right provided the right kind of institutional/structural arrangement is assured. This in turn would best determine the way in which the capital and human capital are utilized to the best of economic productivity and growth.

So given the technology as exogenous and available to everyone, it is hence the institutional arrangement and the ensuing incentive structure that lies at the root of explaining comparative growths. The augmented model then stands as below.

$$Y = F\,(XK, L) \qquad (1)$$

Where 'Y' is the output (measured as annual growth in GDP), 'K' is the physical capital and 'L' represents the human capital portion of capital. However, 'X' the authors referred to as the 'productivity' which solely derives the most efficient combination of the factors of production. This, as argued, essentially depends on the right nexus of the institutional and incentive structure provided in an economy[32]. Thus

$$\textit{Output} = \textit{Productivity x Factors of production} \qquad (2)$$

[31] Given the fact that the convergence hypotheses cannot explain as to why economies fail to converge, the notion of 'conditional convergence' then identifies the variability in the structural (institutional) characteristics of economies as the key determinant.

[32] The more suitable the institutional and incentive structure, the higher the effect of 'X', resulting in a more efficient combination of labour and capital.

If such is the importance of having the right institutional arrangement for economic growth, the financing mechanism can then be considered as among the most crucial components in the configuration of the required arrangement[33]. As a result, this provides justification for the inclusion of financing arrangement as among the variables explaining economic growth in the production function. In the present economic framework, the financing mechanism is governed by interest bearing debt finance. It has been asserted that (nation's) debt plays a significant role in influencing the productivity of labour and capital, hence the economy. However, as can be inferred from the findings of previous sections, debt does not remain a blessing after it gets accumulated beyond a certain limit. In fact, too much of debt can and has dampened growth by hampering investment and productivity. This apparent paradox is the result of what is called as debt overhang (Krugman, 1992). Basically, it implies that if the accumulated debt of a country exceeds or is expected to surpass its repayment ability, expected default will lead to lower domestic and foreign investment with adverse implications for its economic growth.

More specifically, when the debt overhang is such that future increases in output are drained away in the form of higher debt repayments; debt acts like a tax on output. So, larger the debts stock the lower the probability of debt repayment by the borrowing country. The obvious reason is that when greater percentages of any return on investments as well as reserves (foreign currency) are consumed in meeting debt service, creditworthiness erodes causing reduction in economic growth and further access to financial resources. It is further pointed out that when a nation suffers from heavy debt burden, the need to service that debt determines the manner in which labour and capital are exploited in the production process (Hameed et al., 2008).

[33] In the earlier sections, the study has already discussed in some detail the whole architecture of institutional arrangement and the ensuing incentive structure provided in an Islamic economic system. However, for the present section, as per the objective of the study, the financing mechanism is the only center of focus. Nevertheless, it is realized that other institutional/structural factors may also have an effect. (Particularly in a pure Islamic economy, see Shaukat et al. 2014/15). However, the measurement of such factors e.g. the institution of sanctity of contracts, the institution of trust in an economy, the protection of property rights and other similar variables, is beyond the scope and objective of the study. The study hence renders the effects of these variables as constant and applicable in the same way in every economy. Perhaps future research can contribute further by the inclusion of the other institutional variables.

As a result, debt service/burden can thus be regarded as 'X' in the above function[34]. The model[35] would then suggests economic production as a function of debt burden 'DB', measuring debt service, physical capital 'K' and human capital 'L'.

$$Y = f\,(DB, K, L) \qquad (3)$$

As per the objective of the study, as well as from the evidence presented in earlier sections, it is asserted that unlike interest bearing debt financing, the financing through risk sharing arrangement has all the ingredients to better influence the growth and productivity of an economy. There are no servicing commitments in form of interest payments which serve as cost to the system. The inclusion of risk sharing based financing in the production function via 'X' could be best proxied by stock market.

4.1. Empirical Tests and Findings

Since it is both a temporal and a cross sectional assessment, with the aim of assessing contribution to growth and stability, the study considers the application of the latest *dynamic heterogeneous panel technique* as the most appropriate[36]. The present study apparently is at the forefront to apply such techniques in assessing the impact of debt burden as well as risk sharing financing via stock market on the economic growth of the selected countries. The results are expected to not only yield the long-term relationship between intended variables viz-a-viz economic growth, but we can also derive an error correction term (ECT) that allows us to study the short run dynamics towards long run equilibrium. The stability of the systems could be judged by observing the speed of adjustments of any short run deviations back to the long run equilibrium.

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[34] Similar framework has been used by Cunningham (1993); Hook (2004); Kappler (2004); Hameed et al., (2008); Loganathan et al., (2010); Haider and Ali (2012) and Umaru et al., (2013) among others. A range of econometrics techniques have been used in the above studies; from multiple regression analysis to times series based Johensen (VECM) co-integration techniques. All the studies support a significant negative relationship between the country's debt burden and economic growth.

[35]In order to make the production function linear, it is a standard assumption (also used in the given studies) that any technical change is Hicks-neutral i.e. "a change which with given factors proportions, raised the marginal product of labour in the same proportion as the marginal product of capital" (Kennedy and Thriwall, 1972: 20).

[36] Our Thanks to Prof. Mansor Ibrahim and Prof. Mansur Masih of INCEIF for their positive feedbacks on the results.

4.1.1. Data and Sources of Data

Stock market data from a sample of 18 Islamic countries[37] is used to assess its role in determining a better and a more stable economic growth. The sample includes countries in which the proportion of population professing Muslim faith exceeded 50% and for which stock market data, as well as data for other intended variables, were available[38]. The data is obtained from World Bank, IMF, central bank of each country, the World Development Report (2012), Central Intelligence Agency (CIA)'s *World Fact book* (2011) and mainly Datastream. However, data on countries for which the above sources did not record the exact proportion of Muslims in the society was extracted from the Association of Religion Data Archives. The sample comprising of 18 countries is inhabited by nearly a billion people. The yearly data used will cover the time span from 1990 to 2010. Using our sample and given the models, the study will first try and assess the impact of debt burden on the overall economic growth. This would lend more tenable support to our claims of better growth and stability in a risk sharing environment.

4.1.2. Panel Models

The basic framework for panel models is:

$$Y_{it} = \alpha_b + \beta_{it} + e_{it} \quad \text{Where b = 1 …18 and t = 1990…2010}$$

The models used for the purpose of the study are as below.

$$LNY_{it} = \beta_0 + \beta_1 LNS_{it} + \beta_2 LNPOP_{it} + \beta_3 LNX^{\boldsymbol{DB}}_{it} + \varepsilon_{it} \qquad \text{MODEL 1}$$

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[37] The sample includes: Bahrain, Bangladesh, Egypt, Indonesia, Iran, Jordan, Kuwait, Lebanon, Malaysia, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Tunisia, Turkey, UAE. Covering population of nearly a billion people, the given sample was chosen on the argument that if Islamic finance based on risk sharing and no *ribā* can render the economies more growth oriented and stable, the first best demonstration should be assessed on the group of Islamic countries. The above group represents more than 70% of growth engine of the whole OIC countries. Moreover, the sample gives a good mix from highly indebted countries to countries with low debt level viz-a-viz real GDP. Furthermore, Muslims countries are among the regions with high rates of savings, averaging roughly 26% of real GDP as for the given sample. In another ongoing study by Shaukat et al (2015), attempt is being made to adjust for these saving rates in risk sharing based instrument(s) and analyze the effects on providing growth and stability.

[38] Effort was made to cover all those countries, given in the latest list of "Stock Exchanges of the OIC member states" (see 'Final report of the sixth meeting of the OIC member states' stock exchange forum", 2012).

Where 'LNY', represents the natural log of GDP per Capita on annual basis, 'LNS' is the ratio of GFCF (gross fixed capital formation) to real GDP[39], 'LNPOP' is the annual population growth and 'LNX^{DB}' is the above case is the ratio of total debt burden/service on public and publically guaranteed debt to real GDP. 'ε' stands for the error term that satisfies the classical regression assumption. The 'suffix *'it'* given with each variable stands for the respective country and the given year. For example, LNX^{DB}_{it} represents the total public debt burden for country '*i'* in year 't'.

Independent Variables	Expected relationship
LNS	+ve
LNPOP	-ve
LNX^{DB}	+/-ve
LNX^{sm}	+/-ve
LNDTM	+/-ve (if positive, an insignificant or lower than 1 coefficient would serve the purpose)

As mentioned earlier, since the main objective of the section is to empirically suffice that risk sharing based financing can deliver a more stable and resilient economic order, the above model is then adjusted for introducing stock market as represented by the natural log of the 'market capitalization to real GDP−LNX^{sm}. To counter for the argument that performance of stock markets is influenced by debt financing—which generates speculation—via the use of debt, for example, through direct bank lending, the study introduces variable 'LNDTM'− defined as percentage change in the ratio of total bank credit to private and public sector to market capitalization[40]. The variable assesses any impact of debt/speculation on stock market dynamics. A coefficient of less than 1 or a negative or insignificant relation would suggest minimum influence of debt financing and vice versa.

$$LNY_{it} = \beta_0 + \beta_1 LNS_{it} + \beta_2 LNPOP_{it} + \beta_3 LNX^{sm}_{it} + \beta_4 LNDTM_{it} + \varepsilon_{it} \qquad \text{MODEL 2}$$

[39]Given at steady state, savings equals investments, the study uses GFCF. It is a flow value. Statistically it measures the value of acquisitions of new or existing fixed assets by the business sector, governments and households (excluding their unincorporated enterprises) *less* disposals of fixed assets. GFCF is a component of the expenditure on GDP, and thus shows something about how much of the new value added in the economy is invested rather than consumed.

[40] Assuming that it is only through these channels that debt can influence stock market performance and that all private credit is rendered to stock market. Our thanks to Prof. Dr. Zubair Hasan of INCEIF for introducing the variable 'LNDTM'. Moreover, to check for the presence of any co-linearity between the variables of model 2 i.e. 'LNX^{SM}' and 'LNDTM', the study ran the correlation check between them. The correlation was found to be -0.4413.

The empirical tests will be performed in three steps. First, we test for the order of integration in the time series data. Since the time span of the individual series is relatively short, recently developed panel unit root techniques will be utilized in order to increase the power of such tests. Second, having established the order of integration in the series, we use heterogeneous panel co-integration test for the long run relationships between the variables in question. Since it is a macro (unbalanced) panel data, to assess the long-run dynamics and the speed of adjustments back to long-run equilibrium, 'Pool Mean Group'—PMG (Pesaran and Smith, 1995) and 'Mean Group'—MG (Pesaran, Shin and Smith, 1999) estimators are used for the purpose, decided by the Husman test.

4.1.3. Heterogeneous Panel Unit Root Test

Panel unit root tests are traditionally used to test for the order of integration (stationarity) in the variables of the data set. It has become well-known that the traditional Augmented Dickey-Fuller (ADF)-type to tests of unit root suffer from the problem of low power in rejecting the null of stationarity of the series, especially for short-spanned data. Recent literature suggests that panel-based unit root tests have higher power than unit root tests based on individual time series. A number of such tests have appeared in the literature. Recent developments in the panel unit root tests include: Levin, Lin and Chu (LLC) (2002), Im, Pesaran and Shin (IPS) (2003), as well as ADF and PP tests proposed by Maddala and Wu (1999) and Choi (2001) [41]. The results from the panel unit root test are presented in table 4.1. Given the study is using an unbalanced panel data, the unit root tests that could suffice the purpose best are the ADF and PP as unit root testing. As it can be inferred from table 4.1, the unit-root hypothesis cannot be rejected when the variables are taken in levels. However, when first differences are used the hypothesis of unit root non-stationary can be rejected safely—mostly at 1% significance level. These results lead us to conclude that our series are characterized as an I (1) process. As a result, we can proceed to the next step and implement the test for panel co-integration.

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[41] Given that almost all of the independent variables are ratios, a pre-emptive test using Pesaran (2004/07) was performed to detect the presence of any 'Cross-Sectional Dependence'-CSD. The results failed to reject the null hypotheses of 'cross-Sectional Independence'. Moreover graphical representation also showed an upward trend, further sufficing unit root behavior.

Table-4.1
Panel Unit Root Test

Variables	**ADF**		**PP**	
	Level	Diff	Level	Diff
LNY	-3.15	-5.56*	-5.33	-6.64*
LNX^{DB}	-2.27	-8.86*	-3.19	-5.33*
LNX^{SM}	-2.16	-2.23*	-6.01	-9.14*
LNS	-2.79	-5.39*	-4.12	-6.70*
LNPOP	-2.77	-3.47*	2.22	-6.33*
LNDTM	-0.014	- 3.29*	-5.21	-4.43*

* Significant at 1% and **, *** significant at 5% and 10% level

4.1.4 Heterogeneous Panel Co-integration

The study utilizes two types of the heterogeneous panel co-integration test developed by Pedroni (1997, 1999). The results in table 4.2 reveal that null hypothesis of absence of co-integration is rejected in both the models.

Table-4.2
Pedroni's Heterogeneous Panel Co-integration Test Results

MODEL I

Test Statistics	Value
panel v-stat	-1.58**
panel rho-stat	-5.89*
panel pp-stat	-8.50*
panel adf-stat	-5.56*
group rho-stat	-2.81*
group pp-stat	-6.47*
group adf-stat	-6.31*

*Significant at 1% level and **, ***Significant at 5% and 10% level

MODEL II

Test Statistics	Value
panel v-stat	6.26**
panel rho-stat	1.19*
panel pp-stat	3.22**
panel adf-stat	-1.33
group rho-stat	-4.13**
group pp-stat	9.00*
group adf-stat	3.70*
*Significant at 1% level and	**Significant at 5% level

Although Pedroni's co-integration methodology allows us to test the presence of the long run relationships, it could not provide estimation by error correction model. As suggested earlier, to estimate a long-run relationship between the variables in panel framework in presence of co-integration, Pooled Mean Group (PMG) and Mean Group (MG) estimates are applied. STATA 10.0 was used to obtain these estimates. The table below also provides the estimates for the ECT coefficients Φ_i.

Table-4.3
PMG & MG Estimates with 'LNY' as Dependent Variable

INDEPENDENT VARIABLES	MODEL 1 PMG	MODEL 2 PMG	MODEL 1 MG	MODEL 2 MG
$LNX^{DB}\theta i_3$	0.066**	----	0.061*	---
$LNX^{SM}\theta i_3$	----	1.799*	----	1.881**
LNS θi_1	0.522**	1.501*	0.657**	1.565*
LNPOP θi_2	-0.356*	-0.107*	-0.212**	-0.101**
LNDTM θi_4	----	0.872**	----	0.793***
Average speed of Adjustment Φ_i	-0.180*	-0.279*	-0.179**	-0.269*
Constant	0.609	0.601	0.777	0.532
Hausman test (P, values)	0.757	0.818	----	----
No of countries	18	18	18	18
Number of observations	360	355	360	355

*Significant at 1% level and **, ***Significant at the level of 5% and 10%

Table -4.4[42]

	% CHANGE IN REAL GDP GROWTH FOR WHOLE SAMPLE	% CHANGE IN REAL GDP GROWTH FOR LOWER DEBT TO MARKETCAP RATIO (after bifurcation) SAMPLE1	% CHANGE IN REAL GDP GROWTH FOR HIGHER DEBT TO MARKETCAP RATIO (after bifurcation) SAMPLE2
MEAN	5.333534	6.301430	5.392221
STDEV	2.368992	2.442943	2.996323
COEFFICIENT OF VARIATION	44.4169	38.7680	55.56751
T-VALUES FOR SAMPLE 1 & SAMPLE 2	-----	2.142843 For mean's difference	-----

Table-4.5
PMG Estimates for Bifurcated Groups on Debt/Mkt Cap for Model 2

INDEPENDENT VARIABLES	PMG For Whole Sample (as in table 4.2)	PMG for Lower Debt to market cap Group	PMG for Higher Debt to market cap Group
LNX^{SM}	1.799*	1.488*	0.647*
LNS	1.501*	1.422*	0.611*
LNPOP	-0.107*	-0.091**	-1.202*
LNDTM	0.872*	0.591**	0.900**
Average speed of Adjustment Φ_i	-0.279*	-0.312*	-0.161*
Constant	0.601	0.722	0.808
Hausman test (P, values)	0.818	0.433	0.511
No of countries	18	11	7
*Significant at 1% level and	**, ***Significant at the level of 5% and 10%		

[42] Out of 18 countries, 11 were lower than the average sample ratio of 'DTM' and rest were with a higher ratio than average. T-value calculated as $t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$ = 2.04. The Critical value of 't*' at α = 5% for the two populations was calculated as follows:

$\frac{t_1 s_1^2 / n_1 + t_2 s_2^2 / n_2}{s_1^2 / n_1 + s_2^2 / n_2}$ = 1.93

Table-4.6
PMG Estimates for Bifurcated Groups on Income Levels for Model 2

INDEPENDENT VARIABLES	PMG For Whole Sample (as in table 4.2)	PMG for higher income countries group	PMG for lower income countries group
LNX^{SM}	1.799*	1.401**	1.294*
LNS	1.501*	1.313*	0.889*
LNPOP	-0.107*	-0.071**	-1.121*
LNDTM	0.872*	0.696**	0.801**
Average speed of Adjustment Φ_i	-0.279*	-0.270*	-0.223*
Constant	0.601	0.821	0.593
Hausman test (P, values)	0.818	0.113	0.702
No of countries	18	10	8

*Significant at 1% level and **, ***Significant at the level of 5%

4.2. Discussion of Results

From the above findings it can be observed that in both the models, the study found a long-term relationship of the specified variables with economic growth. However, as per the PMG estimates, decided by the Husaman test, these relationships varied. As additional support, table 4.3 also provides the MG estimates to make the results more robust. Judging from the long-term coefficients in the PMG and MG for a sample of 18 Islamic countries, it is shown that in case of model 1, the debt dynamics although shows a positive impact on the growth of the economy, however, this influence is a lot less viz-a-viz the stock market dynamics in model 2.

As can be seen, the long-term contribution of stock market to economic growth is much stronger in both cases of PMG and MG with coefficients of 1.799 and 1.881. The influence on the contribution of labour and capital in both models also varies. It is shown that debt financing has a lower impact on growth, detrimentally affecting the productivity of capital as well as labour. This can be observed by a weak coefficient for both the capital and labour contribution to the economic productivity in long run. In contrast, the influence on capital productivity in model 2 is much more pronounced and effect of population growth is less negative; suggesting that in risk sharing finance, the two factors of production are utilized much better to the benefits of the economic growth. To the argument that debt financing through direct bank lending may influence equity performance, the results clearly show that the expected debt effect as measured by coefficient of 'DTM' although positively significant, but lower than 1. A coefficient of 1 or above would have sufficed the claims of any meaningful debt influence in the stock market performance[43].

The findings are in line with the assertion made particularly in the first few sections of the study. In, as much as, a nation has significant debt burden, the need to service its debt i.e. the interest payments, will affect how the labour and capital will be employed in the production function. More specifically, if the gains of the productivity increase are transferred to creditors—foreign or domestic, little incentive will be left to increase the productivity of capital or labour (Hameed et al., 2008; Qureshi and Ali, 2010 and Haider and Ali, 2012). It implies that the need to service the debt will determine the manner in which labour and capital are exploited in the production process. From the above results, this exploitation is clearly on the depressing trend. As a result, with an increase in debt, the investment and productivity are hampered in the economy; dampening economic growth. Looking at the average ECT coefficient given as 'Φ_i', the speed of adjustment for model I is -0.180 for PMG and -0.179 in MG which means that if there is any shock to the system, it will be a lengthy progress for a system to get back to the long-term equilibrium relation; taking a minimum of 5 years and more.

However, for model 2, measuring the effects of risk sharing financing, the ECT coefficient 'Φ_i' is a lot higher. The speed of adjustment is -0.279 and -0.269; suggesting that a risk sharing/equity based financing is much more resilient and stable to economic shocks with the adjustments back to long-term equilibrium relations taking place in nearly 3.5 years. Moreover, it can be further argued that given a pure Islamic financial system where there will be no interest bearing debt avenues, it is expected that the stock markets will contribute to economic growth more effectively and efficiently since any influence via debt financing will be minimum if not completely absent.

The assertion can be empirically verified by the findings of table 4.4. Based on the average 'DTM' ratio for the whole sample, the sample of the given countries was bifurcated into two group (i) countries which had lower DM ratio than the sample average and (ii) countries which accounted for a higher DM ratio than sample average. The Mean (measuring growth) and Standard Deviations (measuring volatility in that growth) of each group's real GDP growth was

[43] Had that been the case, where the coefficient of 'DM' exceeded 1, it can still be asserted that risk sharing based financing proxied by stock market, is having a better influence on the utilization of factors of production and hence economic productivity/growth.

assessed. As can be seen from table 4.4, for the group of countries which have a less influence of debt in stock market not only have a higher GDP growth, but that growth is more stable. Moreover, the growth and stability is also higher when seen in relation to similar estimates for the whole sample.

The above can be further supported by the PMG estimates, decided by the Hausman test, for the same groups. Given the estimates in table 4.5, countries which have a lower debt ratio appear to be benefiting more from risk sharing based financing as compared to the higher debt group. Not only is the contribution to economic output/growth is higher, with the coefficient of 1.488, but the influence on the utilization of both the factors of production is much more efficient with 1.422 and -0.091 as compared to 0.611 and -1.202 in the higher debt ratio group. There is also a vast difference on the speed of adjustments. Judging by the average ECT estimates for both samples, the lower debt countries are adjusting much faster with the adjustment, given a shock, taking place in nearly 3 years to nearly 6 years in the other group. Note also that the given adjustment in 3 years is also faster than similar estimate for the whole sample.

A similar bifurcation of results based on income levels reveals findings in the same tune. Table 4.6 shows that though the contribution is positive for both the groups, the higher income group's contribution of stock market to growth is more pronounced. The speeds of adjustments to shocks is taking nearly 3.7 years to over 4.5 years respectively. It could be implied that risk sharing finance not only appears to render more growth but higher income levels tend to further enhance the ability of stock markets to contribute to growth. A feedback loop.

All in all, the above results are a further assertion of the analytical and theoretical claims made in the earlier sections, opposing a debt based financing regime to the one based on risk sharing finance: the essence for fostering a more prosperous and stable economic growth. The findings also lend support to the claims made by Cowen and Tabarrok (2011) that given the right kind of institutional and incentive structure (in this case risk sharing based financing), economies can grow steadily and more efficiently— potentially serving the notion of conditional convergence hypotheses. Moreover, the results could also signify the contention that a growing economy, driven by the rate of return to the real sector, will always tend to show positive returns and there would be less chances for the returns to become negative. Among the dynamics that would assure such an outcome will be the feedback loop from an ensuing (growing) productivity of the economy. Given all the above, it can thus be claimed that the findings of the study suffice clearly as to why the Qur'ān ordains the societies to render their efforts to risk sharing as opposed to *ribā* based debt financing.

5. Conclusions

The aim of the present study was to argue that the present interest-based debt financing regime is inherently unstable and crisis prone. This was shown by referring to the findings of both the old as well as the current intellectual pedigree who qualitatively and quantitatively vindicate the fact that interest-based debt financing has caused more economic harm than benefit. All contend that debt and leveraging are the main sources of financial instability in the current system. These features are the prime result, of the existence of an *ex-ante* predetermined rate of return in the form of 'interest' ('*Ribā*' or 'Usury'); turning debts into unmanageable and unsustainable super cycles. The system breeds a financial society on more risk transfer and risk shifting and less on risk sharing– a favored reason for globalization. Moreover, such attributes of the system has given rise to an increased financialization of the global economy; decoupling the real and the financial sectors while amplifying both the overt and covert risks in the economy. The result is a rise in the sensitivity of the system to small shocks. Consequently, the system is obeying an increasingly non-linear behavior, evidencing a clear application of the Qur'ānic concept of 'YAMHAQ' given in verse 276 of chapter 2. These developments have indeed made the system harder to understand, predict and control, translating into an increasing sense of uncertainty regarding the survival of the system.

It was hence argued that Islamic finance, based on its tenets of sharing risks and no *ribā*, can serve as an alternative to the interest-based debt financing. The study has empirically supported the assertions of better growth and stability aspects of risk sharing financing regime. Moreover, theoretical research has also shown that a non-interest-based financial system promotes financial stability (Mirakhor, 1990). Islamic finance prohibits interest-based debt contracts and therefore interest-based credit. Investors share in the risk of economic activities; they select most efficient and profitable projects, and share in profits. Return to investment is based on real capital productivity. It would be expected that in this system, the private sector would have significant potential for investment and growth. Because of one-to-one mapping of the real and financial sectors, Islamic finance would be significantly simpler than the interest-based debt financing system. Since growth in finance has to reflect growth in the real sector only, it is not likely that there would be a decoupling of finance from real sector activities in order for the financialization phenomenon to occur. Furthermore, because interest-based debt contracts are prohibited, debt cannot build up and thus debt overhang symptomatic of interest-based financing are avoided.

The other main sources of the stability in a risk sharing regime are the operational characteristics that remove major sources of volatility and instability. Among these characteristics are the following:

- Transparency, trust and faithfulness to terms and conditions of contracts; Say's law applies all the time; spending (e.g., investment arises from real purchasing power and not from fictive credit; for instance, consumers spend from earned income and not from consumer loans or government transfers; similarly, enterprises invest genuine saving).
- The real values of assets and liabilities ‒of financial institution‒ would be equal at all points in time. In addition the prospect of instantaneous equilibrium between the asset side of the banking system - driven mainly by the real sector of the economy - and the liability side means that there must necessarily be a close and direct relationship between investment and deposit yields. Due to the close relationship between finance and the real sector activities, the rate of return to the latter determines that of the former rather than the reverse.
- Asset/liability risk matching;
- A coordinated asset/liability maturity structure;
- Asset/liability value matching such that the value of both sides of the balance sheet move simultaneously and in the same direction in response to changes in asset prices; and
- Limitations on credit expansion and leverage, naturally arising from the need for credit growth that is tied closely to the expected rate of growth of the real economy.

One of the most vital arguments put forward in favor of globalization was that of improved risk sharing that would result from intensified human interaction across the world. On theoretical ground, this would mean expecting much greater degree of risk sharing between and among economies – resulting from greater freedom of movement of resources, and hence, providing a major source of consumption smoothing in the world economy. These developments were expected to lead to progress toward market completion, which means increasing the number of marketable securities to meet a large number of contingencies – a condition of optimal risk sharing posited in Arrow's (1971) conception. Or, at least, progress could have been expected toward the design and use of Arrow's idea of having securities with pay-offs contingent on the performance of the underlying asset, for example, equity-based securities with close links to the real sector of the economy (Mirakhor, 2011a). Theoretical research has demonstrated sizeable potential welfare benefits of risk sharing[44]. However, empirical studies have shown only marginal gains in risk sharing from globalization. For example, a study by Kim et. al. (2005) has shown that even in the fast growing East Asia-10 countries risk sharing has not been as significant as would have been expected.

It appears that the contribution of the present configuration of the Islamic finance industry to the growth of the real sector has fallen well short of expectations so far. Perhaps the main reason has been the fact that the practitioners and financial engineers of this new asset class – growing within the conventional financial system – had to design instruments that resembled those prevalent in the host system without violating the "no-*ribā*" sufficient condition. This meant creating instruments with tenuous relationship to the real sector to weaken the risk of Islamic financial transactions borne by market players. Moreover, the instruments designed by the industry have been by and large benchmarked to the Libor or closely related reference rates to make them more acceptable to large international banks and investors. Hence, the Islamic finance industry focused on portfolio behavior with strategy of asset concentration in short-term maturities and real estate in the medium-to-long-term maturities, thus replicating the vulnerabilities of the conventional system.

Aside from these problems, there is a risk of path dependency: the risk that the industry will continue following the same pattern of behavior because it has proven profitable thus far. This growing complacency and doing 'business as usual', runs the risk that path dependency will render deviations from the true practice of Islamic finance irreversible. This would mean continued development of debt-like instruments that are low risk but are devoid of risk-sharing elements – a vitally important element of Islamic finance. After all, finance is well aware of the theory of "spanning" – where one basic asset can span into an infinite number of derivative instruments. This theory served as the basis for the rapid development of debt-based derivative markets worldwide which eventually undermined the stability of global finance.

[44] See, for example, Van Wincoop (1999); Kim et. al. (2005); Lee and Shin (2008).

In general, the industry players in their defense argue that "our clients" are not interested in placing their funds at risk, thus discouraging us from risk sharing[45]. Apparently, this argument is unaware that, conceptually, there is a difference between risk taking and risk sharing. The former is prior to the latter. The risk of a given project in the real sector is determined in that sector; and one bears such risks before entering into the financial sector to seek financing. On the other hand, it is at the point of financing where the decision regarding the modality of financing – whether it will in the form of risk sharing, transfer or shifting – is made. The nature and magnitude of risk taken remains the same and immutable as it enters the financial sector at the stage of funds seeking.

Industry players display a further dimension of inertia in resisting risk sharing. This relates to the conceptual *"framing"* of Islamic finance. Framing refers to the fact that people's response to risky situation depends on how they form their perception of a given situation and that depends on how an event is formulated. People react differently to the same situation when it is framed in alternative formulation. Framing is closely related to the idea of *"prospect"* which refers to perception of gains or losses attached to decisions. The way prospects are framed can lead to inconsistent behavior; if the same objective outcome is framed differently in terms of gains and losses, people respond differently. Since losses, are given greater weight than corresponding gains, people are in general loss averse. If the outcome is framed either as a gain or loss, people prefer to choose gain. For example, the prospects of 10 percent loss and 90 percent gain can be framed focusing either on the probability of the loss or the expectation of the gain. It can be argued that a major reason for the inertia in the industry for resistance to progress toward risk sharing is due to the inability of the stakeholders and practitioners to first understand and then frame risk sharing prepositions correctly and effectively.

While the disappointment with the present performance of the Islamic finance industry is understandable, it should be noted that the industry has a short history in which it nevertheless has demonstrated remarkable growth. Perhaps it is this performance that has triggered evidence of growing interest in non-interest rate based finance. Indications are that emerging markets and developing economies are actively considering adoption of instruments of Islamic finance. Governments, particularly in Malaysia, have been major sources of support for the growth of

[45] Such arguments are a norm and were also pervasive in, for example, International conference on Islamic Business, Islamabad, Pakistan (2012 and 2014), the ICIEF, 2015 conference in Qatar, the MFAC, 2015 in Malaysia as well as in conference of security commission Malaysia held with the theme of Risk Sharing in finance (2011/12).

Islamic finance. Few are leveraging the "first-mover" status of Malaysia in education, manpower training and instrument innovation in Islamic finance to introduce their own brand of risk-sharing method of financing. If these efforts succeed, perhaps even the benefits of emerging multiple growth centers in the global economy will be further enhanced with greater stability and resilience in supporting financial transactions through risk sharing (Mirakhor, 2011c). As suggested by Mirakhor, (2012), in the last three decades important strides have been made in applying the rule of no *ribā* based contracts to create an Islamic system. Much more effort needs to focus on the risk sharing aspect of the prescribed rules of the Qur'ān specified in the verse 275 of chapter 2. This potential move is referred to as moving Islamic finance from version 1.0 which only focused on the no-*ribā* part of the verse to now Islamic finance version 2.0; rendered to apply risk sharing in finance-the essence of Islamic finance.

References

Allais, Maurice (1999). "*La CriseMondialeD'Aujourd'hui"*. Clement Juglar.

Andrew Sheng (2009). *"From Asian to Global Financial Crisis",* Cambridge University Press.

Arrow, K.J. (1968), *"Optimal capital policy with irreversible investment,"* in J.N. Wolfe (ed.), Value, Capital and Growth, Essays in Honour of Sir John Hicks, Edinburg University Press.

Arrow, K.J. (1971). *"Essays on the Theory or Risk-bearing".* Chicago: Markam.

Askari, H, Mirakhor, A and Iqbal, Z. (2009). "*New Issues in Islamic Finance and Economics"*, Singapore: John Wiley and Sons (Asia).

———. (2010). "*Globalization and Islamic Finance"*, Singapore: John Wiley and Sons (Asia).

———. (2010). *"Stability of Islamic Finance".* Singapore: John Wiley.

Askari, H, Iqbal, Z, Krichene, N. Mirakhor, A. (2012). *"Risk Sharing in Finance: The Islamic Finance Alternative."* Singapore: John Wiley and Sons (Asia).

Bachelier, Louis, (1900). *"The Theory of Speculation",.* Gauthier-Villars

Bartholomeu, D.J. (2008), "*God, Chance and Purpose: can God have it both ways?"*, Cambridge University Press.

Belouafi. A. (2012). *"Islamic Finance and Financial Stability: A Review of the Theoretical Literature".* Working paper, presented at University of Paris 1, Sorbonne, Islamic Economics Institute – King Abdulaziz University.

Benes. J and Kumhof. M (2012). *"The Chicago Plan Revisited".* IMF Working Paper. WP/12/02

Buiter, W. (2009). "*Islamic finance principles to restore policy effectiveness"*, blogs.ft.com, July 22, 2012.

Bogle. J.C. *"The Clash of the Cultures: Investment vs. Speculation"*. John Wiley & Sons, 2012.

Chapra, M.U. (2007). *"The Case Against Interest: Is It Compelling?":* Thunderbird International Business Review Vol. 49 (2), March April 2007, pp. 161-186.

Checherita and Rother, (2010). *"The impact of high and growing Government debt on economic growth An empirical investigation For the euro area".* ECB Working Paper series No 1237.

Cowen, T and Tabarrok, A. (2011). *"Modern Principles of Economics".* Second Edition. Worth Publishers. NY, U.S.

Cunningham, R. T. (1993). *"The Effects of Debt Burden on Economic Growth of Heavily Indebted Countries".* Journal of Economic Development. Vol. 18. No. 1.

Dickey, D. A., Jansen, D. W. and Thornton, D. C. (1991). *"A Primer on Co-integration with an Application to Money and Income",* Review Federal Reserve Bank of ST. Louis, Vol 73, pp. 58-78.

Ellsberg.D (1961).*"Risk, Ambiguity and Savage Axioms"* The Quarterly Journal of Economics, Vol. 75, No.4. (Nov., 1961), pp. 643-669.

Epstein, G., (2002), *"Financialization, Rentier Interests, and Central Bank Policy*."

Epstein, G. (2006). *"Financialization and the World Economy*." New York: Edward Elgar.

Erbas, N and A. Mirakhor (2007*). "The Equity Premium Puzzle, Ambiguity Aversion and Institutional Quality*." IMF working paper (Washington, DC: International Monetary Fund).

Fisher, I. (1936). *"The Debt-Deflation Theory of Great Depressions"*, Econometrica, Vol.1 No. 4, pp.337-357.

Haider and Ali (2012*).“Impact of debt burden on economic growth: a case of Pakistan*”.ArthPrabhand: A Journal of Economics and Management. Vol.1 Issue 6.

Hameed et. al, (2008).*“External Debt and its Impact on Economic and Business Growth in Pakistan”.* International Research Journal of Finance and Economics.

Hasan, Zubair (2010a). *“Islamic Finance: Structure objective mismatch and its consequences”.* INCEIF. Online at http://mpra.ub.uni-muenchen.de/21726/ MPRA Paper No. 21726, posted 05. April 2010.

———. (2010b*). "Dubai financial crisis: causes, bailout and after - a case study,"* MPRA Paper 26397, University Library of Munich, Germany.

———. (2011a). *"Scarcity, self-interest and maximization from Islamic angle,"* MPRA Paper 31631, University Library of Munich, Germany, revised 17 Jun 2011.

———. (2011b). *"Money creation and control from Islamic perspective,"* MPRA Paper 39796, University Library of Munich, Germany, revised 21 Dec 2011.

Hausman, J. (1978). *“Specification Tests for Econometrics”.* Econometrica. Vol. 40, pp. 1251-71.

Hayek, F. (1944). *“The Road to Serfdom”.* Edited by Bruce Caldwell. Routledge Press. U.K.

Hellwig, M. (1998). *“Banks, Markets, and Allocation on Risks in an Economy”.* Journal of Institutional and Theoretical Economics (JITE), vol.154, no.1, pp.328-345.

Hook, S. L. (2004). *“Banks Stock Markets and Economic Performance: Panel Data Evidence from Developing Countries”.* Labuan Bulletin of International Business & Finance 2(1), 2004, pp. 9-29.

Illgner, A, Platt, J, and Taylor, B. (2010). “*Black Swans, Crisis Economics, and Globalization: A Critical Appraisal”.* New voices in public policies. Vol V. George Mason University.

Imbset. al, (2005), *“The Overhang Hangover”.* World Bank policy Research Working Paper No. 3673.

IMF. (2008). *“Systemic Banking Crises: A New Database”.* Working paper No. WP/08/224. Prepared by Luc Laeven and Fabian Valencia.

IMF Fiscal Monitor (2011). *Addressing Fiscal Challenges to Reduce Economic Risks*. IMF, Washington D.C. http://www.imf.org/external/pubs/ft/fm/2011/02/pdf/fm1102.pdf.

IMF (2012). *"Too Much Finance"*. IMF Working Paper WP/12/161. Prepared by Jean-Louis Arcand**,** Enrico Berkes and Ugo Panizza.

Imran and Tanzeela (2012), *"Public Debt and Economic Growth in Pakistan: A Time Series Analysis from 1972 to 2010".* Academic Research International.Vol. 2, No. 1.

Im, K.S., Pesaran, M.H. and Shin, Y. (2003). "*Testing for Unit Roots in heterogeneous Panels"*. Journal of Economics. 115, pp. 53-74.

Janeway, W.H. (2012). *"Doing Capitalism in the Innovation Economy Markets, Speculation and the State*". Cambridge University Press.

Johansen, S. (1988). *"Statistical analysis of co-integration vectors"*. Journal of Economics Dynamic, Vol. 12, pp. 231-54.

Kappler, M. (2004*). "Determination of Potential Growth Using Panel Techniques".* Discussion Paper No. 04-69. Center of European Economic Research.

Keen, S., (2011). *"Finance and Economic Breakdown: Modeling Minsky's Financial Instability Hypothesis", Journal of Post Keynesian Economics*, Vol. 32, pp. 607-635.

Keen, S. (2012/2014). *"Modelling Financial Instability"*. Available at http://www.debtdeflation.com/blogs/wpcontent/uploads/2014/02/Keen2014ModelingFinancialInstability. pdf.

Kennedy, C and Thriwall, A.P. (1972). *"Technical Progress: A survey".* Economic Journal. Vol. 82, No. 325, pp, 11-72.

Keynes, J.M., 1936, "*The General Theory of Employment, Interest and Money*," *A Harbinger Book* (1965), New York.

Kim, D. and J. Sheen (2004). *"Risk Sharing within Australia and with New Zealand."* presented in Australian Macroeconomic Workshop, University House, Australian National University, Canberra, Australia.

Kim, s., et.al.(2005). "*Regional versus Global Risk-Sharing in East Asia".*

Kim, s. et.al. (2006). *"Financial Integration and Consumption Risk Sharing in East Asia."*Japan and the World Economy, 18(2), 143-57.

Knight, Frank H. (1921**). “***Risk, Uncertainty, and Profit”.* Boston: Houghton Mifflin.

Kumhof and Ranciere, (2010). “*Inequality, Leverage and Crises”.* IMF Working Paper. WP/10/268.

Kyle, A. S. (1985). “"*Continuous Auctions and Insider Trading,".* Econometrica, Econometric Society, vol. 53 Vol. 6, pp. 1315-35, November

Lee, J.W. and K. Shin (2008). *“Welfare Implication of International Financial Integration”.* Asian Development working paper series on Regional Economic Integration No. 20.

Loganathan, Nanthakumar and Subramaniam, T., (2010). “*Dynamic Cointegration Link between Energy Consumption and Economic Performance: Empirical Evidence from Malaysia”.* International Journal of Trade, Economics and Finance, Vol.1 (3).

Maddala, G.S., Wu, S.W. (1999). *“Comparative study of unit root tests with panel data and a new simple test”*. Oxford Bulletin of Economics and Statistics 61.

Mankiw, Romer, G.D and Weil. D. (1992) *“A Contribution to the Empirics of Economic Growth.”* Quarterly Journal of Economics 107, pp. 407-37.

Metzler, L. A., (1951) *“Wealth, Saving, and the Rate of Interest,”* The Journal of Political Economy, Vol. 59, No. 2, pp. 93-116.

Mauldin. J and Tepper. J (2011). “End Game: “*The End of Debt Super Cycle and How It Changes Every Thing”.* Published by John Wiley & Sons. New Jersey, U.S.

Meade, J. E. (1958), *“Is the National Debt a Burden?”* Oxford Economic Papers, New Series,

Vol. 10(2), pp. 163-183.

Meadows, Donella, H. (2000). “*Thinking in Systems”* White River Junction, Vermont: Chelsea Green Publishing.

Marx, K. (1867). *“Das Kapital”.* Vol I. Progress Publishers, Moscow, USSR.

Marx, K. (1893). “*Das Capital”*, Vol. III, London, Penguin Books, 1991.

Minsky, H. (1986). “*Stabilizing an Unstable Economy, A Twentieth Century Fund report”,* Yale University Press, New Haven and London.

Minsky, H. (1992). *“The Financial Instability Hypothesis”.* The Jerome Levy Economics Institute of bard College, Working Paper, No. 74.

Mirakhor, A. (1990/93). *"Equilibrium in a Non-Interest Open Economy"* International Monetary Fund, working Paper, published in Islamic Economics: Journal of King Abdulaziz University, Volume 5, 1993.

———. (2002).*"Hopes for the Future of Islamic Finance".* Published in 'New Horizons', Issue no: 121 July-August 2002. IIBI. London, U.K.

———. (2007). *"Islamic Finance and Globalization: A convergence?"* Journal of Islamic Economics, Banking and Finance.Vol. 3, No. 2.

Mirakhor, A. and N. Krichene (2008).*"The Recent Crisis: Lessons for Islamic Finance,"* Islamic Financial Services Board, 2nd Public Lecture on Financial Policy and Stability, Kuala Lumpur, Malaysia.

———. (2009). *"Resilience and stability of Islamic finance".* European Economic Review.

Mirakhor,A. and I. S. Hamid (2009). "*Islam and Development"*. New York: Global Scholarly Publications.

Mirakhor, A. (2009). *"Islamic Economics and Finance: An Institutional Perspective",* IIUM Journal of Economics and Management, vol. 17, no. 1.

———. (2010).*"Whither Islamic Finance? Risk Sharing in an Age of Crises".* Paper presented at the Inaugural Securities Commission Malaysia (SC) – Oxford Centre for Islamic Studies (OCIS) Roundtable. *"Developing a Scientific Methodology on Shariah Governance for Positioning Islamic Finance Globally"* March 15, 2010.

———.(2011a). "*Islamic Finance in the Multi polar World".* Presented at the Asian Institute Finance Distinguished Speaker Series. Kuala Lumpur, 13 September 2011.

———. (2011b). *"Epistemological Foundation of Finance: Islamic and Conventional."* Keynote address presented at the Foundations of Islamic Finance Conference Series, Kuala Lumpur, March 8-10, 2011.

———.(2011c). *"Risk Sharing and Public Policy*". Paper presented in the 5th International Islamic capital Market Forum. Security Commission of Malaysia. Kuala Lumpur, 10th November 2011.

Mirakhor, A, Krichene, N and Shaukat, M. (2012a). *"Unsustainability of The Interest Rate-Based Debt Financing"*. ISRA International Journal of Islamic Finance Vol.4 issue 2. December 2012.

Mirakhor, A and Shaukat, M. (2012b). "*Survival of The Interest Rate Based Debt Financing Regime".* Journal of Economy and Money Vol.6 No.2 December. 2012.

———. (2012c). *"Regime Uncertainty: Interest Rate Based Debt Financing System"***.** The Journal of Islamic Business Vol.2, Issue 2 December, 2012.

Mirakhor, A. (2012). "*Shariah Compliant Macro-Economic Policy".* Paper presented at Sisana Kijang, Bank Negara Malaysia. November, 2012.

Mirakhor, A and Haneef, R. (2012). "*Islamic Finance Industry: Can it achieve its Ideals?"* Presented at the 3rd Asia Pacific Regional Forum Conference of the International Bar Association (IBA). November, 2012.

Mirakhor, A and Bacha, I. (2012), "*Islamic Capital Market and Development":* Paper presented at 22nd Annual Conference on Monetary and Exchange Rate Policies: Banking Supervision and Prudential Policies. May, 2012

———. (2013). *"The Islamic Capital Market: A Comparative Approach".* INCEIF and Wiley Finance.

Mirakhor, A and Shaukat, M. (2013). "*Islamic Finance in A Multipolar World: Traversing The Complexities of A New World".* The Journal of Islamic Banking and Finance. Vol 31, June 2013, Karachi, Pakistan.

Mishkin. F.S. (2001). "The Economics of Money, Banking, and Financial Markets". 6th Edition, New York: Addison Wesley Longman.

Mohsin, S. K. (1986), "*Islamic Interest-Free Banking*," IMF Staff Papers, Vol. 33.

Mohsin S. K and Mirakhor, A. (1989). *"The Financial System and Monetary Policy in an Islamic Economy",* Journal of King Abdulaziz University: Islamic Economics, Vol. **1**, 1989.

———. (1994). *"Monetary Management in an Islamic Economy".* Journal of King Abdulaziz University: Islamic Economics., Vol. 6, pp. 3-21

Murizah, O.S., Jaffer, A and Ebrahim, S. (2011). *"The Inhibition of Usury (Ribā An-Nasi'ah) and the Economic Underdevelopment of the Muslim World".* Bank Negara Malaysia and Bangor University.

Nadeem and Ali, (2010). "*Public Debt Burden and Economic Growth: Evidence from Pakistan".* International Research Journal of Finance and Economics.

Pagano, M. (1993). *"Financial markets and growth: An overview",* European Economic Review, 37, pp. 613-622.

Palley, T.I. (2007). *"Financialization: What It Is and Why It Matters".* Levy Economics Institute. Working Paper No. 525.

Paulos, J. A. (2003). *"A Mathematician Plays the Stock Market".* Basic Book Publication. NY, U.S

Paul Krugman, (1992) *"The Self-Organizing Economy",* Oxford: Basil Blackwell, 1992. This book is also a delightful introduction to the application of complexity to economics.

Pedroni, P. (1997). *"Panel co-integration, asymptotic and finite sample properties of pooled time series tests, with an application to the PPP hypothesis: new Results".* Indiana University, Working Paper in Economics, December.

Pedroni, P. (1999). *"Critical Values for Co-integration Tests in Heterogeneous Panels with Multiple Regressors".* Oxford Bulletin of Economics and Statistics. Vol. 61, pp. 653–678.

Pesaran, H.M., and (1995). *"Estimating long-run relationships from dynamic heterogeneous panels".* Journal of Econometrics, 68, pp. 79-113.

Pesaran, H.M., Im, K.S, and Shin, Y., (1999). *"Testing for unit roots in heterogeneous panels".* Journal of Econometrics 115, pp. 53–74.

Pesaran, M.H., 2004. General diagnostic tests for cross section dependence in panels. Cambridge Working Papers in Economics No. 0435. Faculty of Economics, University of Cambridge.
Pesaran, M.H., 2007. A simple panel unit root test in the presence of cross section dependence. Journal of Applied Econometrics 22, 265-312.

Philips and Perron, (1991). *"Testing Consistency with Varying Sampling Frequency".* Econometric Theory. Vol. 7, pp. 341-68.

Presbitero, Andrea F., (2005), *"The Debt Growth Nexsus: A Dynamic Panel Data Estimation".* Department of Economics Working Paper No.243, Universita Politecnicadelle Marche.

Ramsey, Frank P. (1928).*"A mathematical theory of saving".* Economic Journal, vol. 38, no. 152, pp. 543–559.

Rajan, R.G. (2005). *"Has Financial Development Made the World Risker?".* IMF Publications

Reinhart, C., V. Reinhart and K. Rogoff (2012).*"Debt Overhangs: Past and Present",* NBER Working Paper No.w18015. URL: http://www.org/papers/w18015.

Reinhart, C., Rogoff, K., and Savastano, M,. (2003) *Debt Intolerance:* NBER Working Paper 9908

Rogoff, K. (2011). *"Global Imbalances without Tears."* Project syndicate.2011-03-01.

Reinhart, C., Reinhart, V. (2010a). *After the Fall*: NBER Working Paper 16334.

———.(2010b). "*Growth in a Time of Debt"* NBER working paper no.15639.

Reinhart, C. and K. Rogoff (2009).*"This Time Is Different: Eight Centuries of Financial Folly".* Princeton University Press.

———. (2008). *Banking Crises: an Equal Opportunity Menace:* NBER Working Paper 14587

Reinhart, C., (2008). *Eight Hundred Years of Financial Folly:* Online at http://mpra.ub.uni-muenchen.de/11864/

———. (2008). *The economic and Fiscal consequences of financial crises:* Online at http://mpra.ub.uni-muenchen.de/13025/

———. (2008). *This Time is Different Chart book: Country Histories on Debt, Default, and Financial Crises:* NBER Working Paper 15815.

Sadr, K. (1999) *"The Impact of Asymmetric Information and Monitoring upon the Choice of Modes of Finance".* Center for Economic Studies, Agricultural Bank of Iran, Tehran, 1999.

Schumpeter, J. A. (1991). "*The theory of economic development"*. Cambridge, Mass. Harvard University Press.

Shaukat, M, Mirakhor, A and Krichene, N. (2013). *"Fragility of the Interest rate based Debt Financing".* Paper presented at the IFFS, 2013, Istanbul, Turkey.

Shaukat, M. (2013). *"Humpty Dumpty Capitalism: The Fragility of the Interest rate based Debt System".* INCEIF Research Bulletin. Available at http://www.inceif.org/category/research-bulletin/bulletin-volume1/

_______, (2014). *"Financing Economic Growth with Stability from Islamic Perspective".* Forth Coming.

Stiglitz, J.E. (1989), *Financial Markets and Development,* Oxford Review of Economic Policy, vol. 5, no. 4.

Stiglitz, J.E. (2010)." *Freefall: America, Free Markets, and the Sinking of the World Economy"*, W.W. Norton & Company.

Taleb, N. N. (2007/2010). "*The Black Swan: The Impact of the Highly Improbable"*. New York: Random House and Penguin.

Taleb, N.N and Blyth, M. (2011). *"The Black Swan of Cairo: How Suppressing Volatility Makes the World Less Predictable and More Dangerous"*. Foreign Affairs. Vol. 90, No. 3.

Taleb, N.N. (2012a). *"ANTIFRAGILE: Things that gain from disorder".* Random House, Inc., New York.

_______, (2012b). *"How to Prevent Other Financial Crises".* SAIS special review Vol. 32, No. 1. The John Hopkins University Press.

Turner, A. (2012). *"Monetary and Financial Stability: Lessons from the Crisis and from classic economics texts".* Speech at South African Reserve Bank.

Udovitch, A.L., (1967). *"At the Origins of the Western Commenda: Islam, Israel, Byzantium?"* pp. 198-207.

Udovitch, A.L., (1970). *"Credit and a Means of Investment in Medieval Islamic Trade."* Journal of the American Oriental Society, vol. 87, no. 3, July-September, pp. 260-64.

Ul-Haque, No. and Mirakhor, A., (1999). *"The Design of Instruments for Government Finance in an Islamic Economy."* Islamic Economic Studies, vol. 6, no. 2.

United Nations Report on "*World Economic Situation and Prospects, 2012".*

Thornton, H. (1802). *"An Inquiry into the Nature and Effects of the Paper Credit of Great Britain".* Edited by F. R. A. v. Hayek. New York: Rinehart, 1939.

United Nations (2009). *The World Financial and Economic Crisis and its Impact on Development*. Report of the journal Secretary. Presented at Conference of the world Financial Economic crisis and its Impacts.

Van Wincoop., E., (1994). *"Welfare Gains from International Risk Sharing,"* Journal of Monetary Economics, vol. 34, October, pp. 175-200.

vanWincoop, E., (1999). *"How big are Potential Welfare Gains from International Risk Sharing?"* Journal of International Economics, vol. 47, February, pp. 109-235.

World Bank (2005).*"Public Debt and Its Determinants in Market Access Countries: Result from 15 country case study".*

World Bank Report on "*Global Economic Prospects",* 2012.

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Risk Sharing and Shared Prosperity in Islamic Finance

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Abstract

This paper argues that risk sharing is an effective method of expanding participation of agents in economic growth and development and more effective sharing of fruits of prosperity than risk transfer that currently dominates financial systems. Kuala Lumpur Declaration of 2012, by a group of leading Sharīʻah *scholars and Muslim economists, considers risk sharing as the essence of Islamic finance, a litmus test of which is its ability to promote financial inclusion and asset-building capacity of the poor and thus better sharing of prosperity. The mobilisation of financial resources toward productive activities through risk sharing enables the Islamic financial system to actualize economic justice and social participation in an efficient manner. The asset-backed equity-financing nature of Islamic finance is conducive to financial system stability because returns, which can only be known ex post, and thus shared on the same basis, are not divorced from risk.*

Stability and equitable growth challenges are arguably difficult to undertake through debt-financing, which transfers the burden of losses from financiers to entrepreneurs even at microfinance levels, distorts economic incentives, increases systemic risk, and renders financial regulation more complex. The procyclicality of the conventional financial system leads to credit

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contraction during economic downturns, precisely when the need rather increases for real investment to stimulate economic output and reduce unemployment. Financial intermediaries tend rather to respond to changes in the riskiness of assets by adjusting balance sheets through credit contraction and various mechanisms of credit risk transfer.

This study is an attempt to demonstrate that the risk-sharing modes of financing real investment in the public and private sector reduce the procyclicality of the financial system. The equity-financing of real investment is conducive to more efficient channels of savings towards development finance. The risk-sharing principle underlying Islamic finance reduces the economic incentives for credit risk transfers and speculative activities. By preventing risk from being entangled in complex debt-creating structures that characterize the incompleteness of contracts under conventional finance, this principle also redefines the role of financial markets and institutions in smoothing consumption and capital expenditure. It is the asset-backed nature of Islamic finance that allows for a participative securitization process that provides different segments of the society with fair opportunities to share economic prosperity. The allocation of risk commensurate to the idiosyncratic abilities to bear losses is arguably more conducive to a socially inclusive financial system. Systematic risk cannot be eliminated, but it is collective risk taking and individual risk aversion that promote more efficient mobilisation of resources, and more equitable sharing of economic risk and prosperity.

Keywords: Risk Sharing, Islamic Finance, Financial System
JEL Classification: G00, O16, P43
KAUJIE Classification: I00, H13, J4, F51

1. Introduction

"Economic inclusion, by which I mean easing access to quality education, nutrition, healthcare, finance, and markets to all our citizens, is therefore a necessity for sustainable growth. It is also, obviously, a moral imperative."

- Raghuram Rajan, 2015

There is considerable thinking about the economic concepts of development, which relies on efficient institutions that promote political and economic stability, and the enforcement of property rights, *inter alia*. Human and economic development can be appreciated from improvement in the quality of education, health, basic infrastructure, and financial inclusion. Iqbal and Mirakhor (2013) argue that there are four dimensions to financial inclusion, including easy access to financial services for all households, competition between service providers, sound and sustainable financial institutions, and effective prudential regulation. Given the precarious conditions of poorer households underserved in terms of opportunities for upward mobility, there is indeed a clear demand for public services, and physical and financial resources. However, the important question remains as to whether the focus should be made not just on access to financial services but also on the financing modes to which access is facilitated.[1] It may be argued indeed that much of the informal borrowing of the poor is made for purposes that should be served by public services such as health and education.[2] Together with the expansion of government programs in these important areas, there should be recognition that the extension of formal credit to the poor can be merely conducive to excessive indebtedness. Thus, the need for alternative solutions to promote prudential access to finance and risk sharing opportunities. Access to finance is important in its own right, but constructive thinking and innovative strategies are needed to channel financial resources in an efficient and responsible manner toward greater participation into economic activities, and sharing of prosperity.

This paper addresses the question of whether sharing the benefits of economic prosperity is ensured through risk-sharing rather than risk-transfer mechanisms. The principal issue is to demonstrate that the twin-challenge of equitable economic growth and financial stability is rather difficult to undertake through debt-financing. Debt transfers the burden of potential losses from financiers to entrepreneurs even at microfinance levels, distorts economic incentives, increases systemic risk, and renders financial regulation more complex. As the primary role of the financial sector is to promote the development of the real sector of the economy through financial intermediation and efficient payments system, financial instability threatens the prospects of economic growth and the process of prosperity sharing. The fruits of prosperity are optimally shared through the efficient allocation of resources toward productive investment without undermining the efforts toward poverty reduction or worsening income inequality. As the defining principle of Islamic finance, risk sharing has the potential of ensuring economic growth with financial stability, and promoting financial inclusion through the fostering of entrepreneurship opportunities for all segments of society.

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[1] Pritchett and Woolcock (2004) examine the critical elements of service delivery, including resources, information, decision-making, delivery mechanisms and accountability. It is argued that the improvement of service delivery depends on how these responsibilities are structured.

[2] This issue is also raised in the excellent work about elusive stability by Mohan (2011), among others.

In the absence of risk sharing, the inherent fragility of the conventional system built upon debt financing is manifested by the recurrence of financial crises. The apparent macroeconomic stability pursued through aggressive monetary policies should not obscure the fact that, at the micro level, wealth disparities and income inequalities are rather widening. The issue is whether the dependence of small borrowers on banks is part of the wider problems about poverty alleviation since banks have limited capacity to extend credit during economic downturns and in the aftermath of financial crises. The procyclicality of the financial system leads to credit contraction during economic downturns, precisely when the need rather increases for real investment to stimulate economic output and reduce unemployment. Indeed, financial intermediaries tend to respond to changes in the riskiness of assets by adjusting their balance sheets through credit contraction and credit-risk transfer mechanisms.

Thus, this study examines the concept of risk-sharing in finance as the driving force for sharing economic prosperity. The Kuala Lumpur Declaration of 2012, by a group of leading Sharīʻah scholars and Muslim economists, considers risk sharing as the essence of Islamic finance, a litmus test of which is its ability to promote financial inclusion and asset-building capacity of the poor and thus better sharing of prosperity. The role of risk-sharing in the optimal allocation of resources in a competitive and dynamic economy is better understood in contrast to risk transfer and in relation with financial stability. The paper is organized as follows. The next section briefly addresses the relation between financial stability and economic prosperity. Section 3 examines the principle of risk-sharing underlying Islamic finance. Section 4 discusses the implications of risk-sharing for prosperity-sharing and income inequality. Section 5 concludes the paper.

2. Financial Stability and Economic Prosperity

2.1. Development and Finance

Financial stability is regarded as a precondition for sustained economic growth and prosperity. This argument is consistent with the stated mission of the Bank for International Settlements, which is aimed at promoting monetary and financial stability. Given financial stability, there remains a major intellectual challenge to development economics, which is to reconcile growth with equity. The conventional wisdom, which no longer enjoys a clear consensus, is that once growth is ensured, equity would be achieved rather systematically. This view assumes, among others, fair access to finance for all, despite conditions of severely limiting poverty for large segments of society. There are, however, recurrent patterns of fluctuating growth rates, and prolonged periods of negative growth, which have asymmetric effects on consumers with different income-levels. Thus, the dynamics of economic growth and properties of financial systems are arguably more complex to ensure financial stability and reconcile equity with growth.

Insofar that the relation of development with finance is concerned, the fundamental question is whether the workings of the financial sector are conducive to equity. Subbarao (2012) argues with reference to the Indian economy that left to its own devise, the financial sector does not have a pro-equity bias. Some regulatory measures may be useful in promoting socially optimal business behavior by financial institutions through priority sector-lending such as agriculture, micro, small or medium industries, low-cost housing and education. The degree of financial services penetration into rural areas can be also used as a criterion for bank branch-licensing in urban areas. While such credit incentives certainly contribute into financial inclusion, broader access to finance remains driven by debt rather than the equity financing of economic activities. Given the asymmetric exposure to risk which underlies debt obligations, it can be further argued that, inherently, financial systems are not even equity-neutral.

The problem of equity is intrinsically related to the mode of financing of real investment. The economics of entrepreneurship imply that investment can be pursued until marginal productivity is equal to zero. The mobilization of resources is governed by the profitability and riskiness of investment projects subject to budget constraints. This is arguably conducive to allocative efficiency, but the issue of equity remains unresolved. Indeed, allocative efficiency need not be pursued with the sacrifice of equity. There are moral and economic dimensions to the relation between finance and development, and the essence of a relation based on equity is not simply about altruism, generosity and benevolence. The competitive economy as envisioned by Adam Smith in *The Wealth of Nations* is founded on a system of morality and justice. Smith (1759, p. 77) argues in *The Theory of Moral Sentiment* that “[s]ociety may subsist, though not in the most comfortable state, without beneficence, but the prevalence of injustice must utterly destroy it.” Thus, both allocative efficiency and equity are important in shaping the relation between finance and development. The pursuit of allocative efficiency in the financial sector promotes economic stability, which reflects the steady state with lower fluctuations of economic output and inflation. However, failure to fulfill the principal function of efficient allocation of resources on the basis of equity and public welfare may undermine financial stability and prospects of economic growth.

Kenneth Boulding (1970, p. 126) notes that "[m]any, if not most, economists regard the Paretian optimum as almost self-evident. Nevertheless, it rests on an extremely shaky foundation of ethical propositions. The more one examines it, for instance, the more clear it becomes that economists must be extraordinarily nice people even to have thought of such a thing, for it implies that there is no malevolence anywhere in the system. It implies, likewise, that there is no benevolence, the niceness of economists not quite extending as far as goodwill. It assumes selfishness, that is, the independence of individual preference function, such that it makes no difference to me whether I perceive you as better off or worse off. Anything less descriptive of the human conditions could hardly be imagined." Abstraction from morality is usually justified on the grounds that competitive economy is governed by value-neutral exchange relations. As argued by Smith (1759) however, allocative efficiency can be achieved on the basis of a system of morality and justice. Thus, exchange relations are indeed essential to risk sharing, and are not necessarily in conflict with the pursuit of equity and economic justice.[3]

If the objective of public policy is to promote prosperity, then this objective is also shared with the *maqāṣid* of sharīʻah. The objective of sharīʻah in finance is not to bind individuals into sharing prosperity by giving away wealth through charity and *qarḍ ḥasan* and becoming themselves poor.[4] It may be argued that it is rather about the sharing, on equitable basis, of economic and financial risks, to which all parts of society are systematically exposed. The asymmetric exposure to systematic risk resulting from the predetermination of claims on future income streams undermines public policies aimed at promoting economic growth and shared prosperity. Asymmetric exposure shifts indeed the burden of losses from one party to another during economic downturns and weakens the long-term relation between finance and development. Thus, it can be argued that it is through risk sharing rather than risk-transfer mechanisms that allocative efficiency and equity can be pursued simultaneously. This risk-sharing argument is central to the relation between development and finance, and it is also crucial to understanding the optimal approach to financial inclusion and poverty alleviation.

2.2. Procyclicality of Financial Systems

In order to understand the relation between risk-sharing and shared prosperity, it is important to consider the salient features of financial systems based on debt

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[3] Friedman (2005) argues that economic growth has moral consequences as rising living standards are conducive to more open, tolerant and democratic societies.

[4] This argument is also advanced by Ibrahim (2013), among others.

and non-debt financial arrangements. The conventional financial system is inclusive of financial intermediaries, financial markets as well as the financial infrastructure to facilitate payments. Financial inclusion is usually referred to as the process of widening the access to financial services provided by regulated financial intermediaries such as commercial banks, and insurance companies.[5] Certainly, access to financial services reduces the reliance of poor households on informal systems of savings and insurance against risks. There is also mounting evidence that access to financial services, to the payments systems in particular, can improve the welfare of the poor in terms of facilitating financial transactions and consumption-smoothing.

However, despite the fact that economies with deeper financial intermediation tend to grow relatively faster, it is not clear whether growth is necessarily accompanied with a reduction in income inequality. The issue remains as to whether access to financial resources is provided in a sustainable and responsible manner. The problems of sustainable and responsible inclusion derive from the fact that financial access may be undermined by the fragility of the financial system itself. The argument can be made that financial inclusion based on microcredit models does not serve the needs of poor households in terms of entrepreneurship and risk management. Debt-financing, even at micro-level, tilts the balance of rights and obligations between creditors and debtors, and the social effects of asymmetric claims on income generated by poor households may be even more severe.

Thus, the usefulness of the financial system for the purposes of sharing prosperity depends on the efficiency of financial institutions, financial markets and payment systems. Financial stability can be understood, in a narrow sense, in terms of the absence of disruptions to the settlements system, but it is the mechanics of financial intermediation that pose systemic problems with the potential of undermining public confidence and the ultimate objective of financial inclusion. As argued by the Financial Services Act in the United Kingdom, the resilience of the financial system is understood not just in terms of its ability to prevent interruptions to financial services, but also credit bubbles. Given the credit cycle, which reflects also fluctuations in economic output and employment, there is an

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[5] It is noted that financial intermediation is also provided by financial institutions other than commercial banks, such as mutual funds, money-market funds, pension funds, investment banks, and hedge-funds, *inter alia*. These financial intermediaries are usually referred to as the shadow-banking system, which is typically less regulated than commercial banks. Naturally, a relatively lower level of financial regulation offers also opportunities for regulatory arbitrage.

intrinsic relation between financial stability and the optimal allocation of resources. The central issue is whether the stability of the financial system can be achieved with debt or equity financing relations. The question is important because the inefficient allocation of resources is conducive to financial instability, which undermines economic growth and prosperity. The type of financial intermediation that is conducive to credit bubbles and financial crises can result also in the failure of the very financial institutions through which financial inclusion is pursued in the first place.

The consumption shocks emanating from fluctuations in the economic cycle can be, to some extent, mitigated by financial intermediaries and financial markets. The ability of households to withstand consumption shocks depends on income levels, but consumption smoothing depends also on the liquidity of assets. As liquidity depends on the convenience and ease with which assets can be converted into consumption units without loss of value, it is important that the financial system allows for efficient asset valuation. As noted by Allen and Gale (2009), it is the perception by individual consumers of uncertainty about the timing of future consumption that explains the preference for liquidity. It can be argued that insurance against liquidity shocks can be provided by financial intermediaries. In the case of banks and depositors for instance, the process of insurance and consumption smoothing is based on interest payments on deposits. Thus, financial inclusion may be instrumental in providing access to financial services that to some extent allow for consumption smoothing. But banking institutions are themselves also bound to seek insurance against their own liquidity shocks. The issue thus remains as to whether financial intermediation can promote financial inclusion, in its broader meaning, which is aimed at increasing participation into the economy through real investment. The effectiveness of financial inclusion schemes rests on the stability of the financial system and on the ability of financial intermediaries to absorb shocks that may affect consumption patterns, and in turn individual time preferences.[6]

Thus, banking institutions are exposed to liquidity shocks, which have the potential of affecting their own ability to extend credit, with asymmetric effects on corporate and households borrowing. This exposure to liquidity shocks is a natural result of the trade-off between the maturity and return of bank assets represented by loan portfolios. The higher premium demanded for holding assets with longer

[6] From an international perspective, Kindleberger (1978, 2013) argues that the U.S. economic depression and prevailing conditions of economic instability are caused, to a large extent, by the instability of the international financial system.

maturities and, thus less liquidity, implies stronger incentives for banks to extend credit on longer term basis. However, the preference for assets with higher returns, albeit with lower liquidity, implies that the bank's balance sheet tends to be characterized by long-term assets but short-term liabilities in terms of bank deposits. This maturity mismatch affects the behaviour of banking institutions depending on their perceptions of liquidity shocks. The ability and willingness to extend credit differs during economic booms and downturns.

The behaviour of lending institutions is also affected by expansionary or tightening monetary policies. As noted by Tirole (2010), there are three main effects of loose monetary policy. Lower short-term interest rates increase the risk of maturity mismatch by widening the differential between long and short term rates. They may be also indicative of the willingness of central banks to further reduce policy rates in response to the onset of new financial crises. Finally, lower rates are conducive to reduced borrowing costs and increased incentives for higher leverage. Expansionary monetary policies reduce the costs of holding illiquid balance sheets, leading to excessive borrowing and leveraged balance-sheets that increase the probability of bank failures and systemic risk. The commitment by central banks to inflationary policies is reflected by measures such as zero-interest rates, quantitative easing programs, and forward guidance aimed at entrenching expectations about inflation. But, the long-term effects of unconventional monetary policies on financial stability and economic prosperity remain uncertain.

The Bank for International Settlements notes in its annual report (BIS, 2015) that global interest rates, whether measured in nominal or inflation-adjusted terms, have been at extremely low levels for a prolonged period of time. "Such low rates are the most remarkable symptom of a broader malaise in the global economy: the economic expansion is unbalanced, debt burdens and financial risks are still too high, productivity growth too low, and the room for manoeuvre in macroeconomic policy too limited. The unthinkable risks becoming routine and being perceived as the new normal. This malaise has proved exceedingly difficult to understand." This malaise reflects the persistence of unbalanced economic expansion and high financial risks, and, "to a considerable extent the failure to come to grips with financial booms and busts that leave deep and enduring economic scars." Failure to understand the economic repercussions of financial booms and crises reflects perhaps the inability to come to grips with the procyclicality of the financial system. The financial system has the potential of exacerbating business cycle fluctuations by amplifying disturbances to the real economy.

As noted by Rochet (2008), this procyclicality is intrinsic to the financial system since credit crunches during economic downturns and credit booms during economic booms are conducive to the formation of financial cycles. The formation of these cycles is driven in turn by shifts in expectations about future economic and financial conditions. The gradual or abrupt changes in expectations can be triggered by new macroeconomic information that affect the credit function of financial intermediaries, precipitating thereby the phases of credit contraction or credit expansion. Kindleberger (1978) argues that financial panics and crashes can be triggered by single events, such as the freezing of fund redemptions or refusal of credit extension to individual market players leading to wider and sudden demand for liquidity. This is symptomatic of financial fragility, which refers to the state of the financial system where shocks of small magnitude have the potential of straining the entire system.

Naturally, the credit cycle is reflected by structural changes in the balance-sheets of financial intermediaries. Together with the demand for credit, there are also attempts at providing supply-side explanations of credit formation. Shin (2009) argues that the securitization process may be useful in explaining the increasing risk-taking capacity of the shadow-banking system. The distorted incentives for financial intermediaries to fully use slack in balance-sheets capacity lead to credit extension in unconstrained manner. Ultimately however, this credit expansion is conducive to the deterioration of lending standards, and downturn in the credit cycle. Thus, the procyclicality of the financial system is reflective of the debt-financing arrangements in the commercial banking as well as the shadow-banking system.

2.3. Financial Instability

The procyclicality of the financial system affects the long-term prospects of economic growth and shared prosperity. Indeed, the empirical evidence from Harding and Pagan (2002) suggests that under the condition of procyclicality between the quantity of money and business cycles, economic downturns can be exacerbated by the contraction of money-supply and credit tightening. Also, Bordo and Haubrich (2010) based on the relationship between money, credit and output cycles suggest that events that heighten the level of financial distress have the potential of exacerbating business cycle downturns. In fact, the procyclicality of the financial system is related to the structure of balance-sheets of banking institutions, which is examined in the theoretical model by Diamond and Dybvig (1983). This important study provides some explanation about the fragility of banking arrangements based on short-term liabilities and illiquid assets. It is argued that in addition to concerns about bank's ability to satisfy deposit withdrawals, bank runs can be also explained by fluctuations in the business cycle. The arrival of new information about potential economic downturns can precipitate the depreciation of assets and increase in the likelihood of financial distress. This implies in turn a rising probability that assets with longer maturities and higher returns would be disposed and sacrificed in order to increase liquidity in the face of more deposit withdrawals. Thus bank runs may not be simply reflective of panics or changes in the patterns of withdrawals for individual consumption purposes. As further argued by Allen and Gale (2009), anticipation of bank runs can be conditional on the arrival of new economic information, and it is not necessarily a random event.

The financial-instability hypothesis proposed by Minsky (1982, 1986) implies that the instability of the financial system derives from the procyclicality of changes in credit supply. The argument is intrinsically linked to the notion that liquidity preference is a determinant of interest rates and the price level of capital and financial assets, as proposed by John Maynard Keynes in *The General Theory of Employment, Interest, and Money*. Based on the assumption of a sophisticated financial system, the model of financial instability by Minsky implies that the demand and supply of investment output depend on the financing conditions. It relies also on the definition of banking as a profit-seeking form of financial intermediation. The accumulation of credit during economic booms implies that inflation feeds upon inflation. Three types of borrowing firms can then be considered: (i) hedge firms capable of servicing debt obligations, (ii) speculative units with potential difficulties that warrant refinancing arrangements, and (iii) Ponzi-finance units under constraints to issue new debt, on permanent basis, in order to service outstanding obligations.

The tightening of monetary policies to fight credit-fueled inflationary pressures increases the likelihood that speculative firms also become Ponzi firms. The refinancing difficulties for speculative firms result from the increase in debt-to-income ratios and decrease in net worth following asset sales to meet debt obligations. The argument about asset sales and deterioration of balance-sheets applies also to lending institutions. There are therefore significant implications for the type of financial inclusion that relies merely on credit from lending institutions. Financial instability depends on the nature of financing that underlies the relation between production resources and investment output. Minsky (1992) notes that liabilities created on the firm's balance-sheets represent the commitment of *prior* income cashflows to future debt payments, despite the determination of expected payoffs as contingent on future economic conditions. This raises important questions about debt-versus-equity financing, and the optimal financing mode for sharing risks and sharing economic prosperity.

The financial instability hypothesis suggests that financing conditions affect the investment function of firms, and thus the linkage between the financial sector and the real economy. Under these conditions, it may not be surprising that real investment represents the most volatile part of the GDP since the behaviour of lending institutions during economic booms and depressions has destabilizing effects on the behaviour of firms. Thus, the dependence of economic growth on capital accumulation and prices of financial assets can affect in turn the balance sheets of households and undermine the benefits from financial inclusion. [7] Reference can be also made to Tobin's *Q*, which provides a measure of the linkage between the financial sector and the real economy based on the ratio of firm value and replacement cost of assets. It can be regarded as a proxy for growth opportunities, with rising levels of Tobin's *Q* providing an incentive for firms to increase capital expenditure financed through the issuance of new equity. In contrast to debt which provides the basis for the financial instability hypothesis, the reliance on equity for the financing of real investment provides stronger foundations for sharing risks associated with growth opportunities, and sharing economic prosperity.

Thus based on Minsky's proposition about financial instability, financing affects the behaviour of firms, and it can in turn constrain lending institutions, leading to the formation of financial crises as a natural result of credit bubbles during economic booms. Financial crises, as argued by Kindleberger (1994), are characterized by precipitated capital flight away from real assets and long-term assets into money and liquid assets, as opposite to capital flight into real assets and long-term financial assets during bubbles. Following a pattern of increases in asset prices, a reversal of expectations triggers a precipitous fall in prices. A reversal may take place over an interceding period of financial distress where anticipations of dipping prices reach gradually a critical threshold that engenders a turning point. Klemkosky (2013) notes also that financial crises reflect a partial breakdown of the financial system due to several factors including excessive debt, formation of asset bubbles, complexity of the banking system, and failure of economic and financial

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[7] With respect to the asymmetric relation between real investment and Tobin's *Q*, the empirical study by Holmes and Maghrebi (2015) provides evidence that realignment toward long-term equilibrium tends to take place only through adjustments of the level of investment in the real economy. It may be argued that this reflects the procyclicality of the financial system as financial crises are associated with increased uncertainty about future economic growth.

models, *inter alia*. It is further argued that financial crises are conducive to long periods of slow economic growth. Thus financial crises may differ in their origin, but they result in economic strains, regardless.[8]

2.4. Financial Crises and Income Inequality

The partial breakdown of the financial system does not imply that some parts are more robust or less vulnerable than others. Indeed as argued also by the Bank for International Settlements (2008), the U.S. credit crisis raises the natural question as to whether the center of the global financial system may be as vulnerable as the periphery. This crisis is not unique either, as argued by Reinhart and Rogoff (2009), who provide evidence from a history of financial crises dating back to the fourteenth-century England that serial defaults are a universal feature of financial crises. There is also evidence from Greenwood and Scharfstein (2013) of an increase in the total value of financial assets to GDP and in the ratio of financial assets to tangible assets in the period leading to the U.S. financial crisis. The disproportional growth of the financial sector as a dominant part of the economy lends support to the argument that the financial crisis was not inevitable. This line of argument is also shared by the Financial Crisis Inquiry Commission (2011, p. xv), which considers that "[t]he profound events of 2007 and 2008 were neither bumps in the road nor an accentuated dip in the financial and business cycles we have come to expect in a free market economic system. This was a fundamental disruption—a financial upheaval, if you will—that wreaked havoc in communities and neighborhoods across this country."

Financial crises are reflective of the significant deterioration of the balance sheets of economic agents through debt accumulation. Richard Koo (2008) argues that post-crisis conditions are characterized by "balance-sheet recession" where the long process of deleveraging can be pursued through capital injections, debt-equity swaps or debt-forgiveness. Also, as noted by Stiglitz (2010, p. 1), "the crisis emanated from the center and reached the periphery. Developing countries, and especially the poor in these countries, are among the hardest hit victims of a crisis they had no role in making." Thus, financial instability has serious implications for the real economy, and the balance sheets of poorer households in particular. Since financial stability depends on financing modes, there are limits to financial

[8] There is a rich literature on financial crises, which grows further with the onset of new ones. As far the U.S. credit crisis is concerned, reference can be made for instance to the study by Lo (2012), who provides a review of related literature, and views about its main causes and economic implications.

inclusion based on credit extension from lending institutions. The fragility of the financial system implies the financial vulnerability of the poor, which worsens during periods of financial instability. Given the asymmetric effects of financial crises on living standards, it is arguably poorer households that are left with the deepest economic scars.

The rising poverty rates that reflect economic scars in the aftermath of financial crises constitute a significant determinant of suicide rates. There is indeed evidence from the literature in medical and social sciences of strong linkage between economic stress and suicide rates. The question is whether financial inclusion can contribute toward poverty alleviation and lessen economic scars during periods of financial instability. Financial inclusion, defined in terms of facilitated access to financial accounts is important in its own right, but it may not be sufficient to absorb the impact of economic crises on the most vulnerable segments of society. Economic shocks affect consumption patterns, and it is through risk-sharing that optimal consumption smoothing can be achieved. As noted by Stiglitz (2010), funding of development initiatives through capital markets is highly cyclical. Thus, the argument can be made that such funding serves relatively few countries and few sectors, and that there is a need for innovative mechanisms for risk sharing that serve better the relation between finance and development for all segments of society.

3. Risk Sharing in Islamic Finance

3.1. The Essence of Risk Sharing

There are some innovative funding mechanisms for development programs, including for instance, commodity-linked bonds that allow commodity-exporting countries to make payments linked with the price of reference commodities. Counter-cyclical finance includes also measures such as the automatic adjustment of outstanding debt during economic downturns and the extension of credit guarantees with counter-cyclical elements. There are however limits to the effectiveness of counter-cyclical finance based on debt. The main question arises as to the optimal level of debt, and whether there exists a threshold at or beyond which debt-financing ceases to contribute toward economic growth and becomes the principal cause of financial instability and economic downturn. This important issue is examined, inter alia, by Reinhart and Rogoff (2010) with respect to sovereign debt and Arcand, Berkes, and Panizza (2012) in relation to private debt. The empirical evidence about the existence of thresholds is not conclusive but the potential for counterproductive effects on economic growth remains.

It can be argued that innovative solutions based on debt fall short from addressing the fundamental flaws of the financial system. As preference for debt-financing derives from differential tax treatment and information asymmetry, the economic rationale behind financing relations based on interest is rather weak and untenable. The natural question arises then as to whether there are viable alternatives to debt financing, which reduce the systemic risk and moral hazards associated with debt. Indeed, the issue is whether a shift in paradigm toward equity financing can contribute toward financial stability, which is essential to effective financial inclusion, sustainable economic development and equitable wealth distribution.

The conventional financial system is based on risk-transfer and risk-shifting relations. There is indeed risk transfer from depositors to banks for consumption-smoothing purposes, and these incomplete contracts are covered by deposit insurance. There is also risk transfer from banks to borrowers through bank lending activities. Mirakhor and Krichene (2009) argue that there is a gradual alteration of Adam Smith's vision of exchange economy based on risk sharing into an economy based on risk-transfer, and into risk-shifting to tax-payers through government bailouts in the event of financial crisis. In contrast, the principle of risk-sharing in Islamic finance dictates that the return on capital should be determined *ex post*. This does not imply that return on capital is necessarily equal to zero in the absence of interest. As expectations of returns and future income determine savings, it is *ex ante* returns that determine real investment. Thus, there is no basis for the argument that an Islamic financial system based on risk-sharing constrains savings and investment. Risk sharing strengthens rather the linkage between the financial sector and the real economy, and its merits become even more apparent when the degree of risk aversion in society increases.

The essence of risk sharing derives from the imperative of taking different states of nature into account, not all of which are necessarily favorable and associated with positive returns. It can be argued that debt financing requires the payment of future cashflows inclusive of principal and interest, irrespective of future states of nature. Askari, Iqbal and Mirakhor (2009) note that Islamic finance prohibits transactions where one party is entitled to a certain amount of rent, measured as a predetermined percentage of the value of a property made available to another party over a predetermined period of time without transfer of ownership. Given the predetermination of rent as a percentage of property value, the return on such transaction is not contingent on the realization of a particular state of nature.

Thus, it is rather difficult to regard interest-bearing fixed-income securities as pure contingent claims, in the sense of Arrow-Debreu securities.

The theoretical studies by Arrow (1953), Arrow and Debreu (1954), and Arrow and Hahn (1971) provide a rigorous conceptualization of Adam Smith’s vision of competitive economy. The Arrow-Debreu-Hahn modelling of general equilibrium for optimal allocation of resources under an ideal market economy. Arrow (1974) further argues that institutional structure is essential to the promotion of exchange, which is the basis of resources allocation. Because uncertainty defines the tradeoff between risk and return and thus relative prices, the optimal allocation of resources is governed by forward looking expectations. The Arrow-Debreu economy assumes the existence of a complete set of competitive markets, where the price system allocates risk, and thus resources as well, based on payoffs contingent on the possible states of nature. The existence of Arrow securities, which deliver one-unit-payoffs conditional on the realization of a state of nature, and zero-payoffs for all remaining states, implies that the price system provides, under the assumption of complete markets, the opportunity to hedge against risk under each contingency.

Risk-sharing, which underlies the optimal allocation of resources in the Arrow-Debreu competitive economy, is also the defining principle of Islamic finance. As noted by Cowen (1983), it is difficult however to accommodate pre-determined rates of interest in Arrow-Debreu-Hahn into the system of equations for general equilibrium. The foundations of optimal allocation of resources in a competitive economy are laid indeed on the concept of state-dependent payoffs, and interest-bearing fixed-income securities would be inconsistent with the definition of pure contingent claims. Under Islamic finance, the return on capital is determined on *ex post* basis, which implies that future payoffs on contingent claims are function of variables in the real economy. It is the intrinsic interdependencies between time, cashflows and risks that forces future cash-flows to be defined by economic activities under a world of uncertainty. This provides the basis for stronger linkage between the financial sector and the real economy.

There is thus no case for default on equity. The return on equity is fully governed by the realization of a certain state of nature. Default can be defined with respect to debt only because of the pre-determination of future payoffs and promised payments independent of multiple and mutually exclusive states of nature. In contrast to default risk defined in case of debt, there is no credit risk for equity either given the absence of state-independent claims. Under equity financing, there is thus no economic rationale for hedging against credit risk, and for credit-risk transfer strategies based on credit-default-swaps. In the absence of credit risk, risk sharing does not entail credit default. Nor does it require risk transfer strategies. Nor should it be construed as unwarranted risk taking without risk diversification strategies.

3.2. Stability of an Islamic Financial System

The fundamental question that arises from the re-emphasis on risk-sharing is about the stability of an Islamic financial system. This issue is important because as noted earlier with reference to the Bank for international settlements, financial stability is a precondition for economic growth. Given the recurrence of financial crises due to serial debt defaults, financial stability seems to be rather elusive. The credit system is based indeed on the ability of banks to issue credit against insufficient deposits. Through credit expansion, banks are empowered not only to create money, but also to fuel credit booms and facilitate leveraged balance sheets. It is possible however, to conceive, theoretically at least, a financial system based on equity participation where bank depositors are shareholders, as demonstrated by Mirakhor (1988). Debt and debt-based contracts can indeed be substituted by equity-financing instruments.

Financial intermediation can be facilitated under Islamic finance, by a wide range of instruments and services. Permissible contracts represent building blocks for custodial services, asset transformation, risk management and payments services that can serve the same functions of the conventional financial system. These building blocks include equity partnership (*mushārakah*), deposit (*wadī'ah*), trust (*amānah*), principal-agent representation (*wakālah*), and (*muḍārabah*), among others. It is the nature of financing relations under Islamic banking that promotes the stability of an Islamic financial system. Under participatory arrangements, there is no room for credit creation or engagement in investment that is not backed by real savings. While the asset-side of balance sheets for Islamic banks reflects equity-financing operations rather than interest-based loans, the liabilities-side is represented by deposits, which are by definition, real savings. There is no tendency for the development of leveraged balance sheets, or for the creation of credit with no foundation in the real economy.

There are no risk-free assets given the prohibition of interest. Without the ability of the banking system to create money through credit, it is the central bank that has exclusive power of money creation. The potential for systemic risk is reduced given the absence of speculative booms, and the preclusion of deposit insurance. Based on equity and backed by real assets rather than lending, there is no economic rationale for bank runs either. The risks for Islamic financial institutions are mitigated insofar that future returns are generated by wealth-creating economic activities. Thus, an Islamic financial system is conducive to allocative efficiency because in principal, partnership dictates prudence. It promotes also financial stability, as well as social and economic justice.

4. Risk Sharing and Shared Economic Prosperity

The discussion in previous sections focused on the relation between financial stability and economic prosperity, the procyclicality of the financial system, and the essence of risk sharing. The notion that financial stability is essential to economic growth, and the fact that the conventional financial system is inherently unstable, raises the question of whether the optimal mobilization of resources and financial stability are better achieved through risk-sharing rather than risk-transfer and risk-shifting. The central argument here is that if economic growth can only be achieved through the optimal allocation of resources, then risk sharing should be essential to the sharing of prosperity. As financial stability is a precondition to economic growth, risk-sharing is also a pre-requisite for financial stability.

4.1. Income Inequality and Wealth Redistribution

There is an extensive literature on the relation between finance and development, and the issue of wealth distribution. Reference is made here to the seminal work about *Capital in the Twenty-First Century* by Piketty (2014) who documents the persistent patterns of wealth and income inequality in capitalist economies over more than two-and-half centuries. It is therein argued that the central contradiction of capitalism and the principal destabilizing force is that the private rate of return on capital r, can remain higher than the rate of growth in income and output g, for prolonged periods of time. The argument raises important issues about the natural relation between the rates of return on capital and rate of economic growth. Piketty (2014, p. 571) notes that "[t]he inequality $r > g$ implies that wealth accumulated in the past grows more rapidly than output and wages. This inequality expresses a fundamental logical contradiction. The entrepreneur inevitably tends to become a rentier, more and more dominant over those who own nothing but their labor. Once constituted, capital reproduces itself faster than output increases. The past devours the future."[9]

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[9] There is also evidence from Rubin and Segal (2015) that growth and income inequality are positively associated, and that the top-income groups stems from wealth that is more sensitive to growth than labor income.

This important argument between income and wealth, and its implications for income inequality is, understandably, the subject of diverging views and critical analysis. For instance, Mankiw (2014) does not dispute the inequality $r > g$, but notes that it derives as a natural steady state condition in Solow growth model under insufficient levels of savings in the economy. Weil (2015) considers the definition of capital and measurement problems associated with the market value of tradeable assets used as proxy of the quantity of physical capital in Piketty (2014). Further clarification is provided by Piketty (2015) about the role played by $r > g$ in the analysis about wealth inequality. It is noted for instance, (Piketty, 2015, p. 5), that capital ownership different historical forms that take different forms of property relations and social conflict.

Palley (2014) argues that Piketty (2014) presents a mainstream neoclassical explanation of worsening inequality, where the widening gap between the rate of return on capital and rate of growth is due to the concentration of capital ownership. This ownership concentration implies that income increases for the wealthy faster than the rate of economic growth. The theoretical argument is based on the neoclassical marginal productivity of capital, which suggests that return on capital is determined by technological factors. The counter-argument is that this rate of return is function of political and social factors, which affect wealth distribution and thus income inequality. Palley (2014) argues that economic growth is also the outcome of policy decisions and institutional choices, and that the debate should center on the differential in speeds at which the economy grows and capital multiplies. There are legitimate concerns that this important debate may be diverted toward the determination of the rate of return on capital as the marginal product of capital, when "what is needed to make capitalism deliver shared prosperity." (Palley, 2014, p. 146).

In light of these important arguments, it is possible to examine this inequality with reference to the valuation of capital goods and financial assets using the present-value relation under certainty. The value of capital goods is expressed as the sum of discounted cashflows generated by the asset in the future. Given a discount factor based on interest rate r, the present value of the financial asset generating a stream of constant dividends d can be expressed, in the limit, as $p_t = d/r$. In the case where dividends grow indefinitely at the rate g, this perpetuity can be valued as $p_t = d/(r-g)$. This present-value equation is valid under the crucial condition that $r > g$ to ensure positive asset prices and avoid the case of indetermination.[10] This condition is reminiscent of, and consistent with, the formulation of the central contradiction of capitalism by Piketty (2014), where r and g represent, instead, the private rate of return on capital and growth rate of income and output, respectively. Thus, the destabilizing force is represented by the tendency for the rates of return to exceed growth rates over prolonged periods of time.

It is clear that the central contradiction of capitalism reflects a breakdown in the relation between the growth rates of capital and economy. The destabilizing factor is the predetermination of the rate of return on *ex ante* basis when information about the growth rate of the economy is only available on *ex post* basis. From the present-value relation, it is clear that return on capital r can be expressed also as the sum of dividend yields and growth rate of dividends $r = d/p_t + g$. With respect to the time variations of expected returns or discount rates, Cochrane (2011) notes that conventional wisdom suggests that the unpredictability of returns is related to variations in expected cashflows, which reflect variations in price-dividend ratios. The evidence indicates however, that price-dividend variations correspond to discount-rate variations. Thus, the formation of discount rates is crucial to the validity of the present value relation, which holds that asset prices should be equal to discounted expected cashflows.

The central contradiction of capitalism may then have also to do with the discount factors and "*the problem of interest*", which was first introduced by Böhm-Bawerk (1895). The notion that a net income can be derived with respect to any form of capital on inexhaustible and continuous basis poses the difficult questions formulated by Kirzner (1996, p. 141, italics added) as to "*how* it is possible for an individual to invest capital funds in a way that yields a perpetual net income. *Why* does not the market bid up the price of all the "machines" (in which the individual might plan to invest his capital) so that no net annual yield remains?" According to Piketty (2014), capital is not an immutable concept as it reflects the state of development and prevailing social relations of each society. It may be further argued that social relations are also reflective of financial relations, which define the terms of risk allocation in the society based on equity or interest-bearing debt.

[10] Campbell and Shiller (1988) provide an approximation of the present-value identity, which expresses the current dividend-price ratio as a function of the sum of future returns, future changes in dividend, and future as dividend-price ratio using a constant of approximation close to unity.

The concept of interest is crucially related to the central contradiction of capitalism, and to the persistent gap between the rate of return on capital and rate of growth in output. As argued by Askari, Iqbal and Mirakhor (2010), interest is regarded by John Maynard Keynes in *The General Theory of Employment, Interest, and Money* as accruing without genuine sacrifice. The compounding of interest is conducive to wealth accumulation at an accelerated rate that tilts wealth and income distribution toward rentiers. The wedge that interest rates create between investment and savings makes sustainable full-employment equilibrium rather difficult to achieve. This may explain the twin problems: the inability of achieving full employment, and the inequitable distribution of wealth and income. Full employment may be approximated under a comprehensive, and gradual, socialization of capital investment that increases the amount of capital until it solves the problem of scarcity, which is conducive to the "euthanasia of the rentier."

With respect to the problem of redistribution through inflation, Piketty (2014, p. 134) argues that "once inflation becomes permanent, lenders will demand a higher nominal interest rate, and the higher price will not have the desired effects." It may be also argued that in the same way that there are limits to inflation-channels of redistribution, a progressive annual tax on capital may not be effective either in suppressing the private return on capital below the growth rate over sustainable periods of time. Again, insofar that the return on capital is determined *ex ante*, lenders would demand a higher nominal interest rate to offset the effects of new tax on capital τ. It can be argued indeed that with r determined *ex ante* and in the absence of upper boundaries on interest rates, the behaviour of lenders would result in the private rate of capital being simply raised to $r + \tau = r^*$ and the central contradiction of capitalism would remain unresolved such that $r^* > g$. [11] Using a simple neoclassical growth model, Mankiw (2015) also argues that taxing capital with proceeds accruing to workers lowers the steady state consumption for both capitalists and workers but impoverishes the former at a faster speed. Thus, if the contradiction is due to the predetermination of the rate of capital, then inflation and tax mechanisms may not provide the desirable long-term remedies to such structural inconsistencies.

[11] It is noted that this argument is based on simplifying assumptions, which abstract the analysis from, for instance, the effects of monetary policy and the determination of short-term interest rates by central banks. The aim though is to consider briefly the potential limits of solutions to the central contradiction of capitalism based solely on progressive taxes without addressing the determinants of the private rate of return on capital.

The problem derives from the conflicting forces that govern the long-term relation between the rate of growth of income and output and the return on capital. It is important to note that whereas the latter is determined by financial arrangements in the financial sector, the former is driven by the outcome of investment in the real economy. It should be further noted that as the rate of return on capital is determined in financial markets, the distinction should be made between money markets and capital markets, and within the latter between bond markets and equity markets. Askari, Krichene and Mirakhor (2014) argue that in an Islamic financial system, "the rate of return to capital is neither a purely monetary phenomenon determined in the money market by the demand and supply of money, as in a Keynesian model, nor is it purely determined by the real demand for and supply of real savings, as in the Classical model. Instead, the rate of return to capital is determined by the rate of return to ownership position (equity) related to marginal product of capital as well as to the portfolio balance equilibrium." Thus, the important distinction should be made between the return on capital as determined in the money and bond markets on one hand and in equity markets in the other.

Money and bond markets provide opportunities for investment under certainty with return on capital based on interest rates and bond yields. In contrast, equity markets provide returns on capital for investment under uncertainty. It can be argued that the principal contradiction of capitalism results from the predetermination of *ex ante* rates of return on capital from investment in money and bond markets when growth rates in income and output are not certain. It is the return on equity that is more congruent with the uncertain nature of real investment and economic growth. This return on equity is determined *ex post*, and depends on the observed growth rate g such that $r = f(g)$. Since the payoffs are contingent on the realization of a particular state of nature, the realized return on real investment is known only on *ex post* basis. The growth rate can be positive or negative depending on the realization of favorable or unfavorable states of nature. This implies that capital is not allowed to increase irrespective of growth rates, and that it is bound to decrease with negative growth. The systematic risks entailed by economic activities are thus shared by investors in capital markets insofar that equity markets, rather than bond markets, are concerned. This distinction is fundamental to understanding the role of equity markets in promoting risk-sharing and its implications for shared prosperity. In light of the effects of the central contradiction of capitalism on income and wealth inequality, equity-financing is also crucial for more efficient and more equitable mechanisms for financial inclusion.

4.2. Risk-Sharing Mechanisms for Financial Inclusion and Shared Prosperity

The discussion until this point has dealt almost entirely with financial instability, and the essence of risk-sharing, and its importance for prosperity-sharing. The notion that risk-sharing promotes financial stability and economic growth raises the question about the mechanisms through which risk-sharing can be achieved. Financial inclusion and financial stability have little significance for poor households however, in the absence of risk-sharing mechanisms with tangible and observable effects that provide the basis for shared prosperity. The risk-transfer relations that underlie the conventional financial system imply asymmetric exposures to economic risk, and do not therefore promote economic justice. Indeed as argued by Askari, Iqbal, Krichene and Mirakhor (2010), "the social and human costs of financial instability and financial crises, though impossible to quantify, might even dwarf the economic costs." The reliance of households on debt, rather than equity, has implications for their leveraged balance-sheets. For poorer households in particular, the limited value of assets implies the absence of collateral and in turn the denial of access to bank credit. The lending experience from microfinance schemes based on the concept of joint liability suggests that these interest-based contracts do not constitute a viable form of financial inclusion. Indeed, the risks associated with economic downturns are not shared with financiers, and the social and human costs can be considerable.

Thus, the foundations of financial inclusion and prosperity sharing lie in risk sharing. The most likely to be financially excluded are the poor and residents of rural areas with limited bank penetration. It is imperative that financial inclusion promotes access to banking services as well as risk-sharing and risk-hedging financial instruments on a fair basis. Under equity-financing, the issue of creditworthiness does not apply with the same force as in the case of lending and debt-obligations. The government plays a central role in the conception and implementation of new strategies for financial inclusion based on equity. To provide the basis for prosperity sharing, it is imperative that governments promote a number of participatory initiatives and incentives toward investment based on risk sharing agreements, which include the following.

a. The most important initiative is the investment in public education and awareness programs about the merits of equity participation schemes.

b. The alignment of positive incentives for micro-savings schemes, and for reduced dependence on consumption loans and charity that tend to perpetuate hand-to-mouth consumption patterns.

c. The issuance of GDP-indexed “bonds” in which income is not fixed *ex ante* but determined on the basis of future economic growth. This is an important issue that is intrinsically related to the central contradiction of capitalism. The issuance of growth-linked securities ensures indeed that the rate of return on capital does not persist above the growth rate of income and output.

d. The implementation of measures against imperfect market conditions such as transactions costs, and asset indivisibility. This argument is against the preferential tax treatment of debt and about ensuring a level-playing field for equity-financing. It is also crucial that the economics of asset divisibility are taken into consideration. Theoretically, the ability to construct optimal investment portfolios under imperfect divisibility depends on the investor’s level of wealth. Financial inclusion should provide poorer households associated with higher degrees of risk aversion with investment opportunities into mutual funds, which allow for asset pooling and portfolio risk diversification. Albeit limited, the assets of poorer households can be optimally mobilized toward participatory investment opportunities based on risk-sharing rather than exploited under micro-finance models based on joint liability and risk transfer arrangements.

e. The design of information-sharing systems for wider-access to macroeconomic and financial information on low-cost basis, ensuring affordability or free access to poorer households. Financial inclusion is not confined to access to financial services, it should include also access to timely and accurate information, which is essential to promote participation into equity markets on informed basis.

f. The integration of inalienable endowments *waqf*-based microfinance into development schemes. In light of the mounting evidence about the adverse effects of micro-credit, it is imperative that new modes of equity-financing substitute for interest-based debt in development programs. Çizakça (2004), and Ahmed (2003 and 2007), *inter alia*, suggest that cash *waqf*, funds from other types of *awqāf* as well as charity *sadaqāt* can be used to finance productive micro-level enterprises in addition and in lieu of government finance.

g. The promotion of Islamic insurance schemes for various income categories based on the concept of takaful. These forms of risk-hedging based on mutuality are essential to the optimal allocation of risk in the society based on the individual degrees of risk tolerance.

h. The institution of development schemes based on equity partnership where potential profits from economic activities are shared with public-private

> participants. It is the government that channels finance and other necessary resources into projects, such as land development, and poorer households in particular are given the opportunity to own, develop and cultivate land and share into future net income streams. This form of financial inclusion based on equity is conducive to poverty alleviation, and shared prosperity. A balanced approach to capital-labour resources promotes allocative efficiency without compromising upon the imperative of equity.

Thus, it is crucial that the institutional, regulatory and administrative structures promote the type of financial intermediation that allows for allocative efficiency and equity. These risk-sharing conditions are conducive to financial stability and economic growth, and therefore shared prosperity. The optimal allocation of risk in the society provides safety in numbers for risk-averse individuals. It may not be possible to assume higher risk-tolerance degrees for individuals with higher income, which describe conditions of diminishing absolute risk aversion. But, the optimal allocation of risk depends on the individual levels of risk tolerance. Thus there are different mechanisms for risk-sharing, including the *muḍārabah* and *mushārakah* financial instruments for equity partnership initiatives explained above. There are also, under Islamic finance, other redistributive institutions for risk-sharing such as obligatory levies of *zakāh,* and non-compulsory benevolent loans *qarḍ ḥasan* and charity *ṣadaqah*, and institutional endowment *waqf*. Finally, the inheritance levies constitute also a form of intergenerational redistribution of wealth and risks among the inheritors.

As noted above, this risk-sharing approach to financial inclusion can be more effective in reducing hand-to-mouth consumption, where poor households tend to consume all disposable income. These patterns result in high levels of correlation between income and consumption, leaving virtually no room for savings to be channeled toward investment. Financial inclusion should not be simply defined in terms of facilitating access to financial services, but it should be conducive to a larger pool of savers rather than borrowers. Robert Shiller (2011) argues that there is a need for the humanizing and democratizing of finance. Whereas democratizing finance means the extension of the principles of risk management to benefit all segments of the society, humanizing finance involves the use of various branches of cognitive science to improve "human-factors financial engineering." Thus, financial innovation should benefit people at all income levels, providing insurance against systematic risks and idiosyncratic risks associated with the vicissitudes of earning a living, as argued also by Shiller (2003). The natural question remains as to whether the democratizing and humanizing process can be optimally achieved under a financial system driven by debt and risk transfer or equity and risk-sharing. It is clear that a financial system that allows for greater financial inclusion based on risk-sharing and mutuality is conducive to financial stability, and shared economic prosperity.

5. Conclusion

There is, arguably, a “market failure” of the financial sector to meet the demand from different social groups, including poorer households, for financial instruments based on risk-sharing rather than risk-transfer. This market failure provides the economic rationale for government intervention. There is a significant role for the government to play in providing an enabling environment for financial inclusion. It is not just the lack of access to financial services that traps many segments of the society into poverty. The participation into economic growth and sharing of prosperity require equity-financing modes based on risk-sharing rather than consumer loans and microcredit schemes that perpetuate the cycle of hand-to-mouth consumption and indebtedness.

To ensure growth with equity, it is necessary that the definition of financial inclusion is broadened to include the financing of development programs based on equity partnership. There is undisputable evidence that debt and leveraged balance-sheets are conducive to financial instability. It is argued that the destabilizing force leading to the central contradiction of capitalism is the persistence of the private rate of return on capital above the growth rate of income and output. It is the predetermination of *ex ante* rates of interest irrespective of the realization of particular states of nature that is conducive to fixed rewards under asymmetric exposures to risk. These conditions contribute to income inequalities, which are inconsistent with the optimal allocation of resources and risk-return tradeoff. As no stream can rise above its source, rates of return on capital cannot be sustained above growth rates indefinitely.

Adam Smith’s vision of competitive economy, which is embodied in Arrow-Debreu-Hahn model of general equilibrium, is based rather on risk sharing. Since the mobilization of resources is driven by forward-looking expectations, it is risk-sharing finance that is more congruent with the riskiness of economic activities under uncertainty. Financial systems laid on the foundations of credit and risk transfer have the procyclical propensity to generate financial crises with the deepest economic scars for poorer households. Mechanisms for risk transfer cannot provide viable solutions for sharing prosperity. It may be thus argued that risk-sharing, as the defining principle of Islamic finance, is not just the catalyst of economic growth, it is the essential mechanism for sharing prosperity, and sustainable economic development.

Further research may shed light on the risks of financial exclusion. The lessons from the microcredit models need to be learned and persistence-in-errors as well as path-dependencies should be avoided. As rightly argued by Aksari, Iqbal, Krichene and Mirkahor (2010), it is time to revamp the financial system to rely on equity. The economic rationale behind equity-financing is that in order to share prosperity, economic risks should be shared as well. The allocation of risk commensurate to the idiosyncratic abilities to bear losses is arguably more conducive to a socially inclusive financial system. Systematic risk cannot be eliminated, but it is collective risk taking and individual risk aversion that promote a more efficient mobilization of resources, and more equitable sharing of economic risks. Economic prosperity should be pursued through risk-sharing rather than at the expense of others.

References

Ahmed, Habib. 2003. "The role of Islamic financial institutions in financing microenterprises: Theory and practice." Paper presented at the *Forum on Islamic economics and finance*, September 27-29, 2003, Amman, Jordan.

———. 2007. "*Waqf*-based microfinance: Realizing the social role of Islamic finance." Paper presented at the *International Seminar on "Integrating Awqaf in the Islamic financial sector,"* March 6-7, 2007, Singapore.

Allen, Franklin, and Douglas Gale. 2009. *Understanding financial crises*. Clarendon Lectures in Finance, Oxford University Press.

Arcand, Jean-Louis, Enrico Berkes, and Ugo Panizza. 2012. "Too much finance?" *International Monetary Fund Working Paper* 12/161.

Arrow, Kenneth J. 1953. "Le rôle des valeurs boursières pour la répartition la meilleure des risques." *Econométrie, Colloques Internationaux du Centre National de la Recherche Scientifique* 11: 41-48.

Arrow, Kenneth J., and Gérard Debreu. 1954. "Existence of an equilibrium for competitive economy." *Econometrica* 222: 265-290.

Arrow, Kenneth J. and Frank H. Hahn. 1971. *General competitive analysis*. San Francisco, Holden-Day, Edinburgh.

Askari, Hossein, Zamir Iqbal, and Abbas Mirakhor. 2009. *Issues in Islamic finance and economics: Progress and challenges*. John Wiley & Sons (Asia) Pte Ltd.

Askari Hossein, Zamir Iqbal, and Abbas Mirakhor. 2010. "Globalization and Islamic finance: convergence, prospects and challenges." John Wiley & Sons, Singapore.

Askari, Hossein, Zamir Iqbal, Noureddine Krichene, and Abbas Mirakhor. 2010. *The stability of Islamic finance*. John Wiley & Sons (Asia) Pte. Ltd.

Askari, Hossein, Noureddine Krichene, and Abbas Mirakhor. 2014, "On the stability of an Islamic financial system." *PSL Quarterly Review*, vol. 67, pp. 131-167.

Bank for International Settlements. *2008. BIS 78th annual report.* June 2008, Basel.

Bank for International Settlements. *2015. BIS 85th annual report.* June 2015, Basel.

Böhm-Bawerk, Eugen von. 1895. "The positive theory of capital and its critics." *Quarterly Journal of Economics* 9: 113-131.

Bordo, Michael D., and Joseph G. Haubrich. 2010. "Credit crises, money and contractions: an historical view." *Journal of Monetary Economics* 57: 1-18.

Boulding, Kenneth E. 1970. *Economics as a science.* McGrow-Hill Book Company.

Campbell, John Y., and Robert J. Shiller. 1988. "The dividend-price ratio and expectations of future dividends and discount factors." *Review of Financial Studies* 1: 195–228.

Çizakça, Murat. 2004. "Cash awqaf as alternative to NBFIs Bank." Paper presented at the *International Seminar on Nonbank financial institutions, Islamic alternatives,*" March 1-3, 2004, Kuala Lumpur, Malaysia.

Cochrane, John H. 2010. "Discount rates." *The Journal of Finance* 46: 1047-1108.

Cowen, Tyler. 1983. "The rate of return in general equilibrium: A critique." *Journal of Post Keynesian Economics* 5: 608-617.

Diamond, Douglas W., and Philip H. Dybvig. 1983. "Bank runs, deposit insurance and liquidity." *Journal of Political Economy* 91: 401-419.

Financial Crisis Inquiry Commission. 2011. *The financial crisis inquiry report*. National Commission on the Causes of the Financial and Economic Crisis in the United States.

Friedman, M. Benjamin. 2005. *The moral consequences of economic growth*. Alfred A. Knopf Publisher, New York.

Greenwood, Robin, and David Scharfstein. 2013. "The growth of finance." *Journal of Economic Perspectives* 27: 3-28.

Harding, Don, and Adrian Pagan. 2002. "Dissecting the cycle: a methodological investigation." *Journal of Monetary Economics* 49: 365–381.

Holmes, Mark J., and Nabil Maghrebi. 2015. "Tobin's *Q* and the threshold adjustment of investment expenditure." *Studies in Economics and Finance* 32: 222-234.

Ibrahim, Shahul Hameed M. 2013. "*Maqasid* driven Islamic banking: Some suggested baby steps." New Horizon: 28-29.

Iqbal, Zamir, and Abbas Mirakhor. 2013. "Islam's perspective on financial inclusion." In *Economic Development and Islamic Finance*, Zamir Iqbal, and Abbas Mirakhor (eds.) The World Bank.

Kindleberger, Charles P. 1978. *Manias, panics and crashes: A history of financial crises*. Palgrave Macmillan.

———. 1994. "Financial crises." in *The New Palgrave Dictionary of Money & Finance.* Newman P., M. Milgate, and J. Eatwell (editors.) MacMillan Press Ltd.

———. 2013. *The world in depression*. The University of California Press, 40th anniversary edition.

Kirzner, Israel M. 1996. *Essays on capital and interest: an Austrian perspective*. Edward Elgar, Cheltenham, United Kingdom.

Klemkosky, Robert C. 2013. "Financial system fragility." *Business Horizons* 56: 675-683.

Koo, Richard, 2008. *The holy grail of macroeconomics: Lessons from Japan's great recession*. Singapore: John Wiley.

Lo, Andrew W. 2012 "Reading about the financial crisis: A twenty-one-book review." *Journal of Economic Literature* 50: 151-178.

Mankiw, Gregory. 2015. "Yes, r>g. So what?" *American Economic Review*: 105 (5).

Minsky, Hyman P. 1982. "The financial instability hypothesis: capitalist production and the behavior of the economy." In *Financial crises: Theory, history and policy*. Charles Kindleberger and J.P. Laffargue, (editors.) New York, Cambridge University Press.

———. 1986. "The financial instability hypothesis: A restatement." In *Post-Keynesian economic theory: A challenge to neoclassical economics*. P. Arestis and T. Skouras, editors, Sussex: Wheatsheaf Books.

———. 1992. "The financial instability hypothesis." *The Levy Economics Institute Working Paper* no. 74.

Mirakhor, Abbas. 1988. "Equilibrium in a non interest open economy." *International Monetary Fund Working Paper* WP/88/111.

Mirakhor, Abbas, and Noureddine Krichene. 2009. "The recent crisis: lessons for Islamic finance." *IFSB 2nd Public Lecture on Financial Policy and Stability*, Islamic Financial Services Board.

Mohan, Rakesh. 2011. *Growth with financial stability*. Oxford University Press.

Pritchett, Lant, and Michael Woolcock. 2004. "Solutions when *the* solution is the problem: Arraying the disarray in development." *World Development* 32: 191-212.

Palley, Thomas. 2014. "The accidental controversialist: Deeper reflections on Thomas Piketty's Capital." *Real World Economics Review* 67.

Piketty, Thomas. 2015. "About c*apital in the twenty-first century." American Economic Review:* 105 (5).

———. 2014. *Capital in the Twenty-First Century*. Cambridge, Massachusetts, Harvard University Press.

Rajan, Raghuram. 2015. "Democracy, inclusion and prosperity." *Speech delivered at the D. D. Kosambi Ideas Festival*, Goa. February 20, 2015.

Reinhart, Carmen M., and Kenneth S. Rogoff. 2009. *This time is different: eight centuries of financial folly*. Princeton University Press.

———. 2010. "Growth in a time of debt." *American Economic Review* 100: 573-578.

Rochet, Jean-Charles. 2008. "Procyclicality of financial systems: Is there a need to modify current accounting and regulatory rules?" *Banque de France Financial Stability Review* 12.

Rubin, Amir, and Dan Segal. 2015. "The effects of economic growth on income inequality in the US." *Journal of Macroeconomics* 45: 258-273.

Shiller, Robert J. 2003. *The new financial order*. Princeton: Princeton University Press.

———. 2011. “Democratizing and humanizing finance: reflections before and beyond Dodd-Frank.” In *Reforming U.S. financial markets*. Edited by Kroszner, R.S, and R.J. Shiller, The MIT Press.

Shin, Hyun Song. 2009. “Securitisation and financial stability.” *The Economic Journal* 119: 309-332.

Smith, Adam. [1759]. *The theory of moral sentiments*. Edited by D.D. Raphael, and A.L. Macfie, (Eds.) Oxford University Press, 1976.

Stiglitz, Joseph. 2010. *The Stiglitz report: Reforming the international monetary and financial system in the wake of the global crisis*. The New Press.

Subbarao, Duvvuri. 2012. “Financial regulation for growth, equity and stability in the post-crisis world.” *Bank for International Settlements BIS Papers* no. 62, pp. 1-8.

Tirole, Jean, 2010. “Lessons from the crisis: global lessons from the financial crisis.” In *Balancing the Banks*. Dewatripont M., J.C. Rochet, and J. Tirole (eds.) Princeton University Press.

Weil, David, N. “Capital and wealth in the 21st century.” *American Economic Review:* 105 (5).

RESOLUTIONS OF OIC *FIQH* ACADEMY

Islamic Economic Studies
Vol. 23, No. 2, November, 2015 (119-122)

In the Name of Allah the Most Gracious, the Most Merciful
All praise is to Allah, the Lord of all the worlds; and peace and blessings are upon our Prophet and Messenger Muhammad and His family and all His companions.

Resolution No. 195 (1/21)
On
Hedging in Financial Transactions

The council of the International Islamic Fiqh Academy IIFA, of the Organization of Islamic Cooperation (OIC), in its 21st session, held in Riyadh (Kingdom of Saudi Arabia), during the period Muharram 15-19, 1435H (November 18-22, 2013),

Having reviewed the research papers submitted to IIFA on “Hedging in Financial Transactions”, and listened to discussions on the subject,

Resolves the following:

- Postponement of issuing a resolution on this subject for conducting more research on hedging in Islamic financial institutions and Sharīʿah-acceptable alternatives of traditional hedging.

In the Name of Allah the Most Gracious, the Most Merciful
All praise is to Allah, the Lord of all the worlds; and peace and blessings are upon our Prophet and Messenger Muhammad and His family and all His companions.

Resolution No. 196 (2/21)
On
Conclusion of Discussion on "Islamic *Ṣukūk*"

The Council of the International Islamic Fiqh Academy (IIFA), of the Organization of Islamic Cooperation (OIC), in its 21st session, held in Riyadh (Kingdom of Saudi Arabia), during the period Muharram 15-19, 1435H (November 18-22, 2013),

Having reviewed the research papers submitted to IIFA on "Conclusion of discussion on Islamic *Ṣukūk*", particularly the issues of:

(1) Sharīʿah ruling on postponement of rent in specifically defined *Ijārah* (lease) transactions; and
(2) Sharīʿah ruling on negotiation of *Ṣukūk* of specific *Ijārah* before identification of subject matter of contract; and
(3) Criteria of *Taba'iyah* (Dependency) and *Ghalabah* (Predominance) and their typical cases,

And after listening to lengthy discussions on the subject,

Resolves the following:

Firstly: Sharīʿah Ruling on Postponement of Rent in "Specific *Ijārah*" Transactions:

(1) In leasing of specific benefits, which the lessee is to obtain in the future, rent can be paid instantly, in installments or deferred.
(2) In leasing of specific benefits, which the lessee is to obtain in the future, rent does not become due until the lessee is given full access to such benefits. If the lessee is not enabled to obtain the benefits during the period agreed upon no rent will become due.

(3) In hiring of services (which involve work) remuneration can be paid instantly; in installments; or deferred.

(4) These rulings on postponement of rent should by no means be used for practicing Sharīʿah-banned acts like "sale of debt for another debt", "earning of profit without provision of guarantee" and "sale of things" that are not owned.

Secondly: Sharīʿah Ruling on Negotiation of *Ṣukūk* of Specific *Ijārah* before Identification of Subject Matter of Contract

(1) IIFA reaffirms its Resolution No. 188 (3/20).

(2) It is not permissible to negotiate *Ṣukūk* of future *Ijārah* assets, before identifying the asset from which benefit is to be obtained.

(3) It is not permissible to negotiate *Ṣukūk* of services that are yet to be delivered unless the party from whom the services will be obtained is identified. *Ṣukūk* in this case are not negotiable except with full abidance by Sharīʿah controls on disposing of debts. When the party from whom services are to be obtained is identified *Ṣukūk* becomes negotiable.

(4) *Ṣukūk* that represent assets to be manufactured by an *Istiṣnāʿ* contract and are leased before actual commencement of manufacturing, are not negotiable.

Thirdly: Some Cases of *Ṣukūk* Issuance

(1) IIFA reaffirms its Resolution No. 188 (3/20).

(2) If the *Ṣukūk* represent assets of a project or a specific economic activity, and comprise real assets, money, debts and benefits, they become subject to item [3-(a)] of Clause (Fifthly) of Resolution No. 188(3/20), as follows:

   a. If debts and money are independent from real assets, benefits, administrative apparatus and principal economic activity, it is not permissible to issue and negotiate such *Ṣukūk* or units unless real assets and benefits constitute the predominant part of the whole.

   b. If ownership of the *Ṣukūk* or unitholders comprises the administrative apparatus and the economic activity that generates money and debts, and has its independent Sharīʿah and legal entity, then it becomes permissible to issue and negotiate the *Ṣukūk* or unit based on the principle of dependency.

c. Economic activity referred to in the preceding items is the business that generate debts and money in a Sharīʿah-acceptable way.

(3) IIFA reiterates what has been stated in item (1) Clause (Sixthly) of its Resolution No. 188 (3/20) that "The resolutions issued by IIFA are valid from date of issuance without affecting contracts that precede them including *Ṣukūk* issued on the basis of Sharīʿah-recognizable *Ijtihad* (Interpretative Judgement)".

(4) Regarding the two principles of *Taba'iyah* (Dependency) and *Ghalabah* (Predominance) the Council is of the view that issuing resolutions on them should be postponed to a later session and recommends mobilization of more research on the two subject.

EVENTS AND REPORTS

Islamic Economic Studies
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IRTI-WB Annual Symposium on Islamic Economics and Finance

The Inaugural Islamic Economics and Finance Symposium was held on September 8-9, 2015, at Boğaziçi University, Istanbul. It was jointly organized by Islamic Research and Training Institute (IRTI), Islamic Development Bank (IDB), the World Bank Group`s Global Islamic Finance Development Center (GIFDC), BORSA İstanbul and Guidance Financial Group. The symposium brought together a broad range of participants from the academia, policy-making circles, and the private sector.

The main aim of the annual symposium was to promote exchange of cutting-edge ideas and foster free discussion on Islamic finance among academicians, policy makers, the private sector and development practitioners. The theme of the 2-day Inaugural Symposium was ***Islamic Finance: A Catalyst for Shared Prosperity***. It was in resonance to the emphasis of Islamic finance on risk sharing in financial and social contracts. While research on Islamic economics and finance has progressed in many areas, important aspects of risk sharing and its relevance to shared prosperity are yet to be explored and developed. The keynote addresses and the papers presented focused on these aspects and contributed towards a better understanding of the role that Islamic finance can play in promoting inclusive growth, reducing inequality, and accelerating poverty reduction.

Welcoming and opening remarks were made by Dr. Zamir Iqbal (Head of World Bank Group`s Global Islamic Finance Development Center (GIFDC)), Dr. Ali Coşkun (President, Center for Applied Research in Finance (CARF), Boğaziçi University), Dr. Talat Ulussever (Chairman, BORSA İstanbul), Prof. Mohamed Azmi Omar (Director General, Islamic Research and Training Institute (IRTI)), and Dr. Mohamad Hammour (Chairman, Guidance Financial Group).

The Keynote speakers in various sessions were; Dr. Andrew Sheng via Skype VC, (Distinguished Fellow, Fung Global Institute); Prof. Dr. Abbas Mirakhor (First Holder, INCEIF Chair of Islamic Finance), Dr. Muhammed Umer Chapra, Prof. Hossein Askari, and Prof. Dr. Murat Çizakça. In addition, twelve papers were presented by scholars and practitioners. These papers analyzed the potential and

actual contribution of Islamic finance to shared prosperity, opening up new questions and directions for further analysis. The full program and presentations are available online at
http://www.worldbank.org/en/events/2015/09/08/inaugural-annual-symposium-on-islamic-finance#2

The best paper award went to Luqyan Tamanni from University of Glasgow for his paper entitled "Islamic Microfinance Institutions: Pro-poor or for profit?" co-authored with Frank Hong Liu.

Summarized by Salman Syed Ali &Turkhan Ali

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Islamic Social Finance Report 2015

The present issue of the Islamic Social Finance Report 2015 focuses on the *zakāh*, *awqāf* and Islamic microfinance sectors in six countries in the sub-Saharan Africa - Sudan, Nigeria, Kenya, Mauritius, South Africa and Tanzania. This is in continuation of the 2014 issue of ISFR focusing on six countries in South and South East Asia.

The Report has benefited from the comments of and presentations by several scholars and representatives of Islamic organizations from the region under focus. Most of them actively participated in the preparatory events for the study that included a workshop on *Awqāf* in association with *Awqāf* S.A. at Pretoria, South Africa and a workshop on *Zakāt* in association with the South African National *Zakāt* Foundation (SANZAF) at Cape Town, South Africa. These were attended by participants from over ten countries in the region.

The Report has been prepared by an internal team of IRTI researchers with additional contribution from scholars and practitioners from Sudan, Nigeria, Mauritius and South Africa. The Report also benefitted from external contributors.

Major findings of this Report were presented at the 10th IDB Global Forum on Islamic Finance on “Exploring Innovative Solutions for Affordable Microfinance in Africa” held in Maputo, Mozambique in June 2015.

A brief summary of key findings of the Report is presented below.

Comparing *zakāt* potential of the sampled countries with their resource requirement to alleviate poverty, it is found that countries like Sudan, Nigeria and South Africa can easily generate resources for poverty alleviation. However, actual *zakāt* collected falls far short of the potential. There is a strong need therefore, to enhance professionalism and efficiency in *zakāt* management and to ensure a movement away from individual to institutional management of *zakāt*.

There is great diversity in the *zakāt* management practices. Unlike South and South East Asian countries, in most Sub-Saharan African countries a major part of *zakāt* is in the nature of in-kind *zakāt* in the form of crops and livestock. Collection of in-kind *zakāt* from the actual locations, e.g. farms that are stretched far and wide entails huge collection costs. Therefore, the cap on operational costs that is traditionally placed on one-eighth of *zakāt* funds collected in South East Asia needs to be revisited.

Sudan provides supporting evidence for compulsory *zakāt*. The voluntary *zakāt* organizations in South Africa have also generally reported good performance. Irrespective of whether *zakāt* is compulsory or voluntary, a policy of decentralization seems to have paid off. Thus, *zakāt* is observed to be institution-elastic. It is the presence of a network of healthy institutions at multiple levels – in public or private domain - that seems to lead to greater public awareness and greater public participation in the process of poverty alleviation through *zakāt*.

The issue of incentivizing *zakāt* payment is quite crucial. Where *zakāt* payment is made compulsory and non-compliance invites penalties and punishment, weak enforcement can cause *zakāt* collection to be poor. Where *zakāt* collection and distribution is entrusted entirely to the state, *zakāt* may be seen as a component of aggregate resources available to the state. In this sense, *zakāt* payment may be seen as a perfect substitute of the direct taxes to the state and may be allowed as deductions to tax payable. However, there must be absolute clarity on the issue as well coordination between *zakāt* and Inland Revenue bodies.

The following are the major findings in relation to the *waqf* sector.

Waqf law should provide a comprehensive definition of *waqf* that includes both permanent and temporary *waqf*. It must explicitly cover various types of *waqf*: family and social *waqf*, direct and investment *waqf*, cash *waqf*, corporate *waqf*.

Preservation of *waqf* is undoubtedly the most important concern in *waqf* management. The legal framework must clearly articulate that all *awqāf* (with the exception of temporary *waqf* or *waqf* for a finite time period) must be governed by the principle of "once a *waqf*, always a *waqf*". In case old laws fail to ensure protection, they must be replaced with new provisions that enable recovery of lost *waqf* assets.

While preservation is important, law must clearly recognize the importance of sustaining and enhancing the benefits flowing out of the *waqf*, this being the ultimate purpose of the act of *waqf*. This is possible only when the importance of development of *waqf* is clearly recognized. An undue emphasis on preservation (e.g. constraints on leasing) would lead to neglect of developmental possibility with private participation. Similarly, an undue emphasis on development, to the extent that it results in loss of full or partial ownership of asset to private developers) would dilute and vitiate the very concept of *waqf*. The regulatory framework must seek to strike a balance between concerns about preservation and development.

The legal framework must not put undue restriction on creation of new *waqf*. Legal requirements that make the process more difficult, e.g. approval of the head of the state, are both unnecessary and undesirable. A simple process of registration with the regulatory body is both desirable and adequate. While obstacles to *waqf* creation must not be there, the legal framework should actually encourage creation of new *waqf* by minimizing financial and non-financial costs of *waqf* creation and management.

Most observers and scholars of *waqf* believe that the institution of family *waqf* must be revived. The laws should consider explicit provisions, such as, the possibility of restricting the benefits to one or two generations, the method of distribution of *waqf* benefits etc. with adequate clarity.

Waqf is an institution originally and always meant to be in the voluntary sector with management of *waqf* entrusted to private parties. However, state has often sought to play a role in the ownership and management of *awqāf*, at times governed by motives to expropriate and at other times, by need to curb corrupt practices of private trustee-managers. Whether ownership and management of *awqāf* should be in private hands or with the state has no clear answer. There is mixed evidence from both public management as well as private management.

Where *waqf* management is in private hands as in case of Mauritius, the state agency as regulator should clearly stipulate elaborate and clear eligibility criteria for a mutawalli or nazir or trustee-manager not only covering aspects of integrity and trust-worthiness but also professional competence. Given that the individual or institution so nominated meets the criteria, the regulator must respect the expressed intention the waqif or endower. Laws must clearly articulate the responsibility of *waqf* management that should not only emphasize preservation and protection of *waqf* assets, but also their development. The responsibility should also include transparent and honest reporting of financials. Laws must clearly stipulate the method of determination of remuneration of managers, sufficiently incentivizing sound and professional management of *waqf* assets.

There is every reason for the state to take punitive action against mutawallis who fail the tests of efficiency, integrity, transparency. The measures must act as effective deterrent against further acts of apathy, neglect and misappropriation. At the same time, the state should not be allowed to wield absolute power to engage in irrational or whimsical action against the mutawalli. Instances of unfair and unlawful action by state are numerous, as are cases of corrupt mutawallis. There need to be effective checks and balances in the law against wrongful acts by both the state as well as the private mutawallis. Power has a tendency to corrupt and the possibility of such action can significantly increase the non-financial cost of creating new *waqf*. Endowers are likely to seek alternative forms of organizing their charitable activities if there is a possibility of undue state interference in the management of the endowed assets or outright usurpation of the endowed assets by the state.

Zakāt and *awqāf* management in Sub-Saharan Africa in general seems to have suffered a great deal due to absence of meso-level organizations, e.g. networks, training and education providers, consultancy and standard-setting bodies and advocacy organizations. As a result, public awareness about these institutions is extremely low in many part of the region. Data is extremely scarce. Capacity building is extremely important but neglected. A major change in mindset of all stakeholders is needed. There is a lot to be done in the matter of improving the administration and governance and disclosures. Transparency and accountability is a precondition to credibility and fund raising.

The Report includes several case studies on integration of *zakāt* and *waqf* with microfinance for provision of safety nets, provision of social goods and affordable financial services. The key lessons from these case studies are highlighted below.

- A review of various Islamic modes that are used for provision of finance to farmers reveals that there is no one-size-fits-all mode, even though *bayʿ salam* is widely seen to be the appropriate mode for agricultural finance.

- Islamic finance discourages debt-based products and encourages equity and partnership based products in general. Given that conventional MFIs derive their income from interest, they seem to be inclined to push their clients into larger and larger amounts of debt. In the Islamic approach, debt is not just discouraged; there are built-in mechanisms, such as *zakāt* to address over-indebtedness of an individual.

- Islamic finance requires "simplicity" in contracts where the rights and obligations of the parties are well understood by them. Even where an Islamic finance model includes future obligations, or composite structures, the uncertainty and ambiguity factor is kept to the minimum. The diminishing *mushārakah* based models used in Sudan are apparently complex but quite "definitive" in terms of transfer of ownership of the key assets into the hands of farmers over a finite period.

- While credit and finance are key inputs for transforming the lives of the farmers, they often require a wide range of non-financial services. Identifying these non-financial needs and finding creative and innovative solutions thereto is critical for success of any intervention.

- A related question is how these non-financial services are to be funded. Should they be priced? Should the farmers pay for these services? The cases highlight both commercial and philanthropic approaches to the issue.

- MFIs that focus on financing the need for physical assets by farmers through conventional or Islamic credit, or through leasing often ignore the importance of providing for basic consumption needs. It should not come as a surprise if farmers resort to diversion of funds from the so-called income-generating project or even distress sale of the assets (funded by MFIs) if the basic consumption needs remain unfulfilled.

- The projects discussed in this study not only seek to leverage existing skills, but also develop new skills, such as in the application of better farming technology on a sustained basis. The projects use an approach similar to conventional venture capital funding (with some differences, of course) and focus on the economic viability of project. They carefully seek to identify risks and mitigate them. They also provide a unique example of combining benevolence with commercial viability.

- In confronting the multitude of challenges facing the poor farming communities, the MFIs may have to limit their outreach significantly. While in case of credit-based finance, the size of financing per beneficiary is very small, the same is very high in case of project-based approaches that seek to finance the entire value-chain.

- Grant money or cash flows from dedicated *awqāf* may be used to absorb operational cost, thereby making it possible to offer financing at a modest rate. Given the widely expressed concern about affordability of high-cost microfinance, such a possibility offers great promise.

Summarized by Mohammed Obaidullah

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Policy Report on "Leveraging Islamic Finance for SMEs"

Published by:

The World Bank
Islamic Development Bank and Islamic Research and Training Institute

The World Bank, Islamic Development Bank (IDB) and Islamic Research and Training Institute (IRTI) undertook a joint study leading to a policy report on "Leveraging Islamic Finance for SMEs". The report was partly a contribution from the World Bank and IDB-IRTI for the G20 priority agenda for 2015. The main objective of the report is to analyze the potential of Islamic finance for the development of the Small and Medium Enterprises (SMEs) sector, with a view to making policy recommendations to leverage Islamic finance as viable long-term investment financing for SMEs. Specifically, the report discussed the challenges of unlocking the potential of Islamic finance; examined the drivers and obstacles pertaining to SME financing through Islamic financial instruments and institutions (IFIs); and identified actions that can be taken by authorities and relevant policy makers to improve the asset-based and equity finance for SME sector through Islamic financial institutions and markets. The report is consists of two chapters and an Appendix:

Chapter 1: Islamic Banking and SME Financing

Chapter 2: Mobilizing Non-Banking Financial Channels

Appendix A: Comparison of Model Law Provisions and Sharīʿah Principles

Chapter 1 of the report provides an overview of the legal and regulatory framework, the state of the financial sector infrastructure, opportunities and challenges in mobilizing finance for SMEs and banking sector limitations in terms of capacity and technology. It also analyzes SME specific factors, particularly the SMEs landscape in terms of number, size, and focus of operation, as well as the opaqueness of information. The chapter highlights that access to finance is one of the most formidable challenges facing SMEs, particularly in the least-developed-member-countries (LDMC). Given their low capital base, the availability of financial resources is essential for the SMEs growth. Despite the recent growth of Islamic financial institutions and the development of new Islamic financing products, the environment is not favorable for Islamic finance to play a vital role in the development of SMEs. This chapter concludes with some recommendations and identifies key reform areas.

Chapter 2 of the report explores the enabling environment for non-banking sector and capital markets for Islamic financing of SME sector. It provides analysis of the development of SME Stock Exchanges (i.e. Nilex), non-banking financial services such as leasing, crowdfunding, and venture capital and SME Private Equity Funds. The chapter also discusses issues concerning the structuring, governance, and guarantees for SMEs sector. The report highlights that lack of collateral is the main obstacle for IFIs to provide financing to SMEs. While land and buildings are widely accepted as collateral for loans, the use of movable collateral (such as inventory, accounts receivables, crops and equipment) is restricted because many countries do not have functioning laws and registries to govern secured transactions. Reforming the framework for movable collateral lending allows businesses - particularly SMEs - to leverage their assets into capital for investment and growth.

Finally, the report provides the analysis to reform the framework for movable collateral lending, allowing businesses - particularly SMEs - to leverage their assets into capital for investment and growth through Islamic financing markets. The analysis suggests that Modern Secured Transactions Registries increase the availability of credit and reduce the cost of credit. The primary beneficiaries of the reform are financial intermediaries such as banks, non-bank financial institutions, micro finance companies, factoring institutions and other creditors. This analysis also provides an in depth research to assess the extent to which a modern secured transactions framework is compatible with the Islamic Law (Sharīʿah) and therefore what elements of the legal framework can support IFIs to introduce or deter them from developing movable asset based lending products. The analysis provides one-to-one comparison of model law provisions and Sharīʿah principles, and suggestion for reconciliation, but subject to further explication and interpretation by the various schools of Islamic jurisprudence.

The full report is downloadable from:
http://www.irti.org/English/News/Pages/Official-Launch-of-Islamic-SMEs-Finance-Report-and-International-SMEs-Conference-2015.aspx

Summarized by Muhamed Zulkhibri

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A Course in Liquidity Management in Islamic Banking

A 5-days course on the Liquidity Management was conducted in Karachi, Pakistan in collaboration with State Bank of Pakistan during 5-9 October, 2015. It addressed Liquidity Risk Management strategies in banking industry in general and development of comparable methods that suit liquidity risk management in Islamic banking industry in particular.

The main objectives of the course were:

- To allow participants to learn about the nature and characteristic features of techniques of Liquidity Management that can be used for providing banking services in compliance with Sharīʿah rules.
- Study the main elements of Liquidity Management in Islamic Banks in comparison to Conventional Banks. Explore empirical case studies of Sharīʿah -compliant Liquidity Management practices with special reference to experiences of some Islamic financial institutions and Regulatory Bodies in IDB Member Countries.

Summarized by Osman Babiker

ABSTRACTS OF ARTICLES PUBLISHED IN *DIRASAT IQTISADIAH ISLAMIAH* IN VOL. 21 No. 2

Islamic Economic Studies
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هل يعود بريق الدينار الذهبي الإسلامي للتعامل في اقتصاديات الدول المسلمة؟
رؤيـة استشرافيـة لمستقبـل التعاملات النقديـة المعـاصر

د. ضرار الماحي العبيد أحمد[1]

مستخلص

(Published in Dirasat Iqtisadiah Islamiah Vol. 21 No.2)

يأتي هذا البحث مكملاً للمناشدات والنداءات المتكررة التي تطالب بضرورة إدخال الإصلاحات الجذرية في النظام النقدي العالمي والتفكير في نظام نقدي بديل آخر أكثر استقراراً، خاصة في ظل تكرار وقوع الأزمات المالية العالمية. حيث تناول البحث قضية التعامل بالعملات المعدنية الثمينة، خاصة الذهب والفضة في المعاملات التجارية وإمكانية عودة نظام قاعدة الذهب بديلاً للنظام النقدي العالمي. وحاول البحث طرح العديد من التساؤلات المهمة المتعلقة بالتحديات التي تواجه النظام النقدي العالمي الحالي وكذلك السيناريوهات المتاحة أمام البديل النقدي الآخر. وقد استخدم البحث المنهج الوصفي التحليلي بالإضافة إلى المنهج التاريخي والدروس المستفادة من تجارب بعض الدول في استخدام العملات المعدنية الثمينة في العصر الحالي. وتوصل البحث إلى جملة من النتائج من أهمها أن الفترات التي تم فيها تبني نظام الذهب نظاما نقدياً للتبادل كانت أكثر

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استقراراً، خاصة خلال فترات الأزمات المالية العالمية، وبالتالي يمكن أن يكون خياراً أفضل في سبيل تحقيق عودة الاستقرار المالي والاقتصادي والنمو المستدام. ويوصي البحث بضرورة التفكير الجاد في العودة إلى نظام قاعدة الذهب ليكون نظاماً نقديا عالميا بديلاً للنظام النقدي السائد حالياً.

Would the Shine of Islamic Golden Dinar returns again for Transactions in Economies of Muslim Countries? Future Perspective of Current Monetary Transactions

Dr. Dirar Al-Mahi El-Obaid Ahmed•

Abstract

This research tries to answer repetitive appeals and calls for necessary radical reforms in the global monetary system and thinking of adopting an alternative monetary system that is more stable especially within the recurrent financial crises. The research deals with the issue of the precious metal currencies such as gold and silver in commercial transactions and a return to gold currency standard as an alternative to the global monetary system. The research attempts to raise many important questions related to challenges facing the current global monetary system and the available scenarios vis-à-vis the other alternative monetary system.

The research adopts the analytical descriptive method, historic method and lessons learnt from experiences of some countries in using precious metal currencies in the current era. The research reaches a number of outcomes. The most important of these outcomes is that the periods when gold was adopted as a monetary system of transaction there was more stability especially during the global financial crises. Henceforth, this could be the best option in achieving financial and economic stability and sustainable growth. The research recommends a return to the gold currency standard to be a global monetary system in order to replace the current monetary system.

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دور الزكاة في تحقيق العدل الاجتماعي

تجربة ديوان الزكاة –السودان

د.مصطفى محمد مسند[2]

مستخلص البحث

لقد جاء هذا البحث متنأولاً لدور الزكاة في تحقيق العدل الاجتماعي، وتنبع أهميته من أن معظم الأبحاث والكتب التي صـدرت عن الزكاة تنأولت الدور الاقتصـادي والاجتماعي للزكاة، بينما يبرز هذا البحث دور الزكاة في تحقيق العدل الاجتماعي مع الأخذ في الاعتبار تجربة السـودان الذي يطبق هذه الفريضة من خلال مؤسسة لها استقلاليتها وشخصيتها الاعتبارية (ديوان الزكاة).

وتتلخص مشكلة البحث في أن الزكاة في جانب مصارفها تهدف إلى تحقيق التنمية الاقتصادية والعدل الاجتماعي وتخفيف حدة الفقر، إلا أن زيادة عدد السـكان وارتفاع معدلات الفقر عند مقارنتها بالموارد الفعلية للزكاة بالإضافة لعدم الثقة المتبادلة بين الكثير من موظفي الديوان، وكثير من دافعي الزكاة قد يضـعف من تحقيق هذه الأهداف. وللوقوف على دور الزكاة في تحقيق العدل الاجتماعي واختبار الفرضيات التي تمت صياغتها فلقد اشتمل البحث على مقدمة وخمسة محأور، تنأول المحور الأول الدور الاقتصادي والاجتماعي للزكاة، واستعرض المحور الثاني علاقة الزكاة بالعدل الاجتماعي، أما المحور الثالث فهو عن تجربة الزكاة في السـودان في تحقيق متطلبات العدل الاجتماعي، واشتمل المحور الرابع على اختبار فرضيات البحث، وتنأول المحور الخامس أهم النتائج والتوصيات التي توصل إليها البحث.

ولقد توصل البحث إلى عدد من النتائج، منها حرص الإسلام على استقلال ميزانية الزكاة حماية لمستحقيها، وتطبيق ديوان الزكاة في السـودان لمبدأ المفاضـلة بين المصـارف (عدم الصـرف عليها بنسب متسأوية) تمشياً مع المصلحة الشرعية، وضعف نسبة جباية الزكاة للناتج المحلي الإجمالي مما يشـير إلى وجود أموال خاضـعة للزكاة لم تصـل إليها الأجهزة الإدارية، وتمركز تمويل محفظة الأمان

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بعواصم الولايات وعدم انتشاره بالريف. أما أهم التوصيات فلقد اشتملت على ضرورة مضاعفة ديوان الزكاة لجهوداته للوصول إلى الأوعية الزكوية التي لم يصل إليها بعد لتضييق الفجوة فيما بين حصيلة الزكاة وعدد الفقراء والمساكين غير المستفيدين، وتحديد دور اللجان القاعدية للزكاة وتفعيلها في الجباية والصرف، وإيجاد آلية يستطيع من خلالها ديوان الزكاة تحصيل زكاة المال المستفاد من البائع مباشرة، وضرورة تبني ديوان الزكاة لمشروع محفظة تشارك فيه مؤسسات الدولة والجهات الخيرية المختلفة التي تعمل في مجال مكافحة، وضرورة انتشار التمويل عبر محفظة الأمان في الريف وعدم تمركزه داخل عواصم الولايات.

الكلمات المفتاحية للبحث: الزكاة – العدل الاجتماعي – ديوان الزكاة السوداني – تخفيف حدة الفقر – محفظة الأمان.

The Role of *Zakāt* in Realization of Social Justice Experience of *Zakāt* House – Sudan

Dr. Mustafa Mohamed Masnad•

Abstract

This research explores the role of *zakāt* in realization of social justice. Most researches and books that are written on *zakāt* focused on the socio-economic role of *zakāt*, while this research emphasizes the role of *zakāt* in realizing social justice taking into consideration Sudanese experience, which applies this religious obligation via an institution that has its independence and legal personality (*Zakāt* house).

The research problem is summarized partially that *zakāt* pursues objectives of achieving economic development, social justice and alleviation of poverty. However, the increasing population, high level of poverty when compared with actual *zakāt* resources and lack of mutual trust among many employees of the House and many of *zakāt* payers, has affected the pursuit of realizing *zakāt* objectives. Therefore, the research is divided into an introduction and chapters to identify *zakāt* role in realizing social justice and in order to test the assumptions. The first chapter explores the economic and social role for *zakāt*, the second chapter discusses the

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relation between *zakāt* and social justice, the third chapter focuses on the experience of *zakāt* in the Sudan, the fourth chapter dwells on testing the assumptions and the fifth chapter explores the important research outcomes and recommendations.

The research has reached a number of outcomes such as: eagerness of Islam to entrench *zakāt*'s budget independence for recipients, application of the principle of equity-distinction on the channels of routing *zakāt* funds (disbursing funds in an unequal manner) in observance of public interest. That principle may be reverted to due to weak impact of *zakāt* collection on the gross domestic product. This indicates that there are some *zakāt* funds that are not collected by the administrative authorities and concentration of collection portfolio in urban areas and lack of presence in the rural areas. Important recommendations focus on necessity of exerting more efforts by *Zakāt* House to reach more *zakāt* payers in order to bridge the gap between *zakāt* proceeds and the beneficiaries from the poor categories. Local committees shall also be strengthened to play better role in collection of *zakāt*. A mechanism should be found for better collection of *zakāt* by *Zakāt* House directly from the seller. *Zakāt* House shall adopt a safety portfolio project where all state institutions and different philanthropic entities could participate in collecting *zakāt* funds. This portfolio shall cover rural areas as well instead of concentrating on major cities only.

Keywords: *zakāt*, social justice, Sudanese *zakāt* house, poverty alleviation, safety portfolio.

دور المراجع الشرعي الخارجي في تفعيل الحوكمة الشرعية بالمؤسسات المالية الإسلامية

أ. حكيم براضية[3]

مستخلص

هدفت هذه الدراسة إلى التعرف على واقع وأهمية المراجع الشرعي الخارجي بالمؤسسات المالية الإسلامية وكيف يساهم في تفعيل الحوكمة الشرعية، من خلال سرد أنواع المراجعة الشرعية وعلاقتها بأنواع الرقابة الشرعية وعرض نماذج الرقابة الشرعية حالياً مع محاولة تصور مكانة المراجع الشرعي الخارجي في المؤسسات المالية الإسلامية وكيف يجب أن يكون، والتعرف على واقع الحوكمة الشرعية

[3] أستاذ مساعد بالمركز الجامعي تيسمسيلت الجزائر.

بالمؤسسات وسبل تفعيلها. وخلصت الدراسة إلى أن التحقق من قيام المؤسسة بالالتزام بالأحكام الشرعية في أعمالها هو واجب إيماني وضرورة شرعية، ولا يكتمل واجب انضباط المؤسسات المالية إلا بفحص وتدقيق المراجع الشرعي الخارجي لأعمالها. ويجب أن يتمتع المراجع الشرعي بالاستقلالية والقوة الفنية والمصداقية، مما يضمن تحقيق الحوكمة الشرعية وحماية الصناعة المالية الإسلامية ومصالح الأطراف ذات العلاقة.

الكلمات المفتاحية: المراجعة الشرعية، هيئات الرقابة الشرعية، الحوكمة الشرعية، المؤسسات المالية الإسلامية.

The Role of External Auditor in Empowering Legitimate Governance in Islamic Financial Institutions

Prof. Hakim Bradhiah•

Abstract

This study aims at identifying the reality and importance of the Sharīʿah external auditor in the Islamic financial institutions and its role in empowering the institutional governance. This empowerment takes shape through bringing up different kinds of legitimate auditing and strengthening their relation with different ombudsman's authorities and exploring examples of Sharīʿah supervision while attempting to visualize the status of external Sharīʿah auditing the Islamic financial institutions and how it should be realized. It also seeks to recognize the reality of Sharīʿah governance and the means of its empowerment.

The study concludes that the relevant institution should commit itself to Sharīʿah provisions in its activities. This is a commitment based on belief and Sharīʿah legitimate necessity. The discipline of financial institutions cannot be complete without proper auditing from an external auditor to vet these activities. The external Sharīʿah auditor shall commit itself to independence, technical quality and integrity in order to guarantee Sharīʿah governance and protect the Islamic finance and interests of relevant stakeholders.

Keywords: Sharīʿah auditing, Sharīʿah supervisory bodies, Sharīʿah governance, Islamic financial institutions.

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The focus of this book is on financial products and infrastructure innovation for housing finance. It quantifies the demand for housing in IDB member countries, estimates the financial gap, and evaluates the current Islamic house financing models and practices in the IDB member countries and elsewhere in the world. It also identifies niche areas where intervention by the IDB Group can promote development of housing sector to meet the housing needs in its member countries.

Lectures

☐	**THE MONETARY CONDITIONS OF AN ECONOMY OF MARKETS: FROM THE TEACHINGS OF THE PAST TO THE REFORMS OF TOMORROW (1993),** pp.64 *Maurice Allais* This lecture by the nobel laureate covers five major areas: (1) potential instability of the world monetary, banking and financial system, (2) monetary aspects of an economy of markets, (3) general principles to reform monetary and financial structures, (4)review of main objections raised against the proposed reforms and (5) a rationale for suggested reforms.	**Price $ 10.00**
☐	**THE ECONOMICS OF PARTICIPATION (1995),** pp.116 *Dmenico Mario Nuti* A case is made that the participatory enterprise economy can transfer dependent laborers into full entrepreneurs through changes in power sharing, profit sharing and job tenure arrangements.	**Price $ 10.00**
☐	**TABUNG HAJI AS AN ISLAMIC FINANCIAL INSTITUTION: THE MOBILIZATION OF INVESTMENT RESOURCES IN AN ISLAMIC WAY AND THE MANAGEMENT OF HAJJ (1995),** pp.44 It provides history and objectives of Tabung Haji of Malaysia, outlines saving and investment procedures of the Fund and gives an account of its services to *hajjis*.	**Price $ 10.00**
☐	**ISLAMIC BANKING: STATE OF THE ART (1994),** pp.55 *Ziauddin Ahmad* The paper reviews and assesses the present state of the art in Islamic banking both in its theoretical and practical aspects.	**Price $ 10.00**
☐	**ROLE OF ISLAMIC BANKS IN DEVELOPMENT (1995),** pp.54 *Ahmad Mohamed Ali* The paper analyses the concept of development from an Islamic perspective, highlighting the role of Islamic banks in achieving the same.	**Price $ 10.00**
☐	**JURISPRUDENCE OF *MAṢLAḤAH* AND ITS CONTEMPORARY APPLICATIONS (1994),** pp.88 *Hussein Hamid Hassan* The paper discusses the Islamic view as well as applications of *Fiqh al Maṣlaḥah* in the field of economic and finance.	**Price $ 10.00**
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☐	***ISTIHSAN* (JURISTIC PREFERENCE) AND ITS APPLICATION TO CONTEMPORARY ISSUES (1997),** pp.148 *Mohammad Hashim Kamali* The lecture deals with an important subject. It is a common knowledge that Qur’an and *Sunnah* are the primary sources of Islamic jurisprudence. It presents a cross section of Islamic legal issues, which are of vital importance to Islamic countries.	**Price $ 10.00**

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Monzer Kahf
IDB Prize Lectures analyses the concept of sustainable development from an Islamic perspective and surveys the state of development in Muslim countries.

Others

☐ **TRADE PROMOTION ORGANIZATIONS IN OIC MEMBER COUNTRIES (1994),** pp.40 **Price $ 10.00**
A directory of trade promotion organizations. A reference for those interested in trade promotion in OIC member states.

☐ **A BIBLIOGRAPHY OF ISLAMIC ECONOMICS (1993),** pp.840 **Price $ 20.00**
A very significant bibliography of Islamic economics organized according to (1) Call Number Index, (2) Descriptor Index, (3) Subject Term Index for Call Numbers, (4) Author Index (5) Corporate Author Index.

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It serves as a useful and up-to-date guide to fertilizer industry, technology and trade in OIC member countries.

☐ **CEMENT INDUSTRY IN OIC MEMEBR COUTNIRES – (SECOND EDITION) (1993),** pp.560 — **Price $ 20.00**

It is a guide to the Cement industry in the OIC member countries to promote trade among them in the area of cement and to enhance the quality and productivity of cement.

☐ **FINANCIAL DEVELOPMENT IN ARAB COUNTRIES (BOOK OF READINGS, No.4) (2005)**, pp.298 — **Price $ 20.00**

This book of readings provides fruitful policy recommendations on various financial development issues in the Arab World such as operational efficiency and service quality in banking. It also examines different aspects related to stock markets development such as efficiency, volatility, hedging, and returns

Actes de Séminaires

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Comme institution consacrée à l'organisation du pèlerinage, TABUNG HAJI (Conseil de Direction des Pèlerins) a servi comme modèle type à cette journée d'étude.

☐ **L'ADMINISTRATION PUBLIQUE DANS UN CONTEXTE ISLAMIQUE (1995),** 150 pages — **Prix $ 10.00**

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Outre l'histoire de l'administration en Islam, cet ouvrage traite de nombreux aspects tant théoriques que pratiques de l'administration d'un point de vue islamique et qui touchent à l'actualité du monde islamique.

☐ **LA ZAKĀT: ASPECTS JURIDIQUES, ECONOMIQUES ET SOCIAUX (1995),** 248 pages — **Prix $ 20.00**

Boualem Bendjilali and *Mohamed Alami (éd.)*

Actes de séminaire sur LA ZAKĀT dont l'objectif est d' ouvrir de nouvelles voies à la reflexion et de faire connaître les concepts, la méthodologie et les principes de base de la collecte et de la répartition de la Zakāt.

☐ **DEVELOPPEMENT D'UN SYSTEME D'INSTRUMENTS FINANCIERS ISLAMIQUES (1995),** 328 pages — **Prix $ 20.00**

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Actes de séminaire dont l'objectif principal était d'identifier les voies et moyens pour l'émission d'instruments financiers islamiques viables qui pourraient préparer le terrain à une mobilisation efficace des ressources financières dans les pays membres de la BID.

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Actes de séminaire don't l'objectif principal était d'offrir aux cadres supérieurs des pays francophones membres de la BID une introduction d'ordre théorique et pratique sur les modes de financement islamiques utilisés par les banques et les institutions financières islamiques.

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Actes de séminaire sur la promotion et financement des micro-entreprises qui peuvent être utiles à tous ceux, décideurs, hommes et femmes du terrain, soucieux de faire de la micro-entreprise un outil efficace et durable de lutte contre la pauvreté.

☐ **LA ZAKĀT ET LE WAQF : ASPECTS HISTORIQUES, JURIDIQUES, INSTITUTIONNELS ET ECONOMIQUES (1998),** 387 pages **Prix $ 20.00**
Boualem Bendjilali (éd.)
Actes de séminaire qui visent à faciliter l'accès des lecteurs francophones à la littérature sur l'économie islamique en général et la Zakāt et le Waqf en particulier.

☐ **LES MODES DE FINANACEMENT ISLAMIQUES (1993),** 48 pages **Prix $ 10.00**
Boualem Bendjlali (éd.)
Rapport d'un séminaire sur les modes de financement islamiques tenu en Mauritanie en 1413H (1992).

☐ **LES SCIENCES DE LA CHARI'A POUR LES ECONOMISTES: LES SOURCES DU FIQH, SES PRINCIPES ET SES THEORIES; LE FIQH DES TRANSACTIONS FINANCIERES ET DES SOCIETES; ET SON APPLICATION CONTEMPORAINE (2001),** 572 pages **Prix $ 25.00**
Boualem Bendjilali (éd.)
Actes de séminaire sur les sciences de la Chari'a pour les économistes dont l'objectif principal est de servir comme outil de base aux chercheurs, étudiants et enseignants en économie islamique sur les sources du *Fiqh.*

Recherches

☐ **LA COOPERATION ECONOMIQUE ENTRE LES PAYS DU MAGHREB (1985),** 138 pages **Prix $ 10.00**
Ridha Saadallah
Cet ouvrage traite de nombreux thèmes dont les ressources naturelles et humaines au Maghreb, le potentiel de coopération agricole et industrielle au Maghreb, etc.

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☐ **LA MOUDHARABA SELON LA CHARI'A ET SES APPLICATIONS CONTEMPORAINES (1994),** 83 pages **Prix $ 10.00**
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☐ ***JOUALA* ET *ISTISNA,*** **Prix $ 10.00**
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Chaouki Ahmed Donia
L'intérêt de cette recherche réside dans le fait qu'elle aborde un nouveau domaine d'application des transactions économiques islamiques se basant sur deux contrats, à savoir "La Jouala et L'Istisna".

☐ **LA PROPRIETE FONCIERE EN ISLAM (1994) *(Enquête),*** 52 pages **Prix $ 10.00**
Mahmoud A. Guilaid
Le but de cette étude est d'examiner les questions les plus importantes concernant le droit de propriété foncière en Islam.

☐ **LES RELATIONS COMMERCIALES ENTRE LE CONSEIL DE COOPERATION DU GOLFE ET LA COMMUNAUTE EUROPEENNE (1995),** 152 pages, **Prix $ 10.00**
Du Passé Récent au Lendemain de 1992
Ridha Mohamed Saadallah
Cette étude procède à une analyse minutieuse des statistiques passées, des échanges commerciaux entre les pays du CCG et ceux de la Communauté Européenne en vue de dégager les tendances profondes et les caractéristiques structurelles du commerce Euro-Golfe.

☐ **ERADICATION DE LA PAUVRETE ET DEVELOPPMENT DANS UNE PERSPECTIVE ISLAMIQUE (1995),** 180 pages **Prix $ 10.00**
Abdelhamid Brahimi
Cette recherche, divisée en deux parties, traite dans la première des facteurs internes et externes de blocage et de l'impasse. La seconde est consacrée à la conception et à la mise en oeuvre de politiques économiques dans une perspective islamique.

☐ **JUGEMENT DU TRIBUNAL FEDERALISLAMIQUE DU PAKISTAN RELATIF A L'INTERET *(RIBA)* (1995),** 478 pages **Prix $ 25.00**
Ce document constitue un outil de travail et une référence indispensables à tous ceux, parmi les décideurs politiques et chercheurs dans les pays membres de la Banque, qui sont désireux de voir se développer l'alternative d'un système financier exempt d'intérêt.

Eminents Spécialistes

☐ **LES CONDITIONS MONETAIRES D'UNE ECONOMIE DE MARCHES DES ENSEIGNEMENTS DU PASSE AUX REFORMES DE DEMAIN (1993),** 64 pages **Prix $ 10.00**
Maurice Allais (Prix Nobel d'Economie - 1988)
L'auteur, dans son examen, critique du système monétaire international, appelle à des réformes tant économiques que morales.

☐ **JURISPRUDENCE DE LA *MAṢLAḤAH* ET SES APPLICATIONS CONTEMPORAINES (1995),** 92 pages — **Prix $ 10.00**
Hussein Hamed Hassan
L'étude, présente le point de vue islamique se rapportant à la question de l'intérêt publique, son lien avec la législation, ses conditions et ses dimensions juridiques; avec un certain nombre d'applications contemporaines.

☐ **JURISPRUDENCE DE LA NECESSITE (*FIQH* DE LA *DHARURA*) ET SON APPLICATION DANS LA VIE CONTEMPORAINE : PERSPECTIVE ET PORTEE (1996),** 259 pages — **Prix $ 20.00**
Abd al-Wahab I. Abu Sulayman
Cette recherche sur le *Fiqh de la Ḍarūrah* aborde le point de vue de la Chari'a islamique par rapport à la notion de *Ḍarūrah* (nécessité), ses conditions et ses perspectives juridiques.

☐ **COOPERATION ECONOMIQUE POUR UNE STABILITE REGIONALE (1996),** 37 pages — **Prix $ 10.00**
Bacharuddin Jusuf Habibie
Cet ouvrage porte sur l'importance coopération économique entre les pays en développement en général et entre les pays islamiques en particulier.

☐ **LE QIYAS ET SES APPLICATIONS CONTEMPORAINES (1996),** 139 pages — **Prix $ 10.00**
Mohamed Mokhtar Sellami
Uni conférence qui traite de l'une des sources de la jurisprudence, reconnue dans la science des fondements du droit sous le nom d'analogie (Qiyâs) et reconnue par l'ensemble des écoles juridiques comme preuve légale et méthode d'extraction des jugements.

Prix de la BID

☐ **LE SYSTEME BANCAIRE ISLAMIQUE : LE BILAN, (1996),** 65 pages — **Prix $ 10.00**
Ziauddin Ahmed
Le but de ce papier est d'examiner et d'évaluer la situation actuelle dans le domaine des banques islamiques aussi bien du point de vue théorique que pratique.

☐ **QU'EST-CE QUE L'ÉCONOMIE ISLAMIQUE? (1996),** 81 pages — **Prix $ 10.00**
Mohammad Umer Chapra
Conférence donnée par Dr. Chapra lauréat du Prix de l'économique islamique 1409H (1989) sur : l'économie conventionnelle et l'économie islamique.

☐ **EVOLUTION DES ACTIVITES BANCAIRES ISLAMIQUES: PROBLEMES ET PERSPECTIVES (1998),** 30 pages — **Prix $ 10.00**
Saleh Kamel
Conférence donnée par Cheikh Saleh Kamel lauréat du Prix de la BID en système bancaire islamique pour l'année 1416H (1995/96). Elle constitue une grande contribution à la compréhension de l'économie et du système bancaire islamiques et à leur évolution.

Traductions

☐	**VERS UN SYSTÈME MONÉTAIRE JUSTE, (1997),** 352 pages *Mohammad Umer Chapra* Ce livre développe avec habilité la logique islamique de la prohibition du *Riba*, et démontre avec rigueur la viabilité et la supériorité du système de financement basé sur la participation au capital.	**Prix $ 20.00**

Documents occasionnels

☐	**DEFIS AU SYSTEME BANCAIRE ISLAMIQUE, (1998),** 90 pages *Munawar Iqbal, Ausaf Ahmad et Tariquallah Khan* Le but de ce document occasionnel est que les théoriciens et praticiens dans le domaine bancaire islamique doivent explorer les voies et moyens permettant au système bancaire islamique de soutenir son rythme de progrès au moment où il entre dans le 21ème siècle.	**Prix $ 10.00**

TRANSLITERATION TABLE

Arabic Consonants

- Initial, unexpressed medial and final:

ء	’	د	d	ض	d	ك	k
ب	b	ذ	dh	ط	t	ل	l
ت	t	ر	r	ظ	z	م	m
ث	th	ز	z	ع	[	ن	n
ج	j	س	s	غ	gh	هـ	h
ح	h	ش	sh	ف	f	و	w
خ	kh	ص	s	ق	q	ي	y

- Vowels, diphthongs, etc.

Short	َ	a	ِ	i	ُ	u
Long	أ	a	ي	i	و	u
Diphthongs	ؤ	aw	ئ	ay		

Notes To Contributors

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9. Articles: Al-Qari, Mohamed Ali (1993), "Towards an Islamic Stock Market", *Islamic Economic Studies*, Vol. 1, No. 1; Books: Khan, A. R. (1993), *Financial Intermediation*, New York: Springer Publishers. Page references to works referred to in the text should take the following form: Al-Qari (1993:17). Citations within the text should follow Harvard APA style.
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