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Articles

Islamic Research & Training Institute (IRTI)

Establishment

The Islamic Research and Training Institute (IRTI) was established by the Board of Executive Directors (BED) of the Islamic Development Bank (IDB) in conformity with paragraph (a) of the Resolution No. BG/14-99 of the Board of Governors adopted at its Third Annual Meeting held on 10th Rabi-ul-Thani, 1399H corresponding to 14th March, 1979. The Institute became operational in 1403H corresponding to 1983. The Statute of the IRTI was modified in accordance with the resolutions of the IDB BED No.247 held on 27/08/1428H.

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The Institute undertakes research for enabling the economic, financial and banking activities in Muslim countries to conform to Sharīʿah, and to extend training facilities for personnel engaged in development activities in the Bank's member countries.

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C. Conduct policy dialogue with member countries.
D. Provide advisory services in Islamic economics, banking and finance.
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F. Provide learning and training opportunities for personnel engaged in socio-economic development activities in member countries.
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I. Develop partnership with research and academic institutions at OIC and international levels.

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The Institute is located at the headquarters of the Islamic Development Bank in Jeddah, Saudi Arabia.

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Understanding Development in an Islamic Framework

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Abstract

In this paper, the foundational rules governing human, economic and financial development in Islam, as understood from the Qur'ān and from the life and traditions of the Prophet Muhammad (pbuh), are summarized. These rules pave the path to development as the basis of institutional structure, which in turn, underpin the path of economic and social progress. The essential elements in the life of a Muslim—the unity of creation, freedom and freedom of choice, economic and human development, economic system and financial practice—are developed.

JEL Classification: O10, P4.
KAU-IEI Classification: B3, H41.

1. Introduction

Susilo Bambang Yudhoyono, the President of Indonesia, the most populous Muslim country, recently wrote: "The big question for 2010—and the whole century—is whether the world's civilizations, religions and cultures will finally

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depart from their persistent patterns of conflict".[1] As the title of his article confirms, the anticipated conflict, real or imagined, is between Islam and the West. Others have asserted that Islam is incompatible with progress—modernization, democracy and the freedom to choose, human freedom, human development, economic development, technological change, gender equality—and insinuate that conflict between the West and those that are labeled as "Muslim" is inevitable.[2] These prognoses and predictions, and many others like them, are based on an unfounded assumption—the behavior and actions of individuals, societies and countries that are labeled "Muslim" affords an accurate picture of Islam and its teachings. In fact, there is a wide chasm between the vision of the Qur'ān for human development and the results achieved by Muslim societies. Religious sheiks, mullahs and politicians have interpreted their own brand of Islam for the masses—brandings that invariably represent a distorted picture of Islam and its teachings. This is not to say that priests, ministers, preachers and rabbis have not done the same. In a world of mass consumerism, religion has become a consumer product like any other, differentiated and marketed the world over. For the West and Muslim countries to engage each other effectively, it is essential that *both* Muslims and non-Muslims have a better understanding of the teachings and foundation of Islam.

In this paper, rules governing the Islamic system as understood from the Qur'ān and from the life and traditions of the Prophet (pbuh) are summarized. We endeavor to elaborate how complying with these rules paves the path to development as conventional development theories today consider operative rules as the basis of institutional structure, that in turn, underpins the path of economic and social progress. We hope to clarify the essential elements in the life of a Muslim—the unity of creation, freedom and freedom of choice, economic and human development, economic system and financial practice. Islam should be understood for what it is, not what some would like to have the world believe. More often than not, it is the lack of detailed knowledge of the principles and institutional requirements of Islam that has created the gulf between the Islamic vision and actual practice. While the Qur'ān presents clear rules of behavior (institutions) for a balanced, holistic development of the individual and of the collectivity, these have been ignored, or poorly understood, represented and practiced. This is important as non-Muslims and Muslims engage each other to resolve their differences. In the process, it is hoped that Islamic prescriptions in economics and finance will be demystified.

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[1] Economist (2010)
[2] Huntington (2002)

2. The Unity of Creation and Freedom of Choice

Islam is a rules-based system, with rules prescribed by Allah for His Worship and for socioeconomic affairs of humankind. The prescriptions ordained by the Law Giver and explained and implemented by His Messenger are also rules. Allah monitors compliance and there are rewards for compliance and reprimands for non-compliance.

There are four fundamental concepts supporting the rule-based system that is Islam. The first is *walayahh,* the unconditional, dynamic, active, ever-present Love of the Supreme Creator for His Creation manifested through the act of creation and the provision of sufficient resources to sustain life and flourish during their temporary existence on this earth. Humans reciprocate this Love by extending their love to other humans and to the rest of creation. The core activity of *walayahh* is love manifested through knowledge and the upholding of justice. The second is *karamah*, human dignity. The Qur'ān considers humans to be the crowning achievement of the creation for whose individual and collective development everything else has been created. Humans are endowed with intelligence to know their Creator, to recognize and appreciate the universe and everything in it, and to understand the reasons for their own existence. The third is the *meethaq*, the primordial covenant in which all humans are called before their Supreme Creator and asked to testify that they recognize in Him the One and Only Creator and Sustainer of the entire Creation and all other implications flowing from this testimony. The fourth concept is *khilafa*: agency-trusteeship. Jointly, *walayahh* and *karamah* provide the basis for *khilafa*. The Love of the Creator endows humans with dignity and intelligence so as to manifest *walayahh* through the instrumentality of *khilafah*. *Khilafah* is the empowerment of humans by their Creator as agent-trustees to extend *walayahh* to one another, materially through the resources provided to them by the Creator, and non-materially through unconditional love for their own kind as well as for the rest of creation. Full understanding of these fundamental concepts manifests itself in operationalization of *walayahh* through rule compliance. The central anchor-rule of the collectivity of rules and a powerful enforcement mechanism is that of actively urging fellow humans to rule compliance and avoidance of rule violation.

A number of verses of the Qur'ān affirm the unity of mankind [1: 4; 13: 49; 28: 31].[3] These verses plus those dealing with the availability of resources as well as human endowments are the foundation of the legislative framework of rules (institutions) for the socio-economic-political behavior of humans. Resources are

[3] Qur'ānic verses are referred to in the text as [verse: chapter].

created for all humans. The diversity of humans does not and should not mean their disunity. In the primordial covenant, all humans recognize the Unity of the Creator as well as their own unity. They also have full cognition of their responsibility to maintain the unity, solidarity and integrity of creation through their service to humanity and to the rest of creation, while removing barriers to progress along the axis of *walayahh*. Any attempt at divisiveness is transgression, impeding the progress of humans toward unity. The fundamental idea expressed here is that the ultimate source of all acts of love originates with Allah. The active-dynamic love of nature or of parents for their children, for example, is a manifestation of the *Walayahh* of Allah. Everything good initiates from the *Walayahh* of Allah. If one is asked to transgress against others one must refuse, again out of love and allegiance to Allah. Behaving justly toward one's fellow humans is the manifestation of the recognition of the love of Allah. In contrast, devotion or service to tyrants is in direct conflict with the love of Allah.

The ultimate *walayahh* toward Allah—*úbudiyyah* or adoration of the Creator through service to His Creation—is to be intended for and returned only to Allah. That is, no one or nothing should be associated with the ultimate *walayahh* to Allah. The world is built upon a multitude of *walayahh*-relationships. Since the unity of creation is a corollary of the Unity of the Creator, any act or thought that creates disunity or discord in the creation—for example, the acceptance of factors, such as race, color, creed that compartmentalizes humans for discriminatory treatment—is a reflection of *shirk* (associating partners with Allah). For this reason, the Qur'ān condemns any basis for differentiation (doling out different treatment) between humans.

Walayahh of the Supreme Creator provides the basis for human dignity, which, in turn, empowers humans with the ability to utilize all material resources. Three other non-material faculties allow humans to dynamically respond to *walayahh*: (i) *áql*, empowering reflective reasoning in humans; (ii) a primordial nature (*fitrah*), serving as an ultimate compass imprinted on the essence of humans; and (iii) freedom of choice. These provide support for humans to be fully conscious and aware of the dignity of their human state. Once humanity made the correct choice by entering into a covenant of cognition of the Unity of the Creator and His *Walayahh* and of returning the *Walayahh* of the Creator through the exercise of the gift of freedom of choice, humanity was then appointed as agent-trustee on earth. This, according to the Qur'ān, was a momentous decision that even the angels questioned [172: 7; 30: 2]. The autonomy provided by the freedom of choice is exercised through compliance, or non-compliance, with rules (institutions) specified by the Creator that are necessary for a harmonious existence.

The most important dimension of the adoration of Allah, *úbudiyyah*, is removing barriers on the path of other humans to empower them to perform their own function of *úbudiyyah*. For example, poverty and destitution are barriers for the poor on their path to reach perfection. Removing these barriers from the path of the poor is an act of *íbādah*, a demonstration of the *walayahh*, the active-dynamic love for one's own kind in adoration of the Creator and in return for His Active-Dynamic Love for His Creation. In politics also, ensuring that no human is deprived of the freedom of choice, sharing the risk of standing up for justice is an act of *íbādah*. Actions taken to ensure the ability of other humans to activate the gifts granted to them by their Creator is an act of adoration of the Creator. The Islamic vision for mankind is to achieve unity.

3. Human and Economic Development in Islam

The prevailing Western concept of development can be viewed as a return to the traditions of the Scottish Enlightenment, in particular to Adam Smith. In his book, *The Theory of Moral Sentiment*, Smith expressed his insight regarding rules of conduct "as the ultimate foundations of what is just and unjust in human conduct… The regard to those general rules of conduct is what is properly called a sense of duty, a principle of the greatest consequence in human life, and the only principle by which the bulk of mankind are capable of directing their actions. Without this sacred regard to general rules, there is no man whose conduct can be much depended upon. It is this which constitutes the most essential difference between a man of principle and honor and a worthless fellow. Upon the tolerable observance of these duties depends the very existence of human society, which would crumble into nothing if mankind were not generally impressed with a reverence for those important rules of conduct. This reverence is still further enhanced by an opinion which is first impressed by nature, and afterward confirmed by reasoning and philosophy, that those important rules of morality are the commands and *Laws* of the Deity, who will finally reward the obedient, and punish the transgressors of their duty. . . The happiness of mankind as well as of all other rational creatures seems to have been the original purpose intended by the Author of Nature when he brought them into existence. No other end seems worthy of that supreme wisdom and benignity which we necessarily ascribe to him; But, by acting according to the dictates of our moral faculties, we necessarily pursue the most effectual means for promoting the happiness of mankind, and may therefore be said, in some sense to co-operate with the Deity, and to advance, as far as is in our power, the plan of providence. By acting otherwise, on the contrary, we seem to obstruct, in some measure, the scheme, which the Author of Nature has established for the happiness

and perfection of the world, and to declare ourselves, if I may say so, in some measure the enemies of God. Hence we are naturally encouraged to hope for his extraordinary favor and reward in the one case, and to dread his vengeance and punishment in the other. . . When the general rules which determine the merit and demerit of actions comes thus to be regarded as the *Laws* of an all-powerful being, who watches over our conduct, and who, in a life to come, will reward the observance and punish the breach of them—they necessarily acquire a new sacredness from this consideration. That our regard to the will of the Deity ought to be the supreme rule of our conduct can be doubted of by nobody who believes his existence. The very thought of disobedience appears to involve in it the most shocking impropriety."[4]

Economists have ignored this Smith and have focused on the champion of self-interest—the basis for utility and profit maximization for the individual consumer and producer, whatever the cost to society, even if it means the impoverishment and exploitation of fellow humans. Smith makes clear that while compliance with the rules prescribed by the Creator is a must, compliance with the market, an instrument for achieving the greatest good, is also a necessity. Smith clearly shares some of the scaffolding of Islam: belief in the One and Only Creator; belief in the accountability of the Day of Judgment; belief in the necessity of compliance with the rules prescribed by the Creator; and belief that justice is achieved if there is full compliance with the rules. Smith also considers the internalization of the rules, being consciously aware of the ever-presence of the Creator and acting accordingly, as crucial to all human conduct. An important insight of the new institutional economics (NIE) is that rules reduce uncertainty and transaction costs, promote coordination and make collective action possible, and that rule-compliance promotes social solidarity.

Systematic focus on economic issues of Islam, however, began in earnest in the 1950's with availability of Sayed Qutb's book, *Social Justice in Islam*.[5] The challenge of the two dominant systems—capitalism and socialism—and their attraction for Muslim youth during the decades of 1950s, 1960s and 1970s made the task of articulating an Islamic response ever more urgent. The first to respond to the challenge, positioning Islam's view on economic matters between capitalism and socialism, was Sayyid Abul A'La Mawdudi.[6] His writings and those of his

[4] Smith (1790)

[5] The book was first published in or about 1945 in Egypt but did not become available in the rest of the Muslim world until the 1950s. It was translated into English much later by John B. Hardie as Social Justice in Islam (Lahore: Islamic Book Services, n.d.)

[6] For a recent rendition of Maulana Mawdudi's ideas on Islam and economics see Ahmad (2011)

students, especially Professor (Senator) Khurshid Ahmad, became a major source of thought and the standard bearer of ideas in Islamic economics.

The 1960s represent a watershed in the progress to articulating a vision of the Islamic economic system firmly grounded on the Qur'ān and the *Sunnah*. The publication of Shaheed M.B. al Sadr's book, *Iqtisaduna*[7] or *Our Economics*, initiated a new approach in articulating Islam's vision of an economy that serves society's needs. Monzer Kahf suggests that the book *Iqtisaduna* became a shining beacon that began a new era in Islamic studies and ushered the birth of Islamic economics.[8] The central focus of the book is to identify the architecture of the Islamic economic system and then to examine and understand the behavior of its constituent elements. These are then the tasks of the discipline of Islamic economics. It is noteworthy that *Iqtisaduna* was written after the Shaheed had already published *Falsafatuna* or *Our Philosophy*, a book that established the ethico-philosophical framework in which *Iqtisaduna* was later envisioned.[9]

As mentioned earlier, because the renewal Islamic economics stemmed from discussion of social justice and social issues, many prominent scholars of Islamic economics focused their efforts on issues dealing with economic development. Starting with Professor Khurshid Ahmad (Ahmad (1980)), Islam's concepts of economic development were further articulated in seminal works by Chapra (1993), Chapra (2000), and Chapra (2008).

During the late 1970s, the intellectual and practical field of development totally changed its focus to human beings, both as the means and the end of the development process. This dramatic change in focus was in large part due to Mahbub ul Haq and his colleagues.[10] This change culminated with the contributions of Amartya Sen to a paradigm shift in development thinking, by arguing against neoclassical dogma, especially the "narrowing" of Smith's view by "the believers in, and advocates of, self-interested behavior."[11] Support for this

[7] Al-Sadr (1961)
[8] Monzer Kahf, (2006)
[9] M.B. Al Sadr, *Falsafatuna* (Beirut, Dar al Ta'aruf, 1980. This book was published first in 1960 and *Moral Sentiments*, years before his more famous book, *The Wealth of Nations*. Until very recently the economics profession made no serious attempt to connect the two. The result of this disconnect has been the development of a "science" of economics divorced from the ethical foundations so strongly articulated and advocated in *The Theory of Moral Sentiments* by its author who is widely acknowledged as the "father" of the market economic system. Similarly, a study of *Falsafatuna* would provide a more complete understanding of *Iqtisaduna*.
[10] ul Haq (1995)
[11] Sen (1999)

view "in Adam Smith is, in fact, hard to find on a wider and less biased reading of Smith. The professor of moral philosophy and the pioneer economist did not, in fact, lead a life of spectacular schizophrenia. Indeed, it is precisely the narrowing of the broad Smithian view of human beings in modern economics that can be seen as one of the major deficiencies of contemporary economic theory. This impoverishment is closely related to the distancing of economics from ethics."[12] Sen's idea of development as freedom assesses wellbeing in terms of what people are capable of being and doing. Sen calls distinct aspects of being and doing, or achieving a specific lifestyle or mode of living, functionings. In assessing human wellbeing in the capability space, Sen suggests that functioning as a point in the capability space represents a specific combination of what a person is able to do. In Sen's framework, capabilities represent the real opportunities individuals have to lead or achieve a certain type of life. Functionings, on the other hand, represent the actual life they lead. Defining development as a process that promotes human wellbeing would mean expansion of capabilities of people to flourish.

The concept of development in Islam has three dimensions: individual self-development called *rushd*, the physical development of the earth called *isti'mar*, and the development of the human collectivity, which includes both. The first specifies a dynamic process in the growth of the individual toward perfection. The second specifies the utilization of natural resources to develop the earth to provide for the material needs of the individual and all of humanity. The third concept refers to the progress of the human collectivity toward full integration and unity. Fundamental to all three is the belief that the Supreme Creator has provided the ways and means to facilitate the achievement of all three dimensions of development.

The process of self-development requires self-purification, which begins with self-awareness, the first sign that the self does not have an independent existence without its Creator and His Creation. This awareness starts an interactive process in which Allah empowers the self along the path to perfection. Progress indicates further advancement in the recognition and knowledge of the Unity of the Creator and His Creation. For example, the degree of sensitivity the person experiences in feeling the pain and suffering of the "other," is an indication of the progress of purification.

With regard to the physical development of the earth, the Islamic view would suggest that the Almighty would not leave humans without sufficient resources to

[12] Walsh (2000)

perform the duties expected of them. Indeed, the Qur'ān makes it clear that Allah has created sufficient resources to meet the needs of all humans at any time and He has done so dynamically, meaning that this sufficiency holds regardless of timeframe and population [49: 54; 8: 13; 3: 65; 21: 15]. Consequently, the assumption that at a cosmic, universal, and general level humanity (macro) faces scarcity would be untenable. This, however, may not be the case at the micro level.[13] As one of the important tests of human experience on this plane of existence, individuals, and groups of humanity experience conditions of plenty as well as conditions of scarcity [15-18: 89; 37-42: 30; 34-36: 34]. The rules prescribed by the Cherisher Lord specify the appropriate response to these tests. The wealthy and the opulent are those who are most susceptible to responding inappropriately. The Islamic view of scarcity is thus in contrast to conventional economics, where there is never enough to go around. According to Islam, there are sufficient resources at the global level as long as individuals share. With regard to exhaustible resources, Islam teaches that these are the heritage of all generations and current generations must preserve the right of future generations—for every individual in each generation to reap the same benefit. Robert Solow in his examination of exhaustible resources concluded similarly: "The finite pool of resources (I have excluded full recycling) should be used up optimally according to the general rules that govern the optimal use of reproducible assets. In particular, earlier generations are entitled to draw down the pool (optimally, of course!) so long as they add (optimally, of course!) to the stock of reproducible capital." [14]

When it comes to the development of the human collectivity, the Qur'ān recognizes legitimate authorities in an Islamic society--those who have *Walayahh/walayahh, Rububiyyah/úbudiyyah* relationships and are fully familiar with and adhere to the prescribed rules. The important point is that it is only the rule-compliance of those in authority that legitimizes them to oversee the implementation of the prescribed rules. Believers are the first to recognize the strength of the belief in such people and then by exercise of their free choice to follow and obey them [59: 4]. Even those with legitimate authority have been left with no degree of freedom to rule according to their own judgment. They must rely on Allah and the Messenger as the ultimate authority in judging rule-compliance. The strength of belief of those vested with legitimate authority must surpass that of a representative believer. The highest office of the leadership of the society, *Imamate* or *Khilafat*, is inaugurated by *mubayaá* (from the word *bayʿ*), which is a contract between the ruler and the community stating that the leader will be rule-

[13] Zaman (2005); Barrera (2005); Marglin (1998)
[14] Solow (1974)

compliant in discharging the duties of the office. This provides a strong accountable basis for governance.[15] The term of the contract between the ruler and the ruled is clear: full compliance with the prescribed rules by the legitimate authority. The community and its members commit to following and obeying the legitimate ruler so long as he is rule-compliant. No authority can violate the prescribed rules and retain legitimacy. No community can claim that it has remained a believing community while governed by an authority that is non-compliant. The Prophet warned that non-observance of this duty by individuals and the community will create the conditions that will result in Allah empowering the worst among humans to rule over the community. And if non-compliance by the community and its members continues in the face of injustice by the illegitimate authority, this becomes a rule violation subject to adverse consequences for the whole community. Such a community heads toward destruction, because those in authority will continue to violate rules in the face of silence and inactive rule-compliance of the members of the community [16: 17].

The process of the physical development of the earth by humans who are aware of themselves, of the responsibilities of trusteeship-agency, and who are ever conscious of their Creator renders sacred all economic activities. There is a command from the Prophet that every activity must begin in the name of Allah, lest it remain incomplete. Profound in its simplicity, this rule is a mechanism of transforming to sacred, as if through an alchemical process, even the most apparently trivial and mundane action. Activities begun and ended with full awareness and consciousness of the Creator follow the rules prescribed for the correct and rightful exploitation of resources, and this, in turn, allows them to flourish as intended by the Creator. The flourishing of these resources removes material barriers on the path to perfection for humans, barriers caused by the paucity of economic resources facing humans individually or in groups. Economic activities undertaken in the Name of the Supreme Creator illuminate the hallowed responsibility of managing resources in accordance with the prescribed rules and the trusteeship-agency of the earth gifted to humans by Allah. Kenneth Cragg marvels: "How duly this delegacy role chimes with the dimensions of the present global scene, its ecological crisis and its political urgency! How decisively it dignifies each selfhood, as never exempt, as always relevant! How in its bearings, it evokes an inter-human mutuality across all frontiers—as, otherwise, frontiers they must be. In 'dominion' the self, without ceasing to be private, becomes a social factor. The world loses a parasite and gains a benison."[16] The "otherwise" warning bell, with its variety of "frontiers" created by "selfishness" without the

[15] Al-Hakimi, et. al., (1989)
[16] Cragg (2006: 27–49)

growth and maturation to "selfhood," has already produced desperate human conditions: rising inequality, extreme poverty and hunger amidst plenty, high infant mortality and low life expectancy, the inability to cope with natural disasters because of insufficient investment in infrastructure, and devastating wars and civil conflicts.

It was only in the last three decades of the twentieth century that professionals looked at a broader concept of development, namely, that humans should be the ends, rather than the means of development. Even in the most sophisticated of concepts—Sen's development as freedom—the imperative of self-development as the prerequisite for a comprehension of the substantive meaning of freedom received little attention. If development means freedom and functioning, then what guarantee is there that without self-development, doing what one values will not lead to fully self-centered, selfish outcomes? The Islamic concept places great emphasis on the need to focus human energy on the achievement of social solidarity and unity. Islam's emphasis on the social dimension is so great that there is not one act of adoration and worship that is devoid of societal implications. The success of each human, on this plane of existence and beyond, is made dependent on patient and tolerant interaction and cooperation with other humans [20: 3]. The idea is that mutual support and social solidarity bring about a more tolerant and patient response to individual and collective difficulties. It is the interconnectedness of humanity that calls forth the order from the Supreme Creator for cooperation in good deeds [2: 5]. The fundamental objective of creation is to create a society in which individuals become cognizant of all their capabilities, including the spiritual. When humans are able to actualize these capabilities, it makes possible a life the Qur'ān refers to as *Hayat Tayyibah*, the good life, a life free of anxiety, fear, and regrets; a life of full awareness of the beauty of creation and Creator; a life of solidarity with other humans and the rest of creation; and a life lived in the full Grace of Allah. The final objective of such a society is to ensure the actualization of the capabilities of humans to progress along the path to perfection toward their Creator. This is the common objective of society as well as of individuals. Achieving such an objective is not possible except through the mechanism of love, which grows so strongly that it lights up the inner torch of *taqwá*, the ever-intensive consciousness of the Supreme Creator.

4. Institutional Economic Structure (Rules of Behavior)

The availability of resources, technology and the efficiency of their utilization determine the level of economic development and the rate of economic growth. Technological progress is encouraged in Islam since this provides the means by

which humans can satisfy their material needs and thus remove the economic barriers on the path to their spiritual progress. Moreover, institutions (rules and norms plus their enforcement) have been found to play a crucial role in determining total factor productivity (TFP). The closer the compliance of actions—in production, exchange, distribution, and redistribution—of society with the governing rules, the higher the total factor productivity, the rate of growth, and the level of economic development. We now turn to important Islamic values, such as abstinence from hoarding of wealth, and summarize the rules for: property rights, market behavior, exchange and trade, and contracts and trust.

Being a believer, that is having *imān*, implies a minimum threshold level of inner (heartfelt) rational-experientially validated belief in the three fundamental axioms central to Islam, i.e. the Oneness of the Creator, Prophethood, and the Day of Accountability, as well as a minimum level of conscious awareness, i.e. *taqwá*. In terms of participation in economic activities, this means that rules governing economic behavior in an Islamic economic system, based on the Qur'ān and the life of the Prophet, are held sacred and binding. Such a system can be defined as a collection of institutions—rules of conduct and their enforcement characteristics—designed by the Law Giver to deal with the allocation of resources, the production and exchange of goods and services, and the distribution-redistribution of the resulting income and wealth. The objective of these rules is to achieve justice, to reduce uncertainty for individuals and to allow them to overcome the obstacles presented by their ignorance. Rules specify what kind of conduct is most appropriate for avoiding conflict and achieving just results. Since everyone knows the rules, the reaction and response of individuals to each situation results in the clarity of the expectations.[17] The effectiveness of rule enforcement is determined by the degree to which the objective of the system, namely, the establishment of justice, is an integral part of the subjective self. It is *imān* that motivates the love of humanity (*walayahh*), which empowers rule-compliance, and *taqwá* assures constancy of behavior in rule-compliance. The sharing of the risks of life is motivated by *walayahh*, which every believer operationalizes through behavior in compliance with the rules. It is the *walayahh* for other humans and for the rest of creation that prompts the believer to want the best for others and to comply with the rule of commending the good and forbidding the transgression of rules. It is love that would call forth full participation in the economic, social, and political life of the community by the believer. It is love that explains why: You will never achieve righteousness until you spend of what you love the most. [92: 3]

[17] Al-Hakimi, Al-Hakimi and Al-Hakimi (1989)

While there are many biographies of the Prophet, there is much less scholarly research on his economic policies during his tenure as the temporal authority in the society he organized in Medina.[18] Rules of governance, accountability and transparency; rules regarding property ownership and protection; rules regarding the formation and the structure of the market; rules concerning the role of the state vis-à-vis the market; rules of behavior by market participants; rules regarding distribution and redistribution; rules related to education, technological progress and society's infrastructure; and rules regarding sources of government income and its expenditures were all promulgated during the ten years of the Prophet's life in Medina. The central axis of design and operation of these rules is justice. The Prophet taught the responsibility of the individual and the collectivity. He particularly emphasized the equality of individuals before the law. The first and the most important of the Prophet's efforts was the formation of a society based on Islamic teaching; this he achieved with the assistance of the critical mass of his followers who had migrated with him to Medina. It was first necessary to create peace, social stability, and the means of defending the nascent society from external threats. The social contract with the inhabitants of Medina constituted agreed-upon procedures for administering society as well as procedures for the mutual support and defense. Next, the Prophet clarified rules of property rights over natural resources.

Before looking at rules governing property rights, it may be instructive to get a precise understanding of what property means. It can be defined as a bundle of rights, duties, powers, and liabilities with respect to an asset. In the Western concept, private property is considered the right of an individual to use and dispose of along with the right to exclude the access of others. Even in the evolution of Western economies, this is a rather new concept of property that has accompanied the emergence of the present form of free market economies. Before that, however, property rights did not include the right to dispose of an asset or to exclude others from its use. For example, a grant of property rights over a parcel of land, a corporate charter, or a monopoly granted by the state gave its possessor the right to the revenues accruing from those grants but excluded the right of disposing of the asset. It was thought that the free market economy required a revision because the restriction on the ability to dispose of a property was incompatible with a free market economy. In Islam, however, limitations on the disposal of an asset, for example, rules against waste, destruction, and opulent use, are retained without diminishing the role of the market.[19]

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[18] One such scholarly study is S. K. Sadr, *The Economy of the Earliest Islamic Period*, Tehran: Shaheed Beheshti University Publishing, 1996.

[19] Al-Hakimi, et. al., (1989)

Property relations are governed by a set of rules regarding rights and obligations. The first rule governing property relations is that everything in creation, including humans, is the property of the Creator. He has created natural resources for the benefit of all of mankind. The second rule asserts the rights of the human collectivity to these resources: *He* it is who created for you all that is in the earth [29: 2]; and: Do not give your resources that Allah has made you (responsible as) its preserver on to the foolish [5: 4]. These two verses, and a number of others, establish the right of access to these resources by all humans. The third rule establishes that once the property is accessed and combined with work by individuals, a full right of possession of the resulting product is established for the individual without either the Creator losing His Original Property Right or the collectivity losing its initial right of possession to these resources. The fourth rule recognizes only two ways in which individuals gain legitimate property rights: (i) through their own creative labor, and/or (ii) through transfers—via exchange, contracts, grants, or inheritance—from others who have gained the property rights title to an asset through their own labor. Fundamentally, therefore, work is the basis of the acquisition of right to property. Work, however, is not only performed for the purpose of satisfying one's desires, it is considered a duty and an obligation. The importance of work has been emphasized in over 300 Qur'ānic verses and reflected in the *Sunnah*. An important corollary of the importance of work is a fifth rule that forbids gaining instantaneous property rights without having worked to earn them, with the exception of lawful transfer. This rule prohibits property rights gained through gambling, theft, earning interest on money, bribery, or, generally, from sources considered unlawful [188: 2; 29: 4]. Although Islam prohibits interest-based contracts, it embraces a contract of exchange that allows risk sharing and consumption smoothing [275: 2; 29: 4].

Just as work is a right and obligation of all humans, so is access to and use of natural-physical resources provided by the Creator for producing goods and services. If an individual, for whatever reason, lacks the ability to work, it does not deprive him of his original right to resources granted to every human. Therefore, the rule of the "immutability of property rights" constitutes the sixth rule of property relations. Before any work is performed on natural-physical resources, all humans have an equal right and opportunity to access these resources. When individuals apply their creative labor to resources, they gain a right to priority in the possession, use and exchange of the resulting product without nullifying the original property rights of the Creator or the rights He granted to all humans in the final product or the proceeds from its sale: This is the justification for the rule of sharing [33: 4; 180: 3; 36-37: 4; 5-11: 92]. The duty of sharing the product or the

income and wealth proceeding from its sale constitutes the seventh rule of property relations, which relates to property ownership rights as a trust. This rule is operationalized through the ordained duties imposed on income and wealth, which must be paid to cleanse income and wealth from the rights of others. This is perhaps the reason why the Qur'ān refers to these duties as *zakāt*, from the root word meaning cleansing and purification, akin to tree pruning that simultaneously rids the tree of its undesirable parts and allows its further growth. The eighth rule of property relations imposes limitations on the right of disposing of property—a right that is presumably absolute in the Western concept of property rights. In Islam, individuals have a severely mandated obligation not to waste, squander, or destroy (*itlāf* and *isrāf*), or to use property for opulence (*itrāf)* or unlawful (*haram*) purposes, such as bribery. Once the specified property obligations are appropriately discharged, including that of sharing in the prescribed amount and manner, property rights on the remaining part of income, wealth, and assets are held sacred and inviolate and no one can force their appropriation or expropriation. While these eight rules strongly affirm mankind's natural tendency to possess—particularly products resulting from individual labor—the concomitant property obligations promote interdependence and cohesion among the members of society. Believers are persons in a relationship of reciprocity. Private initiative, choice, and reward are recognized and acknowledged, as legitimate and protected but are not allowed to subvert the obligation of sharing.

The Qur'ān fully acknowledges the important contribution of markets and places great emphasis on contracts of exchange (*bayʿ*) and trade (*tijārah*). The Prophet implemented a number of policies to enhance the market mechanism and to encourage the expansion of trade. While Medina had its own existing market, the Prophet, with the advice of the leading merchants, selected a location for a new market for Muslims. Unlike in the existing market in Medina, the Prophet prohibited the imposition of taxes on transactions and individual merchants. He also implemented policies to encourage trade among Muslims and non-Muslims by creating incentives for non-Muslim merchants in and outside of Medina. The rules included, inter alia, and in addition to those mentioned above, no restrictions on international or interregional trade (including no taxation of imports and exports); the free spatial movement of resources, goods, and services from one market to another; no barriers to market entry and exit; free and transparent information regarding the price, quality, and quantity of goods, particularly in the case of spot trade; the specification of the exact date for the completion of trade where trade was to take place over time; the specification of the property and other rights of all participants in every contract; guaranteed contract enforcement by the state and its legal apparatus; the prohibition of the hoarding of commodities and of productive

resources for the purpose of pushing up their price; the prohibition of price controls; a ban on sellers or buyers harming the interests of other market participants, for example, by allowing a third party to interrupt negotiations between two parties in order to influence the negotiations to the benefit of one of the parties; and a ban on the shortchanging of buyers, for example, by not giving full weight and measure. Moreover, sellers and buyers were given the right of annulment of a deal: (i) before leaving the location in which it was taking place; (ii) in the case of a buyer who had not seen the commodity and after seeing it found it unacceptable; (iii) if either the seller or the buyer discovered that the product had either been sold for less than, or bought for higher than, it was worth; (iv) if the buyer discovered that the quality of the product was not as expected; (v) if side conditions were specified during the negotiations which were unfulfilled; (vi) if a delivery period was specified but the product was not delivered on time; and (vii) when the subject of the negotiations were pack animals, the buyer had the right to return the animal up to three days after the deal was finalized. These rights of annulment ensured that market participants were protected against a lack of, or faulty, information.

The moral-ethical foundation of market behavior prescribed by the Qur'ān and implemented by the Prophet was designed to minimize the risk for participants and increase the efficiency of exchange. Moreover, rules specified in the Qur'ān regarding faith to the terms of contracts and the knowledge of their enforcement increased certainty and reduced the cost of contracts. From the earliest period of operation of the Medina market, the Prophet appointed market supervisors, whose assignment was to ensure rule-compliance. He ranked honest market participants with prophets, martyrs, and *awlia'* (plural for a *waliyy*) of Allah, because like prophets, they follow the path of justice, like martyrs they fight against heavy odds (satisfy their own greed), and like the truthful Lovers of Allah they are steadfast in their path to perfection. The Prophet would advise the participants to go beyond mere rule-compliance and to treat their fellow humans with beneficence. While justice in the market would be served by rule-compliance, which limits and controls selfish behavior, beneficence rises higher by actually sacrificing one's self-interest for the interests of others.

During his life in Medina, the Prophet laid the foundation for a public treasury. He devised an efficient system not only for collecting prescribed dues, which the Qur'ān had ordained as the rights of members of society in each person's income and wealth, but also for rents and dues on public lands used by private producers and for the per capita dues paid by non-Muslims for benefits derived from public services (paid in lieu of dues paid by Muslims), accruing to the state treasury for

redistribution to the needy. He established a means of defense against external threats, an education system, and procedures for the adoption of new technologies and infrastructural investments. He insisted on the participation of all members of society in its affairs, he encouraged education, he supported the adoption of technologies from neighboring states and people, and he encouraged the expansion of social infrastructure. His emphasis on health and hygiene was so strong that he considered it a religious duty. He emphasized productive work and while he would use the public treasury to alleviate destitution and poverty, he would strongly discourage reliance on handouts to the able-bodied. To encourage work, one of his policies was to enforce risk-reward sharing in production and in trade. He urged his wealthier followers to invest in public infrastructures, for example in water wells, for the benefit of society. He discouraged hoarding of wealth, which is prohibited in the Qur'ān [34: 9].

The Prophet emphasized that it is always the rich, powerful, and the opulent who are exploiters of other humans, who, in order to amass wealth, are the source of the persecution and suffering of the prophets and their followers.[20] The Prophet is constantly reminded in the Qur'ān that the crucial aspect of his own mission, and that of the prophets before him, is to establish justice. In practical terms, the Qur'ān is clear that this means creating a balanced society that avoids extremes of wealth and poverty, a society in which all understand that wealth is a blessing afforded by the Creator for the sole purpose of providing support for the life of all members of society. While the rich consume opulently, the poor suffer from deprivation because their rights in the wealth of the rich are not redeemed.[21] Islam ordains that what is left after one has reached a modest living standard must be returned to the less able members of society as an act of redeeming their rights [7: 57]. Therefore, while Islam ordains hard work, the development of the earth and natural resources provided by the Creator, and the use of proceeds for the satisfaction of the needs of all humans, it prohibits the concentration of output in the hands of a few.[22] Operationally, such an economy can be defined as: the collection of institutions (described above), that is, the rules of conduct and their enforcement characteristics, to deal with the allocation of resources, the production and the exchange of goods and services, and the distribution and redistribution of the resulting income and wealth to establish balance and justice in society.[23]

[20] Al-Hakimi (1989)
[21] Al-Hakimi, et. al., (1989)
[22] Al-Hakimi, et. al., (1989)
[23] Al-Hakimi, et. al., (1989)

As mentioned earlier, scarcity is not the problem; instead it is selfishness, the misuse of resources, and human greed that cause scarcity, poverty, misery, and destitution. Societies that reject divine law have institutions and power relations that allow significant inequalities, which, in turn, lead to inequality of income and wealth. It is the institutional structure of society that allows a pattern of wealth accumulation, creating abundance for some and scarcity for many. This is what creates social divisions, not natural scarcity. It is the institutional structure of society that determines the resource endowments of its members, which, in turn, determine the structure of their preferences and ultimately their economic behavior. Such an institutional structure combined with a poorly functioning process of self-development provides no opportunity for the self to transcend the focus of the self on "me and mine." Self-development is necessary to transcend selfishness. The Qur'ān clearly states the need for "a revolution in feeling or motivation." [11: 13] The revolution, as defined comprehensively throughout the Qur'ān, is a change toward compliance with the rules of just conduct for the individual. The "ethos of justice" is created in society by a critical mass of those whose behavior fully complies with the prescribed rules. We now turn to rules covering access to resources, production, exchange, distribution, and redistribution.

Although the Qur'ān acknowledges that in His Wisdom the Lord has created humans with differences, it also emphasizes that these differences are only apparent and that all humans are the same. In a society in which there is poverty amidst plenty, the roots of inequality must be traced to distortions in the pattern of resource endowments, in the workings of the exchange and/or distribution mechanisms and/or in the redistributive framework. The most fundamental among these is the pattern of resource endowment. This pattern determines the formation of individual preferences, which, in turn, determine behavior in the rest of the economy and in society. Individual preferences are not only influenced by the pattern of resource endowment, but also by the "ethos" of society. The ethos of society, in turn, is influenced by individual beliefs. The feedback processes between the pattern of resource entitlement, belief, ethos, and preference formation are complex, and distortions in these processes are highly consequential for the emergence of poverty, economic inefficiencies, and reduced economic growth and development.

Douglas North believes that cognition plays a central role in belief formation, which, in turn, affects preference formation, rational decision-making, and institutions.[24] Institutions (rules) have a reciprocal effect on cognition. Beliefs

[24] North (1995)

constitute what North refers to as a "mental model." However, whereas North believes that institutions "are clearly an extension to the mental constructs the human mind develops to interpret the environment of the individual," in Islam, rules (institutions) are provided by the Law Giver. For a believer, the "mental model" is formed by these rules (institutions). It is the dense network of rules that reduces uncertainty for individuals and society. When society includes a critical mass of believers, compliance with these rules constitutes the ethos of society. The cognition of the basic structural framework of the belief in Islam forms the "mental model," which then determines rule-compliance, preference formation, decision-making, and behavior. As Uslaner asserts: "Economic equality is the foundation of social solidarity (generalized trust) and trust in government. Generalized trust leads to greater investment in policies that have longer-term payoffs (education spending) as well as more directly leading to economic growth. A weak state with an ineffective legal system cannot enforce contracts; and a government that cannot produce economic growth and the promise of a brighter future will not be legitimate."[25] Moreover, Uslaner suggests: "Unequal wealth leads people to feel less constrained about cheating others and about evading taxes." And: "Inequality leads to unequal treatment by courts, which leads to less legitimacy for the government."

Allah has ordained equally free access to resources by all humans and that the resulting income and wealth, which, by implication from the earlier principle, are also His Blessings, must not be hoarded, but must be shared with those who are less able to access the initial resources.[26] This expenditure is over and above the mandatory portion of net income and wealth collected by the legitimate authority.[27] These charges are referred to as *sadaqat* (singular: *sadaqah*) from the root word meaning truthfulness and sincerity. Their faithful discharge indicates the strength of the sincerity of a person's belief. These expenditures are essentially the repatriation and redemption of the rights of others in one's income and wealth. It is for the good of the person paying them that they are ordained.[28] Since these expenditures are the repayment of what is the right of those who were unable, or less able, to access the natural-physical resources that the Creator has made available to all humans, it is as repayment of a debt without which one's wealth would be soiled. Redeeming these rights is a manifestation of one's belief in the essential axioms of the Oneness of the Creator and His creation. When one is granted the mental-physical capacity by the Creator to access more of these

[25] Uslaner (2008)
[26] Al-Hakimi, et. al., (1989)
[27] Al-Hakimi, et. al., (1989)
[28] Al-Hakimi, et. al., (1989)

resources, it means others less able or unable to use these resources are in fact one's partners, whose rights in the final post-production, post-market proceeds have to be redeemed. The Qur'ān affirms that because these are rights to be redeemed rather than charity, extreme care must be taken of the recipient's human dignity.

As mentioned, Islam recognizes only two legitimate means of acquiring claims to property rights and prohibits transactions that create instantaneous property rights.[29] It is possible to distinguish transactions that create legitimate property rights claims from others by reference to a verse in the Qur'ān in which two types of contract are identified: exchange (*al- bayʿ*) and usury (*al-ribā*) [275: 2]. The first is permitted and the second is prohibited. An example of *al- ribā* contracts is one in which rent is collected for the use of an amount of money for a set period of time without the transfer of the property rights of the money being transferred to the borrower. Exchange (*bayʿ*) is a contract, a mutual transaction in which a bundle of property is exchanged for another. Since *al- bayʿ* is a contract, so must be *al-ribā*; except that the latter is forbidden. That *al-ribā* covers more transactions than just lending with interest can be gleaned from a saying of the Prophet: "First *fiqh* then trade. Whoever engages in trade without *fiqh* will surely be entangled progressively and drawn in *al-ribā*."[30] Here the word *fiqh* refers to internalized knowledge of the rules governing exchange and trade. The rule specified here means that before entering the market, participants must know and have internalized the rules of market participation. Compliance with rules is necessary to reduce transaction costs as well as costs to third parties. Dealing with risk tests the resolve to be rule-compliant and is a source of learning and adaptation for humans. Sharing risk is the most important means of reducing volatility in income and consumption. It can arguably be claimed that all rules governing economic behavior in Islam are to promote risk sharing as a means of advancing human solidarity and the drive towards unity of mankind.

It follows from the above that the first rule of exchange and trade is to understand the prescribed precepts governing exchange and trade before entering the market. Most importantly, market participants are commanded to be fully and consciously aware of Allah at all times like *Men whom neither trade nor exchange entice away from remembering Allah* [37: 24]. The second rule governing exchange and trade is mutual satisfaction of both parties to the transaction because the Qur'ān ordains that trade has to be based on mutual satisfaction of the parties

[29] Al-Hakimi, et. al., (1989)
[30] Al-Hakimi, et. al., (1989)

[29: 4]. As explained earlier, there are a number of ways in which buyers and sellers are permitted to annul a transaction if they are unhappy, even if the transaction was devoid of all elements—such as cheating, deceiving, over praising or disparaging an item subject of the transaction, not giving full weights and measure—that would automatically render a transaction null and void. Moreover, a corollary of this rule is expressed in the Prophet's words: "Allah (Blessed and Glorified) loves his servants to be easy sellers and easy buyers . . . may Allah bless the person who eases selling and buying."[31]

The next set of rules to be understood and internalized by individuals are those governing contract and trust. An insight by Polanyi suggests that the development of exchange on the basis of the legal institution of "contractus" rather than "status" was an essential antecedent of the development of markets.[32] John McMillan suggests that: "Any successful economy has an array of devices and procedures to enable markets to work smoothly. A workable platform has five elements: information flows smoothly; property rights are protected; people can be trusted to live up to their promises; side effects on third parties are curtailed; and competitions are fostered."[33] Earlier discussion should confirm that Islam provides a strong "platform" of "devices and procedures to enable markets to work smoothly." The key to market operation is decision-making autonomy. "Participation in exchange is voluntary; both buyers and sellers are able to veto any deal." He is, however, quick to add that the choices of buyers and sellers "are not completely free though: they are constrained by the extent of their resources and by the rules of the market place."[34] The collection of devices that organize and support transactions—channels for the flow of information; laws and regulations that define property rights and enforce contracts; and the informal rules, norms, and codes that help markets self regulate—he calls market design. A design that allows markets to keep transaction costs low, he calls "a workable" market design. Appropriately, he argues that high transaction costs render a market dysfunctional.[35] Two elements on which McMillan focuses as key to workable market design are the free flow of information and trust, both of which lower transaction costs.[36]

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[31] Al-Hakimi, et. al., (1989).
[32] Polanyi (1971)
[33] McMillan (2002)
[34] McMillan (2002)
[35] McMillan (2002)
[36] McMillan (2002)

The rules prescribed by the Law Giver and explicated and implemented by the Prophet were intended precisely to reduce transaction costs. As observed in the rules developed for the market of Medina, the Prophet ensured, through the propagation of the rules of market behavior, that there would be no interference with the free flow of information regarding the quantity, quality, and prices of goods and services in the market, and this to the point where he forbade a previous common practice of middlemen meeting trade caravans outside the city and purchasing their supplies before the caravans entered the market. Market supervisors, appointed by the Prophet, ensured that there was no fraud, cheating, withholding of information, or other practices that could lead to the malfunctioning of the price mechanism. Each physical segment of the market was specialized with respect to products. Prices were determined by competition among suppliers and every market was intensely supervised by a person called *Muhtasib*, a practice started by the Prophet. Market supervision was supplemented by guilds of each profession and trade.[37] Supervisory devices were based on the rule-enforcement mechanism of commanding the good and forbidding evil. These enforcement devices were fortified by the physical architecture of bazaars, which were constructed such that a grand mosque was located at the center of the bazaar. Every market participant, particularly the sellers, had an opportunity to attend at least two of the five daily prayers in the mosque, noon and afternoon. This was an opportunity for market participants to be reminded of their Creator, of their obligations to Him and to other humans and of the accountability on the Last Day. Throughout the legal history of Islam, a body of rules, based on the Qur'ān and on the traditions of the Prophet, has constituted a general theory of contracts. This body of rules covering all contracts has established the principle that any agreement not specifically prohibited by law was valid and binding on parties.

In a very important tradition, the Prophet says: "Three (behavioral traits) if found in a person, then he is a hypocrite even if he fasts, prays, performs bigger and small pilgrimages, and says 'I am a Muslim': when he speaks, he lies; when he promises, he breeches; and when trusted, he betrays."[38] There is a strong interdependence between contract and trust; without trust, contracts become difficult to negotiate and conclude, and costly to monitor and enforce. When and where trust is weak, complex and expensive administrative devices are needed to enforce contracts. Moreover, it is well known that complete contracts—ones that foresee all contingencies—do not exist. Thus trust is an important element of a well-designed market. When and where property rights are poorly defined and protected, the cost of gathering and analyzing information is high, and trust is

[37] Metz, (1967); Kister (1965); Shihata (1977)
[38] Al-Hakimi et al. (1989); Iqbal and Mirakhor, (2007)

weak, it is difficult to clearly specify the terms of contracts and enforce them. In these cases transaction costs—that is, search and information costs, bargaining and decision costs, contract negotiation and enforcement costs—are high. Where and when transaction costs are high, there is less trade, fewer market participants, less long-term investment, lower productivity, and slower economic growth. As North has pointed out, when and where there is rule-compliance and enforcement, there is an increase in the likelihood that property rights will be protected and contracts honored. Under such conditions, individuals are more willing to specialize, invest in long-term projects, undertake complex transactions, and accumulate and share knowledge.

Keefer and Knack argue that: "In fact, substantial evidence demonstrates that social norms prescribing cooperation or trustworthy behavior have significant impact on whether societies can overcome obstacles to contracting and collective action that would otherwise hinder their development."[39] The last decades of the twentieth century sparked considerable interest in the importance of trust and cooperation.[40] While trust is necessary for the proper functioning of the market, trust is even more essential for social solidarity. In fact, Uslaner equates social solidarity with generalized trust. Among the conclusions Keefer and Knack draw from their empirical cross-country research on trust is that: (i) the levels of trust and trustworthiness vary significantly across countries, and (ii) both trust and trustworthiness "have significant effect on economic outcomes and development." Moreover, they assert that "social norms that produce trust and trustworthiness can solve the problem of credible commitment," which, where and when it exists, causes disruption in economic, political, and social interactions among humans. The problem of credible commitment arises when parties to an exchange cannot commit themselves, or believe others cannot commit themselves, to carrying out contractual obligations. Where this problem exists, long-term contracting will not be widespread and parties to exchange will opt for spot-market transactions. Knack and Keefer have found that per capita economic growth increases by nearly one percentage point per year for every ten-percentage point increase in the number of people who express trusting attitudes. They explain: "the larger the fraction of people in a society who share norms prescribing cooperative or trustworthy behavior in collective action setting, the more likely is the society to have overcome problems of credible commitment in the economic, political and social spheres contracting parties can dispense with costly monitoring of performance

[39] Knack and Keefer (1997)

[40] E. Lorenz (1999); Uslaner (2008); Fukuyama, (1995); Alesina and La Ferrara (2002); Berg, Dickaut, and McCabe (1995); Zak and Knack; Mirakhor (2005); Askari, Iqbal and Mirakhor (2009); Fehr, U. Fischbacher, and M. Kosfeld (2005)

Individuals have more resources available for innovation and investment, as they can devote fewer resources to protecting themselves—through tax payments, bribes, or private security services and equipment—from unlawful (criminal) violations of their property right. Norms of civic cooperation reduce enforcement costs by leading individuals to internalize the value of laws and regulations even when the probability of detection for violation is negligible . . . Norms prescribing cooperation and trustworthiness enhance governmental effectiveness." They conclude: "Evidence is fairly clear that income equality and education are linked to trust and other development-promoting norms."[41]

While in rule-based societies rule-violation is always an option, it has consequences. On then one hand, if rule-compliance monitoring is effective and the probability of exposure and sanction is high, everyone in society would expect that others will take action-decision "within the set of permitted and required action," and the social order will be stable. On the other hand, when monitoring is ineffective and the probability of exposure and of being sanctioned is low, rule-compliance will be weak and social order unstable. All the prescribed precepts discussed here are those that are ordained by the Creator. Even if these precepts are not codified as the law of a given society and are not enforced, they are commands of the Creator requiring compliance; the non-compliant, both individually and/or collectively, are sanctioned. The rule of "commanding the good and forbidding evil" is perhaps the most important of all enforcement devices within the Islamic framework. The Prophet indicated the dire consequences for society and its members of non-compliance: "Comply with the rules of commanding the good and forbidding evil, for if you do not, the most evil among you gain sovereignty over you. Then you pray (for relief from oppression) and your prayers will not be answered."[42] The only recourse for society is to change what is in their self and comply [11: 13].

Throughout the ages, one of the most important questions confronting mankind has been: on what basis should economic resources be distributed? The answer depends on the underlying concept of justice and fairness, which, in turn, depends on the belief system. The concept of justice for humans is simple and unambiguous: justice is obtained when all things are placed where intended by the Creator! How are humans to know where the right (just) place is for everything? The answer is: follow the rules prescribed by the Creator.[43] By the instrumentality

[41] Knack and Keefer (1997)

[42] See the Prophet's Saying number 2218 in A. Payandeh, Nahjul-Fasaha,Tehran: Sazemane Entesharate Javidan, (1974)

[43] Al-Hakimi, et. al., (1989); Qutb (1953)

of His *Walayahh*, the Loving Creator has provided all that is necessary for humans to achieve perfection of the human state. He has also clearly designated the path-to-perfection and has marked it with rules of behavior in all facets of human life. Rule-compliance assures justice, which assures balance for individuals and for society. Compliance with rules, however, does more than create balance, it guarantees that humans draw near to their ultimate objective, namely, their Creator. Morality, therefore, is a result of just behavior.

Given the rules governing property rights, work, production, exchange, markets, distribution, and redistribution, it is reasonable to conclude that in a rule-complying and Allah-conscious society, absolute poverty could not exist. It can be argued that there are no topics more emphasized in Islam than justice and poverty and the responsibility of individuals and society to eradicate poverty. The Prophet said that poverty is near disbelief and that poverty is worse than murder.[44] It is almost axiomatic that in any society in which there is poverty, Islamic rules are not being observed. It means that the rich and wealthy have not redeemed the rights of others in their income and wealth and that the state has failed to take corrective action.

5. Implications for Islamic Economics and Finance

Islamic economics and finance—misunderstood, or at best seen as exotic and of little practical significance—have received little attention in the Western professional literature and have been afforded a narrow interpretation in the popular press.

Islamic Economics: Islamic economics is a set of fundamental rules (institutions) structured on the Unity of Creation, as discussed above, that the Almighty has prescribed for those that choose to follow His Path. The problems facing all economic systems are what goods and services to produce, how to combine factors of production to produce them, and for whom should these be produced? The reason why all economies have to tackle these questions is the assumption that resources are scarce—everything cannot be produced to satisfy the insatiable wants of all members of society. However, as we have mentioned earlier, the Qur'ān states that at the global level the Almighty has provided sufficient resources for humankind, which may not be the case at the local level. Moreover, the Qur'ān does not accept the premise that individual desires for material goods are unlimited; devout Muslims should not be selfish consumers and must limit and

[44] Al-Hakimi, et. al., (1989) ; Qutb, (1953)

control their material desires to support those that are less fortunate. Man needs bread to live, but does not live by bread alone.

In a market-based economy, the underlying assumptions are: consumers are rational individuals who buy goods and services to maximize their individual utility; firms maximize their profit; and with perfect competitive markets the interaction of these different independent agents (consumers and producers) produces an ‘‘optimal solution’’ to the economic questions facing society. Minimal government intervention may be required to address externalities (spillovers from the production and/or consumption of goods and services for which no appropriate compensation is paid, resulting in a divergence between private and social cost) associated with economic activity and other market failures, such as impairment of competition. This optimal solution embodies no judgment on the relative welfare of individual members of society (with abject poverty existing alongside tremendous wealth), does not take into account the welfare of future generations, and essentially assumes perfect mapping from the interest of individuals to that of society. As a result, though consumption and production may be close to their narrowly-defined optimum, a significant segment of society may be destitute, hungry and with little or no economic opportunity, and the welfare of future generations may be compromised. Although the Islamic economic system is a market-based system, an Islamic society cannot depend on the market alone to produce a just solution to the economic dimension of life. An Islamic system integrates into the market system Islamic values, which are the rules (institutions) prescribed by Allah and implemented by his Prophet.

The central goals of Islam for the society are the welfare of all its members and socioeconomic justice. All members of an Islamic society must be given the same opportunities to advance; in other words, a level playing field, including access to the natural resources provided by Allah. For those for whom there is no work and for those that cannot work, society must afford the minimum required for a dignified life: shelter, food, healthcare and education. The rights of future generations must be preserved. Thus Islam advocates an environment where behavior is molded to support the goals of an Islamic society: societal welfare and socioeconomic justice, with the goal of making humankind one, confirming the Unity of Allah’s creation. If the rules prescribed by The Creator are followed, then the outcome will be a just and unified creation. It is with the Unity of Creation as the goal that the Qur’ān advocates risk sharing as the foundation of finance (see below) to enhance trust.

Thus, a true Islamic economic system is a market based system, but with

entrenched Islamic behavior and goals (objectives/rules/institutions) attributed to consumers, producers and to government (authorities), and with institutions as outlined above. For economic analysis, some of these Islamic values and goals can be introduced into the conventional behavioral functions of consumers and producers and others can be added as constraints in the maximization of consumer utility and producer profit. Based on the Islamic vision elaborated in this paper, we expect the Islamic solution to differ in the following important ways from the conventional: greater degree of justice in all aspects of economic management, higher moral standard, honesty and trust exhibited in the marketplace and in all economic transactions, poverty eradication, a more even distribution of wealth and income, no hoarding of wealth, less opulence in consumption, no exploitive speculation, risk sharing as opposed to debt contracts, better social infrastructure and provision of social services, better treatment of workers, higher education expenditures relative to GDP, higher savings and investment rates, higher trade/GDP, higher foreign aid/GDP, higher degree of environmental preservation, and vigilantly supervised markets. It would be expected that these differences would be reflected in higher quantitative and qualitative economic growth if the Islamic rules and objectives were adopted. One would expect a higher rate of growth as higher investment rate, higher educational expenditures, higher social awareness, better functioning markets, higher level of trust, and institutions that have empirically been shown to be critical for growth.

Islamic Finance: The objective of Islamic finance is to support real economic activities through risk sharing—producing real goods and services and prohibiting the financing of purely financial, speculative and other prohibited activities. The Qur'ān strongly suggests that risk sharing, along with other prescribed behavioral rules, e.g., exhortation on cooperation [5: 2], serves to bring humans closer to unity, which, as discussed throughout this paper, in itself is a corollary of Islam's central axiom: the Unity of the Creation. It is a natural consequence of such a system to require risk sharing as an instrument of social integration. This is perhaps why the Qur'ān places more emphasis on rules governing exchange distribution, and redistribution—to affect balanced risk sharing—than on production.

The central proposition of Islamic finance is the prohibition of transactions in which a rent is collected as a percentage of a principal amount loaned for a specific time period without the transfer of the property rights, thus transferring the entire risk of the transaction to the borrower. The alternative to interest-based contracts is *Al-Bayʿ*, a mutual exchange, allowing both parties to share production, transportation, and marketing risks. This, in turn, allows specialization and gains

from exchange. It further allows both parties to reduce the risk of income of volatility and to allow consumption smoothing, a major outcome of risk sharing.

The emphasis on risk sharing is also evident from one of the most important verses in the Qur'ān in respect of economic behavior. The verse states that: "they say that indeed exchange is like usury *(Ribā).* But Allah has permitted exchange and has forbidden usury" [275; 2]. This verse can be considered as the cornerstone of the Qur'ān's conception of an economic system since from it flows major implications of how the economy should be organized. One of these implications relates to the nature of these two contracts; hence, it can be understood as the organizing principle of an Islamic economy. Etymologically, the first *Al- Bayʿ* is a contract of exchange of one commodity for another where the property rights over one good is traded for those of another. In the case of contracts of *Ribā*, sum of money is loaned today for a larger sum in the future without the transfer of the property rights over the principle from the lender to the borrower. Not only does the lender retain property rights over the sum lent, but also property rights over the additional sum paid as interest is transferred from the borrower to the lender. The verse renders exchange and trade of commodities (and assets), requiring the freedom of parties to contract, the foundation of economic activity.

It is generally recognized that equity participation provides a first-best instrument of risk sharing. Moreover, there is some evidence that stock market and social interaction are related.[45] Shiller has recognized the potential benefits of risk sharing for mankind. He points out that "[M]assive risk sharing can carry with it benefits far beyond that of reducing poverty and diminishing income inequality. The reduction of risks on a greater scale would provide substantial impetus to human and economic progress."[46] Arguably, the most meaningful human progress would be achieved when all distinctions among human beings on the basis of race, color, creed, income, and wealth are obliterated to the point where humanity truly views itself as one. Greater risk sharing and financial globalization could well promote the objective of the unity of mankind. Methods and instruments of risk sharing, such as equity participation, venture capital, and direct foreign investment, can explore all risk-return to assets and the real rate of return, leading to greater risk sharing. It can do so across geographic, racial, national, religious, cultural, language, and time boundaries. In the process, it can help remove barriers among people and nations.

[45] Hong, Kubik, and Stein (2004); Huberman (2001)
[46] Shiller (2003)

In regard to banking, an Islamic banking system can have two types of banking activities: safekeeping and payments activity, and investment banking. The first type of activity is similar to 100 percent reserve system, with deposits remaining highly liquid and checking services fully available. This system has to be a fee-based system to cover the cost of safekeeping, and transfers and payments services. The second activity is an investment activity with deposits considered as longer-term savings and allowing banks to engage directly in risk taking in trade, leasing, and productive investment in agriculture, industry, and services, on behalf of the investor. Most important characteristic of this activity is that it is immune to un-backed expansion of credit. An Islamic bank is assumed to match deposits maturities with investment maturities (with no need for asset-liability management). Returns to invested funds arise ex-post from the profits or losses of the operation, and are distributed to depositors as shareholders of equity capital. Since loan default is absent, safekeeping depositors do not face this risk of loss of their assets.

At its core, Islamic finance embodies ethical values which were, in the past, also characteristics of Christianity and Judaism, but which were eroded over time to serve the narrow interests of the wealthy and vested interests at the expense of society at large. While the beneficial and ethical attributes of Islamic finance are evident, most observers have largely ignored the economic benefits. Indeed, in the years between the two great wars, eminent Western economists, such as Keynes, raised serious questions about the stability of conventional finance. More recently, a number of economists are again questioning the stability assumptions of conventional finance, its debt-based characteristic and leveraging. Conventional banks fail to meet inherent stability conditions even in the presence of prudential regulations. Unlike conventional banks, Islamic banks do not create and destroy money. Money is not issued by the stroke of a pen, independently of the production of real goods and services. There can be no bank run or speculation, as the source of credit for speculation, credit multiplication, does not exist. Tangible real assets owned directly by the institution cover liabilities. Risks for Islamic financial institutions are mitigated as they relate essentially to returns from investment operations and not to the capital of these institutions. These features afford Islamic financial system added stability.[47]

Capital markets play a critical role in Islamic finance. The first best instrument of risk sharing is a stock market "which is arguably the most sophisticated market-based risk-sharing mechanism" (Brav, et.al., 2002). Developing an efficient stock

[47] Iqbal, Askari, Krichene, Noureddine, and Mirakhor (2010)

market can effectively complement and supplement the existing and still to-be-developed array of other Islamic financial instruments. It would provide the means for business and industry to raise long-term capital. A vibrant stock market would allow risk diversification necessary for management of aggregate and idiosyncratic risks. Such an active market would reduce the dominance of banks and debt financing where risks become concentrated creating in turn system fragility.

In addition to the standard stock market, there is another capital market that provides a platform for trading asset-linked securities. The notion of "materiality" in Islamic finance of binding capital/financing closely and tightly to a real asset that is financed encourages the issuance of securities against a portfolio of assets. These "asset-linked" securities would be traded in the market through competitive bidding by a pool of investors, which includes individuals, Islamic banks (for their portfolios), institutional investors such as pension funds or insurance funds, and corporate treasuries. These investors trade these securities in primary and secondary markets. There is no reason to believe that the targeted investors will be limited to Islamic investors, but these securities will be available also to conventional investors who may be attracted to their risk-return profile for their portfolio.

Recent development of *Ṣukūk* (Islamic bonds) is an initial step in this direction. However, majority of the current forms of *Ṣukūks* are not structured as asset-linked due to several demand and supply side constraints. Once risk-sharing "asset-linked" securities are introduced, this market will complement stock markets and will provide necessary means to investors to construct well-diversified portfolios to match desired risk-return profiles.

While Islamic finance could afford a number of potential benefits if fully developed, no Muslim country has done so, and with a handful doing so in name only. In practice it has been principally used to tap Muslim funds, by both Islamic and Western institutions. Specifically, a number of instruments have been designed to simultaneously mimic the characteristics of conventional instruments and be sanctioned as "*Sharia*-compliant." Individual financial institutions have formed their own *Sharia* boards to sanction their instruments, affording significant fees to board members, and raising serious conflict of interest issues in the process.

6. Implications for a Turnaround and Sustained Progress

Islamic economics is based on a set of rules, which in turn are at the foundation of institutions that provide the scaffolding for Islamic economics and finance and

for human and economic development in Islam. The reasons for the limited progress in Muslim countries are two fold: Muslims have not internalized the prescribed rules provided in the Qur'ān and interpreted and practiced by the Prophet in his brief time in Medina; and Muslim countries have not developed and nourished the recommended institutions that provide the scaffolding for sustained human and economic development and progress. Thus, for a sustained turnaround, Muslim countries must turn to institutional reform. The needed reforms that are embodied in the rules contained in the Qur'ān and practiced by the Prophet are also in line with the latest recommendations in conventional economics. [48]

The most crucial and central to Islam's concept of development is the progress humans make in developing the self. Without this, balanced and appropriate progress in the other two dimensions of development is not possible; any forward movement in them without self-development leads to harmful distortions. Compliance with the rules prescribed by the Law Giver prevents distortions. The rules constitute a network that regulates all dimensions of the human experience, individually and collectively, on this plane of existence. Some of the important insights of new institutional economics (NIE) relate to the benefits of rule-compliance, the most important of which date back to Adam Smith.

Effective institutions that monitor rule-compliance by all promote material growth through higher total factor productivity (TFP). The three rules which NIE considers crucial to economic growth—property rights protection, the enforcement of contracts, and good governance—are emphasized in the Qur'ān and by the Prophet. These three rules may be also restated as the institution of an independent judiciary, an institution that develops policies, regulations and laws that promote human and economic development, and an institution that supervises rule compliance. However, the network of rules (and the accompanying institutions) in Islam that guarantees development goes further. These are: the rule of seeking knowledge, no waste, no harm or injury, hard work and no fraud, cheating or abuse of property. The internalization of the rules of conduct governing market participation and compliance with them assures that the market will be an efficient mechanism to create a balance within an economy. Rules regarding the fair treatment of others assure that those who participate in the act of production receive just payment for their efforts. Thus, market-based distribution guided by the price mechanism would also be fair. Rules governing income redistribution assure that the rights of others in access to resources are preserved before income becomes disposable. All economic transactions are governed by rules requiring

[48] Mirakhor and Askari (2010)

strict faithfulness to the terms and conditions of contracts and promises. Hence, the probability of asymmetric information and moral hazard is minimized. Rules governing consumption assure that there is no opulent or wasteful consumption. Since consumers internalize these rules before entering the market, these rules also shape consumer preferences and thus demand. Rules governing the use of disposable income and wealth (that is, income and wealth after they have been cleansed of the rights of others) assure that wealth is not hoarded and is made available in the form of investment and expenditures in the way of Allah. Prohibition of interest assures the direct participation of wealth-holders.

Also important is that the Supreme Creator has endowed humans with the freedom of choice. This Supreme Gift of the Creator is so fundamental that humans have the choice of rejecting the reality of their own Creator. Thus Muslim societies must embrace governance structure and institutions that support human freedom. The freedom of choice also allows humans to choose leaders who embrace justice and just rule and who reject unjust rule. There is the Prophetic saying that on the Day of Reckoning the oppressor, the oppressed, and the person(s) who stood by and observed the oppression will be called upon to answer: the oppressor for oppression, the oppressed for not resisting the oppression, and the bystander for not assisting the oppressed. Any injustice perpetrated by individuals against other humans and against the rest of creation is ultimately an injustice to the self. Allah loves justice; it is a central part of His Universal Love. Humans must live a life that is just and must stand up to injustice wherever they find it. This is the contour of an economy where everyone who is able to work works hard, using technical knowledge to combine with their own labor and the resources provided by the Creator to produce goods and services for society.

Conclusion

The contour of an Islamic economy is one where everyone who is able works hard, using knowledge to combine with their own labor and the resources provided by the Creator, to produce goods and services for society. Economic, social, and political affairs are conducted with the goal of removing barriers to the progress of all humans and in full compliance with rules, including those governing property rights, market behavior, exchange and trade, and contracts and trust. Knowing that they are responsible and accountable, individually and collectively, they invest allegiance in a legitimate authority to carry out their affairs, with the legitimacy of the authority established by rule-compliance. The rule "commanding the good and forbidding evil," applicable to individuals and society, assures the full and active participation of all in the affairs of society. Rules stemming from the *Walayahh* of

The Creator and reflected in the *walayahh* of the believers for one another and for the rest of humanity and creation, as well as rules prescribing participation in acts of worship that are mostly public, promote human solidarity and unity. The existence of absolute and relative poverty, along with significant income inequality, is prima facie evidence of rule-violation and governance failure, for which members of society are, individually and collectively responsible.

These rules and institutions are the foundation of Islamic economics and finance. While conventional economics assumes scarcity of resources, Islam acknowledges scarcity only at the micro level and this due to misdistribution of income and wealth resulting from non-compliance with the rules of conduct; while conventional theory adopts the market and assumes that consumers maximize their own utility and producers maximize profits, the Islamic vision, although embracing the market-based system and proposing rules that enhance its functioning, includes a spiritual and moral foundation that attaches overriding importance to the welfare of society and of each and every individual in this and in future generations. Risk sharing is important in of itself as it promotes trust and brings humankind closer together—in support of the Unity of Allah's Creation—and affords a number other potential benefits if fully developed, including financial stability.

Islamic economics and development in Islam are based on a set of rules, which in turn are at the foundation of institutions that provide the scaffolding for Islamic economics and finance and in turn for human and economic development. The reasons for the limited progress in Muslim countries are that Muslims have not internalized the prescribed rules and Muslim countries have not developed and nourished the recommended institutions that provide the scaffolding for sustained progress. Fundamental institutional reforms are essential for a positive turnaround in Muslim countries.

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Islamic Finance in the United Kingdom: Factors Behind its Development and Growth

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Abstract

This paper aims at capturing the latest developments and growth of Islamic finance (IF) in the UK. The study also aims at shedding light on the driving factors that have been attributed to the rise of this phenomenon in this country. To meet these objectives, the paper utilizes historical and thematic analytical methodologies to draw some lessons and recommendations. The results show that the UK is the country number one in the West, in view of the number of institutions and Universities involved in the educational and training aspects relating to IF, the number of licensed intermediaries providing 'Islamic' financial services, and the number of law firms involved in legal and consultancy services in the IF field. Among the prime factors that have been explored to explain the gradual, but steady progress of IF in the country, are: (i) – The UK's government proactive role, and (ii) - The active role played by a number of UK Muslim organizations.

Keywords: Islamic finance, banking, finance, FSA, UK
JEL Classification: G00, G200, G29
KAU-IEI Classification: I0, F11.

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1. Introduction

Despite the economic and financial downturns that have engulfed many international economic and financial centers, the latest reports reveal the fact that IF still exhibits a two-digit growth over the past few years. For Instance, the Malaysian-based KFH Research Ltd reported, in September of this year that the industry is operating across 75 jurisdictions with 600 institutions, and total assets to be in the threshold of US$ 2 Trillion by the end of the year; representing more than a 20% increase from last year's figure (KFH Research, 2013 and IFSB Stability Report, 2013). As a result of this growth and spread, IF is no longer confined to its traditional Muslim and Arab markets; rather, it has spread, in various degrees, all over the globe. Among the places that have witnessed a "unique" involvement and evolution in this process is the United Kingdom. The active role, that the UK has played, led some experts to describe this phenomenon as a "*standalone*" experiment in the development and promotion of IF outside the Muslim and Arab worlds.

Seizing upon this momentum, the British Prime Minister; David Cameron announced at the 9th World Islamic Economic Forum[1] (9th WIEF) that he and his government plan to make the UK an International Financial Centre for IF. This paper argues that the UK is already a 'hub' in many aspects relating to IF operations and practices; the UK has been involved in accommodating limited services as early as the late 1970s and early the 1980s, the number of institutions providing 'Islamic' financial services, the number of various degrees and certificates offered by British Universities and other professional institutions, and, finally, the number of law firms engaged in consultancy and IF product developments. Therefore, what matters is putting this call into the perspective of the previous initiatives taken by the Labour government, financial regulators and supervisors, promoting agencies; like the *CityUK* and its predecessor IFSL, of the competitiveness of the City of London as an International Financial Centre on one hand, and elaborating on the factors that stand behind this growth and development on the other.

[1] The 9th WIEF was convened in London on October 29th-31st 2013. The Forum started as an OIC Business platform in 2003. In conjunction with the tenth OIC Summit that was held on 15th October 2003 in Putrajaya, Malaysia, the establishment of the Forum was declared. The inaugural OIC Business Forum sought to create a business 'face' of the OIC. The Forum brought together government leaders, captains of industries, academic scholars, regional experts, professionals and corporate managers to discuss opportunities for business partnerships in the Muslim world. The second OIC Business Forum was convened in Kuala Lumpur in 2004 and the subsequent convening of the 1st WIEF in Kuala Lumpur in 2005. This was an important shift that opened up the Forum to include Muslim communities beyond OIC countries and other non-Muslim communities across the globe. Source: www.wief.org.

By making this pledge, the current UK government is, in fact, reinforcing the previous initiatives taken by its Labour predecessor that will make London at the heart, of not only a regional level but an international bid to compete with 'Islamic' Cities such as Bahrain, Dubai and Kuala Lumpur. In the words of the UK Chancellor of the Exchequer, George Osborne, is to turn the City of London into the "*unrivalled western Centre for Islamic Finance*" Osborne (2013). This ambitious plan by a conservative government emphasizes the fact when it comes to economic interests of the nation, the divide line between Labour and Conservative parties is slim; British governments aim to consolidate the position of London as an International financial Centre. We think this is an understandable move that may reflect a response, by British governments, to the realities of the fierce 'head-to-head' economic and financial battles that are ever increasing within the Capitalist camp since the collapse of the Berlin Wall in 1989, and they have been reinforced by the economic and financial uncertainties that many advanced economies are going through because of inflictions of the recent financial turbulences. George Osborne, the British Finance Minister, summarizes this policy in a crystal clear manner in the article that he wrote on the FT newspaper as follows: "Whether it is attracting money from China, rejecting damaging protectionism and financial transaction taxes, or issuing the first sovereign Islamic bond in the western world – this government is doing what it takes to open Britain up for business, and for new sources of finance and extra jobs" Osborne (2013).

Indeed, there are other dimensions like political and educational ones as noted by a recent note by the Foreign and Commonwealth Office (FCO) and by the UK trade and investment (UKTI) report. The latter document revealed that UK is one of the most attractive places to study in the world with about 100,000 international students studying at UK universities, Quilter-Pinner and Yan (2013) and UKTI (2013: 11)

To put this call and the measures that may follow into perspective, this research aims to capture the latest developments of IF industry in Britain. Particular attention, in this regards, is given to the identification of the major factors that have played an important role in this evolution. The investigation also sets out to draw important lessons and extrapolates practical steps that can be of benefit to regulatory and supervisory authorities in other jurisdictions intending to integrate IF into their conventional financial systems. To address these points properly, the research explores the following questions:

1. What are the earliest and latest developments of IF industry operations in the UK?

2. What are the deriving factors that stand behind the "*uniqueness*" of the role played by the UK in the spread and development of IF outside the Arab and Muslim World?
3. Is there a correlation between the development of IF in the UK and the welcoming attitude adopted by the UK authorities? In other words, does the Financial Services Authority[2] (FSA)'s approach to regulating Islamic finance provide the appropriate environment for its development in the UK? [3]
4. What lessons and practical steps can be drawn from the experiment?

The remainder of the paper is organized as follows: section **2** reviews the relevant literature. Section **3** provides a brief overview of the developments of the operations of IF in general. Section **4,** on the other hand gives particular attention to the earliest and latest developments of IF industry in the UK. Section **5** touches upon the factors that stand behind the development and growth of IF in the UK, while Section **6** looks at the phases of the regulatory process pursued in the UK to provide a 'level playing field' for IF products and services and explores the practical steps derived from the UK experiment and the lessons that can be learnt from the experience. Finally, Section **7** draws some concluding remarks and identifies some issues for future consideration as far as the accommodation of IF in conventional systems is concerned.

Before ending this introduction, we must stress that describing this newly emerging industry in this research as 'Islamic' should never be interpreted as an 'Islamic authentication or stamping' from our part; it is simply that is how IF products and services have been described in many official reports and other studies and researches. Stating this matter clearly and categorically from the beginning is very important. This is because of three main reasons: i) – Limits of the research (i.e. raising this issue is beyond the stated objectives of the study), ii) - We are not Sharīʿah scholars or members of advisory boards whose main job is to give Sharīʿah verdicts or '*fatāwā*' on the conducted operations and products; and finally iii) – We have spelled out some of the reservations that have been raised by us and others regarding the 'Islamicity' of the prevailing Sharīʿah compliant industry in our 2011 publication.

[2] UK's single financial regulatory body. It came into being in 1997, and it operates under a single piece of legislation that applies to all financial operations and products: the Financial Services and Markets Act 2000. Financial Services Authority, 2006, "*Islamic Banking in the UK*", Briefing Note BN016/06, 9 March 2006. Available at: www.fsa.gov.uk/pages/About/Media/notes/bn016.shtml.

[3] Masood O. *et al.,* 2009, "*Role of Islamic Mortgages in UK*", p. 377.

2. Review of the Literature

Numerous studies and researches have been carried out in the last few years, dealing with different aspects related to the presence of IF in the UK. The reviewed literature seems to indicate that the challenges facing IF in the UK and the opportunities that it may benefit from received a great deal of attention.

Wilson (1999) investigated the characteristics of the British financial market and the evolution of Islamic finance since the beginning of the 1980s until the 1990s of the last century. He examined the challenges and opportunities surrounding the development of IF in Europe with particular reference to the UK experiment. However, the data of the study stopped at the borders of the 1990s of the last century.

Wilson (2003), Langah (2008) and Belouafi *et al*. (2011) also investigated the barriers and opportunities facing the presence of Islamic banking and finance in the UK. Aldohni, (2008) on the other hand, focused on the UK prudential banking regulation in paving the way to the Islamic banking operations by investigating the issue of 'how effective has been the UK regulatory body; the FSA in achieving its objectives through the adopted measures?'. Aldohni (2011) has taken the issue further by comparing the approach taken by the UK authorities and that of their Malaysian counterpart in accommodating IF in their respective financial markets.

Other investigations like Dar (2002), Mathews *et al.* (2003) and Masood *et al*. (2009) explored the 'Islamic' mortgage products and market in the UK for buying houses in Britain. They dealt with a partial issue relating to financing homes for members of the Muslim community in the UK; the size of this market and the obstacles that encounter the members of the community in purchasing their own homes.

Wilson (2007) looked at the latest developments about "Islamic finance in Europe", with references to the experiences of some countries such as Germany regarding the issuance of instruments (i.e. Saxony-Anhalt *Ṣukūk*), and the United Kingdom with respect to licensing of Islamic banks and traditional financial services that are "compatible with the provisions of the Islamic Sharīʿah". The study focused on the British government for the issuance of sovereign *Ṣukūk* and the factors that made Britain ahead of their European counterparts in this area.

At the official level, the UK government published two important documents in 2007 and 2008. The 2007 study published by the FSA concentrated on the regulatory perspective. The other official document issued by the UK Treasury in December

2008, spotted a number of barriers that may prevent the development of Islamic finance in the British capital market and the role that the British government has and should play in this regard, in order to create a 'level playing field' for this type of funding and institutions.

Another study by Masood *et al.* (2011) provided an analysis of the growth and rise of smaller Islamic Banks in the past decade. The main focus of the research has been investigating the stability of smaller IBs *vis-à-vis* their larger sisters. The study was general not confined to the UK as such.

Khan (2012) analysed the perception and awareness of non-Muslims towards Islamic finance in the United Kingdom and the selection criteria used by the consumers in choosing a financial institution. He determined the extent to which non-Muslims are aware of Islamic finance in the UK and their perceptions towards it. He explained the behavioural aspects of consumers towards the financial services industry, which helps in forming perceptions or beliefs. He also discussed the intrinsic as well as the extrinsic factors that affect non-Muslims perceptions towards Islamic finance in the UK.

Elaine Housby wrote two books on Islamic finance in the UK. One in 2011 entitled "Islamic Financial Services in the United Kingdom" and the other in 2013 entitled: "Islamic and Ethical Finance in the United Kingdom". In the first book, the author provided a comprehensive account of the Islamic financial services that are available in the United Kingdom at the time, giving a general account of the British Muslim population, its size, age, origin, location, educational and occupational achievements, followed by an overview on the history of Islamic finance in the UK and an outline on the essential principles of Islamic thought on financial matters. Subsequently she dealt, in turn, with each area of financial services as they exist at the time in the UK, including personal accounts, home purchase finance, the equivalents of personal loans and insurance, investment, *Ṣukūk* and commercial funding. In the second book, Housby answered questions such as what exactly is ethical finance? Is Islamic finance ethical? Is ethical finance Islamic? by examining a wide range of financial institutions in the UK, which fall broadly within the ethical sector, considering the nature of their principles and practices, and how they relate to Islamic models and to Muslim communities. She compared the principles and functioning of Islamic and secular ethical financial services in the UK and provided a comparison of Christian thought and secular ethical financial services with the Islamic tradition.

A more recent brochure published by the UK Trade & Investment (UKTI, 2013), provides an overview of the Islamic finance landscape in the UK, mapping the sector's history, its phenomenal rise and outlining the unrivalled knowledge expertise and experience the UK offers across all sectors from education to international law and banking Business profiles from key industry players.

To the best of our knowledge, none of the previous studies and researches has examined separately and thoroughly the factors that stand behind the development and growth of IF in the UK; particularly the initiatives taken by the Muslim community living over there. Furthermore, our study covers the trend of this phenomenon in a detailed and comprehensive manner with more focus on the regulatory approach followed by the UK financial regulators to derive some practical steps, lessons and limitations that can be drawn from this experiment.

3. Development of Islamic Finance: An Overview

Islamic financial operations were known and practiced since the 7th century AD when the Prophet Mohammed (peace be upon him) prohibited some transactions involving *Ribā* (interest), *Gharar* (deception), *Qimār* (gambling), *Mujazafah* (speculation), *Ihtikar* (monopoly) and other similar transactions and allowed some other transactions such as *Murābaḥah* (Mark-up sale), *Mushārakah* (partnership), *Muḍārabah* (sleeping partnership), *Muzāraʿah* (Sharecropping) and similar transactions. Some of these operations were known to many earlier civilizations but they were developed further under the Islamic civilization, (Chachi, 2005).

The Global Islamic assets held by commercial banks stood at $1.3bn in 2011, but the industry's forecast growth of some 40% over two years will see this figure rise to $1.8bn in 2013, according to research by Ernst & Young (Handckok, 2013).

The industry is set to grow significantly in the years ahead. At the current rate of growth the market could top $2 trillion in assets by the end of 2014. The largest centres remain concentrated in Malaysia and the Middle East, including Iran, Saudi Arabia, UAE and Kuwait (UKIFS, 2013).

The prevailing IF came into being no more than four decades ago. However, historically speaking, the first recent writings and attempts to establish a modern Islamic bank that cater for the financial needs of Muslims in a Sharīʿah compliant way, were made much earlier.

Most of the writings on the history of contemporary Islamic finance agree that the idea of Islamic banking emerged in the late 1940s of the twentieth century, referring to the book of Anwar Iqbal Qureshi (1946) entitled: *Islam and the Theory of Interest*, and an article by Naeem Siddiqui (1948) entitled "Banking on Islamic Principles". However, an earlier attempt, that has come to be known only recently[4], was made in the late 1920s in Algeria, when an Algerian reformist named Brahim Abu-Yaqddan[5] called for the establishment of a 'modern' bank based on the principles of Islamic Sharīʿah. That call was, then, followed by a detailed study prepared by some Algerian businessmen. In that study all the necessary steps to open the bank was spelled out, but the experiment never came to realization as it was prevented by the French colonizers who were in control of Algeria at that time[6].

The recent institutional development of Islamic banking since the 1940s went through three major phases.

The first phase is between the 1940s and the 1950s when many of the Islamic countries became independent from the Western colonization. This phase saw few attempts to initiate Islamic finance, among which an attempt to establish an Islamic bank in the late 1950s in a rural area in Pakistan, though this had no lasting impact (see Traute, 1983; Wilson, 1983 and Chachi, 2005). It was a small experimental Interest-Free Bank, founded by a small number of pious landowners who were prepared to deposit funds without interest rewards. The credit was advanced to other poorer landowners for agricultural improvements. No interest was charged for the credit, but a small fixed administrative fee was levied to cover the operating costs of the bank. However, as Wilson (1983:75) put it: "although there was no shortage of borrowers, the depositors tended to view their payments in the institution as a once and for all effort and the institution soon ran short of funds. In addition, the depositors took a considerable interest in how their deposits were loaned out and the bank officials enjoyed little autonomy with no new deposits forthcoming, and problems over recruitment of bank staff, who were unwilling to give up lucrative and secure careers in city commercial banking for an uncertain venture in the countryside, the institution soon foundered".

This was followed by a two successful attempts in the second phase during the 1960s. One was the introduction of a local saving bank in the rural area of *Mit-Ghamr*

[4] Belabes, (2013). "A New Pages from the History of Islamic Banking: An Early Initiative to Establish an Islamic Bank in Algeria in the Late 1920s".
[5] Abou Al-Yaqdhan, Ibrahim (1928) *Hâjat al-Jazaïr ila Masrif Ahli* (The Need of Algeria for a Native Bank), *Wadi Mizab*.
[6] Belabes, (2013). Op. cit, p. 10-11.

in Egypt, the *Mit-Ghamr* Local Saving Bank (MGLSB) and the other was the establishment of the Pilgrims Fund Corporation or Tabung Haji in Malaysia (THM). Both were based on the principles of Islamic Sharīʿah.

The MGLSB was initiated by Al-Naggar, who later became the Secretary General of International Association of Islamic Banks. The model was in line with the German savings banks adapted to the rural environment of an Islamic developing country. This experiment proved quite successful and the savings mobilisation impressive. Its success in winning the support of a large number of students, farmers and villagers who regarded the bank as their own, is discussed by Ready (1967); El-Naggar (1974), Harvey (1981); Traute (1983) and Wilson (1983). El-Naggar (1974:272) commented: "In spite of the short period during which the bank has been in operation, it has rendered vital services to the economic development of the local community, especially in the development and the establishment of small industries and in providing new opportunities of work for unemployed workers in *Mit-Ghamr* and its 53 affiliated villages".

After three and a half years, the experiment came to an end, not because of its insolvency or other financial difficulties or misconduct, but, rather, because of its success as measured by some indicators pointed out in some studies (Ready,1967; El-Naggar, 1978; Wilson, 1983 and Chachi, 2005). During the period of its operation, the bank was able to reduce problems of rural indebtedness in the areas where this bank and its branches were operating. Borrowers, no longer, had to depend neither on the few local moneylenders, many of whom charged high interest rates, nor on the non-Islamic banks which consider them as a 'non-bankable class' and which, they themselves would not deal with, as these banks base their operations on *Ribā* (interest and usury) which is *Haram* (prohibited) according to their belief in Islam (El-Naggar, 1978; Wilson, 1983; Chachi, 2005).

El-Naggar (1978:230-232) reported that: "Paradoxically, yet not surprisingly, it has been its success, rather than the reverse, which has created problems for the bank. As soon as the social role of the bank began to make itself evident in the successful development of the local area, conflicts started with the local social authorities who saw it as interfering in their own area of authority and regarded it as simply reduplicating their own efforts unnecessarily. In the meantime, because the bank introduced a new concept of banking more expressive of Islamic belief and practice and firmly rooted in a popular Muslim base, the size of savings and the number of savers were increasing rapidly either by the addition of new savers, or by savers who transferred their money from the commercial banks to the Islamic one. Inevitably, this aroused the traditional banks against their new popular based and progressive

competitor. Thus, in furthering such changes, the functions and role of the bank could, from a narrow view-point, be regarded as conflicting with existing institutions such as the social authorities, the commercial banks and some of the central holding organizations: industrial or commercial which were mainly under government control, so it was stopped".

Nevertheless, the venture laid the seeds of modern Islamic banking and pointed the way for subsequent undertakings. Soon afterwards, many Islamic social, developmental and commercial banks started doing business following the example of *Mit-Ghamr* local savings bank with some improvements. The first of such banks is the Nasser Social Bank established in 1971 in Egypt, not as profit oriented institution but as a social bank to serve the previously 'unbankable' low income group; followed by the Islamic Development Bank (IDB), an Inter-governmental institution established in 1975 in Jeddah (Saudi Arabia), with the purpose to foster the economic and social development of its member countries, and by the Dubai Islamic Bank (DIB) in Dubai (UAE) in 1975, the first major Islamic commercial bank, the success of which led to the establishment of a series of such banks elsewhere.

The second successful experiment in this regard, happened approximately at the same time as *Mit-Ghamr* Local Savings Bank. It is the birth of the Pilgrims Fund Corporation or Tabung Haji in Malaysia (THM), which started operation in 1963 with a number of objectives that included:

- Enabling Malay Muslims to save gradually, in order to support their expenditure during Hajj (pilgrimage) and for other beneficial purposes.
- Enabling Malay Muslims to have active and effective participations in investment activities that are permissible in Islam through their savings.
- Protecting and safeguarding the interests and ensuring the welfare of pilgrims during pilgrimage by providing various facilities and services.

With such objectives in mind, Tabung Haji, which is still operating until now, has been running successfully since then. Over the last 50 years of operation, it has provided excellent and comprehensive services with premium quality to satisfy the pilgrims need prior, during and after their pilgrimage. Its existence was attributed to a working paper presented by the Royal Professor Ungku Aziz titled, "Plan to Improve the Economy of Prospective Pilgrims" in 1959 (Tabung Haji website).

Tabung Haji started its business in 1963 with only 1281 members and a total deposits of MR46,600 the quasi-government body now has a membership (account holders) of around 8 million and deposits of more than US$41 billion. It is the country's largest Islamic fund manager with a network of 119 branches with more than 6,000 touch-points nationwide. It also makes its presence globally by operating an office in Jeddah, Saudi Arabia. The number of account holders when seen in proportion to the total Malaysian Muslim population of 29 million, is an indicator (27.6%) of how popular and successful this experiment is in Malaysia (Tabung Haji website).

The third phase happened by the mid-1970s, which saw the introduction of commercial private banking, Dubai Islamic Bank (DIB) and an intra-government initiative, the Islamic Development Bank, at a regional level among OIC[7] member countries in 1975. From then on, IF has grown steadily, spreading from one institution in one country, the Dubai Islamic Bank in the UAE, to about 600 institutions in more than seventy Islamic and non-Islamic countries with total assets in the threshold of 2 Trillion US Dollars as mentioned earlier (KFH Research, 2013 and IFSB Stability Report, 2013) and it has been growing at the rate of two digits over the last fifteen years[8]. Thus the operations and products of the industry have also been diversified.

4. The Developments of IF industry in the UK

4.1. The Earliest Developments up to the year 1999

The UK welcomed Islamic banking and finance since its early emergence in the late 1970s and early 1980s. The following activities, undertaking and actions make the point:

- In 1976, soon after the First International Conference on Islamic Economics, organized by King Abdul Aziz University, Jeddah at *Makkah Al-Mukarramah*, Saudi Arabia, the Islamic Foundation[9], Leicester, UK established its Islamic Economic Unit as the first ever research Centre on the subject. This Research Centre was followed by the International Centre for

[7] Organization of Islamic Conference. Recently the name of the organisation has change to "the Organization of Islamic Cooperation".

[8] According to Ibrahim Warde, "… *the rate of growth [of IF] accelerated from an average of 14 percent a year in 1994-2002 to 26 percent a year in 2003-2010*". Ibrahim Warde, 2010, "*Islamic Finance and the Global Meltdown*", available at: www.islamica-me.com.

[9] Winner of the 'Islamic Economics' prize of the Islamic Development Bank group in 1432H (2011).

Research in Islamic Economics (CRIE) at the University of King Abdul Aziz University in 1977. The Islamic Foundation UK subsequently published the major works by pioneers of Islamic economics, banking and finance like Nejattullah Siddiqi, Umer Chapra, and others. It also organized conferences, seminars and workshops on these topics in collaboration with the IDB, IRTI and Loughborough University.

- In 1981, the International Association for Islamic Economics (IAIE) was established in Leicester, UK. It is the Association responsible for the organization of the major international conferences on Islamic Economics. The 4th Conference was organized in Loughborough, UK in the year 2000. The last 2 conferences (8th and 9th) were organized in Qatar in 2011 and in Turkey in 2013 respectively.
- In 1982, the UK allowed *Dar Al-Mal-Al-Islami* (DMI), based in Geneva, to open an office in London and to mobilize investment funds for Luxembourg Investment Company and Luxembourg *Takāful* Company. DMI was founded in 1981 by indenture under the laws of the Commonwealth of the Bahamas with its headquarters in Geneva (Switzerland) for the purpose of conducting business affairs in conformity with Islamic law, principles and traditions and offering a wide range of Islamic financial services. It has an extensive network stretching over four continents, with well-integrated regional subsidiaries enabling it to respond to local business needs and conditions. Based on this geographic structure, the DMI Group and associates act as a financial bridge between the world's leading financial Centres and Islamic countries (DMI website).
- In 1983, *Takāful* UK Limited was established in the UK as a subsidiary of DMI, to cater for the need of Muslims residing in the UK, offering them Islamic investment opportunities provided by *Takāful* S.A in Luxembourg, especially for those who are opposed to buying a product they consider is contaminated with *Ribā* or interest. *Takāful* (UK) is still operating from Birmingham, UK, offering Islamic financial services available from a broad spectrum of product providers, in addition to *Takāful* services offered by *Takāful* S.A in Luxembourg (*Takāful*, UK Website).
- In 1983, The Bank of England (BOE) allowed Al-Baraka Bank to operate in the UK. This bank was founded in 1982 by the Al-Baraka Investment Company, based in Jeddah, Saudi Arabia. It was the only bank offering exclusively Islamic Banking Services in the UK under the 1987 Banking Act. Its business did not take-off until it opened two branches in London in 1988 and 1989, and a branch in Birmingham in 1991. Al-Baraka's major initiative was in housing finance, as it started to provide long-term Islamic mortgages

to its clients from 1988 onward. Al-Baraka and its client would sign a contract to purchase the house or flat jointly, the ownership share being determined by the financial contribution of each of the parties. Al-Baraka would expect a fixed predetermined profit for the period of the mortgage, the client making either monthly or quarterly repayments over a 10 to 20 year period, which covered the advance plus the profit share (Wilson, 1999:426-428). The BOE allowed Al-Baraka some time to seek diversification of ownership, but the problem could not be solved to its satisfaction. The bank therefore decided to surrender its license to offer banking services. It finally closed as a bank at the end of June 1993, though it continued to operate as an investment company (Housby, 2013).

- In 1995, the Loughborough University became the first western university to recognize and adopt the teaching of Islamic banking and finance at the Master level in collaboration with the Islamic Foundation UK, which sponsored the research-fellow to do the teaching and supervision of students choosing the optional course in their Master degree.
- In the same year, the Islamic Foundation UK, together with Loughborough University organized a major Conference in collaboration with the Islamic Development Bank, where the Governors of some central banks of Muslim countries such as Malaysia and UAE met with the Governor of Bank of England, Sir Eddie George and some scholars to discuss the possibility of allowing Islamic banks to operate in the UK to serve its Muslim population.
- In 1997, the United Bank of Kuwait added another major development in the availability of Islamic financial products in the United Kingdom. This was the introduction of home purchase finance by the bank by establishing a specialist Islamic division to its UK operation in 1991. This was eventually named the Islamic Investment Banking Unit, the name under which it still operates. The United Bank of Kuwait later merged with the Al-Ahli Bank and is now known as the Al-Ahli United Bank. The house purchase product was given the brand name of *Manzil*, which means 'dwelling'. The introduction of this service released considerable pent-up demand. Initially, *Manzil* offered only a *Murābaḥah* product, but in 1999, it introduced an *Ijārah* mortgage version. The latter has proved to be far more popular (Housby, 2013).

4.2. The Latest Developments from 2000 onward

It appears, from the available sources that from the year 2000 onward, the UK realized further the benefits of Islamic finance, so it allowed it gradually on the high street. For instance:

- In 2000, one of the famous UK Universities[10] hosted the 4th International Conference of Islamic Economics. Thus, making the only European country to hold such an important event at the international level. In addition, in the year 2002, one of its academics[11], was awarded the Islamic Development Bank Prize in Islamic Banking and Finance. In the same year 2000, the Islamic Foundation UK established the first Islamic institute[12] to teach Islamic economics, banking and finance at master level in collaboration with Portsmouth University, then with Loughborough University and nowadays with Gloucester University (MIHE website and Islamic Foundation Website).
- The year 2001 saw a remarkable political and regulatory boost through the creation a high-level working group with representatives from the City, government, the council of Mortgage Lenders, the Muslim community and the FSA, to examine the barriers to Islamic finance in the UK, (Ainley *et al*., 2007: 8; HM Treasury, 2008: 10; UKIFS, 2013:10). The group was set up by the Bank of England and the UK Treasury, and it was chaired by Andrew Buxton, former Chairman of Barclays Bank, and Sir Eddie George, the then governor of the Bank of England (BOE). Since the formation of this working group, as reported by the UKIFS (2013:10), the UK government and regulators have attempted, through the addition of 'Alternative Finance' clauses to various Taxation Acts, to create an environment where IF players and their clients are not treated any differently to their conventional counterparties. The account below elaborates further on the steps taken in this regards.
- In 2003, the UK, recognizing the vast potential of this market, began shaping the tax and regulatory framework and it allowed the development of Islamic finance products. One of the first initiatives was to remove the double stamp-duty land-tax charge on Islamic mortgages. Hence, the UK is the first EU country to introduce legislative changes to provide a 'level playing field' for IF in its tax bills. The establishment since 2003 of an enabling fiscal and regulatory framework in the UK for IF has been key to facilitating these policy objectives. Initiatives have included:
  - The removal of double-tax on Islamic mortgages and the extension of tax relief on Islamic mortgages to companies, as well as individuals.

[10] The University of Loughborough, UK
[11] John Presley, ex-Professor of Banking at Loughborough University, UK.
[12] Markfield Institute of Higher Education, UK.

- Reform of arrangements for issues of bonds so that returns and income payments can be treated 'as if' interest. This makes London a more attractive location for issuing and trading *Ṣukūk*.
- Initiatives by the Financial Conduct Authority to ensure that regulatory treatment of Islamic finance is consistent with its statutory objectives and principles.

❖ In 2003, the Government also launched the UK's first IF Task Force in order to support further developments of the UK's Islamic finance sector, help increase inward investment and strengthen the economy. It included major industry figures to ensure that the UK's offer is promoted at home and abroad by both the public and private sector. One of the key objectives of the Task Force is to engage with the UK Islamic Finance Secretariat (UKIFS) and others to promote and raise the international profile of the industry. Many firms operating in Islamic finance in the UK are members of UK Islamic Finance Secretariat (UKIFS), which is part of The CityUK (UKIFS, 2013).

❖ In July the same year 2003, HSBC, the giant international bank, introduced an Islamic current account and Islamic home purchase finance in the United Kingdom. The bank's Islamic division is called *Amānah*, meaning 'trust'. HSBC has at least one branch in virtually every town of a reasonable size in the United Kingdom, and is thus an everyday presence to British Muslims. Specialist *Amānah* counters were set up in branches with a significant Muslim population locally and prominent posters displayed in the windows of such branches. HSBC originally offered an *Ijārah* contract, but has now switched to a *Mushārakah Mutanaqissah* (diminishing partnership) scheme. In this latter model, the bank and the client are joint-owners of the property, with the client buying out the bank's share of the equity in installments and paying rent for the use of the proportion of the property still owned by the bank. The main difference from an *Ijārah* model is that the client is described as a joint-owner from the outset rather than as a tenant until all payments have been completed.

❖ Since the year 2005, London has also emerged as the Centre for secondary market trading in Islamic instruments. The City is home to many of the originating banks, as well as the hedge funds and real money investors that have recently bought into Islamic bonds (*Ṣukūk*). *Ṣukūk* are structured in such a way that investors have a beneficial interest in the cash flows generated by the underlying assets. The size of the *Ṣukūk* market, encompassing domestic and international issues, is estimated at about $60bn. The market is expanding at a rapid pace. The past few years have seen a rapid expansion in the issuance of *Ṣukūk* securities across Asia and the Middle East (The Banker, 11-2007). In this regards, the UK is also ahead of many Western and non-Western

financial Centers. According to the Global IF Forum (GIFF, 2012:9) report at the end 2012, the London Stock Exchange listed 42 *Ṣukūks*, followed by Luxemburg and the Irish Stock Exchanges listing 16 and 9 *Ṣukūks* respectively.

- In its Budget 2009 report, the UK Treasury announced provision of relief from tax on capital gains and capital allowance rules to encourage Islamic debt issuance in the form of *Ṣukūks*, all as part of its "ongoing drive to promote the UK as a Centre for Islamic finance".
- The UK government in January 2010 took a further step with regards to the issuance of *Ṣukūk* in order 'to provide greater certainty to issuers, arrangers and investors, and to provide AFIBs with a regulatory treatment akin to that for conventional bonds where they are structured to have economic characteristics similar to conventional debt instruments' (Finney and Sapte, 2009).
- In 2013 the 9th Meeting of the World Islamic Economic Forum was hosted in London. This is the first time this major international conference has been held outside Asia and the Middle East. In this meeting, the UK Prime Minister, David Cameron, announced the UK plan not only to maintain the position of London as a hub of Islamic finance and also announced that the British Government will soon issue £200 million worth of *Ṣukūk*. This figure is well below the £2 billion worth of *Ṣukūk* that was planned for, during the height of the international financial crisis in 2007 (Jessop and Bell 2009: 10).
- Nowadays, the UK is, as reported by Filippo *et al.* (2013:29) and UKIFS (2013:5), one of the most advanced and sophisticated Islamic financial markets in the western world and is quickly becoming a key destination for foreign Sharīʿah-compliant institutions. It is the first western country to allow the establishment of the first fully-fledged Islamic bank, the Islamic Bank of Britain (IBB) and currently has six fully-fledged operating Islamic banks, that is more than in any other Western country. The fully-fledged Sharīʿah compliant banks in the UK are given in the following table:

Table-1
Summary about Islamic Banks Operating in the UK

Name of Institution	Inception Date	Nature of Work and Activities
The Islamic Bank of Britain (IBB)	2004	A retail bank and the only Islamic bank with a high street presence having five branches and around 50,000 customers. The bank offers a wide range of Sharia compliant financial products in the UK.
European Islamic Investment Bank (EIIB)	2005	A wholesale investment bank which offers its customers Sharīʿah compliant Treasury and capital markets, asset management, private banking, trade finance, correspondent banking and advisory and corporate finance services. EIIB has its headquarters in London.
The Bank of London and The Middle East (BLME)	2007	An independent wholesale Sharīʿah compliant UK bank based in London. Its offering spans corporate banking, treasury and wealth management that comprises private banking and asset management.
Qatar Islamic Bank UK (QIB UK) (European Finance Hose)	2008	A Wholesale Islamic Investment Bank. It provides Sharīʿah compliant investment banking services including trade finance, private equity and asset management to clients ranging from High Net Worth individuals to sovereign wealth funds and other institutional investors.
Gatehouse Bank	2008	A wholesale investment bank operating in capital markets, real estate, asset finance, Treasury business and Sharīʿah advisory services. The bank manages $1.7bn real estate assets in the US and UK. In December 2012 the bank issued the UK's first ever real estate backed sterling *Ṣukūk Al-ljarah*.
Abu Dhabi Islamic Bank UK (ADIB-UK)	2013	Also a wholesale bank which is already operating a large branch network in Egypt – and is in the process of extending operations to several markets across the Middle East and beyond. ADIB UK limited was established to bring the bank's services to clients in the UK.

Source: Authors Compilation from Institutions Web Sites & UKIFS (2013:12)

This is in addition to the provision of Sharīʿah compliant accounts by an estimated 16 conventional banks, such as HSBC, Lloyds-TSB, Barclays Bank, etc. that have set up windows in the UK to provide Islamic financial services.

The UK is also a major global provider of the specialist legal expertise required for Islamic finance, with around 25 major law firms providing legal services in this area. London, in particular, has become an important financial Centre, where major international firms and the Middle East's biggest traditional banks are offering Islamic financial products and services in this city (Filippo *et al.*, 2013:29). Today, the UK is the leading Western country and Europe's premier Centre for Islamic finance. It is well positioned to capture a growing share of Islamic finance business

in the coming years (UKIFS, 2013). According to The Banker magazine's latest Islamic Finance survey, the UK ranks as the ninth largest global location for managing Islamic finance assets, with $19bn in reported assets (The Banker, 2012).

Finally it is important to make a note about how IF is being perceived officially: is it regarded as an 'alternative finance' like 'green' and 'ethical' financing? Or as 'an alternative' in the sense of having the 'potential' to replace existing conventional finance as some protagonists of IF may have portrayed the move by British governments in adopting a 'welcoming' attitude towards the presence of IF in Britain? According to UK official sources, IF simply denotes to "the subsection of the financial services industry that complies with the principles of Sharīʿah (Islamic Law)"[13]. These sources pointed out that the most important principles upon which IF framework rests are[14]:

- ✓ Prohibition of the payment and receipt of interest[15]: money itself is considered to have no intrinsic value – it is merely a store of wealth and a medium of exchange.
- ✓ Prohibition of uncertainty or speculation[16]: everybody participating in a financial transaction must be adequately informed and not cheated or misled.
- ✓ Prohibition of financing certain economic sectors [or activities] (ethical dimension of IF): investment is forbidden in those activities viewed as socially detrimental. These include gambling, pornography, and alcohol.
- ✓ Importance of profit and loss sharing: the investor and the investee must share the risk of all financial transactions[17].

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[13] HM Treasury, 2008, "*The Development of Islamic Finance in the UK: the Government's perspective*", p. 5.
[14] *Ibid.*, p. 7.
[15] This is the very apparent and the most important feature of *Ribā* in nowadays financial practices.
[16] This is an imprecise translation of the word *Gharar*, which can be best, translated as *alea*, or *aleatory* contracts. Also information asymmetry and zero-sum game can be of great benefit in exploring the wider context of *Gharar* in Islamic law.
[17] This is not the case under *Muḍārabah*, a form of partnership under which one party provides capital and the other entrepreneurship or work; the parties share in the generated profits but losses are borne entirely by the capital provider if true and honest information and accounts are disclosed by the entrepreneur or work provider. This is also not the case under *Murābaḥah* (mark-up sale), *Ijārah* (leasing), *Ijārah wa Iqtina' (hire purchase), Salam* (future delivery of a commodity against pre-payment) and *Istiṣnāʿ* (future delivery of manufactured commodity according to pre-agreed specifications) where the returns on investments are not *Ribā* (interest) but agreed upon at the time of signing the contracts.

- ✓ Asset-backing principle: financial transactions should be underpinned by an identifiable and tangible underlying asset.

Even though that is how IF has been defined and framed, it has been, on the other hand, perceived as an industry that is widening financial choice by serving not only Muslim customers, but also customers of other faiths and cultures. In this regard, a UK official document states: "It is often suggested that IF products may be particularly attractive to those interested in ethical finance, due to certain characteristics non-Muslim businesses may be attracted to IF to increase their sources of funds or liquidity" [18].

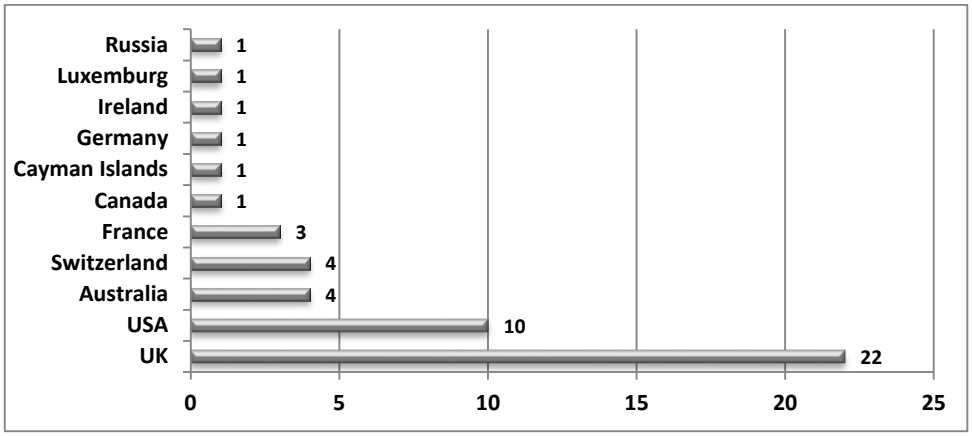
It is within this general context and framework of the nature of IF that the industry has been accommodated and promoted in the UK financial system over the last thirty years or so. Due the well placed position of the UK financial, legal and educational establishments, many of these entities are engaged in providing IF services in one way or another.

According to an IFSL and the UKIFS reports,[19] there are 55 educational organizations and over 20 law firms involved in this process (Filip *et al.*, 2013:29). A number of companies that engage in principal investing and fund management are also operating in the UK market. Some of these are Gulf Finance House, Dar Capital (UK), Fajr Capital and Al-Salam Europe[20].

From the above account, it can be noticed that the UK has positioned itself as an international gateway for IF finance in the non-Arab and non-Muslim World[21]. The following figures provide further evidence to support the aforementioned progress:

[18] HM Treasury, 2008, "*The Development of Islamic Finance in the UK: the Governments' perspective"*, pp. 7-8.
[19] IFSL Research, 2009, "*Islamic Finance 2009*", p. 5 & 6, and UKIFS, 2013, "UK, the Leading Western Centre for Islamic Finance", p. 7.
[20] The Muslim Council of Britain, 2009, "*London and Islamic Finance: Briefing Paper for the Mayor of London*", p.5.
[21] The UK is even well ahead of many Muslim and Arab countries.

Figure-1
Number of Banks Providing Sharīʿah Compliant Services in Western & Offshore Centres

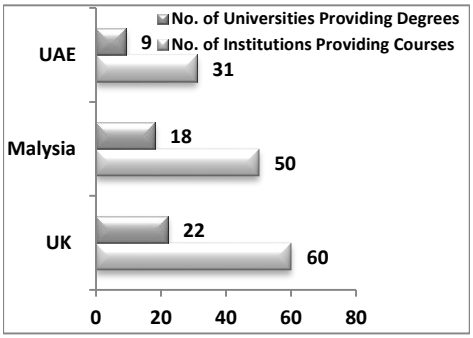


Source: UKIFS (2013), "UK, the Leading Western Centre for Islamic Finance", p.4**.**

Figures (2) and (3) below show that the UK is well positioned in the education and research in IF; the UK has the largest educational institutions; universities and other professional bodies involved in the teaching and training of IF, and in research output the UK came second after Malaysia. According to a recent report produced by IFDI of Thomson Reuters: "Malaysia is leading in terms of research published on Islamic finance in the last three years, with 169 research papers, of which 101 were peer reviewed. The UK and USA followed with 111 research papers (56 peer reviewed) and 73 research papers (39 peer reviewed) respectively. A total of 655 research papers were issued globally on Islamic finance in the last three years, of which 354 were peer reviewed"[22], Trade Arabia Business News Information (2013).

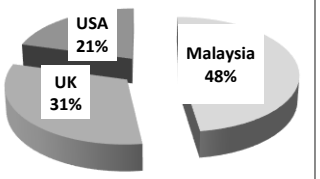
[22] Trade Arabia Business News Information (2013), "UK, Malaysia top in Islamic finance research", ww.tradearabia.com.

Figure – 2- Number of Establishment Involved in IF Education



Source: Business Intelligence Middle East (2013) & After School Higher Education Advisor (2013)

Figure -3- Published Peer & Non Peer Reviewed Papers



Source: Trade and Business News Information (2013).

The above indicators suggest that there is a positive correlation between the welcoming attitude of the UK authorities, especially those involved in regulation, and the growth of IF in Britain. This is not a surprise since the development and promotion of any new business needs an enabling environment that send positive signals to responsible authorities of that business or industry, and IF is not an exception in this regard. This fact has been acknowledged in the UK by official and other sources[23]. This tendency has caught the attention of other jurisdictions to learn from the British experiment. For instance, in 2006 central banking authorities in Canada and Kenya visited the FSA and met representatives of the local banks who had taken the steps of starting Islamic banking operations, like the Islamic Bank of Britain, to look into the feasibility of adopting the UK model to enable investors to start Islamic banking operations in their respective domiciles[24]. Furthermore, the ex-Governor of the State Bank of Pakistan, Shamshad Akhtar[25], in one of her keynote speeches in a conference about IF, indicated that developed jurisdictions can pursue the approach adopted by the UK authorities in welcoming IF in their financial

[23] An example of that is UK Trade and Investments assertion that the "supportive legislation boosts UK's world-leading Islamic finance industry. This success has been facilitated by important legislative changes which have created a dynamic base for Sharīʿah-compliant financial products". UK Trade and Investments, (2010). "*Supportive legislation boosts UK's world-leading Islamic finance industry*".

[24] Abu Umar Farooq Ahmad and M. Kabir Hassan, (2006). "*The Adoption of the UK Finance Bill Proposals on Islamic Finance into Islamic Banking in Australia*", p. 51.

[25] Shamshad Akhtar, (2007). "*Islamic Finance- Growth, Competitiveness and Sustainability*", p.3.

systems. Indeed, the learning process is not going to take place in the 'cut' and 'paste' format as each and every jurisdiction has its 'unique' social, cultural and economic contexts within which it operates.

5. Driving Factors behind Development and Growth of IF in the UK

This section tries to answer the question of 'why has the UK been able to reach this Position?' In consulting various sources; officials and others and observing the developments and growth on the ground the authors of this research came to the conclusion that several factors have attributed to the rise of this phenomenon. This is being the case, it has to be stated that the elaborated factors do not carry the same weight as far as their importance and role is concerned. Among the paramount factors the following can be identified and explored:

1. The nature of the political system (pragmatism, realism, and inclusiveness). In various documents and occasions, the UK government and its officials spelt out the supportive and ambitious attitude relating to the development of IF in the UK. For instance, in the official document published at the end of 2008, the UK government stated that its main objectives of the development of IF in the British Isles are two-fold[26]: First, to enhance the UK's competitiveness in financial services by establishing the UK as a gateway for international Islamic finance; and second, to ensure that everybody, irrespective of their religious beliefs, has access to competitively priced financial products. In this regard, the story of Lord Edward George, the former governor of the Bank of England, and a Muslim family, has been mentioned in various sources to indicate the inclusiveness approach adopted by the British authorities to make sure that everyone in the British society, regardless of faith and ethnicity, has access to a competitive and appropriate level of financial services and products. That incident drove the attention of Mr. George to IF since the beginning of the nineties. In 2003, he wrote about this: "I became interested in it [IF] more than a decade ago when I met a very lovely, deeply, religious, Muslim couple who were living in this country with their family, and who had recently bought a house on the back of a conventional mortgage. They told me of their delight in their home, but then they explained to me –not at all in an aggressive way, in fact in sorrow rather than anger- their regret that they had had to go against their religious principles to finance it. That made a big impression on me… I thought our very inventive financial system could find ways of meeting the needs of the different sectors of

[26] HM Treasury, 2008, "*The Development of Islamic Finance in the UK:* ", p. 13.

our society in ways where this kind of problem need not arise"[27]. This concern has been reiterated and carried out by other officials, like the Chairman of the FSA. In a speech delivered at the Muslim Council of Britain "Islamic Finance and Trade" Conference, the then chairman of the FSA, Mr. Callum McCarthy stated: "It would have been an invidious form of social exclusion for regulation to have prevented the development of financial products which conformed with their religious beliefs [Muslims living in the UK], and therefore to have condemned them to a position where their religious beliefs prevented them from accessing financial services. We at the FSA have been concerned to avoid this" [28]. It is clear that the above quotes and initiatives represent part of the government policies to combat social exclusion[29].

2. The Nature of the Version of the Capitalist Model Adopted. It is a well-recognized and established fact that there are varieties of capitalist models that have been adopted and implemented in various places throughout history, in the localities where capitalism has been the prevailing economic model. This has led some economists to compare this phenomenon with the varieties of products launched by companies to preserve their competitive edge and to meet customers' preferences. The late American economist Hyman Minsky was once asked about this; his reply was: "At one time the slogan of the Heinz pickle and ketchup company was "57 Varieties". When I make the point about the varieties of capitalism in America, I often say that "There are as many varieties of Capitalism as Heinz has of pickles."[30] The implications of such a fact at the practical level center around the emphasis on the more liberal and less interventionist view of the state in the economic affairs *vis-à-vis* the more socially oriented version. In the 1980s of the last century, liberalism dominated the political and economic scene in the UK. As a result, private ownership, liberal norms in business and deregulation of the financial system have been the main tools relied upon to attract foreign investments to the UK market. Within that context, IF saw its early entrance and development in the UK. As time passed by, other factors, such as the tremendous growth rates and spread of IF influenced the approach adopted by the UK authorities to establish London as an International hub for IF.
3. London as a Leading International Financial Centre. Since the 17th century, London has developed a tradition, of open attitude towards innovation and new

[27] Edward George, 2003, "*Towards Islamic House Financing in the UK*", p. 73.
[28] Callum McCarthy, (2006). "*Regulation and Islamic finance*", Speech delivered at the Muslim Council of Britain Islamic Finance and Trade Conference, 13 June 2006. Available at: www.fsa.gov.uk.
[29] Michael Ainley, (2008). "*Listing and Regulating Sukuk in the UK*", p. 6.
[30] Hyman Minsky, (1993). "*Finance and Stability: the Limits of Capitalism*", May 1993, WP #93, p.4.

ideas[31] in the financial sector. Wilson (1999) noted that: "London has turned out to be the largest market in the world for foreign exchange dealing, and the largest Centre for interbank transactions and syndicated lending". This observation is still supported by the recent data and information. According to the latest available data in April 2013, trading in the United Kingdom accounted for 41% of the total, making it by far the most important Centre for foreign exchange trading. Trading in the United States accounted for 19%, Singapore 5.7%, which is surpassing Japan for the first time and, finally Japan is in the fourth place accounting for 5.6%, (Kristine Aquino, 2013). In addition, the London Inter-Bank Offering rate, or LIBOR for short; which represent the average interest rate estimated by leading banks in London that they would be charged if borrowing from other banks, is used as a benchmark in the pricing of many financial products including Islamic ones. This is due to the flexibility and welcoming response of its financial system in order to maintain a competitive edge over its rivals. Several analysts, observers, politicians and academics have pointed out this factor[32]. For instance, Rodney Wilson, former professor of economics at Durham University, noted that "The UK has been a gateway for IF to enter Europe, partly reflecting the role of London as the leading international financial centre, but also as a consequence of the exposure of leading British banks to the Arab and wider Islamic World and their knowledge of these markets"[33]. Furthermore, after the introduction of the latest legislation in 2010 related to alternative finance investment bonds (AFIBs) or *Ṣukūk*, Sarah McCarthy-Fry, the Exchequer Secretary to the Treasury, stated that: "Islamic finance is an area that has been helped by the openness to new influences and ideas that we have here in the UK. With our depth of skill, experience and connections all around the world, we have ensured that the UK has long been the leading Western centre for Islamic finance"[34].

4. The Flexibility of the Legal System and the Nature of the Adopted Regulatory Framework. With regard to flexibility, it is noted that the existence of trust laws and equity principles under the British common law has given the UK government enough room to deal with the ownership matters that arise in the structures of most of IF instruments. In terms of regulation, Norton Rose, a key adviser for many Islamic transactions noticed that the steps taken by the UK

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[31] Ainley et al., (2007). "*Islamic Finance in the UK: Regulation and Challenges*", FSA, November 2007, p. 11.

[32] See also Howard Davies, (2002). "Islamic Finance and the FSA", pp. 104-105. Mr. Davies was an FSA chairman in the period 1997-2003.

[33] Rodney Wilson, (2007b), "*Islamic Finance in Europe*", p.2.

[34] UK Trade and Investments, (2010). "*Supportive legislation boosts UK's world-leading Islamic finance industry*".

authorities, in this regard, played a decisive role in the advancement of IF in this country: "For the last few years, HMRC have been very receptive to representations made for tax treatment of Islamic finance to be more onerous than conventional finance. These changes should ensure that there are now no UK tax obstacles in issuing *Ṣukūk* backed by UK land. These tax changes will give considerable boost to the UK Islamic finance initiative and ensure that in these difficult times alternative sources of finance will be available in the UK[35]". More importantly, the use of English law in the development of IF products and in the dispute settlements relating to IF transactions outside the UK have also played a role in consolidating London's position as an International hub for IF.[36]

5. The Establishment of a Single Regulator that Oversees the Operations of the Whole Financial Sector. The FSA was established by an Act of legislation[37], the Financial Services and Markets Act (FSMA) 2000. Thus, the FSA has combined the work of 11 different regulators into a single body under a single piece of legislation, and since the end of 2001 the FSA started its operations as the main statutory regulator for the UK financial services industry. This development may have quickened the process of the establishment of IFIs in the UK letting a single body to decide upon the licensing applications, rather than multiple entities as was the case under the old regime. In addition, the FSA has benefited from the initiatives taken by its predecessors as there was no lack of dialogue and discussion between the previous regulators and IF stakeholders, especially the Muslim community living in the UK[38]. Furthermore, the UK's principle-based regulatory structure, which is designed to accommodate a range of financial structures to suit multitude clients may have played a part in this development as well, thus giving the City of London more flexibility than its competitors elsewhere[39].
6. The Remarkable Growth and Expansion of the IF Industry, in almost all Places of the Global Financial Village, over the Past Few Years. This phenomenon has been attributed to several factors; the infancy of the industry, the liquidity accesses in the Gulf, the low levels of financial penetration in many Muslim countries and communities, and the rise of the emphasis on the ethical and moral

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[35] Gillian Walmesley, (2011). "*Another year of growth and development for the London Stock Exchange markets for Islamic finance*", pp. 1-2.

[36] Aziz Tayyebi, (2008). "*Islamic Finance: An Ethical Alternative to Conventional Finance*?", p. 5.

[37] Ainley, et al., (2007). "*Islamic Finance in the UK: Regulation and Challenges*", FSA, November 2007, p. 11.

[38] Howard Davies, (2002). "*Islamic Finance and the FSA*", p. 103.

[39] The Muslim Council of Britain, (2009). "*London and Islamic Finance: Briefing Paper for the Mayor of London*", p. 6 & Gillian Walmesley, (2011). "*Another year of growth and development for the London Stock Exchange markets for Islamic finance*", p. 1.

dimensions in financial dealings and practices in the aftermath of the recent financial turbulences. In addition, the traditional base (i.e. The Arab and Muslim Worlds which constitute 1/5 of the World population with 1.8 billion inhabitants that are growing by 1.5 per cent per year) of the industry is so vast and many of its countries and regions are financially and economically underdeveloped, but at the same time they have displayed good economic growth in the last few years and are projected to pursue that path. For example 253.9 million Muslims live in the 10 fastest growing economies in the World between 2011 and 2015, (Quilter-Pinner and Yan 2013). Furthermore, these places are generally unbanked, thus demand for financial services will continue to rise; governor of the central bank of Malaysia (Bank Negara), noted in one of her latest lectures that: "in many IDB countries, studies have shown that economic development is constrained by lack of access to finance, given that only 30 per cent of adult population use formal financial intermediaries", (Aziz 2013). Besides, various surveys conducted recently and in the past few years reveal the face that "a significant portion of the Muslims, if given the choice, would opt out for IF", (Organization of the Islamic Cooperation SESRIC[40] 2012: 12). In addition, demand for Islamic financial services is not confined to Muslims only, but non-Muslims may show interest in this kind of 'alternative' or 'ethical' financing. In Malaysia, for instance a quarter of IF customers are non-Muslims, (Quilter-Pinner and Yan 2013; Ali S. S. 2011: 21). Having observed this general trend about the whole traditional base of IF, it has to be noted that the development of IF varies from one region to the other. Ernst and Young (2012) pointed out that North Africa is the least developed in this regards if compared to others; especially the Gulf and Malaysia. The report categorically analyzed the status of three countries; Morocco, Libya and Oman. In 2010 these countries had no Islamic financial institutions, but they have taken legislative measures to accommodate the industry. The report estimated that by 2015 these countries will have IF markets worth $10bn, $5bn and $8bn respectively. The report also projected that the industry will make an impressive progress in Algeria, Egypt and Saudi Arabia. The industry will grow by 1192% in Algeria, by 395% in Egypt and by 220 in Saudi Arabia[41].

7. The Active Role and Involvement Carried out by some Muslim Community Organizations. It has already been mentioned that the Islamic Foundation, UK played an instrumental role in the advancement of Islamic Economics and Islamic Finance, not only in the UK, but elsewhere through publications and other means of the dissemination of Islamic economics knowledge. There are other

[40] Statistical, Economic and Social Research and Training Centre for Islamic Countries.

[41] One has to treat these estimates and figures with caution as the political climate has changed dramatically in some places like Egypt and is still unstable in some other places like Libya. If the unrest at the social front, in Many Arab and Muslim countries, is added, the situation will be more blurred.

organizations as well. For instance, the Muslim Council of Britain (MCB)[42]; a non-profit national Muslim organization has set up in 2005 a Business and Economics Committee (BEC). Reviewing the tasks that this committee has carried out, since its inception till now, show that IF has been present all along. The committee has good connections with the government's bodies like the FSA, the Treasury, trade and industry, and the CityUK. Through these links the ECB got engaged with various activities: consultation on tax amendments for IF products, increasing IF awareness through publication of special reports[43], participation in international events (e.g. heading the British delegate that participated in the 5th WIEF (2009) and attending the 9th WIEF), organizing public lectures, symposia, giving introductory courses about tenets and operations of IF, and holding meetings with business and political personalities (e.g. Sheikh Saleh Kamel, the Saudi Businessman and Gordon Brown the ex-Chancellor of the Exchequer). The other noticeable entity is the Islamic Finance Council UK ("IFC")[44]; a Scotland based organization that has been established by some active Muslims for the sole role of promotion and enhancement of IF in the British Isles. Since its inception, IFC has initiated many programs that aim at promoting the IF industry in the UK. Among these are: engagement with government bodies at the local and national levels, and awareness campaigns to increase IF outreach amongst key stakeholders within the society and particularly among Muslim community. Since 2005 the IFC has been holding a series of round table forums and conferences attracting leading industry players. Indeed, there are other individual and collective initiatives like 1st Ethical, but they are not engaged in the sort of activities that fits the research framework.

There are, of course, other factors such as the English language, as an international financial and business language, and close trade ties between Middle-Eastern countries, especially from the Gulf, and the UK.

[42] The MCB is a national charitable organization that has been set up in 1997 by Muslim community leaders to act as an Umbrella for different Muslim organizations. Currently the MCB represents over 500 affiliated national, regional and local organizations, mosques, charities and schools. Source: www.mcb.org.uk.

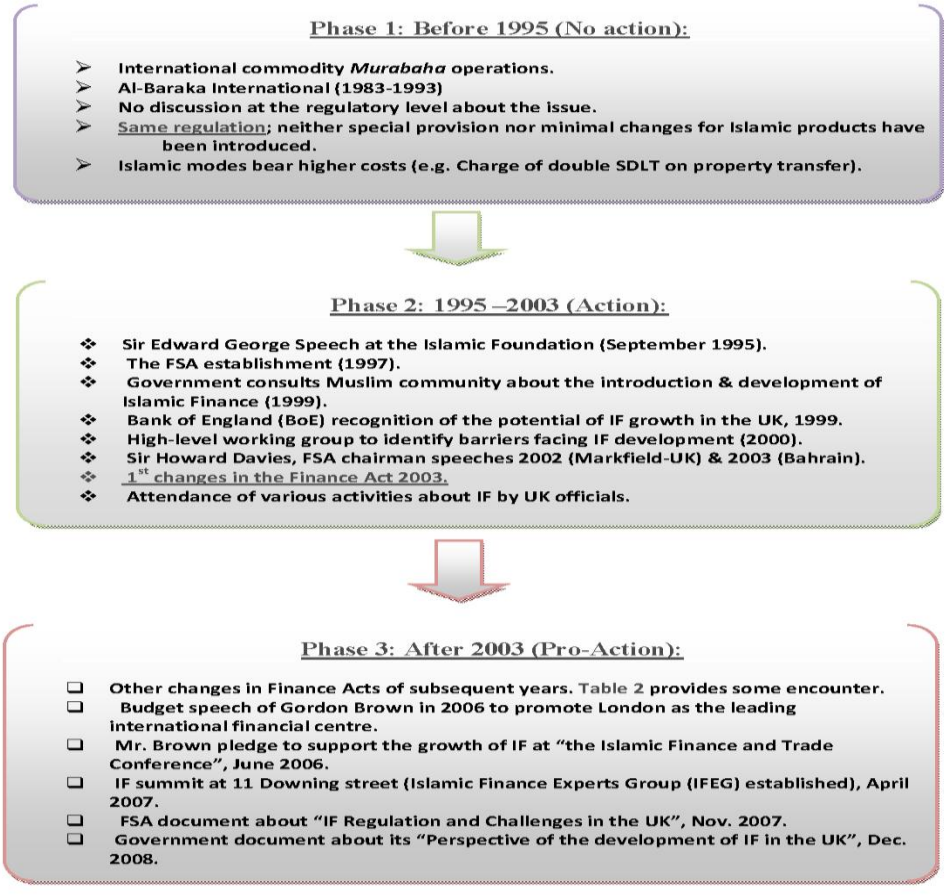
[43] The latest is "The Muslim Pound: Celebrating the Muslim Contribution to the British Economy". The report has been launched at the 9th WIEF that was held in late October in London.

[44] The IFC is a not for profit body established to promote and develop the Islamic finance industry. Its work focuses on two broad areas: advisory and promotion of IF. In IFC provides advisory in three main areas: Training & Education, Research and Tailored Solutions. For more information visit the IFC web site.

6. The Regulatory Process of Accommodating IF in the UK: Phases, Steps and Lessons

From the available data and information, Sharīʿah compliant products were first introduced in the UK markets since the early 1980s and they have been steadily developing and growing till this moment. The regulatory approach and attitude adopted by the UK authorities can be summarized in three main phases as illustrated by the following figure (4):

Figure-4
Summary of the Regulatory Phases pursued in the UK



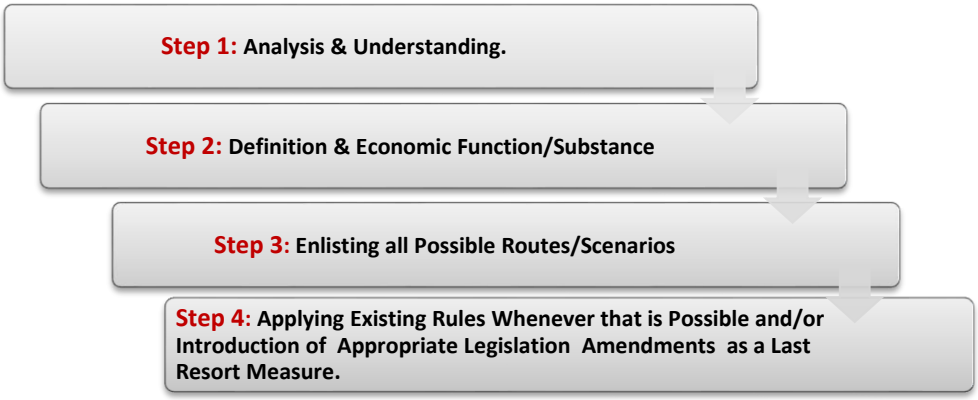
It is clear from the above account that the UK authorities have been accustomed to IF services and products for a very long period. During this period, IF industry witnessed significant developments. Those developments were captured and translated by British officials into policies that allowed IF to flourish on a gradual process in the UK. So, despite the ambitious intention of the government, as mentioned in the previous section, with regard to the development of IF in the UK, the government did not rush into hasty decisions and policies. As a result the changes came into being only over the last few years, as illustrated by the table given below:

Table-2
Examples of Introduced Changes to Finance Acts

Date	Changes
2003	Removal of the double charge of Stamp duty Land Tax (SDLT) for *Murābaḥah* & *Ijārah* contracts. Thus allowing individuals to purchase homes. Other measures were introduced as well to offer Islamic products for Child trust fund, asset finance and ISAs.
2005	Extension of the removal to *diminishing Mushārakah* (another mode of alternative finance).
2006	Extension of removal to beneficiaries (i.e. companies).
2007	Discussion of applying the same tax rules of conventional debt instruments like bonds to *Ṣukūk* (Islamic Bonds).
2008	Dealing with more issues relating to the issuance of *Ṣukūk*.
2009	Legislative measures for SDLT, Capital Gains Tax (CGT), and capital allowance rules for land transactions involved in the structuring of *Ṣukūk* instruments
2010	The Financial Services and Markets Act 2000 Order 2010 exempts alternative finance investment bonds (AFIBs), a class of debt-like security which includes *Ṣukūk*, from collective investment scheme (CIS) regulations

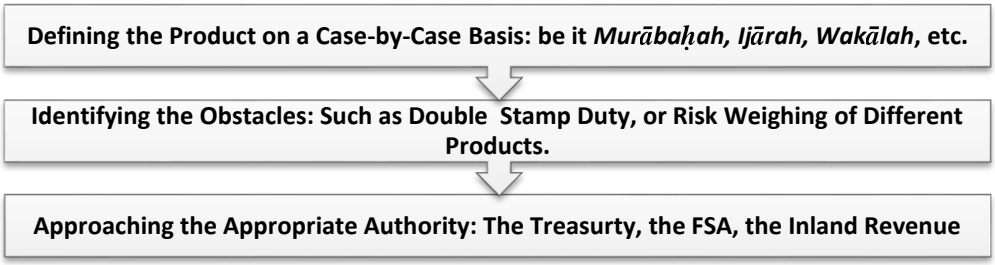
The practical steps derived from the UK approach in accommodating IF can be summarized in the following diagram:

Figure-5
Practical Steps of the UK Approach in Accommodating IF



The analysis has been carried out by working groups, such as the Islamic Finance Expert Group (IFEG) and the Tax Technical Working Group (TTWG) and through the various consultation papers to make sure that an in-depth analysis has been carried out, looking into the various aspects and implications of IF services and products. Furthermore, the process has been conducted through the following general guidelines[45]:

Figure-6
General Guidelines Governing the Steps Taken by the UK Authorities



[45] Edward George, (2003). "*Towards Islamic House Financing in the UK*", p.77.

For example**,** in the second step (Figure 5) the first group that was chaired by Edward George identified four main obstacles in the area of the provision of 'Islamic' home financing. These were[46]:

1. Treatment under Stamp Duty whereby duty may need to be paid twice, or at a higher rate than on a conventional mortgage because of the nature of the transaction involving the initial ownership by the financier.
2. Higher regulatory capital charges where conventional mortgages –and indeed *Murābahah* mortgages- attract a capital risk of 50%; but some Islamic mortgages –*Ijārah* mortgages- attract a higher rate of 100%.
3. Disadvantages under the various public sector home ownership schemes – such as Right to buy or Rent to mortgage, whereby the purchaser may be unable to take advantage of the benefits offered under the schemes due to the involvement of the financier as the owner of the property.
4. Disadvantages in terms of the housing cost element of Income support or income-based Jobseeker's Allowances as compared with that of a conventional mortgage.

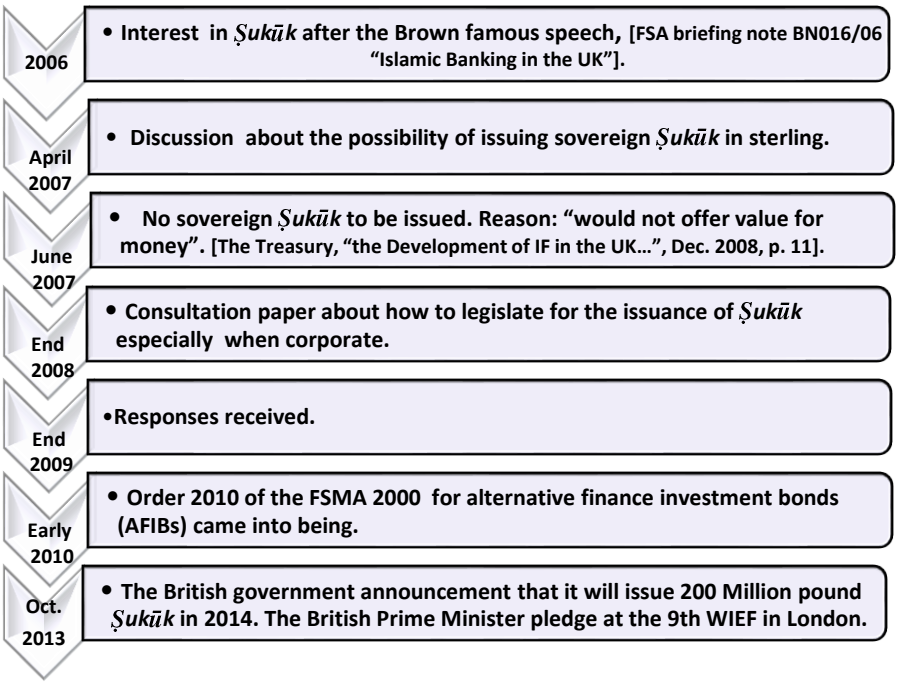
Subsequent groups have come across other obstacles as the process of accommodating IF products and services widened to include more products and more interested economic agents as shown in the above table (2). As a result, the process has been lengthy as the introduction of IF products and services have wider implications that need to be taken into consideration to avoid any unintended outcome. The treatment of *Ṣukūk* given below provides a typical example of how the process has been carried out to reach the appropriate policy.

The Example of Ṣukūk

The UK government has shown interest in *Ṣukūk* since 2006, after the Brown speech, the then Chancellor of the Exchequer, promising to promote the City as the international financial centre. Part of that strategy was to look into the economic potential of *Ṣukūk* as an alternative, but complementary instrument to conventional bonds that can be used to widen government options in diversifying the sources of its financing. Figure (7) below gives a summary of the initiatives taken between 2006 and 2013:

[46] *Ibid*, pp. 74-75.

Figure-7
UK Initiatives with Regard to *Ṣukūk*, between 2006 and 2013



After the analysis and the consultation process, the outcome has been to enlist all possible routes/options and then select the most appropriate.

1. The Enlisted Routes/Options[47]:
   - Option 1: Introduction of a unique regulatory definition for AFIBs (*Ṣukūk*) to exempt explicitly these instruments from CIS regulations and to create a new specified investment under the Regulated Activities Order (RAO).
   - Option 2: Same as (1), but AFIBs will be come under the existing tax definition.
   - Option 3: Same as (1), but includes AFIBs under existing specified investment of creating or acknowledging indebtedness.

[47] HM Treasury & FSA, (2008). "*Consultation on the legislative framework for the regulation of alternative finance investment bonds (Sukuk)*", p.3 & HM Treasury & FSA, (2009). "*Legislative framework for the regulation of alternative finance investment bonds (Sukuk): summary of responses*", p. 4.

- Option 4: Do nothing.

2. Selecting the Appropriate Option. The government opted for the first option as laid down in the order 2010 of the FSMA 2000 for alternative finance investment bonds as indicated above.

That approach led the government to conclude that, while its "objectives for IF are ambitious … it is,[nonetheless], committed to ensuring that behind these ambitious objectives, the necessary analysis, consideration and consultation is carried out to deliver real benefits to industry and consumers in the UK"[48].

From the previous examination of aspects relating to the accommodation of IF in the UK, the following lessons can be drawn:

- Need for clear-cut objectives (i.e. city competitiveness & citizens' access to financial products) and guiding principles (commitment, fairness & collaboration). Thus, subsidence of ideological and cultural sensitivity is of prime importance for an accommodative environment that is open to new ideas and innovations, irrespective of their origin, provided that they are of benefit to the society in general, or to an important part of its citizens.
- Thorough analysis through high-profile groups and consultation with various parties and departments concerned.
- Gradual and progressive process.
- Resolute and steady development.
- Stakeholder approach: On opening the door for IF, the UK authorities have involved several bodies and entities on their side as well as those on the IF industry's side. In particular, the Muslim community residing in the UK was involved in the process from the outset.
- Taxation as the main tool for legislating IF products and services. The main guiding principle of this process is to look into the economic substance of the transaction rather than its legal structure or form, based upon the "*no obstacles, no special favors*" policy. Hence IF products and operations have be treated as if they "were interest-bearing" instruments. Based on these

[48] HM Treasury, *2008). "*The Development of Islamic Finance in the UK: The Government's Perspective"*, p. 14.

considerations, the following principles have been applied to accommodate IF products into the tax bills[49]:

1. Treatment should follow the economic substance of the transaction.
2. Treatment should be on the same basis as equivalent financial products that bear interest.
3. Ordinary tax rules should be applied where possible.
4. Rules that give undesirable or unpredictable results should be amended.

7. Concluding Remarks and Issues for Future Consideration

In the preceding sections we examined and analyzed various aspects related to the growth and development of IF in the UK. On the basis of that analysis and discussions, the following concluding remarks and/or issues for future exploration can be made:

- IF has grown remarkably in the UK over the years. Many factors have been attributed to this growth. Political and regulatory factors have been identified as overriding elements in this process. An important feature of this development is the supportive government policies intended to broaden the market for Islamic products for both Sharīʿah compliant institutions and firms with 'Islamic windows'. The development of Islamic finance has also enjoyed cross party support over the past decade with two key policy objectives: firstly, to establish and maintain London as Europe's gateway to international Islamic finance; and secondly, to ensure that nobody in the UK is denied access to competitively priced financial products on account of their faith (UKIFS, 2013).
- Important lessons can be learnt from the British experiment. This, by no means, should be interpreted as a call for the adoption of a "*cut and paste*" solution but rather, it is a call to get inspiration from this experience by taking things even further than the UK. This is because every country has its unique characteristics and circumstances that should be taken advantage of in today's very competitive and complex environment, through the "comparative advantage" notion that served the growth of trade and mutual exchanges between nations over the centuries.

[49] *Ibid*, p.19.

- There are regional and international contenders who are trying to rival the UK's positioning of London as a hub for IF outside the Muslim world. Will this reality push the UK authorities to take further measures for accommodating more products and institutions of IF? Or do they consider their position well ahead of their rivals? Hence, time will play in their side in observing and responding comfortably to the steps that their rivals might take.
- As for the issues for future consideration the following points can be made:
  - Does it make a great difference and impact, at the practical level, to adopt the minimal changing approach as is the case with the UK, or the dual approach as is the case with Malaysia and Bahrain, for the following stakeholders?
    - Industry players
    - Sharīʿah boards
    - Lawyers.

  In other words, are there big differences between the two approaches? Or are they almost identical in their final impact on the welcoming process of accommodating IF in conventional systems?
  - If Islamic Finance is regarded as a "true" equity and asset backed industry and has been "easily" accommodated into conventional system, can a serious debate be initiated about providing "level playing field" for equity modes of finance in relation to the "favours" given to debt modes of finance to put an end to the biased legislative regimes that have affected the emergence of "abnormalities" in the practices of economic agents in the prevailing financial system? In other words, can a legal shift be attained to allow more equity and participatory modes of finance to play a greater role in the financial intermediation process?

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Integrating *Zakāt* and *Waqf* into the Poverty Reduction Strategy of the IDB Member Countries

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Abstract

The paper estimates the resource gap for poverty reduction and potential of Zakāt and Waqf in the IDB member countries.[1] Paper stresses on revival of the Zakāt and Awqāf institutions and their enforcement, which will enable the IDB MCs to generate sufficient revenue for their all pro-poor expenditures. For any tangible results, the institutions of Zakāt and Waqf need to be integrated into the poverty reduction strategy of the IDB member countries. The proceeds of these institutions should be made as a part of their pro-poor budgetary expenditures.

Keywords: Integrating *Zakāt* and *Waqf*, *Zakāt* & *Waqf* and pro-poor expenditures, Potential of *Zakāt* & *Waqf* and Poverty reduction, Islamic institutions and poverty reduction, Poverty reduction in the IDB member countries.
KAU-IEI Classification: R0

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[1] In this paper, the income of the population under USD 2 has been taken out from the GDP of the countries under study for the estimation of potential zakat collection and the zakat on remittance has been included.

1. Introduction

Poverty has been the serious problem and a great challenge especially for Developing Countries. Most of the IDB member countries (MCs) are also facing the same problem, where the level of poverty is sever and housing more than 50 percent of their population living on less than $ 1.25 a day. Among these countries are Burkina Faso (56.5%), Chad (61.9%), Mali (51.4%), Mozambique (60%), Niger (64.4%), Nigeria (64.4%), Sierra Leone (53.4%), and Uganda (51.5%). Incidence of Poverty is also sever in countries such as Bangladesh (49.6%), Benin (47.3 %), Comoros (46.1 %), Guinea-Bissau (48.8 %) and Uzbekistan (46.3 %). These results are based on the international poverty line (under $1.25 a day), which overestimate the incidence of poverty in some of the IDB MCs, such as Benin, Burkina Faso, Mali, Mozambique , Nigeria and Uganda compared to their national poverty lines. In contrast, countries like Albania, Azerbaijan, Egypt, Iran, Jordan, and Malaysia, Kazakhstan, Morocco, Tunisia, Turkey and Gabon have been underestimated compared with their national poverty lines. Under international poverty line of US $ 2 a day, the incidence of poverty, in most of the countries, is found to be more than 70 percent of their total population (for detail see appendix Table 1).

Different policies and strategies have been adopted in different countries in the past to reduce the poverty, but the fact remains that poverty persists especially in the member countries. The Muslim countries inherited very strong institutions of *Zakāt*, *ṣadaqāt* and *waqf* for fighting against poverty. In the past, these institutions were used very successfully for the rehabilitation and welfare of the poor[2]. Unfortunately these institutions have been neglected by the Muslims countries and consequently housing many poor in their countries. Few IDB member countries (Yemen, Saudi Arabia, Malaysia, Libya, Pakistan and Sudan) have introduced the system of *Zakāt*, which, however, is different in terms of coverage of *zakātable* items and assets. Other countries have not introduced this system and it is considered as a private affair. This is known fact that Muslims are paying their *Zakāt* on their own to the poor and to different charitable institutions. However, all these transaction are not passing through proper channels, are un- recorded, without any planning and not a part of any strategy. Therefore, one cannot asses the effectiveness of *Zakāt* in poverty alleviation. The same is the case with the institution of *awqāf*. These institutions need to be revived and organized with proper planning, which will provide additional source of income to the governments for the social welfare of the society. These institutions need to be integrated in the overall poverty reduction strategy of the IDB member countries for the tangible results. This paper is written for the said purpose.

[2] See Qardawi , 1981.

The remainder of the paper consists of four sections. Section 2 provides the methodology and data sets used in the paper. Section 3 estimates the resource gap, the potential of *Zakāt* collection and compares the resource availability with resource required for poverty alleviation. Section 4 discusses the *waqf*, a brief historical background and its potential for poverty alleviation. Section 5 highlights the integration of *Zakāt* and *waqf* into the poverty reduction strategy of the IDB MCs. Section 6 sets forth summary, conclusion and the recommendations.

2. Methodology and Data Set

2.1. Estimation of Resource Shortfall.

The poverty gap index (based on international poverty lines of US $1.25 a day in 2005 PPP for hard core poor and US $2.0 a day for the poor respectively) has been converted into absolute amount for each country under investigation (For detail see Shirazi and Fouad, 2010).

2.2. Estimation of Potential Zakāt collection

Different studies have been made for the estimation of potential *Zakāt* collection in the past. All such studies have used different methodology and employed diverse opinions of scholars regarding the coverage of *Zakāt* and consequently their results are not comparable (see Shirazi 2006 for references).[3] Kahf (1989) estimated *Zakāt* potential for eight Muslim countries by using National Income Accounts. His estimates of potential *Zakāt* were based on three different opinions of jurists regarding *Zakātable* items. Those three definitions were named as Z1, Z2 and Z3. According to these definitions, under Z1, *Zakāt* can be collected in the range of 1.0 percent to 2.0 percent, under Z2 *Zakāt* collection varies 3.1 percent to 4.9 percent and under Z3 it can vary from 3.2 percent to 7.5 percent of the GDP for the eight Muslim countries (see Table 1).

This paper utilizes the Kahf's estimates for the rest of the IDB member countries (For details see (Shirazi, 2006; Shirazi and Fouad 2010). We have made another adjustments (in addition to the adjustment that we made to Kahf's study as we have mentioned in our previous studies) to kahf's study i.e. i) we have taken out the

[3] Since there is no agreement among the scholars on the new wealth that may be brought under zakat net, hence there is urgent need for the general agreement on the definition of the items, which may be taken as *zakātable* items. This requires *ijmāʿ* of the *ʿulamā'* and other contemporary scholars on the issue.

amount of income of the poor under US $ 2 from the GDP of each member country and assuming that the rest are able to pay *Zakāt* and ii) *zakāt* on remittances has been included.

Table-1
Percentage of estimated *Zakāt* proceeds to GDP in selected Muslim countries

Countries	Z1	Z2	Z3
Egypt	2.0	3.9	4.9
Indonesia[4]	1.0	1.7	2.0
Pakistan	1.6	3.5	4.4
Qatar	0.9	3.7	3.2
Saudi Arabia	1.2	3.7	3.4
Sudan	4.3	6.3	6.2
Syria	1.5	3.1	3.1
Turkey	1.9	4.9	7.5

Source: Kahf (1989)

2.3. Data sets

We have used Poverty gap index under US $ 1.25 a day and US $ 2.0 a day as reported in World Development Indicators (2011). Most of the data are taken from World Bank (various publications). While GDP (at PPP) are taken from the CIA World Fact books and the World Bank, World Development Indicators Online. All these data are used to estimate the funds needed for bridging poverty gap and for the estimates of *zakāt* potential.

3. Resource Gap and the *Zakāt* Potential in IDB Member Countries

In this section, we have reported the estimates of resource required and potential *Zakāt* collection for poverty elimination in the IDB member countries.

3.1. Resource Shortfall for Poverty Reduction

The column 7 and column 8 of the Table 2 shows the resource required by each country for poverty elimination under US $1.25 a day and US $ 2.0 a day respectively. The sample countries are composed into three groups. Group 1 presents countries with moderate resource shortfall (one percent or less than one percent of

[4] Muhammad Firdaus et al (2012) estimated 3.40 percent of GDP as zakat potential of Indonesia, which is based on households income, industries and bank deposits

their GDP). These are Albania, Algeria, Azerbaijan, Cameroon, Egypt, Gabon, Guyana, Iran, Jordan, Kazakhstan, Malaysia, Morocco, Suriname, Tunisia, Turkey, Yemen, Iraq, Indonesia and Pakistan. Group 2 depicts countries with intermediate resource shortfall (more than one percent to six percent of their GDP). This group of countries consists of Djibouti, Tajikistan, Mauritania, Cote d'Ivoire, Senegal, Uzbekistan, Bangladesh and Gambia. Group 3 consists of those countries for which resource shortfall is more than 6 percent of the respective country's GDP. Some of these countries are Mozambique (12.92%), Niger (7.90%), Sierra Leone (19.04%), and Guinea-Bissau (17.26%) (See Table 2 for detail).

Column 8 of the Table 2 presents the resource shortfall under US $2. The resource short fall as a percentage of GDP is very high in the case of Guinea-Bissau (58.24%), Mozambique (35.19%), Niger (32.51%), Sierra Leone (56.26%), Chad (35.06%), Guinea (20.74%) and Bangladesh (23.10%). The total resource shortfall for all the sample countries under US $ 1.25 a day and US $ 2.0 a day is estimated to be 1.067 percent and 4.091 percent respectively of their total GDP.

3.2. Potential Zakāt Collection

The Table 3 presents the potential amount of *Zakāt* that can be collected under three different opinions of scholars regarding the items and assets that can be brought under *Zakāt* net. Columns 8 through 10 of the Table show Potential *Zakāt* collection including *Zakāt* on foreign remittances[5]. However, for some countries *Zakāt* on remittances are not included due to non- availability of the relevant data (see Table 3). On average Z1 for eight IDB member countries such as Benin, Cameroon, Gabon, Guyana, Mozambique, Suriname, Togo and Uganda ranges from 0.17 percent to 0.40 percent of their GDP. This is due to very low share of Muslim population in these countries. Similarly, for these countries, Z2 and Z3 vary from 0.37 percent to 0.84 percent and 0.42 percent to 0.95 percent of their GDP respectively. For rest of the 32 OIC member countries, Z1 ranges from 0.66 percent to 1.81 percent, Z2 varies from 1.41 to 3.84 percent, while Z3 varies from 1.59 percent to 4.32 percent of the GDP of the respective country. The potential *Zakāt* collection from Z1, Z2 and Z3, for all the countries under study, comes out to be 1.53 percent, 3.27 percent and 3.68 percent of their total GDP respectively. Although we have used 1.8 percent as Z1 for all other countries except Egypt, Pakistan and Turkey (for which we have used 2.0 percent, 1.6 percent and 1.9 percent respectively) still we get different potential *Zakāt* collection as a share of GDP due to adjustment of GDP with Muslim population share.

[5] Following Mohieldin et.al (2011) for zakat estimation on remittances.

Table-2
Resource Shortfall for Poverty Elimination under US $1.25& US $ 2 Poverty Lines

	Survey Year	GDP (PPP) Millions	Total Population	Resource Shortfall under $ 1.25 per annum (Million)	Resource Shortfall under $ 2 per annum (Million)	Resource Shortfall under $ 1.25 per annum as % of GDP	Resource Shortfall under $ 2 per annum as % of GDP
Group 1: Countries with moderate Resource shortfall under USD 1.25 per day (≤ 1.0 percent of GDP)							
Albania	2008	21810	3619778	6.61	23.78	0.030	0.109
Algeria	1995	109616	28265291	180.54	1320.55	0.165	1.205
Azerbaijan	2008	77610	8177717	14.92	89.55	0.019	0.115
Cameroon	2007	40240	18060380	98.88	1107.46	0.246	2.752
Egypt	2004–05	309733	71550018	130.58	1828.10	0.042	0.590
Gabon	2005	17839	1290693	5.30	47.11	0.030	0.264
Guyana	1998	1977	736291	13.10	37.09	0.663	1.876
Iran	2005	643503	69087070	126.08	907.80	0.020	0.141
Jordan	2006	25628	5537600	10.11	24.25	0.039	0.095
Kazakhstan	2007	168200	15284930	27.89	44.63	0.017	0.027
Malaysia	2009	383000	25715820	46.93	75.09	0.012	0.020
Morocco	2007	125392	30860595	70.40	698.38	0.056	0.557
Pakistan	2006	437500	165803600	3101.56	22754.89	0.709	5.201
Suriname	1999	2159	432413	11.64	36.93	0.539	1.711
Tunisia	2000	45617	9563500	17.45	209.44	0.038	0.459
Turkey	2005	561075	72065000	295.92	1367.79	0.053	0.244
Yemen	2005	46150	21095679	404.25	2279.18	0.876	4.939
Indonesia	2009	960200	240271500	3946.46	27186.72	0.411	2.831
Iraq	2007	102400	27499640	75.3	1124.19	0.074	1.098
Group 2: Countries with intermediate Resource shortfall under USD 1.25 per day (1.0 percent to 6.0 percent of GDP)							
Bangladesh	2005	163728	153281120	9161.42	37820.58	5.596	23.100
Cote d'Ivoire	2008	33850	20179600	690.52	2636.87	2.040	7.790
Djibouti	2002	1244	762775	18.44	81.30	1.483	6.535
Gambia	2003–04	1491	1524061	84.14	277.03	5.643	18.580
Mauritania	2000	3634	2566152	66.74	297.85	1.836	8.196
Senegal	2005	18133	11770340	579.98	2113.72	3.198	11.657
Tajikistan	2004	9682	6467377	150.49	793.16	1.554	8.192
Uganda	2009	38120	32369560	1787.00	6427.30	4.688	16.861
Uzbekistan	2003	43028	25567700	1749.79	6196.59	4.067	14.401
Group 3: Countries with severe Resource Shortfall (≥ 6.0 percent of GDP)							
Benin	2003	9163	7961594	570.30	1947.01	6.224	21.249
Burkina Faso	2003	12450	13081911	1211.63	3743.52	9.732	30.068
Chad	2002–03	8335	9118887	1065.09	2922.33	12.778	35.061
Comoros	2004	630	587944	55.80	146.79	8.856	23.299
Guinea	2007	10960	9947814	689.88	2272.98	6.295	20.739
Guinea-Bissau	2002–03	635	1455881	109.60	369.85	17.260	58.244
Mali	2006	12664	11968376	1026.59	3188.97	8.106	25.181
Mozambique	2008	18940	21284700	2447.21	6665.73	12.921	35.194
Niger	2007	8860	12894870	700.11	2880.46	7.902	32.511
Nigeria	2003–04	178435	134659379	18185.75	46103.33	10.192	25.838
Sierra Leone	2002–03	2396	4924199	456.07	1348.00	19.035	56.260
Togo	2006	4971	6410428	333.42	1305.61	6.707	26.265
Total		4660998		49723.9	190701.91	1.067	4.091

Source: our estimates

3.3. Resource Shortfall and Potential Zakāt Collection

Resource shortfall and potential *Zakāt* collection have been put together in Table 4. Column 3 through 5 represents the potential *Zakāt* collection under three definitions of *Zakātable* items whereas column 6 and 7 show the resource shortfall under US $ 1.25 and US $ 2 respectively. The resource requirement, under US $1.25 a day, of the countries in-group 3, for poverty elimination is too high, which cannot be met by their potential *Zakāt* collection. For example, the resource shortfall of Burkina Faso (9.73%), Chad (12.78%), Guinea-Bissau (17.26%), Mozambique (12.92%), Nigeria (10.19%) and Sierra Leone (19.03%) are very high and corresponding *Zakāt* collection even under Z3 is very low ranging from 0.163 percent to 1.59 percent of their GDP. However, resource shortfall of the countries in group 1 can easily be covered from collection of Z1 except Guyana and Suriname (Table 4). If we take into account the administrative cost of *Zakāt* collection (assuming 10 to 20 percent of the potential *Zakāt* collection), even then Z2 and Z3 collection is enough for fulfilling both the amount of resource shortfall and administrative cost.

Djibouti from group 2 can cover her resource shortfall from Z1, while other countries in the group cannot meet their resource shortfall from Z1. However, two countries (Mauritania and Tajikistan) of group 2 can easily meet their resource requirements from Z2 and Z3. Twenty-one member countries can easily eliminate poverty form generating their own *Zakāt* resources, whereas the rest of the sample countries cannot meet their resource shortfall from their own resources.

Resource shortfall, under US $1.25 a day and US $ 2.0 a day, on average, is 1.07 percent and 4.1 percent of the GDP for all the countries under study. The corresponding amount, which can be collected under Z1, Z2 and Z3, estimated to be 1.53 percent, 3.27 percent and 3.68 percent of their total GDP, respectively. These resources are not only sufficient to provide for the shortfall and eliminate the extreme poverty but also can generate surplus.

Resource shortfall under US $ 2.0 a day is high. Countries, which could meet their resource shortfall under US $ 1.25 a day from *Zakāt* proceeds, are not able to meet their resource shortfall under US $ 2.0 a day. The countries, which added to such list, are Pakistan, Cameroon, Guyana, Suriname and Yemen (Table 4). As noted above that resource shortfall under US $ 2.0 a day cannot be met by resources raised through potential *Zakāt* collection. The maximum that can be collected is estimated to be 3.68 percent of the GDP of all countries under study , whereas corresponding resource required are estimated to be 4.1 percent of the GDP of these countries.

However, some resource rich countries are not included in the sample due to non-availability of the data. If these countries also collect *Zakāt* to its potential and transfer their surplus to the common pool and if these funds could be provided for the resource deficit countries then we hope that the deficit in resource can be met and poverty under US $ 2 a day can easily be eliminated.

Table-3
Potential *Zakāt* Collection (Adjusting GDP for Poor under $ 2 per day)

		Zakāt with out remittances (% of GDP)				*Zakāt* with remittances (% of GDP)		
	Survey Year	Z1	Z2	Z3	*Zakāt* on remittances (% of GDP)	Z1	Z2	Z3
Albania	2008	1.040	2.223	2.506	0.002	1.042	2.226	2.509
Algeria	1995	1.717	3.672	4.140	0.006	1.723	3.678	4.146
Azerbaijan	2008	1.673	3.578	4.034	0.033	1.706	3.611	4.066
Bangladesh	2005	0.861	1.841	2.075	0.012	0.873	1.853	2.087
Benin	2003	0.219	0.468	0.527	0.001	0.220	0.469	0.528
Burkina Faso	2003	0.457	0.977	1.101	0.001	0.457	0.978	1.102
Cameroon	2007	0.330	0.706	0.796	0.002	0.332	0.708	0.798
Chad	2002–03	0.441	0.942	1.062	0.000	0.441	0.942	1.062
Comoros	2004	1.133	2.424	2.733	0.000	1.133	2.424	2.733
Cote d'Ivoire	2008	0.580	1.242	1.400	0.003	0.583	1.244	1.402
Djibouti	2002	1.512	3.234	3.645	0.001	1.513	3.235	3.646
Egypt	2004–05	1.579	3.377	3.806	0.006	1.585	3.383	3.812
Gabon	2005	0.173	0.370	0.417	0.001	0.174	0.371	0.418
Gambia	2003–04	1.115	2.386	2.689	0.011	1.127	2.397	2.701
Guinea	2007	0.947	2.025	2.283	0.004	0.950	2.029	2.286
Guyana	1998	0.173	0.371	0.418	0.003	0.177	0.374	0.421
Iran	2005	1.755	3.754	4.231	0.002	1.757	3.755	4.233
Jordan	2006	1.702	3.641	4.104	0.052	1.755	3.693	4.157
Kazakhstan	2007	0.845	1.808	2.038	0.001	0.847	1.809	2.039
Malaysia	2009	1.104	2.362	2.662	0.003	1.107	2.364	2.665
Mali	2006	0.912	1.950	2.198	0.002	0.913	1.952	2.200
Mauritania	2000	1.449	3.099	3.494	0.000	1.449	3.099	3.494
Morocco	2007	1.745	3.733	4.208	0.031	1.776	3.764	4.239
Mozambique	2008	0.162	0.346	0.390	0.000	0.162	0.347	0.391
Niger	2007	0.546	1.168	1.317	0.000	0.546	1.168	1.317
Nigeria	2003–04	0.558	1.194	1.346	0.000	0.558	1.194	1.346
Pakistan	2006	1.495	3.197	3.603	0.005	1.499	3.201	3.608
Senegal	2005	1.295	2.769	3.122	0.015	1.310	2.784	3.137
Sierra Leone	2002–03	0.067	0.142	0.160	0.002	0.069	0.144	0.163
Suriname	1999	0.383	0.819	0.924	0.000	0.383	0.819	0.924
Tajikistan	2004	1.362	2.913	3.284	0.000	1.362	2.913	3.284
Togo	2006	0.114	0.245	0.276	0.000	0.114	0.245	0.276
Tunisia	2000	1.753	3.750	4.227	0.010	1.763	3.760	4.237
Turkey	2005	1.770	3.785	4.267	0.001	1.770	3.786	4.267
Uganda	2009	0.181	0.388	0.437	0.006	0.187	0.394	0.443
Uzbekistan	2003	1.164	2.490	2.806	0.000	1.164	2.490	2.806
Yemen	2005	1.554	3.324	3.747	0.015	1.570	3.340	3.763
Indonesia	2009	1.465	3.134	3.532	0.006	1.471	3.140	3.538
Iraq	2007	1.708	3.652	4.117	0.00	1.708	3.652	4.117
Total		1.414	3.024	3.409	0.00	1.414	3.024	3.409

Source: Percentage of Muslim Population is taken from http://en.wikipedia.org/wiki/Islam_by_country

4. *Waqf*: A Brief Historical Background and its Potential for Poverty Alleviation

Waqf

Waqf is an important religious and social institution, which has been used for the welfare of the needy, the poor, the family and the society. Wealth is transferred from private ownership to collective ownership (beneficiaries) through this mechanism. Personal assets or any other belonging can be endowed in *Waqf* for religious, educational, or any other benevolent purpose under specific terms and conditions. The terms and conditions include: (1) it is a permanent arrangement, and cannot be done for a certain period[6]; (2) it becomes immediately effective, and cannot be kept in abeyance; (3) it is an irrevocable legal contact; and (4) *Waqf* property can never be confiscated.[7]

4.1. A Brief History of Waqf for the Welfare of the Society

Awqāf were set up for both the religious and social purposes. The first example of such *Awqāf* was the Mosque of the Prophet (PBUH) in Madinah, which was established by the prophet himself (Pbuh). Later, as recommended by the prophet (pbuh) other *Waqf* were established for the social purpose, such as the land of Khyber endowed by Umar and the fruit were then distributed to poor, free slaves, to provide for guest, wayfarer, and some reasonable quantity to its custodian. Another example was the purchase of water well (*Bi'r Rumah* by Uthman) and made it free for everyone in Madinah. The history tells that *Awqāf* had been growing year after year. It is proven fact that *Awqāf* have been the important pillar in the religious, social, cultural, scientific, economic and political life of Islamic society. For every conceivable enterprise of social benefit, there was a *Waqf, such as* for mosques, universities, schools, hospitals, orphanages, houses for the poor, food for the poor, the blind, battered/abused women, soup kitchens, wells, aqueducts, fountains, public baths, watchtowers, bridges, cemeteries, salaries, pensions, guesthouses, libraries, books and animal welfare. In Othman period, the society left the financing of health, education and welfare entirely to the *awqāf* system (See Ali, 2009; Rashid, 2011; and Ahmed, 2004).

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[6] The Malikites accept temporal *waqf* by the will of the founder.(see for details kahf, 2003)
[7] *http://www.banglapedia.org/httpdocs/HT/W_0018.HTM*

Table-4
Resource Shortfall and Potential *Zakāt* Collection

	Survey Year	Z1	Z2	Z3	Resource Shortfall under $ 1.25 per annum as % of GDP	Resource Shortfall under $ 2 per annum as % of GDP
Group 1: Countries with moderate Resource shortfall under USD 1.25 per day (≤ 1.0 percent of GDP)						
Albania	2008	1.042	2.226	2.509	0.030	0.109
Algeria	1995	1.723	3.678	4.146	0.165	1.205
Azerbaijan	2008	1.706	3.611	4.066	0.019	0.115
Cameroon	2007	0.361	0.770	0.868	0.246	2.752
Egypt	2004–05	1.625	3.468	3.909	0.042	0.590
Gabon	2005	0.175	0.374	0.422	0.030	0.264
Guyana	1998	0.183	0.388	0.437	0.663	1.876
Iran	2005	1.765	3.774	4.254	0.020	0.141
Jordan	2006	1.710	3.657	4.122	0.039	0.095
Kazakhstan	2007	0.847	1.811	2.041	0.017	0.027
Malaysia	2009	1.108	2.366	2.667	0.012	0.020
Morocco	2007	1.812	3.840	4.324	0.056	0.557
Pakistan	2006	1.732	3.699	4.169	0.709	5.201
Suriname	1999	0.396	0.846	0.954	0.539	1.711
Tunisia	2000	1.781	3.809	4.294	0.038	0.459
Turkey	2005	1.782	3.811	4.296	0.053	0.244
Yemen	2005	1.774	3.795	4.278	0.876	4.939
Indonesia	2009	1.588	3.389	3.820	0.411	2.831
Iraq	2007	1.778	3.802	4.286	0.074	1.098
Group 2: Countries with intermediate Resource shortfall under USD 1.25 per day (1.0 percent to 6.0 percent of GDP)						
Bangladesh	2005	0.873	1.853	2.087	5.596	23.100
Cote d'Ivoire	2008	0.694	1.481	1.669	2.040	7.790
Djibouti	2002	1.774	3.793	4.276	1.483	6.535
Gambia	2003–04	1.702	3.627	4.087	5.643	18.580
Mauritania	2000	1.771	3.788	4.270	1.836	8.196
Senegal	2005	1.694	3.606	4.063	3.198	11.657
Tajikistan	2004	1.699	3.633	4.095	1.554	8.192
Uganda	2009	.2730	0.577	0.650	4.688	16.861
Uzbekistan	2003	1.587	3.395	3.827	4.067	14.401
Group 3: Countries with severe Resource Shortfall (≥ 6.0 percent of GDP)						
Benin	2003	0.220	0.469	0.528	6.224	21.249
Burkina Faso	2003	0.457	0.978	1.102	9.732	30.068
Chad	2002–03	0.954	2.041	2.301	12.778	35.061
Comoros	2004	1.760	3.765	4.244	8.856	23.299
Guinea	2007	1.514	3.235	3.646	6.295	20.739
Guinea-Bissau	2002–03	0.660	1.411	1.590	17.260	58.244
Mali	2006	1.598	3.416	3.851	8.106	25.181
Mozambique	2008	0.354	0.756	0.852	12.921	35.194
Niger	2007	1.584	3.388	3.820	7.902	32.511
Nigeria	2003–04	0.889	1.901	2.143	10.192	25.838
Sierra Leone	2002–03	1.046	2.238	2.523	19.035	56.260
Togo	2006	0.242	0.518	0.584	6.707	26.265
Total		1.526	3.265	3.680	1.067	4.091

Source: Based on Table 2 and 3

The literature shows that during the Ottoman period, thousands of people, without expecting any personal interest, founded thousands of institutions with their own property and money in the areas of infrastructure building. These include roads,

bridges, irrigation system, welfare services; educational services such as opening school library, university etc…and allocated some or all his private properties such as farms, houses, enterprises and savings as revenue sources to these institutions to ensure their continuous running[8]. We can find some important illustrations of *Waqf* institutions in the history. For example, three –quarters (¾) of all Arab land in the former Ottoman Empire belonged to *Waqf*. In Algeria , under French occupation , *Waqf* comprises half(1/2) of the lands of the country in the middle of the nineteenth century, during the same time in Tunisia *Waqf* represented 1/3 of land in Tunisia. In Egypt in 1949, about 1/8 of the agricultural land belonged to this category. (Boudjellal 2005 cited in Achmad Tohirin, 2010). Furthermore, the total budget of *Waqf* reached to one third of the state budget in Ottoman State where in each of some three hundred administrative units called sanjak, there were around a thousand *Waqf*s (YediYildiz, 1996). More importantly, *Waqf* went beyond the need of fulfillment of the poor to empowering them in the society. This was achieved through development and continuous assistance in education and health to build productive capacity, improve their access to finance, to innovate and research to assist them.

No doubt, history tells the rich experience of the role of *Waqf* in social development and the poverty alleviation, but today's revenues of *Waqf* are insufficient to pay even for the general maintenance of the Mosque. This is mainly due to the changes occurred in its management system. "With colonialism came misery to *Awqāf*. Thousands were abolished or put to other uses and governed by alien rules" (Rashid, 2011). He also suggested a survey of *Waqf* properties to prepare a data bank of *Awqāf* in all countries, which is a necessary condition for the efficient and effective management. He called for the revival of the family *Waqf* and the development of the *waqf* properties.

4.2. Potential of Waqf

The intention of many governments to revitalize *Waqf* is explained by its potential contribution to poverty alleviation. In fact, today *Waqf* could be useful in all aspects including education; access to finance to facilitate innovation and increase productivity; health care water, sanitation and many more. (See Khan, 2007). *Waqf* has a great potential to provide for the needs of the poor in not only the short run but also enriching them in the end. Keeping in view the importance of *awqāf*, in recent years, some efforts have been made by some countries to organize the *Awqāf* property, which is left unattended or misused. For example, In Indonesia, Indonesia *Waqf* Board (IWB), an independent institution, has been established few years ago

[8] For more information see http://yunus.hacettepe.edu.tr/~yyildiz/placeofthewaqf.htm

to promote the economic benefit of *Waqf* asset for the sake of religious interest and people empowerment. [9] There are an estimated 358,710 *Waqf* location in Indonesia, which totals 1, 5 million sq meters. (Indonesia *Waqf* Board). This *Waqf* asset can be part of potential solution for helping the poor. In addition, cash *Waqf* has recently grown fast in Indonesia mainly because of its flexibility and potential to benefit poor anywhere. Indonesia *Waqf* deposit (IWD) is managing cash *Waqf*. The institution has enormously facilitated the redistribution and the management of cash *Waqf*. The cash *awqāf* has an annual potential collection of 3 trillion Rupiah. (Nasution, 2003 cited in Affandi and Nufus, 2010).

According to the report on Social, Economic and Educational Status of the Muslim Community of India (2006)[10] , there are about 490,000-registered *Awqāf* in all over India and the total area under *Awqāf* properties are about 600,000 acres and the book value at about Rs 60.00 billion. A good number of the *Awqāf* properties are located in city centers and the current market value is many times more than the book value. "As the book values of the *Waqfs* properties are about half a century old, the current value can safely be estimated to be several times more and the market value of the *Waqf* properties can be put at Rs. 1.2 lakh crores (1,200 billion, about US$ 24.0 billion). If these properties are put to efficient and marketable use they can generate at least a minimum return of 10 per cent which is about Rs. 12,000 crores (Rs. 120 billion, about US$ 2.4 billion) per annum. .. Wherever the *Waqf* lands have been put to efficient use they have generated an average return of about 20 per cent".

The Muslim poor require about 0.301[11] percent of the GDP to bring each one who is below the poverty line to the level of non-poor. The *awqāf* properties can generate income of about 0.325 percent of the GDP, which is higher than the required amount for poverty reduction. Therefore, only *awqāf* can alleviate the poverty of the Muslim poor.

Keeping in view the importance of *Waqf*, many Islamic countries have now set up either ministry or special department to manage the *Waqf* institution. One of their missions is to revive *Waqf* and put this Islamic institution at the heart of poverty alleviation in their respective countries. In addition to this, some international *Waqf* program have succeeded in the social development of the poor and providing emergency reliefs. For instance, The Islamic Relief Worldwide *Waqf* Programme

[9]Official website of IWB: http://bwi.or.id/index.php?option=com_content&view=article&id=1&Itemid=136&lang=en

[10] http://www.scribd.com/doc/53403975/52/Economic-Potential-of- *Waqf* -Assets-in-India

[11] Poverty line, US$ 1.25 per day: poverty gap ,10.5: Muslim population , 153 million and GDP at PPP US $ 2431.199 billion in 2005 (see Shirazi and Fouad for methodology)

whose aim is to provide sustainable solution for a better future has been successful in many parts of the globe and cover all aspects of development. In 2011 alone, the institution has implemented eight major programs, which affected the lives of thousands of family in the field of emergency supplies, water, sanitation, education, sustainable livelihood.[12]

Many writers emphasize the role of the private sector as the main driver for economic prosperity. The creation of a proper working environment for *Waqf* would thus lead to an increase in the private participation by voluntary transfer of asset to assist the poor. The funds available from *Waqf* institution will replace the government expenditures on poor and these funds could be utilized for developmental needs of the country; reduce its budget deficit, result better income distribution, economic growth and reducing poverty..”(Budiman and Kusuma 2011)

Literature on *Waqf* also identifies the lack of operational capacity. In Bangladesh for instance, Karim (2010) identified among others the lack of main power in the management of *Waqf* in the country. There are less than 100 officers managing nearly 150,000 estates. These officers in addition to their very small numbers also lack qualification for proper management. He also questioned the integrity of the *Waqf* institution official as these latter have been subject to many bribery complaints. According to him, there is too much discretion granted to them and in most of the case, they end up using it for their own advantages. Kahf (2003), on the other hand, proposed some reforms that have to be undertaken for a better management of *Waqf* institutions. These reforms include creating boards of supervision that consists of representatives of beneficiaries, working staff in *Awqāf* projects and properties and local community and NGOs; establishing criteria and measures of managerial efficiency in nonprofit corporations that are applicable to the variety of properties and objectives of *Awqāf*; auctioning the management of *Awqāf* on competitive ground for a definite period of time, say 3-5 years; and creating a government supportive body that may provide technical assistance, facilitate financing, and establish necessary governance regulations. When the Institutions of *Waqf* will have the support, legitimacy, and operational capacity needed, then the creation of an effective public value could be expected.

5. Role of IDB in Developing *Awqāf* Properties

Keeping in view the important role of *Awqāf* in socio-economic development of the society and alignment with its own mission, IDB with the collaboration of other

[12] for more information a see http://www.irwaqf.com/index.php?waqf_programme/index/16

institutions has established *Awqāf* Properties Investment Fund (APIF) for the development of Islamic *Awqāf* properties and investment in these properties. The Fund priority areas of investment include residential, commercial, retail and industrial facilities. The Fund gives investment priority to the APIF's participatory countries followed by the IDB member countries and rest of the world. The IDB is the manager of APIF and focusing her efforts on the success of the Fund for benefiting all stakeholders including contributors, nazers, unit holders, beneficiaries and the public at large. About US $ 72 million paid up capital is funded by 15 contributors (see appendix 2 for details).

The IDB has provided a line of financing of US$ 100 million to the Fund and has approved SU$ 200,000 for developing feasibility studies. The APIF has financed 39 projects (15 projects have been completed) worth US$ 876 million in 18 countries with its own contribution of US$ 338 million (see appendix 3 for details).

The IDB is in the planning process of establishing an International *Awqāf* Development Bank. It has already established World Waqf Foundation (WWF) with mission to ensure that *Awqāf* contribute to the cultural, social and economic development of Muslim countries and communities, and to alleviate hardship among the poor through establishing, sponsoring and supporting viable institutions, projects and programmmes.in the IDB member countries and the Muslim communities. IDB's entities are also contributing for the social educating and social development of the MCs. For example, Islamic Research and Training Institute have published a good material of both *Zakāt* and *awqāf* through in house research and through conducting training programs, holding conferences, seminars and workshops.

6. Integrating the Institutions of *Zakāt* and *Waqf* into the Poverty Reduction Strategy of the IDB Member Countries

Most of the poor countries have been setting the national priorities for their public investment and provision of services for poverty reduction. This is especially after the 1999, when the IMF and the World Bank started preparing poverty reduction strategy paper (PRSP) with the consultation of the respective countries. PRSP focuses on the pro-poor growth; human development; provision of the basic services and social safety nets; and good governance. For example, PRSP of Pakistan identifies 17 pro-poor sectors, which are grouped under five broad headings such as Market access and community services; Human development; rural development; Safety nets and Governance. The detail is provided in Appendix 4. Similarly Islamic Development Bank's poverty reduction strategy focusses on promoting pro-poor growth with particular emphasis on equitable distribution of the benefits; addressing

the barriers and issues faced by women in economic development; emphasizing human development; especially improvements in health care and education; Providing social safety nets for the poor; insisting on good governance and access to public service delivery by the poor; and fostering and harnessing full ownership and commitment by member states.[13]

A few studies advocating for the integration of *Zakāt* and *Waqf* into the poverty reduction strategy of the poor countries are worth mentioning. Ahmad (2008) states that *Zakāt* has not been made a part of the development programs of Bangladesh and it is not mentioned in the PRSP of Bangladesh. The paper shows that although macroeconomic policies play an important role in reducing poverty, poverty cannot be eliminated in an effective way without using *Zakāt*. Furthermore, the paper highlights two conditions under which the role of *Zakāt* in alleviating poverty will be more effective. "First, *Zakāt* has to be complimented by robust macroeconomic policies that enhance growth and also redistribute income to eliminate poverty. Second, while more *Zakāt* has to be collected and disbursed, the impact on poverty will only be significant when a larger percentage of *Zakāt* proceeds are used for productive purposes". The paper suggests integrating of *Zakāt* with overall development programs of the country and making it as a part of the PRSP.

In their paper, Hassan and Khan (2007) highlight the important role of *Zakāt* in poverty alleviation. They have shown that *Zakāt* funds can replace government budgetary expenditures in the range of 21 percent of Annual Development Plan (ADP) in 1983-84 to 43 percent of ADP in 2004-05, which can be utilized for other social and development expenditures of Bangladesh. Furthermore, *Zakāt* can increase the productivity, employment and output which will consequently increase the taxation potential of the government. However "unfortunately, neither the government nor the IMF /World Bank see the need to include *Zakāt* as poverty alleviation instrument".

Khan (2007) argued that the current framework for PRSP could not be used to determine the potential and the impact of *Waqf* in the overall poverty alleviation schemes. It is thus important to register all such institutions in the country, request information about their resources (including *ʿushr* and *ṣadaqāt*) and the types of activities they undertake to achieve their objectives. Once the statistics are available, there should be an isolated column for *Waqf* in the national accounting system. In this respect, it is easy to keep tract of its evolution and importance in the community. International donors including International Monetary Fund (IMF), World Bank, and

[13] See Islamic Development Bank (2007), " Policy Paper on Poverty Reduction"

Islamic Development Bank should help providing both technical and financial assistance to countries to develop an efficient registration and recording of *Waqf's* Statistic. He emphasized that the successful *Waqf* institution throughout the world should coordinate and make accessible their knowledge of the management of the institution accessible to others. This activity will require high communication and coordination between concerned countries. He also stressed that the state should revive *Waqf* institution by creating proper environment and legal framework and refrain from interfering management of *Waqf*, and extends the owner and the beneficiary influence on the system.

Unfortunately *Zakāt* and *awqāf* institution have not been taken seriously by the Muslim countries. Only a few Muslim countries including Yemen, Saudi Arabia, Libya, Sudan, Pakistan, and Malaysia have compulsory *Zakāt* management through government, while other countries such as Egypt, Jordan, Iran, Bangladesh, Bahrain and Iraq, have formed specialized state institutions but it is voluntary. Many countries have the safety net programs for the very poor and vulnerable but no country has made the institution of *Zakāt* and *Awqāf* as a part of their poverty reduction strategy. However, in one country-Pakistan-, for the first time the poverty Reduction Strategy paper (PRSP-II) has mentioned the role of *Zakāt* in poverty alleviation and there is no mention of *Awqāf*. For example looking at the appendix Table 3, which, gives the details of the pro-poor expenditures and allocation to 17 pro-poor sectors[14], grouped under five broad headings such as : Market access and community services, Human development:, Rural development:; Safety nets; and Governance provides a good base for our analysis. The total budgetary expenditures as a percentage of the GDP are shown in Table 5.

[14] Market access and community services: (i) roads, highways and buildings, (ii) water supply and sanitation, Human development: (iii) education, (iv) health, (v) population planning, (vi) natural calamities, Rural development: (viii) agriculture, (ix) land reclamation* (x) rural development, (xi) rural electrification (People's Works Programme-II); Safety nets: (xi) subsidies; (xii) social security and welfare including Benazir Income Support Programme; (xiii) food support programme including Pakistan Bait-ul-Mal and Punjab Food Support Scheme; (xiv) Peoples' Works Programme; (xv) low cost housing; Governance: (xvi) administration of justice; and (xvii) law and order.

Table-5
PRSP current & development budgetary expenditures of Pakistan
(FY 2001/02 - FY 2007/08)

	PRSP Expenditures (Rs Million)			PRSP Expenditures as percent of GDP			
Fiscal Year	**Current**	**Development**	**Total**	**Current**	**Development**	**Total**	**Non-BE**
2001/02	-	-	166,074	-	-	3.77	0.17
2002/03	160,528	48,515	209,043	3.33	1.0	4.33	0.24
2003/04	182,318	78,983	261,301	3.23	1.40	4.63	0.23
2004/05	203,608	112,635	316,243	3.09	1.71	4.80	0.21
2005/06*	205,345	170,794	376,139	2.69	2.24	4.93	0.23
2006/07*	215,712	210,967	426,680	2.47	2.42	4.89	0.25
2007/08*	301,935	270,685	572,620	2.88	2.58	5.46	0.26

Source: PRSP-II. The last column is added

Table 5 shows that PRSP budgetary expenditures increased from 3.77 percent of GDP in FY 2001/02 to 5.46 percent of GDP in FY 2007/08. However, non-budgetary pro-poor expenditures (such as *Zakāt*, micro credit, EOBI, Pakistan Bait -ul -Mal) increased from 0.17 percent of GDP to 0.26 percent of the GDP over the same time. The amount of *Zakāt* disbursed (including direct and indirect transfers) from 2004-05 through 2007-08 was in the range of 0.04 percent to 0.06 percent of the GDP, while collection of *Zakāt* funds remained in the range of 0.05 to 0.08 percent of the GDP during the same time period. The actual *Zakāt* collection never increased beyond this level due to the many reasons including a few assets which are subject to *Zakāt*; exemption granted from time to time; non transparent and poor governance and people do not trust the public administration (for details See Shirazi ,1996 and 2006). Pakistan has a good network of social safety net program, but this is not much effective due to the lack of funds required for the number of deserving people. This has been also highlighted in the PRSP-II:

> Funding of specific safety net programmes has traditionally been insufficient given programme objectives and target populations. As a result, safety net programmes are fragmented and often duplicative; have limited coverage and are poorly targeted with small benefit levels relative to household income and the poverty gap; payments are infrequent and irregular; administrative arrangements are inadequate; and Monitoring and Evaluation capacity is not up to the mark, which negatively affect programme efficiency and quality of service delivery. Consequently, these programmes have limited impact on poverty and vulnerability.

If we compare the pro-poor expenditures (3.77 percent of GDP in 2001/2002 to 5.5 percent in 2007/08) of Pakistan with potential *Zakāt*, collection (ranges about 2 percent to 4 percent of GDP) then it is obvious that country can easily fulfill its pro-poor expenditure only with *Zakāt* collection. In that case, country will not need any borrowing from the multinationals or the existing funds can be utilized for other developmental purposes. We have not mentioned the potential proceed of the *awqāf* of Pakistan, for which we need data, survey and registration of all *Awqāf* properties, which are not available at the moment

If we utilize the *Awqāf* properly and combine it with potential *Zakāt* proceeds, then Muslim world does not need any other source for the pro-poor expenditures. For this purpose, revival of the Islamic institutions, their optimum utilization and implementations to the letter and spirit is needed.

Let we take the Indian Muslim community which is larger Muslim Population after Pakistan. The Muslim poor require about 0.301 percent of the GDP to bring each one who is below the poverty line to the level of non-poor. The *awqāf* properties, which have the potential of generating income of about 0.324 percent of the GDP, are much higher than the required amount. Therefore, only *awqāf* can alleviate the poverty in case of Indian Muslims.

However, there is a strong need for proper planning and management of the institutions. These institutions (*Zakāt* and *Awqāf*) need to be integrated in the poverty reduction strategy of the countries for the effective use of the funds and to have an impact on the poverty. Therefore, proceeds from these institutions should be the part of the PRSP.

We have observed especially in case of Pakistan that when cash is transferred to the poor or they are given funds/assets for rehabilitation under rehabilitation scheme, proper record is not maintained or there is no follow up. Although selection of the poor/beneficiaries are made by the local people (member of the local *Zakāt* committee in case of *Zakāt* transfer, who know them personally especially in the rural areas), many favoritisms have been noticed and the system is non-transparent. Lists of the beneficiaries are not available for third party evaluation/screening. There is much duplication as also identified by the Pakistan PRSP-II. However, system of payment is integrated with the banking system.

The countries may learn from Turkey's experience of her social assistance program[15] especially for the identification of the deserving people. People who consider themselves as candidate for the benefits of the program fill application forms themselves, which are entered to the computer by the local social workers. Since the application form provides the information regarding the personal identity card number, the applicants are automatically scrutinized by using the personal ID numbers through ten-government data basis via net. All the relevant information for the selection of the poor such as address, asset (e.g., car, house), social insurance, job status, salary etc. are available on the net. The final score, which identifies the eligibility or otherwise is calculated by the system, which is further verified by the field research process. The final selection is made by the board of trusty (see Esenyel, 2011).The electronic data basis is very important for the selection of the beneficiaries and keep track of the progress made by the beneficiaries. The member countries should start making electronic data basis, which could be used for multipurpose.

7. Conclusion and Recommendations

7.1. Conclusion

An attempt has been made in the paper to investigate the resource gap in the IDB member countries for poverty reduction and matching the resource gap with the proceeds of the institution of *Zakāt* and *Awqāf*. The paper finds that if *Zakāt* is implemented to letter and spirit then enough resources can be generated which will be enough for poverty alleviation from all the MCs. However, by individual country efforts, countries in group one and some in group two can easily fill the resource gap for the poverty alleviation, while all countries in group three cannot alleviate poverty by their own efforts. Since complete information on *Awqāf* properties is not available in any of the given MCs, therefore it is difficult to estimate the potential of *Awqāf* properties. However, based on available data on *Awqāf* properties in India, estimates show that if *Awqāf* properties are developed then enough resources can be generated, which will be sufficient for the poverty alleviation of Muslim poor.

[15] The benefits provided include in kind benefits such as food, coal, clothing, school supplies ; monetary assistance conditional cash transfer such as education support for children attending primary school and secondary school and health support for 0-6 age group children ; free medication (the green card scheme), and assistance for medical costs not covered by the green card scheme. The law covers the need citizens who are not covered by any social security organizations and people who would be able to contribute to society and to produce when given temporary small-scale support or an opportunity for education. (see Kaoru, M Urakam , 2011)

Keeping in view the Pakistan PRSP-II, paper finds that *Zakāt* and *Awqāf* can generate enough revenue for meeting all the pro-poor expenditures. Country does not need any financial assistance from the multinationals for mobilizing resources for the pro-poor budgetary expenditures. Therefore, it is suggested for all the MCs to enforce law of *Zakāt* and *Awqāf* to letter and spirit, integrate these into the poverty reduction strategy, and make these as a part of their pro-poor budgetary expenditures.

7.2. Recommendations

In the light of the literature and the analysis provided in the paper following recommendation are made.

7.2.1. Recommendations for the IDB Member Countries

Zakāt

- Institution of *Zakāt* should be revived in all the IDB MCs and the legal framework should be provided by the respective governments for its implementation to the letter and spirit.
- *Zakāt* should be collected to its potential by bringing all assets and wealth under *Zakāt* net. For potential *Zakāt* collection, governments may replicate the *Zakāt* collection model of the state of Swat's (1915-1969), where *Zakāt* proceeds were auctioned and the higher bidder was granted the sole collection right from his area. By this way, state of Swat was able to generate 50 percent of the revenue for the annual budget (see Shirazi and Yasin, 2010). All banks should be allowed to collect *Zakāt* on bank deposits (Pakistan model), but with no *Zakāt* exemptions to anybody.
- On distribution side, arrangement should be made for the cash transfer to the disabled, old aged and orphanage, and in-kind transfer for the rehabilitation of the poor. Also, make arrangements for the schooling of the poor, for their technical knowhow and health care. For this purpose, Pakistan's model of *Zakāt* distribution can be adopted, but with clean and transparent public administration.
- The selection of the poor may be made by the local representative (local *Zakāt* committee members, who know the local people personally especially in the rural areas) or the Turkish conditional cash transfer program, where the beneficiaries are applying their own on a prescribed form, and their eligibility is scrutinized by government computerized data.

- For the purpose of transparency, lists of beneficiaries should be made available for third party observation/screening.
- All the IDB MCs may digitize all databases including assets / wealth, addresses etc. where the personal identity card number can retrieve any information. This will be helpful for determining the eligibility of the beneficiaries (Turkish model) as well as easy to follow up whether poor is rehabilitated.

Waqf

- A detailed survey, seeking information on the nature of the *Awqāf*, their value, income, expenditures, administrative structure, is needed to build data bank, which will be helpful for the efficient and effective management of the *Awqāf*, development of the *Awqāf* properties, and revival of such *Awqāf*, which were confiscated, or encroachments have been made in the past.
- All *Awqāf* properties should be registered , which will enable future planning for the *awqāf* properties
- MCs should provide the legal framework and enabling environment for the *Awqāf* properties
- MCs should revive the family *awqāf* and encourage cash *awqāf* with tax incentives to the endowers.
- MCs should assist the *awqāf* management for the efficient running of the *Awqāf* and may invest in *Awqāf* properties.
- The IDB MCs should integrate both the *Zakāt* and *Awqāf* institutions in their poverty reduction strategies and made proceed of these institutions as a budgetary part of their pro-poor expenditures.

7.2.2 Recommendations for the IDB

- May collect information on successful *Awqāf* institutions and disseminate best practices to MCs for their implementation.
- May help MCs in providing technical assistance for preparing data bank of *Awqāf* properties.
- May continue its development of *Awqāf* properties through *Awqāf* Properties Investment Fund in the contributory countries and may expand its operation to other MCs.by inviting MCs through central banks. The central banks of MCs may encourage its scheduled and other banks to invest in the APIF. The IDB may reactivate World Waqf Foundation for achieving its mandate.

- It may establish International/World *Zakāt* Fund for the development of the poor of MCs and the other Muslim communities, asking *Zakāt* surplus MCS and other rich people for their contribution
- IDB entities-like IRTI- is already educating people in the MCS through its publications and holding conferences, seminars and workshops, which need to be expanded by the WWF.

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Appendix-1
Poverty in the Selected Muslim Countries

Country	Survey Year	Population Below $ 1.25 a day (%)	Poverty gap at $ 1.25 a day (%)	Population Below $ 2 a day (%)	Poverty gap at $ 2 a day (%)	Poverty headcount ratio at national poverty line (% of population)
Albania	2008	1.9	0.4	4.3	0.9	12.4
Algeria	1995	6.8	1.4	23.6	6.4	22.6
Azerbaijan	2008	1.9	0.4	7.8	1.5	15.8
Bangladesh	2005	49.6	13.1	81.3	33.8	40
Benin	2003	47.3	15.7	75.3	33.5	39
Burkina Faso	2003	56.5	20.3	81.2	39.2	51
Cameroon	2007	9.6	1.2	30.8	8.4	39.9
Chad	2002–03	61.9	25.6	83.3	43.9	55
Comoros	2004	46.1	20.8	65	34.2	44.8
Cote d'Ivoire	2008	23.8	7.5	46	17.9	42.7
Djibouti	2002	18.8	5.3	41.2	14.6	NA
Egypt	2004–05	1.9	0.4	18.4	3.5	19.6
Gabon	2005	4.8	0.9	19.6	5	32.7
Gambia	2003–04	34.3	12.1	56.7	24.9	58
Guinea	2007	43.8	15.2	70	31.3	53
Guinea-Bissau	2002–03	48.8	16.5	77.9	34.8	64.7
Guyana	1998	7.7	3.9	16.8	6.9	NA
Indonesia	2009	18.7	3.6	50.7	15.5	14.2
Iraq	2007	4	0.6	25.3	5.6	22.9
Iran	2005	1.9	0.4	8	1.8	NA
Jordan	2006	1.9	0.4	3.5	0.6	13
Kazakhstan	2007	1.9	0.4	1.9	0.4	12.7
Malaysia	2009	1.9	0.4	2.3	0.4	3.8
Mali	2006	51.4	18.8	77.1	36.5	47.4
Mauritania	2000	21.2	5.7	44.1	15.9	46.3
Morocco	2007	2.5	0.5	14	3.1	9
Mozambique	2008	60	25.2	81.6	42.9	54.7
Niger	2007	43.1	11.9	75.9	30.6	59.5
Nigeria	2003–04	64.4	29.6	83.9	46.9	54.7
Pakistan	2006	22.6	4.1	61	18.8	22.3
Senegal	2005	33.5	10.8	60.3	24.6	50.8
Sierra Leone	2002–03	53.4	20.3	76.1	37.5	66.4
Suriname	1999	15.5	5.9	27.2	11.7	NA
Tajikistan	2004	21.5	5.1	50.8	16.8	NA
Togo	2006	38.7	11.4	69.3	27.9	61.7
Tunisia	2000	2.6	0.4	12.8	3	4.2
Turkey	2005	2.7	0.9	9	2.6	20.5
Uganda	2009	37.7	12.1	64.5	27.2	24.5
Uzbekistan	2003	46.3	15	76.7	33.2	NA
Yemen	2005	17.5	4.2	46.6	14.8	34.8

Source: World Bank Development Indicators (2011)

Appendix-2
APIF Participants and their Contribution in the Paid-up Capital as at end 1432H

(US $ million)

No.	Name of participants	Country	Paid-up Capital
1.	Islamic Development Bank	Saudi Arabia	29.5
2.	OIC-Islamic Solidarity Fund	Saudi Arabia	10.9
3.	Ministry of Islamic Affairs, *Awqāf*, Da'wa and Irshad	Saudi Arabia	7.5
4.	Kuwait *Awqāf* Public Foundation	Kuwait	5.0
5.	Kuwait Finance House	Kuwait	5.0
6.	Faisal Islamic Bank	Egypt	3.0
7.	Iran Endowment Fund	Iran	2.9
8.	Al-Baraka Islamic Bank	Bahrain	1.0
9.	Bahrain Islamic Bank	Bahrain	1.0
10.	Investment Bank of Bahrain	Bahrain	1.0
11.	Islamic Tadamun Bank	Sudan	1.0
12.	Jordan Islamic Bank	Jordan	1.0
13.	Arab Islamic Bank	Palestine	1.0
14.	Ministry of *Awqāf* and Islamic Affairs	Jordan	1.0
15.	Amanah Raya Bhd.	Malaysia	1.0
	Total		71.8

Source: *Awqāf* Properties Investment Fund

Appendix-3
Islamic Financial Services Department (IFS) *Awqāf* Properties Investment Fund
List of Projects since its Inception

Serial. No.	Project Code	Country	Name of the Project	Approval Date - G	Mode of Finance	APIF	APIF Line	Total APIF	Beneficiary & Co-finance	Total Amount	Current Status
Projects Completed											
1	6MA 0106	Malaysia	Shariah Courthouse-Malaysia (Govt. Guarantee).	29/Oct/2007	Leasing	2.00	0.00	2.00	State Govt. of Selangor	76.00	Under Repayment
2	6IRN 0088	Iran	Semnan Residential & Commercial Bldg Project-Iran (Govt. Guarantee)	26/Dec/2005	Leasing	5.00	3.00	8.00	Iran Endowment Fund	14.20	The project sponsors are settling overdue amount according with the agreement reached between them & IDB
3	6UAE 0040	UAE	Nama Commercial & Residential Building, Fujairah, UAE (Assign. Guarantee)	26/Mar/2009	Leasing	3.00	6.00	9.00		18.00	1st Repayment $808,358 was due on 08/04/12 was transferred on 28/04/12 by beneficiary.
4	6UAE 0042	UAE	*Awqāf* Comm. Building-Ajman (Govt. Guarantee)	13/Mar/2002	*istiṣnāʿ*	1.00	2.15	3.15		3.15	On 24/04/12, email them all needed documentations as they requested on the phone. Waiting reply on payments made to IDB and their supporting documents. Also next payment due date.
5	6KU 0019	Kuwait	*Awqāf* Commercial Tower Al S a l a m St. (Govt. Guarantee)	17/Mar/2002	Profit Sharing	1.00	16.29	17.29		17.29	Under Repayment
6	6KU 0020	Kuwait	Extension of *Awqāf* Commercial Complex, Mubarak St. (Govt. Guarantee)	17/Mar/2002	Profit Sharing	1.00	14.77	15.77		15.77	Under Repayment
7	6SAU 0039	KSA	Madinah Research Center, Madinah (Bank Guarantee)	9/Dec/2002	Leasing	2.00	1.70	3.70		3.70	The project was rescheduled and sponsors were liable to pay installment No. 11 for $335,821.42 on 21/06/12. Now they expressed intention to settle the full amount. FCD is requested to calculate the full outstanding amount.
8	6UAE 0041	UAE	Al Khan Residential Building, Sharjah. (Govt. Guarantee)	12/Jul/2003	Leasing	2.00	1.00	3.00		3.22	Payments are up-to-date. Next repayment is No.14 for $161,983.61 due on 12/07/12.
9	6QA 0025	Qatar	Women Center for Memorization of Quran (Govt. Guarantee).	16/Sep/2003	Leasing	3.30	3.70	7.00		11.00	Payments are up-to-date. Next repayment is No. 11 for $472,832.36 due on 11/07/12.
10	6SAU 0038	KSA	WAMY-Makkah Project, Makkah (Bank/assign Guarantee)	30/Oct/2004	Leasing	3.00	1.00	4.00	WAMY	4.00	Payments are up-to-date. Next & last repayment is No. 10 for $122,501.59 due on 03/09/12.
11	6IRN 0089	Iran	Residential & Commercial Complex, Mashhad. Leasing, 8 years including 2.5 years gestation. (Govt Guarantee)	30/Sep/2005	Leasing	3.00	7.00	10.00	Iran Endowment Fund	22.70	The project sponsors are paying dues according to agreement reached them and IDB
12	6IRN 0101	Iran	Hamgam Khodro Asia Co. (Govt. Guarantee)	18/Oct/2007	Leasing	0.50	0.00	0.50	Hamgam Khudro Asia Company	19.00	Following the agreement reached between the project sponsors and IDB, former has paid an installment.
13	6SU 0161	Sudan	*Awqāf* Comm Tower, Parliament Street, Sudan (Govt. Guarantee)	1/Dec/2003	Leasing	3.30	5.70	9.00		10.00	Beneficiary requested 2 years extension of the gestation period to 13/12/2012. On 28/04/12, LD gave no objection. FCD replied matter is not rescheduling but extension of gestation so FCD is involved.
14	6BD 0159	Bangladesh	IIUC Tower, Bangladesh (Govt. Guarantee)	17/Apr/2006	Leasing	2.00	2.00	4.00	Islamic University	5.50	Project is up to date in repayment of installment

Serial. No.	Project Code	Country	Name of the Project	Approval Date - G	Mode of Finance	APIF	APIF Line	Total APIF	Beneficiary & Co-finance	Total Amount	Current Status
									Chittagong Trust		
15	6IRN 0096	Iran	Bandar Abbas-Res & -Comm. Complex Project(Govt. Guarantee)	11/May/2004	Leasing	3.00	5.00	8.00		12.63	Project has recently been completed its repayment.
Projects Approved and under implementation											
1		Sharjah, UAE	Constriction of Kbaldiya Residential/Commercial *Waqf* Complex in Sharjah, UAE	9/May/2012	Leasing	7.00	4.70	11.70	The *Awqāf* General Trust, Sharjah - UAE	50.80	Project approved on 30-6-2012. Preparation of agreements underway.
2	SAU 0046	Saudi Arabia	APIF Leasing Operation of US$ 10.0 million for Construction of a Residential Building having total cost of US$ 34.0 million in Al Seeh District, Medina Munawara, K.S.A.	5/Feb/2012	Leasing	5.00	5.00	10.00	*Awqāf* Shanaquetta	34.00	The sponsors have raised some comments on drafts of financing agreements. A meeting in IDB HQ with sponsors and Mauritanian delegation was held in May 2012, in this respect. New drafts have been prepared by Legal and sent to sponsors.
3	6TU 0167	Turkey	APIF leasing operation of US$ 17 million for the construction of an International trade Center in Ankara – Turkey	18/Nov/2011	Leasing	7.00	10.00	17.00	T.R. Prime Ministry of Genera Directorate of Foundations	83.20	The project sponsors have informed that they have arranged financing from their own sources; as such, project will be liable cancelation.
4	6BD 0165	Bangladesh	APIF Leasing Operation of US$ 11.5 million for the construction of IIUC Tower-2 having 16.5 million in	6/Aug/2011	Leasing	4.50	7.00	11.50	Islamic University Chittagong Trust	16.50	Project sponsors are completing formalities to declare the agreement effective
5		Libya	APIF Leasing Operation of US$ 14.0 million for the Construction of Abu Miliana *Waqf* Commercial Building in Tripoli – Libya	26/Jan/2011	Leasing	5.00	9.00	14.00	General Authority of *Awqāf* & *Zakāt* Affairs - Libya	21.00	Sponsors apologized for not being able to accept our offer of financing. However, there is still hope to revive the project. Reminder letter sent to the Minister of *Awqāf* on 6 June 2012.
6	6LE 0072	Lebanon	APIF Leasing Operation of US$ 5.00 Million for the Construction of Bazerkan Commercial Center having total cost of US$ 21.5 million in Beirut, Lebanon.	22/Nov/2010	Leasing	4.00	1.00	5.00	Makassed Philanthropic Association in Beirut	21.50	Agreement was not signed due to taxation issues. A new proposal to change the mode of financing to *Istiṣnāʿ* was made to the Beneficiary in May 2012. Awaiting reply.
7	6YAR 0093	Yemen	APIF Leasing Operation of US$ 15.0 Million for the Construction of Commercial Center having total cost of US$ 30.0 Million in Sana'a – Yemen.	22/Dec/2008	Leasing	5.00	10.00	15.00	Ministry of *Awqāf* - Yemen	30.00	Agreement sent for signature on 28 July 2010. Sponsors promised several times to provide their comments on the draft of financing agreements but nothing has been received so far.
8	6CE 0019	Sri Lanka	APIF Leasing Operation of US$ 19.5 Million for the Construction of Makola Twin Tower Commercial Complex, Colombo, Sri Lanka.	15/Dec/2009	Leasing	5.00	5.00	10.00	Makola Muslim Orphanage	19.50	The signature of agreements was delayed due to legal and tax issues. A solution has been found and a memo was submitted to the Management in June 2012.
9	6QA 0028	Qatar	Ablan Project - Qatar APIF Leasing Operation of US$ 15 Million for the Construction of Residential Complex having total Cost of US$ 56.4 Million in Doha - Qatar.	17/May/2010	Leasing	5.00	10.00	15.00		56.40	Agreement was not signed as the Beneficiary has proposed to change the scope of the project.
10	6BH 0051	Bahrain	Construction of a Serviced Apartment Building, Alseef District Manama – Bahrain (Jaffaria Project).	7/Jun/2011	Leasing	7.00	9.00	16.00	Beneficiary: *Jaffaria Waqf* Directorate - Bahrain.	25.00	The beneficiary did not sign the draft of agreements. Sponsors asked for changing the mode of financing to *Mushārakah*. A letter was sent to sponsors on May 1, 2012 in order to plan for a meeting with the new Board members of *Jaffaria Awqāf* Directorate.
11	6MAS 0008	Mauritius	APIF Operation of US$ 5.0 million for the Construction of Highlands Shopping Complex in favour of Education Trust, having total cost of US$	16/Aug/2011	*Istiṣnāʿ*	3.00	2.00	5.00	The Education Trust, Mauritius	6.10	All the effectiveness docs have been submitted except the escrow account. A draft was submitted and was reviewed by the LD. Awaiting final agreement.

Serial. No.	Project Code	Country	Name of the Project	Approval Date - G	Mode of Finance	APIF	APIF Line	Total APIF	Beneficiary & Co-finance	Total Amount	Current Status
12	6SU 0162	Sudan	Residential & Commercial Building for WAMY, Sudan (Assin. Guarantee).	15/Sep/2008	Leasing	2.00	6.00	8.00	WAMY - World Assembly of Muslim Youth - KSA	16.50	Financing Agreements signed on 21/3/2010 but not declared effective (Original of tripartite agreement signed by Al Baraka Bank not yet provided).
13	6SU 0163	Sudan	Munazzamat Al Dawah Al Islamiya-Sudan (Bank Guarantee)	22/Oct/2008	Leasing	5.00	5.00	10.00	Munazzamat Al Dawah Al Islamiya-Sudan	35.00	A meeting was held with sponsors in May 2012. A new letter sent to them to clarify about completion of financing, new proposal of guarantees and update of feasibility study based on new assumptions. New Feasibility study awaited.
14	6SU 0165	Sudan	Construction of Commercial, Residential & Hajj Complex in Jeddah. (Sudanese Project).	18/Jan/2010	Leasing	5.00	10.00	15.00	Islamic National *Waqf* Chamber	30.00	Declaration of agreement being effective is pending due to the delays in opening of Escrow Account and financing gap.
15	6SU 0158	Sudan	Construction of Hayat Addawaa Furnished Apartment Tower, Khartoum, Sudan.	14/Jul/2010	Leasing	1.00	3.30	4.30	Hayat Addawaa Al Islamia Sudan	7.00	Project declared effective in 1433. Consultancy firm is already selected. Selection of contractor underway. First and second disbursements under processing.
16	6NIR 0111	Niger	Construction of a Commercial & Residential Complex, Niamey, Niger.	18/Jan/2010	Leasing	5.00	10.00	15.00	Islamic University of Niger	26.00	Selection of consultant for design and supervision was approved by IDB in Jan 2012. However, the Beneficiary requested to appoint a consultant firm from UAE directly. The Bank gave approval in June 2012 as per guidelines.
17	6UAE 0043	UAE	APIF Leasing Operation of US$ 6.0 Million for the Construction of a Commercial & Residential Building, Fujairah, UAE.	7/Dec/2010	Leasing	3.00	3.00	6.00	Fujairah Welfare Association – UAE	20.00	Financing agreements have been amended to reduce financing to US$ 5 million, Project declared effective on July 8, 2012. First disbursement under processing.
18	6SU 0160	Sudan	Al Azhari Resi-Com-Complex-Sudan (Govt. Guarantee)	28/Nov/2007	Leasing	3.00	5.00	8.00	National Student Welfare Fund	36.00	Under disbursement.
19	6SU 0159	Sudan	APIF Leasing operation of US$ 7.5 Million for the Construction of Commercial & Residential Complex (Al Magzoub) having total Cost of US$ 9.5 Million in Khartoum – Sudan.	21/Dec/2009	Leasing	1.00	6.50	7.50	Almagzoub Organisation	9.50	Under disbursement.
20	6SU 0164	KSA	Abi Tharr *Waqf* Hotel Project, Madina. (Govt. Guarantee)	6/Dec/2006	Leasing	5.00	3.00	8.00	Islamic Endowmen Corporation – Sudan	33.00	Disbursement of funds is temporary stopped due certain administrative requirements imposed by the Municipality.
21	6DI 0064	Djibouti	Construction of Commercial & Residential Complex having total Cost of US$ 10.0 Million in Djibouti.	27/Dec/2009	Leasing	3.50	5.00	8.50	Ministry of Muslim Affairs and *Awqāf* Properties	10.00	Consultant for design and supervision was selected in Dec 2011. IDB has approved the draft final design in July 2012. Bidding docs are under preparation.
22	6QA0027	Qatar	Bayrohaa Tower, Qatar	24/Dec/2006	Leasing	5.00	5.00	10.00	Ministry of *Awqāf* and Religious Affairs	48.00	Project was put on hold by Beneficiary due to poor market conditions. A deadline was given to the Beneficiary to make new proposals by end July 2012; otherwise, the project will be closed.
23	6TAT 0002	Tatarstan	Construction of Commercial & Residential Center in Kazan.	17/May/2010	Leasing	1.00	2.00	3.00	Muslim Religious Board of Tatarstan	5.00	The project land is no longer available to the Beneficiary and a new land has been proposed. Cancellation of the project and appraisal of a new one is being considered.
		Total	Approval - Active			125.10	201.11	337.91		876.16	

Appendix-4
PRSP Expenditures (FY 2001/02 – FY 2007/08)

Sectors	Expenditure (Rs million)						
	FY 2001/02	FY 2002/03	FY 2003/0	FY 2004/0	FY 2005/06	FY 2006/0	FY 2007/0
Roads, Highways & Bridges	6,340	13,145	22,746	35,181	53,248	60,003	84,825
Water Supply and Sanitation	4,644	3,421	5,799	6,538	10,338	16,619	19,817
Education	66,290	78,447	97,697	116,873	141,702	162,084	182,646
Health	19,211	22,368	27,009	31,426	39,203	53,166	61,127
Population Planning	1,331	3,120	4,689	4,578	10,229	7,002	13,322
Social Security & Welfare	3,664	1,301	4,144	2,030	7,575	4,513	18,942
Natural Calamities	189	410	529	922	19,148	5,008	7,728
Irrigation	10,133	15,535	22,506	37,871	59,819	74,771	83,493
Land Reclamation	1,838	1,733	2,016	2,111	2,673	2,348	3,130
Rural Development	12,325	16,883	18,607	15,369	15,040	22,175	23,334
Rural Electrification	0	0	1,422	4,354	1,000	2,499	2,748
Food Subsidies	5,513	10,859	8,513	5,359	6,021	5,455	54,872
Food Support Programme	2,017	2,017	2,804	2,703	3,081	3,458	4,370
Khushal Pakistan Fund *	800	800	590	78	-	2	1,420
Low Cost Housing	0	0	423	318	305	299	597
Justice Administration	1,981	2,196	2,437	3,116	5,642	5,081	7,820
Law and Order**	31,004	36,293	39,370	47,416	1,115	2,088	2,429
Total Budgetary	166,074®	209,043®	261,301	316,243	376,139®	426,68®	572,620
Total Non-Budgetary***	7,669	11,938®	13,210®	13,776®	17,912®	21,916®	26,974®
Total Beneficiaries (000)	1,786®	2,04 ®	3,654	3,632	6,390®	5,120®	5,563
Total (Budgetary and Non-Budgetary)	173,743	220,981	274,511	330,019	394,051	448,596	599,594
Grand Total: Rs 2,441,495 million (FY 2001/02 – FY 2007/08)							

Source: PRSP-II (2008), Ministry of Finance, Government of Pakistan, 2008.

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An Attempt to Develop Sharīʿah Compliant Liquidity Management Instruments for the Financier of Last Resort: With Reference to Qatar Development Plan

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Abstract

In 2011, Islamic banking reached around 24% of the banking sector in Qatar, yet Qatar Central Bank (QCB) has not developed a Sharīʿah *compliant financier of last resort. This paper investigates to which extent the available liquidity management instruments for Islamic banks are* Sharīʿah *compliant. Each instrument is analyzed in the context of* Sharīʿah *standards. Findings of this analysis suggest that the available instruments some* Sharīʿah *issues, such as ribā, tawarruq, and ijārah ʿīnah. We propose three alternative* Sharīʿah *compliant liquidity management instruments for the financier of last resort, as well as the interbank market. The first instrument is short-term muḍārabah deposits. The second, is to sell Islamic banks' leased assets to the central bank. Whereas, the third is open market operations utilizing tradable ṣukūk.*

Keywords: Liquidity Management Instruments, Islamic Banks, Central Bank, Financier of Last Resort
JEL Classification: G21, E59.
KAU-IEI Classification: L31, L32.

1. Introduction

The share of Islamic banking in Qatar reached around 24% of the total banking sector in 2011.[2] However, Qatar Central Bank (QCB), like many other central

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banks, lacks Sharīʿah compliant instruments to enhance liquidity management in Islamic banks. Although managing liquidity is a fundamental component of sound management in all financial institutions, the responsibility of liquidity management is shared by commercial banks and central banks. In general, banks need liquidity to meet their commitments, satisfy required reserves, and seize investment opportunities. Thus commercial banks are concerned about maintaining their liquidity position to an extent that keeps the banks solvent and allows them to maximize profit. Nevertheless, liquidity and solvency are twin aspects of banking: an illiquid bank can rapidly become insolvent, and an insolvent bank is illiquid. If either of these happened, it may lead to financial instability. Central banks are also concerned about liquidity management to ensure a sound and efficient banking system on one hand. On the other hand, they keep track of the level of liquidity within the banking system as a part of their responsibility of ensuring the smooth operation of the interbank payment settlement system, as well as the implementation of monetary policy. In this context, central banks are expected to maintain a desirable level of liquidity. This level can be thought of as the level that is consistent with the monetary authority's policy targets, whether these relate to monetary aggregates, the exchange rate or inflation (Ganley, 2003, p. 4). Islamic banking, like any other banking system, must be viewed as an evolving system. Islamic scholars and practical bankers have taken up that challenge and have made commendable progress.

Yet in many jurisdictions, Islamic banks suffer from a shortage of Sharīʿah compliant interbank instruments. In addition, arrangements for instruments for a financier of last resort for Islamic financial institutions are still unclear in both normal circumstances as well as for emergency periods of stress (Islamic Research and Training Institute, 2010, p. 38).

As long as the central bank has agreed to license Islamic banks, it is responsible for providing them with a level playing field to achieve equal treatment and provide for fair competition. This paper investigates to which extent the common liquidity management instruments used by Islamic banks as well as central banks are Sharīʿah compliant. Each instrument is being analyzed in the context of the Sharīʿah standards set by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), as well as the resolutions of the Fiqh Academy of the Organization of Islamic Conference (OIC). Furthermore, the authors attempt to develop Sharīʿah compliant liquidity management instruments for the financier of last resort. The remainder of this paper is organized as follows: in Section II, we

[2] Authors' calculation using banks' balance sheets

review the related literature; in section III we describe selected liquidity management instruments available for Islamic banks; in Section IV, we provide our analysis and findings; in Section V, we propose three Sharīʿah compliant instruments for the financier of last resort; finally, in Section VI we summarize our conclusions.

2. Literature Review

Traditionally, in conducting their role as the financier of last resort, central banks have three tools which they can use to influence the availability of liquidity in the financial system. The first is conducting open market operations, where the central bank may influence the level of aggregate reserves but not a specific institution. It is usually used during settled (normal) periods and at the discretion of the central bank. The second involves the outright purchase/sale of assets, mainly sovereign bonds. This tool affects the central bank's money (reserves) permanently and deals with specific financial institutions. The third tool also involves central bank transactions directed at a specific institution. Unlike open market operations, this third tool can be used at the discretion/initiative of the central bank or the financial institution. (Cecchetti & Disyatat, 2010, p. 32). Notwithstanding, these conventional instruments involve interest (*ribā*), which is not accepted in Sharīʿah. Thus, some central banks have developed Islamic liquidity management instruments. A survey that include the experience of the Central bank of Sudan, the Central Bank of Malaysia, and Bahrain Central Bank is provided hereunder.

The Central Bank of Sudan (Bank of Sudan)

Hassan (2004) describes the Bank of Sudan's experience in developing Sharīʿah compliant *ṣukūk* to be utilized in liquidity management and the conduct of open market operations. These *ṣukūk* include central bank *mushārakah* certificates, government *mushārakah* certificates, government investment certificates and central bank *ijārah* certificates.

Central Bank Mushārakah Certificates (Shamam)

In order to issue this type of certificates, the Bank of Sudan, together with the Ministry of Finance, started a partnership company called the Sudan Financial Services Company (SFSC). The Central Bank allocated its shares in the ownership of the five nationalized commercial banks to this company. SFSC plays the role of

an open market operation fund (OMOF). Central bank *mushārakah* certificates were issued to represent ownership in this fund.

Government Mushārakah Certificates (Shahamah)

Shahamah certificates represent ownership of equal shares in a basket of public economic enterprises sold by the SFSC. Meanwhile, privatization of government units may result in losing the assets that may be securitized and represented by *Shahamah* certificates.

Central Bank Ijārah Certificates (Shihab)

Shihab certificates represent ownership of leased assets, such as real estate, which were originally owned by the central bank. This type of certificates is tradable. However, it is limited to the availability of the central bank's assets, which are usually very few.

Government Investment Certificates (Sarh)

Sarh certificates represent ownership of pooled investments based on various contracts (*ijārah, murābaḥah, istiṣnāʿ, salam*).

Salam Securities

Salam government securities represent assets that are sold for advanced payment against future delivery. These certificates are kept until the delivery date. *Salam ṣukūk* are not tradable as per AAOIFI Sharīʿah standards on tradability and redemption of *ṣukūk*. (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, p. 244).

The Central Bank of Malaysia (Bank Negara Malaysia)

The basic strategy to introduce Islamic banking was a kind of *replication.* It is essentially a transform methodology of the funding products of conventional banks into Islamic products (Bacha 2008, p. 10). A brief description of the instruments developed by Bank Negara Malaysia (BNM) is given below:

Wadīʿah Acceptance

Wadīʿah acceptance refers to a mechanism whereby the Islamic banking institutions place their surplus fund, with BNM based on the concept of al *wadīʿah*. The BNM is not obliged to pay any return on the funds placed with it. However, it may pay a dividend as a "*hibah*" or "gift". *Wadīʿah* account in the Central Bank is a guaranteed liability on the bank. Thus the structure of *widiʾah* under the mechanism described above has different names for the concept of a 'guaranteed time deposit for increment' in conventional banking system as follows: a deposit account renamed a *Wadīʿah* account that is being paid a return regardless of whether any funds are invested. The interest is declared to be a dividend and is being paid under the name of being a *hibah* (gift).

Ar-Rahnu Agreements I

Under *ar-rahnu* agreements (RA-I), the financier provides a loan to the borrower against securities that are pledged by the borrower as collateral. Returns from an RA-I are determined based on the average interbank money market rate and are taken by the BNM in the form of a gift (*hibah*). This is exactly the mechanism of interest determination in a repo that is undertaken in conventional central banking.[3] However, the interest paid against the conventional loan is renamed as being a gift (*hibah*).

In addition, BNM has introduced liquidity management instruments on the basis of the concept of *bayʿ al-ʿīnah*; these include:

BNM Istithmar Notes
Sale and Buy Back Agreement
Islamic Negotiable Instruments of Deposit (INID)
Negotiable Islamic Debt Certificate
Ṣukūk Bank Negara Malaysia Ijārah

The Central Bank of Bahrain

The Central Bank of Bahrain (CBB) issues short and long-term debt instruments on behalf of the government of Bahrain. They are issued for liquidity management in Islamic financial institutions (Bahrain Central Bank, 2011, p. 4). In addition, the CBB has developed an Islamic repo instrument.

[3] For example see QCB's instructions to banks. (Qatar Central Bank, 2011, pp. 33-34).

Salam Ṣukūk

Salam ṣukūk are issued on the basis of *salam* contracts, whereby the government of Bahrain promises to sell aluminum to the buyer at a specified future date in return for a full price payment in advance. However, they are not tradable as per AAOIFI Sharīʿah standard No.17, para.5/2/14 (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, p. 244).

Ṣukūk Al-Ijārah

The CBB, on behalf of the Ministry of Finance issues *ijārah ṣukūk*. They represent assets that are leased back to the Ministry, which also undertakes to buy the assets back upon maturity of *ijārah* period. This is *ijārah ʿīnah*. (The OIC Fiqh Academy, Islamic Economics Research Institute, Islamic Training and Research Institute, 2010, p. 6).

Islamic repo

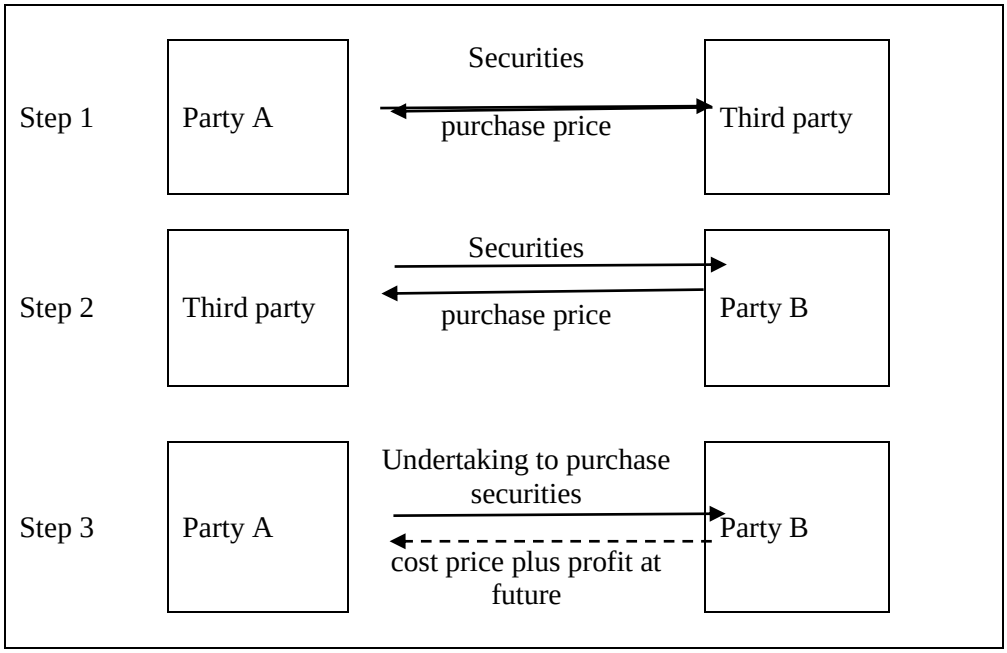
The *ijārah ṣukūk* holders are eligible for the CBB 1-week standing facility under the mechanism of the sale and purchase of government *ijārah ṣukūk*. /the International Islamic Financial Market (2010) describes the mechanism of Islamic repo. The mechanism involves three separate *ṣukūk* sale and purchase transactions between three parties, namely, the *ṣukūk* owner (the bank in need of liquidity), an intermediary bank (market maker), and the CBB (the liquidity provider). It is also called three-party *i'aadat al shira'* (three party buy-back), which is structured as follows:

The structure of the three-party Islamic repo represents organized or banking *tawarruq*, which refers to the transaction of buying a good for a specified deferred payment and selling it for a lower spot price in order to get liquidity (cash). The result of this transaction is the acquisition of cash now for a higher debt that is due at a future date. There are two facts that highlight *tawarruq* in this transaction:

1- The good (in this case, the security) is not purchased for its own sake; rather, it is just an intermediary to get cash.
2- The pre-arrangement (collusion) between the parties to conduct an operation that results in acquisition of cash for a higher debt to be paid in future.

The OIC Fiqh Academy in its resolution No. 179, adopted in its 19th session in 2009 resolved that organized *tawarruq* is prohibited in Sharīʿah, as it is a practice that is used to obtain cash for a higher debt. That is what *ribā* is. The resolution states that banking *tawarruq* is not permissible because of the pre-arrangement—regardless of explicit or implicit— between the parties to obtain cash now for a higher debt that is due in the future, which is *ribā*. (Resolutions of the OIC Fiqh Academy, 179/19). In addition, resolution No. 157, adopted in 2006, states that "any pre-arrangement that leads to *ribā* such as *ʿīnah*, and sale combined with loan is prohibited in Sharīʿah*"* (Resolutions of the OIC Fiqh Academy, 157/17).

Figure-1
Structure of the CBB's Three-Party Islamic Repo



Source: (International Islamic Financial Market (IIFM), 2010), p.20)

3. Description of Selected Liquidity Management Instruments

In order to meet their liquidity demand, Islamic banks have two options; the first is to utilize interbank instruments, while the second is to approach the Central Bank as a financier of last resort.

Islamic Interbank Instruments

Wakālah Agreement

A *wakālah* agreement is between two parties, namely the *muwakkil* "principal", and the *wakīl* "agent". *muwakkil* agrees to assign the *wakīl* to invest a certain amount of money for a specified period of time, usually one year. The *wakīl* is entitled to receive a *wakālah* fee from the *muwakkil* on the contract's starting date. Under *wakālah* contract, the muwakkil –as the principal—bears all the risks associated with the acts of the *wakīl*, except risks resulting from misconduct or negligence on the part of the *wakīl*. In *wakālah* contract—as used as a financial contract in Islamic banks— the *wakīl* specifies the expected return on investment, where in most cases, any amount exceeds the expected return shall be an incentive payment to the *wakīl*. The term of *wakālah* ranges between three months and six months, renewable up to one year. The object in the *wakālah* contract is to invest in short-term banking activities similar to short-term *muḍārabah* deposits.

The *wakālah* agreements are used as interbank instruments between Islamic banks. They have also been used between Islamic and conventional banks, provided that the Islamic bank is the user of the funds in such a transaction, but not the provider of the fund.

Commodity Murābaḥah

Islamic banks use commodity *murābaḥah* to perform their interbank liquidity transactions between two Islamic banks, as well as interbank transactions between an Islamic bank and a conventional bank. (IFSB, 2008, p.15, 17). The *modus operandi* of commodity *murābaḥah* is described below:

1) Bank A orders Bank B to buy a specified amount of a commodity and signs a promise to buy the same for an agreed price.
2) Bank B purchases a metal at spot prices from London Metal Exchange through a -third party—broker.
3) Bank B sells the metal to Bank A on a deferred payment basis at an agreed price that includes the cost plus profit margin. This is a *murābaḥah* transaction.
4) Bank A sells the commodity to a broker at spot price to realize cash immediately.
5) At the due date, Bank A pays the total agreed amount to bank B.

Some Liquidity Management Instruments Offered by Central Banks

In order to fulfill their responsibility to supervise banking system and to carry out its monetary operations, central banks deploy several tools for liquidity management as follows.

Required Reserve Ratio

Required reserve ratio is an indirect monetary policy instrument used by most central banks. It is a percentage of the total deposits in the depository institutions. Central banks calculate this ratio based on the daily average of total deposits during a one-month period.

Central Bank Standing Facilities
Money Market's Lending and Deposit Facilities

Central Banks offer deposit and lending standing facilities to banks in order to manage liquidity in the banking system, as well as to navigate short-term money market rates. Lending facility intends to satisfy the day-to-day requirements of primary liquidity. The deposit facility, by contrast, aims to absorb excess primary liquidity in the banking system. Interest on deposited or borrowed funds is settled in the banks' clearing accounts. .

With regard to Islamic banks, the returns on their deposits and interest on their loans are accrued to a specified period. At the end of the period, settlement is undertaken within a mechanism of clearing between the debit and credit interest for each Islamic bank. If the net interest is a debit, the Islamic bank does not take the difference. On the other hand if the net balance is a credit, then the Islamic bank has to pay the difference to the central bank*2-b. Automatic Clearing Lending Facility*

The Automatic Clearing Lending Facility (ACLF) is a standard standing lending facility offered by a central bank to licensed banks in the country. At the end of each monetary policy day, the central bank extends overnight funds to deficit banks to ensure a flexible supply of primary liquidity in the banking system. By the day's end, a bank's debit position on its settlement account is considered by the central bank as a request for a loan via this facility. This facility is also offered by central banks to licensed Islamic banks but rarely used by the latter because it is also based on interest.

Repurchase Operations

Central Banks offer a lending facility via repurchase operations (Repos). Banks are entitled to get loans with a maturity of two weeks or one month with a pre-announced interest rate. The size and timing of the repurchase agreement is initiated by the banks. Domestic government securities, i.e., loans backed by domestic assets, are used as collateral to conduct any repo transaction.

Certificates of Deposit

Central banks introduce certificates of deposits as an instrument of monetary operations and liquidity management. They are issued at different short term maturities such as 14 days, 28 days, 91 days, etc. Certificates of Deposit are issued by central banks to confirm that a sum of money has been deposited by a licensed bank for a limited term and at a fixed or variable interest rate. The certificate holder shall receive, on maturity date, the principal amount plus accrued interest. (see for instance Qatar Central Bank Web page). The issuance procedure is done via an auction mechanism on the amount and interest. At the maturity date, the certificate of deposit's holder receives its principal plus the accrued interest.

Credit Facilities

With a view to alleviate the liquidity stress on banks in 2008, central banks sometimes introduce an emergency lending window in the form of a collateralized loan through which banks can borrow at a given interest rate.

Government Securities

Governments usually issue securities to finance their projects. In 2010, the Ministry of Finance in Qatar issued securities (bonds and *ijārah ṣukūk*) for the purpose of liquidity management. Bonds and *ṣukūk* offer a fixed coupon (rent for *ṣukūk*) rate of 6.5% and tenure of eight years, starting from June 2010. Subsequently, in 2011, another issue of *ijārah ṣukūk* took place at the amount of Qatari Riyal (QR) 33.00bn with a fixed rent of 3% paid on a semiannual basis for a tenure of three years. (QCB Web page).

Treasury Bills

Treasury Bills (T-Bills) are government debt instruments issued with maturity not exceeding one year; therefore, these are generally considered as money market instruments. T-Bills are usually sold at a discount, i.e. at a lower price than its nominal value. On the due date, the government is committed to pay the nominal value of the T-Bill. T-Bills are fully negotiable instruments which could be bought and sold, pledged as collateral or used in repurchase transactions. (QCB Web page) Islamic securities may issued as short term *murābaḥah ṣukūk*. Some central banks issue *Murābaḥah* securities on the basis of Tawarrq using spot commodity contracts of London Metal Exchange.

International Islamic Liquidity Management Corporation

Established on 25 October 2010, the International Islamic Liquidity Management Corporation (IILM) has 14 founding members consisting of central banks, monetary authorities, and multilateral international organizations. The objective of the IILM is to create and issue short-term Sharīʿah-compliant financial instruments to facilitate effective cross-border Islamic liquidity management. (International Islamic Liquidity Management Corporation Web Page).

4. Analysis and Findings

In this section each of the above described instruments is analyzed in the context of Sharīʿah standards offered by AAOIFI, as well as the resolutions of the OIC Fiqh Academy in order to find out the suitability of each instrument in liquidity management from Sharīʿah point of view.

Analyzing Islamic interbank instruments

Wakālah Agreement

This is a Sharīʿah compliant contract and it is recognized by the AAOIFI in its Sharīʿah standards.[4] The object in the *wakālah* contract is to invest in short-term banking activities similar to short-term *muḍārabah* deposits. However, *wakālah* contract may also be used as a camouflage for a hidden interest when the rate of profit is pre-fixed.

[4] For more details on *wakalah* contracts, see (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, pp. 326-330).

Commodity Murābaḥah

The structure of the commodity *murābaḥah* transaction involves *tawarruq*, which are not permitted by Sharīʿah according to the OIC Fiqh Academy.

Tawarruq refers to a transaction where one party purchases a commodity for a specified price, the payment of which is deferred (buy now; pay later), and selling it for a lower spot price in the market in order to get liquidity (cash). The result of this transaction is that one party obtains cash now in exchange for a larger debt that is due at a future date. That is what "*ribā al nasi'ah*" refers to. Introducing a commodity as a mere intermediary vehicle in *tawarruq* does not make it a real rational sale or trade. In fact, goods are normally bought so they can be consumed or traded, i.e., sold for a higher price in the market. Rational behavior does not warrant a person buying a commodity to resell it at a lower price. Furthermore, such a behavior violates the objective/implication of the purchase/sale contract مقتضى عقد البيع and the objective of Sharīʿah in protection of property.[5]

Arranged *tawarruq* is a mechanism in which the seller is a bank which arranges to buy a commodity to sell to its customers at a higher and deferred price, and reselling it again for cash at a lower price than that charged to the customer, so that the customer gets this cash against a future debt. It usually involves several agency and sale agreements. (Alsuwailim, 2009, p. 380).

The OIC Fiqh Academy in its resolution No 179 adopted in its 19th session in 2009, considers *tawarruq* to be prohibited in Sharīʿah as a practice that is used to obtain cash while incurring a higher debt and described it as pure *ribā*, which is prohibited in Islam. Pre-arrangements that hides *ribā* were also discussed and outlawed by the OIC Fiqh Academy in its resolution No. 157 in 2006, which states: "Any pre-arrangement that leads to *ribā* such as *ʿīnah*, and sale combined with loan is prohibited in Sharīʿah". (The website of The OIC Fiqh Academy, resolutions of sessions 17 and 19)

Analyzing liquidity management instruments offered by Central banks

Required Reserve Ratio

Many central banks do not differentiate between conventional banks and Islamic banks with regard to the imposed required reserve ratio, although

[5] For more details on *Tawarruq* see (Alsuwailim, 2009, pp. 312-451).

muḍārabah-based deposits represent a significant part of total deposits in Islamic banks.[6] In fact, this is still one of the unresolved issues in Islamic finance in general. The argument against this practice Is summarized as follows:

a- Investment accounts in Islamic banks are different from the conventional time deposits in their nature. The agent (an Islamic bank) in a *muḍārabah* contract has no right to exclude a part of the *muḍārabah* amount from an investment without appropriate authorization from the depositor.
b- Investment accounts are placed with the bank on the basis of *muḍārabah*, and hence, as a principle, might be considered as being similar to the bank's capital in their liability to loss. Therefore, this fact should be taken into consideration when applying required reserve ratio on Islamic banks.

Standing Facilities

Money Market Lending and Deposit Facilities

With regard to Islamic banks, as mentioned above, clearing between the debit and credit interest for each Islamic bank is settled at the end of the period. In this context, it is worthwhile to distinguish between two issues. The first is clearance between debts and the second is clearance between interests. An Islamic bank may agree with a conventional counterpart on the clearance of loans between each other provided that they are interest—free loans. To illustrate this distinction, let us first differentiate between a mutual understanding among different parties about how to deal with interest—free loan, and the concept of 'loan for loan'. Muslims always give loans without interest to each other, as a loan (*qarḍ*) is categorized as a *tabarruʿāt* contract. It is an act of benevolence. However, 'loan for loan' implies that the lender will lend only if there is a benefit or compensation for him/her. This is *ribā* as per the Fiqh standard: "Any loan from which a benefit accrues is *ribā*". Contemporary applications include a loan for a loan of the same amount and maturity, a loan for a loan of a lower amount and higher maturity to balance the complementary loan, etc. Clearance between debts may be carried out through a bill of exchange. It is similar to what is known as *suftajah*, a mechanism via which one party may pay his/her debt to another party by a third party, who is a debtor to the first party.

Clearing debit and credit interest is totally different from the aforementioned loan transactions. First of all, credit and debit interest are the result of dealing with interest-based loans, which results in *ribā* and are prohibited in Sharīʿah. Under a

[6]For example in Qatar it represents 82% as calculated by the authors for the year 2011.

clearance agreement, interest accrues to the Islamic bank on its deposits with the conventional bank but the Islamic bank abstains from acquiring this interest. Instead, interest gained is used to offset interest due from the Islamic bank when its account is overdrawn. The overall transaction is a result of interest-based transactions which are not permissible in Sharīʿah. Secondly, any haram (non-permissible) earning is not actually earned according to the tenets of Sharīʿah and should go to charity rather than being used to pay any expenses or discharge of any obligations. Thirdly, depositing sums with conventional banks is discouraged by Sharīʿah. Notwithstanding, if interest is accrued, it should not be left for the conventional bank for the following reasons:

a. Muslims who initiate an interest-based contract are responsible for it and leaving the interest does not exempt them from their responsibility.
b. The bank is not entitled to the amount of interest due.
c. This behavior subsidizes conventional banks and supports their *ribā*-based activities.

Rather, as discussed before any interest should go to charity. (Albaz, 1998, pp. 173-182). Finally, the loans in the money market transactions are interest-based, i.e., the loan is offered against agreed compensation, which is offset by the Islamic bank's deposit with a central bank for an equal amount/day. Taking into consideration that any loan from which a benefit accrues is *ribā* loan, this contractual relationship is invalid in Sharīʿah. In this regard AAOIFI Sharīʿah standard No.4 states that clearance of a debt is permissible in Sharīʿah and can be done automatically or by agreement. However, the standard states that a swap is prohibited because it is, in fact, done by clearance between interests! (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, p. 39).

Automatic Clearing Lending Facility

Central banks treat conventional and Islamic banks equally in this regard. However, the interest due from Islamic banks is settled via the same above-mentioned interest clearing mechanism, and the same above analysis is applicable to this instrument.

Repurchase Operations

This instrument involves interest (*ribā*), which is prohibited in Islam. However, there is a need for offering counterpart instruments that are Sharīʿah compliant to Islamic banks.

Certificates of Deposit

The certificates of deposit offered by central banks involve interest (*ribā*), and there should be alternative instruments offered to Islamic banks. In addition to the issue of interest, trading the certificates of deposits in a secondary market involves sale of debts, which is also prohibited in Islam.

Credit Facilities

This instrument also involves *ribā*, which makes it inaccessible to Islamic banks.

Government Securities

Although *ijārah ṣukūk* are recognized in the AAOIFI Sharīʿah standards, the abovementioned *ṣukūk* are issued on formula of already existing assets sold to investors and leased/purchased back from them." This formula involves the Sharīʿah issue of *ʿīnah*, as the purchased asset being handed back to the originator at the maturity of the *ijārah ṣukūk*.[7]

The recommendation of the OIC seminar on Islamic *ṣukūk* held in Jeddah, May 2010, considers this kind of *ijārah ṣukūk* as *ʿīnah*, which is prohibited in Sharīʿah.[8] (The OIC Fiqh Academy, Islamic Economics Research Institute, Islamic Training and Research Institute, 2010, p. 6). The rationale of this consideration is that the asset is being sold to the *ṣukūk* holders for a certain tenure, after which the same asset is redeemed by the originator. The price difference that represents *ribā* is being paid as rent. Apparently, the OIC Fiqh Academy discarded any argument that resale to the seller done after a period of time that allows for changes in the asset itself. It also discarded the argument that *ijārah* for which rent is paid is a sale of usufruct which does not exist at the time of the contract and therefore the *ʿīnah* does not apply to the difference of repayment called rent!

Treasury Bills

Treasury bills for Islamic banks are issued as *murābaḥah ṣukūk*. This type of *ṣukūk* is recognized by AAOIFI. However, limited information on the structure of

[7] *Bayʿ* al-*ʿīnah* refers to buying a commodity for a cash payment and selling it back for a higher price payable at a future date.

[8] This was confirmed by the OIC Fiqh Academy in its 20th meeting in Algeria, September 2012. The resolution states that it is prohibited in Shari'ah to sell an asset, with a condition that allows the seller to lease purchase back the same for a total amount that exceeds the selling value. This condition transforms the transaction to *ʿīnah* which is prohibited in Shari'ah.

murābaḥah ṣukūk prevents deep analysis for this instrument. Notwithstanding, they are not tradable in the secondary market (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, pp. 238-244).

International Islamic Liquidity Management Corporation

Until the time of writing this article the IILM has not yet begun operating.

Findings

Our analysis suggests the following:

1- The available Islamic liquidity management instruments for Islamic banks are not considered Sharīʿah compliant in the context of Sharīʿah standard offered by AAIOFI, as well as the resolutions offered by the OIC Fiqh Academy.
2- Common liquidity management instruments offered by central banks can be categorized as follows:
   - Conventional instruments which involve *ribā*
   - Invalid Arrangement for Islamic banks because it involve Sharīʿah issues, such as clearing between interest in a money market mechanism and *Ijārah ʿīnah* in government *Ijārah ṣukūk*.
   - Islamic instrument with limited information, such as *Murābaḥah ṣukūk*

5. Sharīʿah Compliant Instruments for the Financier of Last Resort

In what follows three alternatives Sharīʿah compliant financier of last resort instruments are proposed.

The First Alternative: Short-term Muḍārabah Deposits

The central bank may finance Islamic banks on the basis of *muḍārabah*, which refers to a special kind of partnership, whereby an investor or a group of investors provides capital to an agent, who invests it for a certain period of time. The profit is shared according to pre-agreed proportions, while the losses are incurred by the principal investor.

Short-term *muḍārabah* deposit works according to the mechanism described below:

1- The central bank signs a master agreement with Islamic banks who wish to participate. The master agreement contains the following:
   a- The profit-sharing ratio between the central bank as the *rub al mal* (principal), and the Islamic participant bank as the *mudarib* (agent) or at least the principles according to which this ratio can be determined for each *muḍārabah* transaction at the time of its undertaking.
   b- When the Islamic bank asks for a *muḍārabah* deposit, it shall reveal its expected rate of return, which is supposed to be known to the central bank anyway. However, this rate is not guaranteed.
   c- If the actual rate of return exceeds the declared expected rate of return, the central bank forsakes this excess and the Islamic bank is entitled to keep the difference. Alternatively, this excess profit may be allocated to a special profit equalization reserve at the central bank to supplement occasions of low profit.
2- Upon request, the central bank can place a *muḍārabah* investment deposit with an Islamic bank which faces a liquidity shortage.
3- The maturity of central bank deposits may be any term from overnight to a week or so. The central bank is recommended to restrict this instrument to very short-term such as overnight, one day or up to two weeks, as it is not a healthy sign to approach the financier of the last resort for longer periods.
4- Upon maturity, the Islamic bank pays the principal and distributes the declared profit to the central bank as per the pre-agreed profit-sharing ratio.
5- The central bank may accept a rate of return lower than the declared rate only if the Islamic bank can prove with strong and hard evidence, as specified in the master agreement, that the actual profit in reality less than the declared/expected profit.

In addition of being suitable as an instrument for the financier of last resort, short-term *muḍārabah* deposits can be used in interbank transactions. However, if it becomes known that the bank is acquiring direct finance from the central bank, this may send a negative signal to the market about the bank's soundness, causing depositors to withdraw their deposits. In this regard, (Lumsdaine, 2010) highlights that the announcement that Northern Rock had sought liquidity assistance from the Bank of England triggered an immediate run on its deposits. Thus this instrument is more suitable during the normal periods.

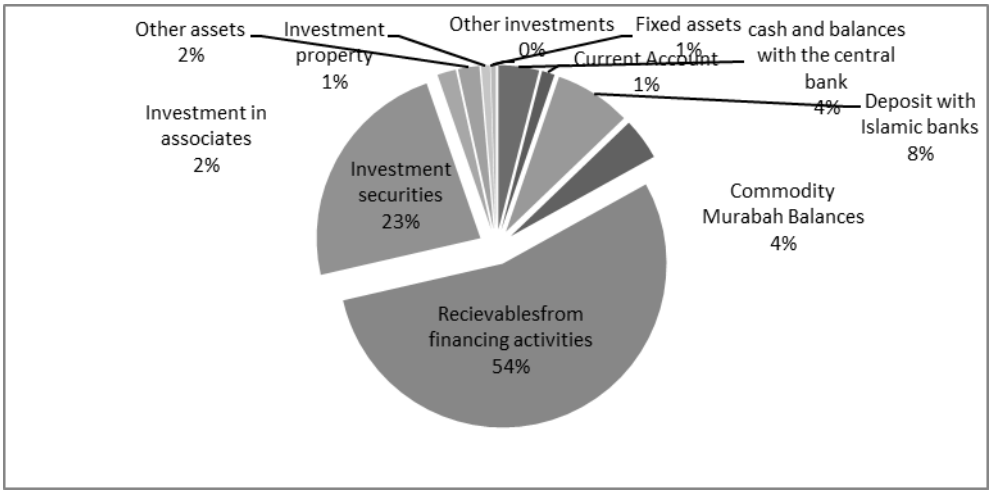
The Second Alternative: Selling Islamic Banks' Assets

Under a master agreement, the central bank and Islamic banks may agree on:

a) The types and quality of assets that may be accepted for discounting at the central bank. These assets have to be tradable, from the Sharīʿah point of view, and have a high rating.

b) The discounted asset is being used in the central bank's open market operations.

Figure-2
Islamic Banks' Assets



Source: Authors' calculations using the four Qatari Islamic banks' financial statements for 2011

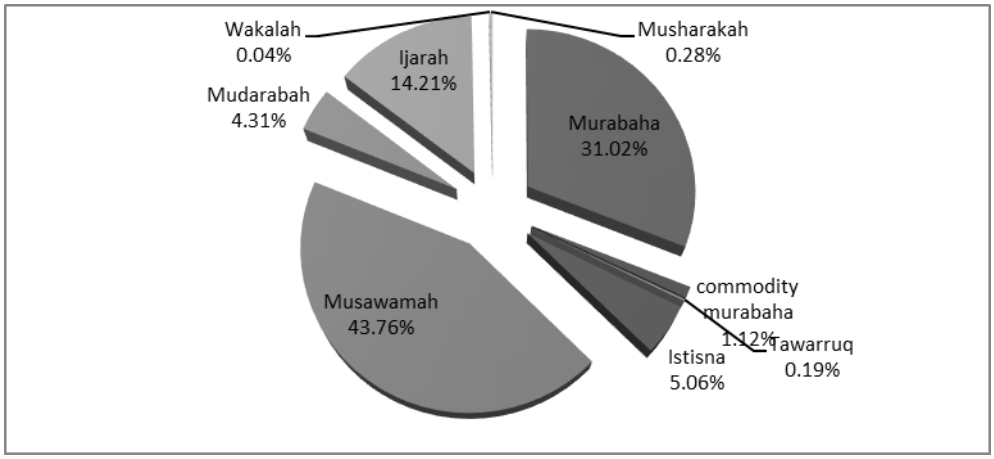
Figure 2 shows the composition of Islamic banks' assets in Qatar at the end of 2011.[9] As can be seen, around 54% of their assets are receivables from financing activities; investment deposit with other Islamic banks make up 8%, whereas commodity *murābaḥah* balances and cash represent 9%. Fixed assets make up a small proportion of the total. Financial investments are mostly made up of non-tradable certificates. Thus a sale of the banks' assets implies sale of debts or, in other words, receivables from financing activities.

Figure 3 gives the breakdown of receivables from financing activities shown in Figure 2. This indicates that 75% of the receivables cannot be sold as per the Sharīʿah position on the sale of debt because they are the result of *murābaḥah* and *musawamah* sales. However, 19% of receivables come from *ijārah* and

[9] Islamic banks' assets in Qatar are used as a n example, but the instrument is not limited to Qatar.

muḍārabah financing activities. Both can be sold such a way to meet liquidity needs. Specifically, leased assets usually have a fixed rate of return, which makes selling them more appealing. The mechanism of selling an Islamic bank's lease contracts is described below.

Figure-3
Islamic Banks' Financing Activities



Source: Authors' calculations using the four Qatari Islamic banks' financial statements for 2011

The financial lease contracts of all Islamic banks in Qatar are *ijārah muntahiyah bittamlik* contracts, under which the Islamic bank keeps ownership of the asset until all the installments are settled. If the bank needs liquidity, it may sell the leased assets, because their sale amounts to transfer of rights and liabilities with regard to the relevant assets. When the Islamic bank sells the leased assets, the asset's ownership is transferred to the central bank. As the new owner, the central bank is entitled to the periodic rent, which has been predetermined.

An agency agreement shall be signed between the central bank and the Islamic bank, as a part of the master agreement of this instrument. The central bank assigns the Islamic bank as the agent that collects the rent and the purchase part of the installments of the lease/purchase contract with the retail lessee on behalf of the central bank. Furthermore, under the master agreement, the Islamic Bank may opt, to sell the corpus of the asset to the central bank and lease it from the central bank at a rate that is negotiated between the two parties. This is different from the rental rate payable to the Islamic Bank by customer in the retail contract.

Like short-term *muḍārabah* deposits, this instrument can also be used for interbank transactions during settled periods. However, during times of crisis, when there is uncertainty about an asset value, a bank's assets can be discounted at the central bank as a financier of last resort. When the central bank purchases the assets, it can offer it for sale to all Islamic banks including the one who sold it, provided that this has not been pre-arranged between the central bank and the Islamic bank who sold the asset, thus making it a sort of repo.

The Third Alternative: Open Market Operation Using Tradable Ṣukūk

Description of the instrument proposed in this section can be developed in two stages. The objective of the initial stage is to develop tradable sovereign *ṣukūk* to qualify its holders (Islamic banks) to obtain financier of last resort facilities. In addition, such *ṣukūk* are considered instruments to sterilize the monetary effects of expansionary fiscal policy. They will also help the government finance its developmental projects. In the second stage, the proposed *ṣukūk* are used to conduct open market operations. It may also be discounted at the central bank as a way of providing a standing finance facility to Islamic banks, and perhaps to conventional banks as well.

The initial stage begins with coordination between the central bank, the Ministry of Finance and other government and semi-government entities. For example, article 44 of QCB's law empowers the central bank to initiate a coordination plan between QCB and government entities. It states the following:

> *The bank and the Ministry shall lay out a mechanism for coordination between monetary and fiscal policy. The bank shall coordinate with other government authorities in order to implement its objectives* (Qatar Central Bank, 2006).

This coordination will help the Ministry of Finance and other government entities to acquire finance to achieve their five year development plan, which is outlined in the Qatar National Development Strategy 2011—2016 (QNDS 2011—2016). The programs and projects identified in the QNDS 2011-2016 are from 14 sector strategies developed by various government entities (Qatar General Secretariat for Development Planning, 2011).

Together with QCB, the relevant government entities may establish a special purpose vehicle (SPV) as a concerned body to raise finance, and to implement, and

follow up the projects to achieve the targets of QNDS 2011—2016. To raise finance for different projects, the SPV may issue *ṣukūk* to Islamic banks and perhaps to conventional banks also. In this context, the *ṣukūk* serves three different aims: they are a means of finance, an instrument to sterilize of expansionary fiscal effects and a tool for the financier of last resort.

It is worthwhile in this context to mention that on 1 July 2012, Qatar issued decree No3 of 2012, authorizing the Ministry of Economy and Finance to establish two shareholding companies and to sign agreements with them for issuing *ṣukūk*. The Ministry may transfer government properties to these firms for the purpose of issuing *ṣukūk* up to USD 4bn (Ministry of Economy and Finance Web Page, 2012).

Ṣukūk as a Mean of Finance

The planned investment over the period covered by the QNDS 2011—2016 is expected to exceed 25% of GDP over the period. Table 1 shows some key projects to be achieved over 2011—2016. As can be seen from Table 1, the projects consist of infrastructure development, capacity expansion of existing projects, construction and services. Accordingly, different tradable types of *ṣukūk* can be structured.[10] Here, we suggest a few types of such *ṣukūk*:

Table-1
Key Projects of the QNDS 2011—2016

Project	Cost
Residential and business construction projects	QR 130bn.
Infrastructure projects including: Power and water improvement New Doha port Information technology	USD 65bn
Additional infrastructure for sustainable resource management such as a treated sewage effluent distribution system	USD 8.5bn to USD 12.5bn
Digitization project in which hundreds of books, maps and manuscripts will be available via an online repository	N/A
Expanding the capacity of hydrocarbon-related industries	QR 88bn.

Source: (Qatar General Secretariat for Development Planning, 2011)

[10] For more details on Sukuk types see (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, p. 238).

1.a. Hybrid Istiṣnāʿ-Ijārah Ṣukūk/Istiṣnāʿ Ijārah Muntahiyah Bittamlik

The structure of this type of *ṣukūk* begins as *istiṣnāʿ ṣukūk*. Upon completion of the project, the *ṣukūk* are transformed into *ijārah ṣukūk* or *ijārah muntahiyah bittamlik.*

Project financing can be undertaken through an *istiṣnāʿ* contract when the projects relates to manufacturing, construction and buildings. From Table 1, for example, the following projects can be financed by *istiṣnāʿ-ijārah* (or *ijārah muntahiyah bittamlik*) *ṣukūk*: residential and business construction projects, power and water improvement (as these need cables installated) and development of power stations, the new Doha port, sewage effluent distribution system. *istiṣnāʿ-ijārah (or ijārah muntahiyah bittamlik) Ṣukūk* can be structured as follows:

1- The SPV signs *ijārah (or ijārah muntahiyah bittamlik*) contract with the originator (the government entity in charge of developing the project).
2- The SPV signs a services agency agreement with the originator to undertake maintenance during the lease period.
3- The SPV signs an agency agreement with the originator to enable the originator to conclude the contract and receive the asset directly from the contractor upon completion.
4- The SPV issues *ṣukūk* for the value of the *istiṣnāʿ* contract and sells them to potential investors (in this case, Islamic banks have priority to be the investors and conventional banks may cover in the case of a shortage of financing).
5- The originator (the government entity) signs an undertaking to buy the project, gradually along with rental payments, or at the end of the lease, from the *ṣukūk* holders.
6- Proceeds from the *ṣukūk* are used to settle payments to contractors and consultants as the work progresses.
7- Upon completion, the contractors deliver the completed asset to the originator.
8- The originator starts to pay periodic rentals and payments to buy fractions of the project as per the *ijārah muntahiyah bittamlik* contract. If it is an *ijārah* contract, it can be made for a given period that is renewable with no need for amortization or exit (no payments for gradual purchases). Investors then can sell their holding in the market at market prices like a perpetual bond with a fixed return meaning that the buyer will be eligible to get return as applicable for the *Ijārah Ṣukūk*.

9- After deducting their commission and any maintenance costs, the SPV delivers periodic payments to the *ṣukūk* holders.

To distinguish between *istiṣnāʿ-ijārah* and *istiṣnāʿ-ijārah muntahiyah bittamlik ṣukūk*, we must review the purpose for which the *ṣukūk* is issued and used. In the context of the present paper, this instrument is mainly designed to serve as an instrument for the financier of last resort. In addition, it serves to finance the government's developmental expenditure and as a tool to mop up excess liquidity resulting from expansionary fiscal policy. The second and third objectives can be achieved by both *istiṣnāʿ-ijārah* and *istiṣnāʿ ijārah muntahiyah bittamlik*. However, the first objective can be accomplished by both types for a certain period, which ends at the maturity of *istiṣnāʿ -ijārah muntahiyyah bittamlik contract*. Thus the *istiṣnāʿ ijārah ṣukūk* dominates the *istiṣnāʿ-ijārah mintahiyah bittamlik ṣukūk* from the point of view of being an instrument for the financier of last resort, as the former is a revolving instrument, whereas the later ends at its maturity date.

As per the AAOIFI Sharīʿah standards on the trade and redemption of *ṣukūk*, the *istiṣnāʿ ṣukūk* are tradable only when the asset starts to be manufactured or constructed (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, p. 244). This is because the tradability of *ṣukūk* depends on what they represent. At the initial stage, during the *wakālah* stage, *istiṣnāʿ ṣukūk* represent debt, which is not a tradable asset, but its ownership can be transferred at its face value. This makes it mandatory that the originator should attempt to synchronize the assignment of the subscribed *ṣukūk* with the physical start of the project. Notwithstanding, as construction starts, the *istiṣnāʿ ṣukūk* represent the project under construction and are tradable. Upon completion of the project, the *istiṣnāʿ ṣukūk* are transformed into leased-asset *ijārah* or *ijārah muntahiyah bittamlik ṣukūk*, representing assets tied to a lease contracts which are also tradable.

Ijārah Ṣukūk

These are certificates of equal value issued by the owner of an asset or a financial intermediary on the owner's behalf. The basis of issuing this type of *ṣukūk* is that the issuer sells an existing leased asset to the *ṣukūk* holders, who are the buyers of the asset. The proceeds of the *ṣukūk* are the purchase price of the asset. *Ṣukūk* holders are jointly entitled to their benefits and bear the associated risks. This type of *ṣukūk* can be suitable for financing some projects in Table 1, specifically information technology projects and expanding the capacity of hydrocarbon-related industries. Such projects are capital-intensive. For example,

hydrocarbon capital includes heavy machinery such as refineries, drilling equipment, liquid to gas technology, etc. These are imported standardized capital assets. Thus they can be bought and leased to the industry/project. The structure of the *ijārah ṣukūk* to finance capital- intensive industries is described below:

1- Under a master lease agreement, the SPV signs a long-term lease contract with the originator, where the SPV, on behalf of the *ṣukūk* holders, leases an asset (machine, equipment, etc.) from the originator as a lessee for a fixed rent. (The master agreement may indicate rent to be periodically adjusted according to the inflation rate over a certain period of time.) The term of the *ṣukūk* is determined by the economic useful life of the leased asset(s).
2- The SPV signs an agency agreement with the originator to import the required asset that is specified in the master agreement. This may also be done through a *wakālah* given to the originator.
3- The SPV issues *ṣukūk* with a total value that is equal to the purchasing price of the asset to be leased, whereby proceeds from *ṣukūk* are used to purchase the asset.
4- Periodic rental payments are distributed to the *ṣukūk* holders after deducting the SPV's commission and any additional expenses that are specified in the master agreement.

In order to guarantee a fixed real rate of return (rent) and continuity, the SPV may establish some reserves such as inflation adjustment reserves and depreciation reserves, as well as maintenance and renovation reserves. The maintenance reserve is used for the periodic maintenance and renovation of assets. Thus the rent received by the *ṣukūk* holder can be thought of as the net value after deducting reserves for maintenance and adjusting for inflation. At the end of the asset's useful life, the SPV uses the asset's residual market value, in addition to the depreciation reserves to replace the asset or to make a final balloon payment to *ṣukūk* holder, which is a sort of capital refund. Alternatively, the SPV may issue more *ṣukūk* depending on the price of the new asset.

Ṣukūk as an Instrument to mop up excess liquidity resulting from Expansionary Fiscal Policy.

Monetary stability is a crucial challenge for QCB. Because the Riyal is tied to the US dollar and Qatar operates an open capital economy, Qatar cannot run a fully independent monetary policy. Furthermore, QCB faces the challenge of managing

the monetary outcomes of fiscal spending aligned with QNV 2030 combined with the cost of hosting the FIFA 2022.

In order to absorb structural monetary effects, QCB may use outright sales. This refers to selling eligible assets outright in the market. Such operations are executed for structural purposes only. The legal nature of these transactions implies a full transfer of ownership (European Central Bank, 2011, pp. 22-23). A similar instrument was developed by the Reserve Bank of India in 2004 to differentiate the liquidity absorption of a more enduring nature by way of sterilization from normal day-to-day liquidity management operations. (Reserve Bank of India, 2005, p. 223); (Gray, 2006, p. 34).

In the case of Qatar, the proceeds from *ṣukūk* will not be circulated into the banking system; instead, the SPV will maintain its account with QCB. Notwithstanding, when the entity pays its dues to the contractors and sellers, QCB may conduct open market operations at the time of each payment to absorb any undesirable excess liquidity from the banking system. Hence the monetary effect of spending is sterilized.

Ṣukūk as a Sharīʿah Compliant Instrument for the Financier of Last Resort

In the very short initial stage, *istiṣnāʿ ijārah ṣukūk* are not tradable as they represent cash. Hence they cannot be discounted at the central bank. Even though this period of non-tradability can be shortened to a minimum, these *ṣukūk* can be transferred to the central bank at face value. In this case, QCB would take the role of investor and would keep the *ṣukūk* until they become tradable, i.e. when the asset starts being constructed. The central bank may accept to transfer *istiṣnāʿ-ijārah* (or *ijārah muntahiyah bittamlik) ṣukūk* to its ownership as the project financier, provided that the total outstanding *istiṣnāʿ ṣukūk* owned by QCB does not exceed 5% of the average revenue of the budget for the last three years as per Article 49 of QCB law (2006), which states:

> *Ministries, government organs, public corporations and authorities and companies owned or managed by the state shall not borrow from the bank whatever the form, maturity and amount of such borrowing.*
>
> *As an exception from the above, the bank may grant the government, upon application of the minister, a sum not exceeding 5% of the average revenue of the state budget for the last three years, and for a term not exceeding four months* (Qatar Central Bank, 2006).

The bank who initially discounted the *ṣukūk* may buy them, provided that the sale takes place in the open market via an auction mechanism, rather than being done by pre-agreed mutual consent. The difference between the two sale mechanisms is that buying back the discounted *ṣukūk* in the open market does not involves *ʿīnah*, whereas if it is pre-arranged between the QCB and an Islamic bank, the transaction then involves *ʿīnah*.

As mentioned above, upon completion of the asset, *istiṣnāʿ ṣukūk* are transformed into *ijārah ṣukūk*, which are tradable as per AAOIFI Sharīʿah standards. (Accounting and Auditing Organization for Islamic Financial Institutions, 2010, p. 244). In this case, banks may discount their *ijārah ṣukūk* at the central bank to get the liquidity they need. However, using this instrument may result in a long-term shift in the central bank's monetary liabilities, particularly high powered money. In order to avoid an undesirable expansion in high powered money, the discount may be accompanied by open market operations.

At the time of a liquidity shortage, the central bank may purchase the *ṣukūk* via open market operations, in order to inject liquidity into the banking system.

Overall, this instrument can be used by the financier of last resort during normal times and at time of crisis. In addition, it has the following merits:

1- This instrument can be considered as a part of a wider program of fiscal reform. For example, when revenues are squeezed by unanticipated falls in hydrocarbon price, the government may issue *ṣukūk* to finance its development expenditure.
2- The proposed coordination and issuance of *ṣukūk* help to mop-up the excess liquidity resulting from the expansionary fiscal policy.
3- The proposed instrument in this paper can be considered as a milestone in the development of Islamic interbank money markets and capital markets. It will help in achieving the targets for 2014 set in the QNDS 2011—2016. The targets include:
    a. introducing an extended range of instruments to help manage domestic liquidity;
    b. preparing a strategy to guide broader domestic capital market development. (Qatar General Secretariat for Development Planning, 2011, p. 80).

6. Conclusion

Commercial banks are concerned about their liquidity position and maintaining it to an extent that keeps the bank solvent and allows it to maximize profit. On the other hand, central banks keep track on the liquidity in the banking system in order to ensure a smooth payment settlement system, as well as to maintain a level of liquidity that is consistent with the target of monetary policy, to achieve the central bank's ultimate objectives.

In order to manage their liquidity, Islamic banks use interbank instruments, as well as central bank instruments. Finance contracts that are used by Islamic banks in their interbank transactions include commodity *murābaḥah* and *wakālah* agreements. Analyzing these instruments reveals that the commodity *murābaḥah* agreement is done as a *tawarruq* transaction, and the *wakālah* agreement is restricted to short-term deposits. Furthermore, most of central banks' instruments are conventional instruments based on *Ribā*. Notwithstanding that some of available Islamic instruments involve Sharīʿah issues such as *ijārah ʿīnah*. For Islamic banks to utilize conventional deposit/lending facilities for clearing between interests and agreements on interest-based loans is not valid in Sharīʿah. In addition, these mechanisms contradict the *Fiqhī* standard that "any loan from which a benefit accrues is *ribā*."

Three Sharīʿah compliant instruments are proposed in this paper. The first instrument is the short-term *muḍārabah* deposit. A very short term (overnight or one day) is recommended, whereby the rate of return can be easily predicted. The second instrument is based on discounting Islamic banks' assets. The third instrument is open market operations using tradable *ṣukūk*. The recommended *ṣukūk* are *istiṣnāʿ-ijārah ṣukūk* and *ijārah ṣukūk*. These two types of *ṣukūk* are tradable. They can be developed by coordination between the central bank and the government entities that are concerned with developmental projects to achieve the goals of QNDS 2011—2016.

Recommendations for central banks

- It is important to set a strategic plan to enhance Islamic finance. The plan may include the priority of designing Sharīʿah compliant instruments for interbank markets, central bank operations and government budget financing.
- Central banks should start using the open market operations to manage liquidity after proper forecast for the potential short-term and long-term liquidity position.

- A high level of coordination between the central bank and government entities is needed to enhance liquidity management and government budget finance. Establishing a special purpose vehicle to implement the coordination and issue the required *ṣukūk* may be of high priority if the proposed coordination is desired.
- Appropriate Sharīʿah advice is needed at the central bank level for consultation on the permissibility of different *ṣukūk* structures, Islamic contracts, and Islamic instruments for liquidity management.

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Efficiency Measure of Insurance v/s *Takāful* Firms Using DEA Approach: A Case of Pakistan

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Abstract

This study aims at comparing the Pakistan's Takāful and conventional insurance companies in terms of efficiency and productivity for the period 2006-2010. We apply Data Envelopment approach to estimate technical, allocative and cost efficiencies. The results indicate that the insurance industry as a whole is cost inefficient due to high allocative inefficiency. However, technical efficiency components show improving trends. Results further indicate that Takāful firms are more efficient as compared to conventional insurance firms. Malmquist productivity index shows a significant improvement in scale efficiency. However, we do not find any considerable contribution of technology to improve overall productivity. The study suggests introduction of innovative and diversified products in insurance industry of Pakistan, particularly for Takāful companies.

Keywords: *Takāful*, insurance, Comparative Analysis, Non-Parametric Methods.
JEL Classification: G22, P51 D22, C14.
KAU-IEI Classification: I44.

1. Introduction

The insurance industry plays an important role in the development of social and economic sectors of an economy by minimizing risk of all economic activities on the one hand and by channelizing long term financial resources on the other. An efficient

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and productive insurance sector also contributes to economic growth of a country by transforming savings into investment projects through the financial intermediation (Financial Sector Assessment: 2005). Insurance companies offer different services to households and businesses for their well-being. The primary service of insurance company is to provide risk coverage against any loss to property, business and life, etc. Thus, an insurance company encourages the otherwise risk-averse individuals and entrepreneurs to undertake high return activities, of course with higher risk, than they would normally hesitate to do so.

Given the importance of insurance in the country's socio-economic development and its distinct functions from other financial institutions, it seems attractive to look at its performance, particularly in the presence of dual insurance system where *Takāful*[1] and conventional insurance firms are working side by side. Before the introduction of *Takāful* rules in 2005, insurance sector in Pakistan comprised of only conventional insurance firms. Since 2005, *Takāful* industry started operation and now 5 *Takāful* firms (two family and three general *Takāful* firms) are offering different Sharīʿah[2] compliant products in the market. First *Takāful* firm in Pakistan started its operation in 2006, and now five *Takāful* firms are operational in the country by 2011. Since 2006, *Takāful* industry demonstrated healthy growth in its net & gross premium and assets structure [See Appendix A Table 1].

Efficiency is an important issue for *Takāful* firms as they are facing intense competition from the well-established conventional insurers. Moreover *Takāful* operators have the vast opportunity to attract those customers who were not previously having the conventional insurance because of its incompliance with Sharīʿah; hence it is possible to increase customer base and the insurance penetration rate in Pakistan.

In recent years there has been a significant growth in insurance sector of Pakistan along with the entry of *Takāful* firms in industry. This very fact motivates us to undertake the efficiency and productivity analysis of insurance and *Takāful* firms. The present study attempts to measure the performance of insurance and *Takāful* industry and tries to explore the relationship between the efficiency and productivity

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[1] *Takāful* is the concept of Islamic insurance (as alternative to conventional insurance) based on principles of shared responsibility and risk sharing through mutual cooperation, rather than risk exchange.

2 Sacred orders of Allah in the Qur'ān, religious, social and commercial practices of the Prophet (SAW), *Qiyās* (Analogy), and *Ijmāʿ* (the agreement of whole Islamic world on an issue) form the basis of Sharīʿah.

with different operational measures of risk protection. More specifically, the study will concentrate on the comparison of cost efficiency and total factor productivity of different *Takāful* and conventional firms under reference. It is expected that the findings of this study will help the insurers, regulators, government and Sharīʿah Boards of *Takāful* companies to design new and innovative Sharīʿah compliant products in Pakistan, which in return will stimulate *Takāful* demand and increase the insurance penetration in the country

The rest of the paper is planned as follows. Section 2 reviews the relevant literature on efficiency and productivity of insurance and *Takāful* companies. Section 3 outlines the related concepts and empirical methodology. Section 4 presents data and the description of the selected variables and Section 5 analyzes the results. The last section concludes the study.

2. Literature Review

There are many studies that explore the efficiency and productivity of insurance sector, both in developed and developing economies, by using parametric and non-parametric approaches. However very few studies are available that measures the efficiency of *Takāful* industry. Most of the studies on insurance efficiency have focused heavily on the developed countries and particularly, on the insurance industry in USA and the west [see, Gardner and Grace (1993), Yuengert (1993), Cummins et al. (1999), Amel et al. (2004), Greene and Segal (2004) and Jeng et al. (2007)].

Studies that evaluated the performance of European insurance sector include Diacon et al. (2002), Ennsfellner et al. (2004), Cummins and Misas (2006), Fenn et al (2007). For instance, Ennsfellner et al. (2004) investigate the production efficiency of Austrian insurance industry, while Cummins and Misas (2006) examine the impact of organizational structure on the efficiency of Spanish insurance firms. Other studies in European countries focus on productivity measurement using Malmquist index and stochastic frontier analysis [see for example, Cummins et al. (1996) for Italy, Fenn et al. (2007) for European countries]. These studies document that both efficiency and productivity of insurance companies altered significantly due to deregulatory process in these countries. Further, it is concluded that growth in new products and adoption of technology has improved the performance of insurance sector in these economies significantly.

Although, most of the literature is centered upon the performance of insurance sector either in U.S. or other developed countries, however, in recent years, we find

other studies that investigate efficiency and productivity of this sector in Asian economies. While majority of these studies cover East Asian economies (see for example, Mansoor and Radam, 2000; Karim and Jhantasana, 2005; Hao and Chou, 2005; and Jeng and Lai, 2005), there are a few studies on South Asian countries as well.

Most of the studies have attempted to measure the efficiency of conventional insurance, but a few studies have also focused on the efficiency of *Takāful* firms, for instance Kader et al. 2010; Yusop et al. 2011; Ismail et al, 2011; examines the efficiency of *Takāful* firms operating in different countries. Kader et al (2011) investigated the cost efficiency of *Takāful* firms operating in seventeen Islamic countries. Their study concludes that average cost efficiency scores of *Takāful* firms are comparable with developed conventional insurers. They further suggest that a skilled and experienced Board of Directors can contribute positively to optimal resource allocation and hence the efficiency.

Ismail et al. (2011) perform a study to measure the efficiency of *Takāful* and conventional insurers in Malaysia over the period 2004-2009.They find that efficiency score for *Takāful* firms' remains lower (i.e. 64 percent) than their conventional counterparts (i.e. 87 percent). The study further suggests that *Takāful* firms should reduce their agency cost and management expenses and improve their investment gains by investing in healthy projects. Saad et al. (2006) also analyze the efficiency of life insurance industry in Malaysia, using the data on *Takāful* and conventional insurance firms. The findings of the study indicate that conventional firms are performing better as compared to *Takāful* firms. They further suggest that *Takāful* firms should increase their size to optimal level in order to improve the efficiency score.

Despite the fact that a growing literature is available on efficiency of insurance sector as well as on *Takāful* firms around the globe, we do not find even a single study that measures the comparative performance of Pakistan's insurance and *Takāful* sector. Of course, a few studies are available on comparison of Islamic and conventional banking efficiency (see, Khyzer et al, 2011; Akhtar et al, 2011; Shah et al, 2012). Thus it will be interesting to investigate the relationship between the efficiency and productivity of two different organizational forms i.e. *Takāful* and conventional firms having different operational framework towards risk protection.

3. Methodology

The efficiency concept is basically used to evaluate the performance of a firm. Conventionally, financial ratios such as return on assets, return on equity, expense to premium ratios etc. are used to measure their performance. However the emergence of frontier methodologies with their meaningful and reliable measures now dominates the conventional approaches to evaluate efficiency and most studies follow the new approach.

There are two main frontier based approaches used to measure the efficiency: namely parametric and non-parametric approach. The parametric approach requires the specification of functional form of the production, cost and profit frontier and some distributional assumptions about the error term. On the other hand, non-parametric approach does not assume any specific functional form for evaluating efficiency, and therefore, does not take into account the error term. (Cummins and Xie; 2008).

Data Envelopment Analysis (DEA) was first introduced by Charnes et al. (1978) and extended by Banker, et al. (1984). The purpose of this approach was to measure the relative efficiency of each DMU (Decision Making Unit) with the best practices firm. DEA decomposes the cost efficiency (CE) into two components. One is technical efficiency (either maximizing output for a given level of inputs or minimizing inputs for a given level of output). The other is allocative efficiency (using input in optimal proportions given the input prices and output quantities). Technical Efficiency (TE) can be further decomposed into Pure Technical Efficiency (PTE) and Scale Efficiency (SE). SE occurs when firm operates at Constant Returns to Scale (CRS) and PTE occurs when firm maximizes its output with Variable Returns to Scale (VRS). The resultant efficiency measure, ranging between zero (least efficient) and one (most efficient), depicts the distance from each unit to frontier.

The present study uses non-parametric approach by applying DEA. We choose this approach on the basis of certain advantages. The main advantage of this approach lies in lesser demand for data and therefore it is appropriate for small sample size. Further, DEA[3] analyzes the efficiency of each firm separately, and can easily identify the efficiency and productivity changes across the firms (Cummins

[3] For further details on DEA see [Coelli (1996) and Coelli et al. (1997)].

and Xie; 2008). We use the software package DEAP[4] developed by Coelli (1996) to measure the cost efficiency and its components.

Finally, to measure the change in efficiency and technology, we adopt the DEA based Malmquist Index Approach. The idea was first presented by Malmquist (1953) and later extended by Caves et al. (1982). There are several methods to compute the Malmquist productivity index. We estimated output oriented Malmquist index in this study, which is based on DEA. Malmquist indices can also be calculated by using DEAP software package. To estimate the Malmquist Productivity Index we need a balanced panel data. For this purpose, we include only 16 firms for the period 2007-2010.

4. Data and Variable Description

4.1. Data

The data sample for this analysis consists of 12 conventional insurance and 5 *Takāful* companies operating in Pakistan (List of insurance and *Takāful* companies is given as Appendix B). The sample size represents more than 80% of the market share (in terms of premium) reflecting the fact that the selected sample is the representative of Pakistan Insurance and *Takāful* sector. To estimate the cost efficiency, we use un-balanced panel data for the period 2006 to 2010, obtained from the annual reports of insurance and *Takāful* companies.

4.2. Variable Description

The most critical task of the efficiency analysis for financial sector is to define output, inputs and their prices.[5] An appropriate selection of the output-input variables in the insurance industry makes it a more difficult and challenging job.

The precision of the efficiency results depends upon the definition of outputs, inputs quantities and their respective prices. There has been much debate on the selection criteria of input-output variables in financial sector, particularly, for insurance industry (see for example, Yuengert, 1993; Cummins and Weiss, 1998; Worthington and Hurley, 2002).

[4] Data Envelopment Analysis Program (DEAP), software used to calculate efficiency score.
[5] See, Sealey and Lindley (1977), for a detailed discussion on variable selection.

Table-1
Descriptive Statistics

Description	Mean	Median	Standard Deviation
Output Variables			
invested assets	13.28×10^9	10.10×10^8	37.9×10^9
Net Premium	3.12×10^9	5.42×10^8	6.22×10^9
Input Variables			
Labor	635	223	975
Total Fixed Assets	1.97×10^8	1.03×10^8	2.27×10^8
Business Services	9.82×10^8	8.81×10^7	2.40×10^9
Equity capital	3.16×10^9	9.70×10^8	4.50×10^9
Input Prices			
Labor	473498	455424	259383
Total Fixed Assets	0.1664	0.1435	0.1154
Business Services	0.0808	0.0419	0.1201
Equity capital	0.4826	0.4760	0.2620

Different output variables have been identified by various studies to measure the efficiency and productivity of insurance sector. Risk pooling (or risk bearing) and intermediation services are considered two main services that insurance industry provides to customers [Cummins and Zi (1998)]. Much of the existing literature prefer to use premium income as a common measure of risk pooling as policy holders in fact buy protection against risk by purchasing insurance policies.

For intermediation function we used the proxy of invested assets [See Cummins et al. (1999), Worthington and Hurley (2002), Jeng and Lai (2005)]. Worthington and Hurley (2002) consider invested assets as an output with the argument that net profit of most general insurers comes from the intermediation function of borrowing from policyholders and investing in marketable securities rather than premium

The choice of input variables is somehow undisputed as compared to the selection of output variables in insurance analysis. In general, three types of input variables namely Labor, Capital and business services are used to measure the efficiency [see Meador et al (1996), Cummins et al (1996), Greene and Segal (2004),Cummins and Xie (2008)]. Some studies also used the equity capital as an input [Cummins, Turchetti, and Weiss (1996), Greene and Segal (2004), and Jeng and Lai (2005)]. It is important in the sense that insurers need to maintain equity capital for the payment of claims to their policyholders if losses exceed the expected limits. We include four

inputs Labor (X_1), total fixed assets (X_2), business Services (X_3) and equity capital (X_4), in the present study.

5. Results and Discussion

In this section we discuss the results of cost efficiency and its decomposition into technical and allocative efficiency arrived at by DEA analysis. We also measure total factor productivity by decomposing it into technical efficiency change and technical change

5.1. Efficiency Results

First, we measure the cost efficiency of individual insurance and *Takāful* firms and its components of pure technical, scale and allocative efficiency for each year from 2006 to 2010. Year wise average efficiency results of *Takāful* and conventional insurers for the period 2006-2010 are presented in Table 2.

Table-2
Year wise Efficiency Results of *Takāful* and Insurance Firms

Year	Pure Technical Efficiency	Scale Efficiency	Allocative Efficiency	Cost Efficiency
2006	0.92	0.84	0.58	0.54
2007	0.96	0.77	0.53	0.51
2008	0.93	0.76	0.54	0.50
2009	0.72	0.50	0.41	0.29
2010	0.91	0.82	0.48	0.43
Mean	**0.89**	**0.74**	**0.51**	**0.45**

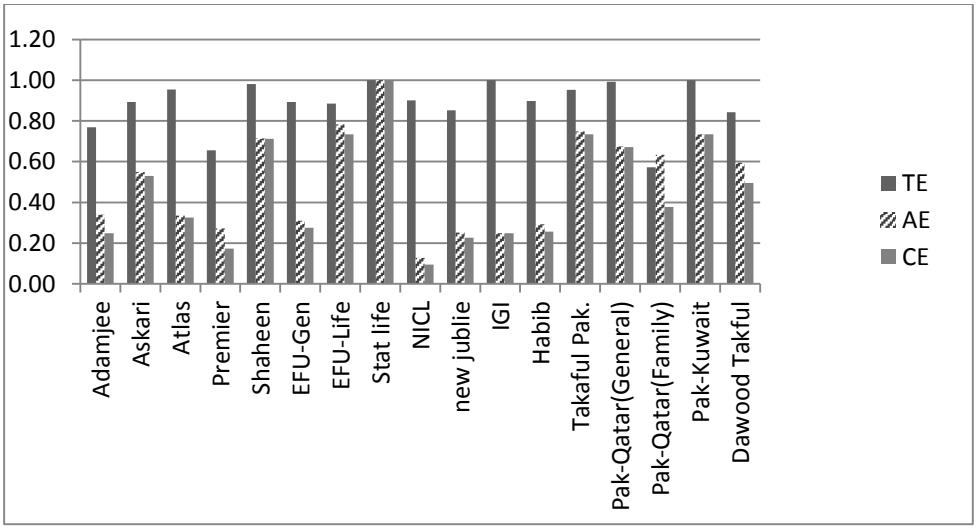
Results depict that both the insurance and *Takāful* industry in Pakistan on the average remain technically efficient. However, insurance sector shows lower allocative efficiency on the average and consequently the cost efficiency dominates.

We find mix trend for pure technical efficiency over the period. Results indicate that on the average, insurance and *Takāful* sector shows 89 percent pure technical efficiency. This measure shows as to how much resource allocation and internal management are efficient in their performance. To achieve the most efficient level, firms, on the average need a reduction of 11 percent in the inputs level which they are currently using to produce the same level of output.

Similarly, scale efficiency of insurance industry remains about 74 percent indicating a significant expansion in insurance sector of Pakistan during 2006-2010. This measure indicates whether the firm is operating on optimal scale or otherwise. Scale efficiency equal to one (i.e. constant returns to scale) is the indication that firm is operating at optimal scale, while deviation from unity (either increasing returns to scale or decreasing returns to scale) depicts that firm is away from its optimal level.

Another important source of cost efficiency is firm's allocative efficiency. If a firm is successful to equate its marginal products to input price ratios then it is optimizing its resources to produce a certain level of output. It is notable that insurance sector of Pakistan remains about 49 percent allocatively inefficient during the period of study, which might have contributed to cost inefficiency of this sector significantly. Average cost efficiency of this sector is recorded only 45 percent over the period concerned showing that insurance and *Takāful* firms could have reduced about 55 percent expenditures as compared to the existing level to produce same output level.

Figure-1
Firm Wise cost efficiency and its components (2006-2010)



Firm wise efficiency score depicts that only one firm that is also the largest firm in sample is 100 percent cost efficient. It is noteworthy that allocative efficiency dominates the cost efficiency as firm even with highest technical efficiency shows lower cost efficiency, as they remain less efficient allocatively. These results are not

unexpected because insurance sector of Pakistan has been highly concentrated as few firms are dominating the whole sector. This high concentration plus product differentiation of insurance industry might have resulted into care free attitude on the insurance firms who do not use their resources efficiently. However, recent wave of competition and deregulatory process may improve the resource allocation mechanism in these firms by providing them a level playing field to insurance sector in coming years.

Comparative analysis of *Takāful* and conventional insurers shows that overall *Takāful* firms are more cost efficient as compared to their conventional counterparts. It is noteworthy that allocative efficiency dominates the cost efficiency as *Takāful* firms are cost efficient due to high allocative (68%) efficiency, while conventional firms observed low allocative efficiency (43%) even though they are technically more efficient.

Table-3
Efficiency Comparison of *Takāful* and Conventional Firms

Firms*	**PTE**	**SE**[6]	**AE**	**CE**
Conventional Firms	0.89	0.86	0.43	0.40
Takāful Firms	0.87	0.38	0.68	0.60

* PTE = Pure Technical Efficiency, SE = Scale Efficiency, AE = Allocative Efficiency & CE = Cost Efficiency

High allocative efficiency of *Takāful* firms indicates that this industry is choosing the optimal combination of inputs. However lower scale efficiency of *Takāful* firms indicates that the operators should expand their size to enjoy the benefits of economies of scale.

[6] All Takaful firms are operating at Increasing Returns to Scale (IRS), while among conventional firms 51% are operating at Constant Returns to Scale, 44% at Increasing Returns to Scale and only 5% at Decreasing Returns to Scale.

5.2. Productivity Results

In this section, the results for total factor productivity and its components are also presented. We estimate output oriented Malmquist index in this study, which is based on DEA. Table 4 presents year wise average results for Malmquist index and its components of technical efficiency change, technological change and total factor productivity change.

Table-4
Malmquist Index Results

YEAR	EFFCH*	TECHCH	PECH	SECH	TFPCH
2008	0.997	1.021	0.955	1.044	1.017
2009	1.022	0.94	0.985	1.038	0.961
2010	1.083	1.001	0.974	1.112	1.083
Mean	**1.033**	**0.987**	**0.971**	**1.064**	**1.019**

*****EFFCH = Efficiency Change, TECHCH = Technological Change, PECH = Pure Efficiency Change, SECH
= Scale Efficiency Change and TFPCH = Total Factor Productivity Change.

If the value of Malmquist index and any of its components exceeds unity, it indicates the improvement in performance, while a value equal to unity shows no change and less than unity shows the deterioration in its performance. The results show that on the average insurance sector experienced growth in total factor productivity, mainly due to scale efficiency change, while deterioration is observed in technical change.

The average growth in total factor productivity is found to be 1.9 percent annually. Similarly, there has been significant technical efficiency improvement as this measure registers a 3.3 percent growth on the average, which is also consistent with our previous results of cost efficiency obtained on the basis of DEA. However, we find deterioration in technological change.

As can be seen from Table 4, there has been a decline in productivity in the year 2009, which may be the consequence of decline in overall economic growth, high inflation rate, floods, global financial crisis and internal security situation of the country. These factors might have caused a reduction in productivity. Malmquist productivity results also show that insurance industry has experienced an overall productivity growth, which is contributed mainly by scale efficiency change.

Further, the size of the business has a significant impact on different efficiency measures, although not identical for all firms.

Table-5
Productivity Comparison of *Takāful* and Conventional Firms

Firms	EFFCH	TECHCH	PECH	SECH	TFPCH
Conventional Firms	1.008	1.012	1.009	0.999	1.019
***Takāful* Firms**	1.189	0.943	0.902	1.286	1.120

The comparative results as shown in Table 5 reflect that *Takāful* firms observed a significant improvement in productivity with score 12%, that arises mainly from scale efficiency change. On the other hand conventional insurers observed only 1.9 % growth in total factor productivity. Conventional firms mainly depicts growth due to improvement in technology, while *Takāful* firms show deterioration in technology, which suggests that more innovative and diversified products should be introduced by *Takāful* firms to improve their productivity.

6. Conclusion

Although, a growing literature is concerned with insurance sector efficiency and productivity keeping into view its importance in economic development around the globe, only limited information is available on the efficiency comparison of conventional and Islamic insurance. This study attempts to break new grounds for measuring performance of insurance and *Takāful* firms in Pakistan. We compared efficiency of *Takāful* and conventional Insurance from 2006-2010, using DEA model

Results of the analysis indicate that the insurance firms remain technically efficient showing about 89 percent efficiency during the period under reference. Similarly, results are also indicative of scale efficiency (i.e., 74 percent) illustrating a significant expansion in insurance sector of Pakistan during 2006-2010. On the other hand, however, insurance sector experiences allocative inefficiency, which dominates the cost efficiency.

The empirical results of cost efficiency indicate that *Takāful* firms are more efficient than conventional counterparts due to high allocative efficiency, leads to

the conclusion that their choice of inputs is optimal. Further we compared *Takāful* and conventional insurers in terms of economies of scales. The results suggest that all of the *Takāful* firms are operating at IRS as compared to 44% in case of conventional firms using this model. This means that large number of *Takāful* firms enjoying a chance to increase their operations to reduce scale inefficiency and improve their performance. Most of the conventional firms (51%) are operating at CRS with the exception of only 5% with DRS, which show that they are operating at optimal scale.

Malmquist index also shows high productivity results for *Takāful* firms, mainly due to scale efficiency change. However we do not find any contribution from technology change for both types of firms. It is recommended that *Takāful* and conventional firms should introduce new and innovative products to improve the productivity. Finally, the comparative analysis highlights that *Takāful* firms are efficiently competing with their conventional counter parts despite the fact that they are new in the field. It is recommended that *Takāful* firms should increase their efficiency and win the competition by improving their services, product quality and marketability of their products. To conclude, the study observes a significant improvement in the performance of insurance sector of Pakistan that is mainly contributed by technical and scale efficiency. However, firms could not succeed to allocate their resources optimally, perhaps due to market imperfections in the insurance industry.

It can be claimed that our study lays the foundations for further research to be carried out on the *Takāful* industry in different parts of the Islamic World with different perspectives, like macroeconomic environment, consumer preferences and corporate governance.

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Appendix-A

Premium, Assets and Investment Income of *Takāful* Industry

Year	Net Premium	Gross Premium	Total Assets	Investment Income
2006	32587061	128968834	314028583	18699897
2007	122158639	265261596	2049709638	72611699
2008	430305193	799922277	2561899601	68721395
2009	1157135909	1463608137	3015843070	189346770
2010	1580238472	2243204264	3341469369	181640658

Efficiency score of *Takāful* firms

Takāful Firms	PTE	SE	AE	CE
Takāful Pak.	0.95	0.25	0.75	0.71
Pak-Qatar(Gen)	0.99	0.22	0.67	0.67
Pak-Qatar(FMY)	0.57	0.53	0.63	0.36
Pak-Kuwait	1.00	0.31	0.73	0.73
Dawood Takful	0.84	0.59	0.59	0.50
Mean	0.87	0.38	0.68	0.60

Malmquist Results for *Takāful* Firms

FIRM	EFFCH	TECHCH	PECH	SECH	TFPCH
Takāful Pak.	2.198	0.919	1.003	2.192	2.020
Pak-Qatar(Gen)	1.045	0.915	0.989	1.056	0.956
Pak-Qatar(Fmy)	0.857	0.922	0.797	1.075	0.790
Pak-Kuwait	1.171	1.029	1.000	1.171	1.205
Dawood Takful	0.674	0.931	0.719	0.937	0.628
Mean	1.189	0.943	0.902	1.286	1.120

Appendix-B

List of Insurance and *Takāful* Companies used in this Study

List of Insurance Companies

1. State Life Insurance Corporation Ltd.
2. Adamjee Insurance Company Ltd.
3. Askari General Insurance Company Ltd.
4. Atlas General Insurance Company Ltd.
5. Premier Insurance Company Ltd.
6. Shaheen Insurance Company Ltd.
7. E.F.U. General Insurance Company Ltd.
8. E.F.U. Life Insurance Company Ltd.
9. National Insurance Corporation Ltd.
10. New Jubilee Insurance Company Ltd.
11. International General Insurance Co. of Pak.
12. Habib Insurance Company Ltd.

List of *Takāful* Companies

1. *Takāful* Pakistan Ltd.
2. Pak-Qatar General *Takāful* Ltd.
3. Pak-Qatar Family *Takāful* Ltd.
4. Pak-Kuwait *Takāful* Ltd.
5. Dawood Family *Takāful* Ltd

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An Empirical Study of Islamic Equity as a Better Alternative during Crisis Using Multivariate GARCH DCC

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Abstract

Risk Sharing is the core of the Islamic finance, the closest modern equivalent being equity investments. Through the decades of Islamic Finance development scholars have stressed on equity as the most beneficial financial mechanism while most accept modern joint-stock companies as quasi Mushārakah and Muḍārabah forms, but this segment is still small in Islamic finance. Multitude of reasons contributes to it, primarily, the risk averseness and myth of equities as more risky alternate. This paper attempts to investigate this myth utilizing MGARCH DCC method, by studying the volatilities and correlations of Islamic indices over a period of twelve years. The findings are promising, suggesting a low moving correlation between the conventional and Islamic indices. The results substantiate the authors' argument, that during crisis, Islamic indices provide though not complete, but partial insulation, thus a safer haven. This bodes well for a hugely untapped Islamic alternate investment avenue for exploration.

Keywords: Islamic Equity Market, Global Crisis, Multivariate GARCH Dynamic Conditional Correlations, Equity Investments
JEL Classification: O16, C87
KAU-IEI Classification: K2, K3.

1. Introduction

Islamic banking and finance has mushroomed into an increasingly substantial segment of the global financial market leading to the crystallization of the Islamic stock market in particular, as a viable alternative to its conventional counterpart. It

is in the wake of the global economic meltdown that Islamic finance is in the limelight as a force to be reckoned with.

With Muslim societies becoming more sophisticated and their financing needs more complex, coupled with stagnating Islamic thought evolution, there comes a need to strengthen the current Islamic financial system, in particular the equity market. The wider acceptance of equity investments by Sharīʿah scholars in the early 1990s paved the way for the launch of equity markets complimented with the teachings of Islam.

Further, the establishment of credible equity benchmarks such as Dow Jones Islamic Market Index (DJMI) and FTSE Global Islamic Index Series has been a turning point for the industry, providing a comparative platform between indices. Looking into the performance of Islamic indices, no convincing performance differences can be found between them and conventional indices up until 2006. While Islamic indexes are growth and small-cap oriented, their conventional counterparts are relatively more value and mid-cap focused Girard and Hassan, (2008). Changes in performance of indices are attributed mainly to the global crisis of 2007, where preliminary evidence tends to support the stability of Islamic indices during the period.

This significant stability can be contributed by several factors such as the exclusion of conventional banking and insurance shares and stocks that failed to pass the screening criteria due to the nature of their business, from Islamic indices. Similarly, Islamic stock indices have included developing markets that were able to provide more leverage and thus Islamic indices were more positively skewed to the US market. Lastly, the Sharīʿah screening criteria had excluded financial organizations, the real instigator of the financial crisis, characterized by increasingly large and volatile cross-border capital flows amid an environment of profound international financial integration.

It is the last factor that forms the crux of the paper, where we attempt to analyze the dynamic correlations between the US conventional and financial indices (as a proxy for global benchmark) with fundamental Islamic indices. We employ the Dynamic Conditional Correlations approach to observe shifts in correlations between the indices during the crisis period. This approach allows us estimate correlations between standardized residuals with a small number of parameters.

Based on Multivariate General Autoregressive Conditional Hetroskedasticity Dynamic Conditional Correlation (MGARCH DCC) allows us to observe the

behavior of a time series that is similar in any epoch. This will permit us to comprehend the dynamic correlation of Islamic indices with global benchmark equity indices in comparison with their conventional counterparts. This will enable us to examine whether Islamic indices benchmarking have provided diversification or a dampening effect of the crisis. We hope to contribute to the growing reliance on Islamic equity investments by providing substantial empirical evidence on this matter.

This paper consists of six sections. Following the introduction, an assessment of the existing literature is conducted. We discuss the research objectives the motivation for the study in section 3, followed by the research methodology in section 4. The empirical results and their interpretations are then analyzed in section 5. Lastly, the conclusion, limitations and possible avenues for further research are explored in the final section.

2. Literature Review

The growing awareness of and demand for investing in accordance with Islamic principles on a global scale has created a flourishing world Islamic capital market. Despite the mounting interest in this global phenomenon, little research is available on Islamic stock markets. Leafing through the literature, studies can be found on the performance of capital market related investment products but at firm level only. Hence, it is the opinion of the authors that there is no prior research conducted on the dynamic correlations of global Islamic and conventional indices.

Globally, the existing research literature pertaining to Islamic indices in particular is inadequate. Nevertheless, authors such as Ahmad and Ibrahim (2002); Hakim and Rashidian (2002); Hussein (2005) and Albaity and Ahmad (2008) have analyzed the performance of Islamic indices vis-a-vis conventional stock market indices using stock market data. Similarly, Beik and Wardhana (2009) evaluate the volatility and forecasting ability of Islamic indices. However, these studies are mostly analyzed for developed countries and do not involve dynamic correlations and volatility concerns as addressed by this study.

In a study conducted by Hassan (2004) while investigating the market efficiency and relationship with risk return framework of DJIM, it was found that DJIM outperformed their conventional counterparts from 1996 to 2000 and underperformed them from 2001 to 2005. It was further revealed that the reward to risk and diversification benefits are similar for both indexes. Similarly, Girard and

Hassan (2008) found in their study that there was no difference between Islamic and non-Islamic indices in regards to performance.

Hussein (2004) indicates, in his study, that while Islamic and conventional indices (from a sample of FTSE indices) have similar performances, Islamic indices reach abnormal returns in bullish markets and underperforms in bearish markets. Correspondingly, Al-Zoubi and Maghyereh (2007) find Islamic indices to be less risky than the benchmark, attributing it to the profit and loss sharing principle in Islamic finance.

Similarly, Milly and Sultan (2009) revealed that Islamic funds perform much better during calm economic times and moderately better during times of crisis. It was then hypothesized that Islamic asset allocation methods may be safer during times of economic and financial distress. These results were concurred by Arshad and Rizvi (2013) who applied continuous wavelet to identify traces of comovement between regional Islamic and conventional stock Indies. Their results indicated that Islamic indices in the Asia Pacific and Emerging Market region were partially immune to speculative shocks to global financial services, thus regaling Islamic indices as a better alternative.

On the other hand, Mansor and Bhatti (2011) while analyzing performance of conventional and Islamic mutual funds in Malaysia discovered that Islamic portfolio provides slightly less returns as compared to conventional. Furthermore, it was revealed that Islamic and conventional portfolios rely on the market portfolio, which in turn mirrors the performance of conventional mutual funds mainly.

Moreover, a line of research investigating the efficiency and performance of stock markets revealed that gains from stock index diversifications is generally predicted on the belief that there exists low correlation among the return of different stock indices, Ben Zion (1996).

Interestingly, no correlation can be found between DJIM and Wilshire 5000 index and three-month treasury bills. In this study by Hakim and Raishidian (2004), the interdependence theory of financial markets was debased and it was concluded that the Islamic index has unique risk features that is independent from broad equity markets owing to the Sharīʿah screening criteria. This contradicts other studies Hassan, (2004), Girard and Hassan (2008); that provided empirical evidence of Islamic and non-Islamic indices being similar.

Looking at the approach taken for this paper, several empirical researches have undertaken MGARCH to study conventional financial volatility. Worthington and Higgs (2003) employed MGARCH to examine the transmission of equity returns and volatility among Asian markets. Similarly, Zhao (2010) used MGARCH to analyze the dynamic relationship between the Renminbi real effective exchange rate and stock prices. These studies and several more undertook MGARCH as it helps in understanding the volatilities and variations between the variables.

Keeping in mind the evident lack of literature on dynamic condition correlations in mind, this study aims to achieve the research objective by employing the technique of dynamic conditional correlations. It is to the best of the authors' knowledge that no previous studies have undertaken MGARCH model to estimate DCC and variances at equity indices level in Islamic finance.

3. Research Objective

In the main, this study attempts to investigate the claims that Islamic stock market are a safer alternative for investment during the financial crisis. The motivation of this study arises from the need to provide more empirical evidence to support Islamic finance as a viable substitute in the global arena. With the lack of research in this area, it becomes necessary to lay some groundwork for understanding the dynamic correlations of Islamic indices throughout the years. It is our objective to investigate the nature of Islamic indices during the period of crisis to understand whether there exists a diminishing effect on the correlations of Islamic indices against global benchmark. Furthermore, we attempt to empirically prove the decoupling effect of Islamic indices and the reduction in conditional correlations against global indices for the period of the financial crisis.

The objective of this study is to analyze the changing correlations between the global conventional and Islamic indices over the last decade and to pinpoint shifts in conditional correlations. The primary motivation of this study is to put to rest the argument on Islamic financial principles in equity markets as a safer if not an insulated alternative investment avenue during crisis. Benchmarking and imitation investment of the Islamic indices is not restricted by any means to only Muslims, and this gives rise to exploring this avenue.

With the above-mentioned motivation, we attempt to address the following research question: Do Islamic indices show lower dependence on conventional counterparts in times of crisis?

4. Methodology

The empirical study portion of our research is a multi-step process, where we attempt to sequentially analyze the data starting from simple descriptive statistical numeric. The crux of our model attempts to study the volatility of four conventional global indices and five Islamic indices. All the indices used for our empirical study have been taken from the Dow Jones Indices family. There are two main reasons for restricting our scope to Dow Jones Indices; firstly, to maintain uniformity amongst the underlying universe of stocks in conventional indices and the computational aspect of index pricing. Second reason is to maintain harmony in the Islamic indices because of Sharīʿah screening parameters. Every index screening process follows roughly the same criteria, but with slight variations in cutoffs for different ratios. Keeping all indices on the Dow Jones standard allows us to keep consistency. We have taken daily values of indices, transformed to daily returns for an extended period of 12 years from January 3, 2000 to December 30, 2011 a total observation points of 3130 day. The indices used are as follows:

Table-1
Details of Indices used in the Study

Conventional Indices		Islamic Indices	
CWFS	Dow Jones World Financial Services	IAP	Dow Jones Islamic Asia Pacific
CUSFS	Dow Jones US Financial Services	IWRLD	Dow Jones Islamic World
CJUS	Dow Jones US	IOIL	Dow Jones Islamic Oil Sector
CAP	Dow Jones Asia Pacific	IWEM	Dow Jones Islamic World Emerging Markets
		IFIN	Dow Jones Islamic Financial Services

In order to address the research question we have taken the conventional US Financial Services and Conventional World Financial Services indices as primary global benchmark. The intuition behind this are two fold; firstly US as the most liquid and largest equity market is the largest constituent of Dow Jones universe. Secondly, our study focuses on analyzing the Islamic indices in periods of world crisis, the most recent and most sever of them being the financial crisis originating from US and then the ensuing global economic slowdown.

To address our research questions, we have used the MGARCH model. Initially we test our variables on both Normal and T distribution to determine which distribution is a better fit to our set of variables. To have a cursory glance at the founding basis for our research questions, regarding Islamic financial indices as a safer alternative as compared to conventional indices, the empirical results of unconditional correlations coefficients will suffice.

However to address our research objective in specific, we utilize MGARCH DCC. The DCC model allows us to observe and analyze the precise timings of shifts in conditional correlation. Estimation of DCC is a two-step process to simplify estimation of time varying correlations. In the first stage, using GARCH model for each variable, univariate volatility parameters are estimated. In stage two, for the time varying correlations matrix, residuals from first stage are used as inputs for estimation. For sake of brevity, we omit details of mathematical derivations and the equations, which can be found in Pesaran and Pesaran (2009).

5. Empirical Evidence

5.1. Descriptive Statistics

The descriptive statistics for the daily returns of the nine indices in our study provides interesting insights into absolute time independent volatility of the returns, as represented by the standard deviations. The standard deviations for the conventional indices are relatively higher than Islamic ones especially for the Conventional US Financial Services Index. This high volatility for the US Financial Services and World Financial Services Indices is in line with our expectation, since the ten-year study comprises of three years of extreme financial volatility and global meltdown of the financial industry owing to the crisis. An interesting insight is in the relatively higher standard deviation of the Islamic Financial and Takaful Index as well, owing to different nature of the Islamic financial system. The common myth is that they should not have had major volatility, but then from a practitioning point of view, Islamic financial institutions closely attempt at mimicking the conventional procedures and returns, and their exposure to real sector is similar to that of conventional financial companies. The spillover of the conventional financial crisis affected the real sector companies, which in turn affected the Islamic financial institutions since their exposure to the real sector was threatened. At this point, the results seem similar to the aforementioned Hasan (2002) of Islamic indices underperforming.

Table-2
Descriptive Statistics

	Mean	Std. Deviation	Kurtosis	Skewness
IAP	-0.00044%	0.01332	4.62369	-0.31531
IFIN	0.00589%	0.01698	16.28017	0.53073
IOIL	0.03414%	0.01592	8.5335	-0.32215
IWEM	0.01000%	0.01384	4.98219	-0.23733
IWRLD	0.00182%	0.01161	6.34459	-0.13098
CAP	0.00416%	0.01273	4.60745	-0.28753
CWFS	-0.00410%	0.01534	7.58491	0.15186
CUSFS	0.00538%	0.02173	9.12782	0.26868
CUS	0.00777%	0.01374	6.822	-0.02929

The graphical plots of the daily returns of both the conventional and Islamic indices provide a varying picture as compared to the earlier simple statistical results, as seen in Appendix A. It is noticeable that all indices show a period of high volatility in returns during 2007 and 2009. This is in line with expectations owing to the financial crisis of 2007 that blew out in an economic collapse in US and a recessionary phase in all major economies.

A cursory glance at the Graphs shows two interesting factors which we would address in the following empirical tests and analysis. Firstly, the volatility of returns spikes up at the same instance, but the width of the volatility period on the Graphs is smaller for the Islamic indices. This represents that the volatile periods amongst Islamic indices normalized quicker than their conventional counterparts.

The other phenomenon that stands out is the Conventional Asia Pacific and its Islamic counterpart index. The indices daily returns show relatively less volatility over the whole ten years under study. Surprisingly, even during the crisis period the volatility spikes up but dies very quickly for the Conventional Asia Pacific Index. The plausible reasons for this observation will be discussed later.

At this juncture, we cannot make any clear argument in favour of the Islamic indices as being a better or worse option for investment during crisis or in normal times.

5.2. Unconditional Volatility and Unconditional Correlation

For our research we have used a sample of daily returns from January 3, 2000 to December 30, 2011 a total observation points of 3130 days, excluding the weekends and holidays. As a first step towards estimating dynamic conditional correlations and volatilities, we first take a look at the summarized results of maximum likelihood estimates of λ_1 and λ_2 in Table 3 below. The table also summarizes the delta 1 and delta 2 estimates while comparing multivariate normal distribution with multivariate student t-distribution.

Table-3
Estimates of λ_1 and λ_2, Delta, for the Indices

		Normal Distribution		T - Distribution	
	Parameter	Estimate	T Ratio	Estimate	T Ratio
Lambda 1	IAP	0.919780	154.3839	0.941480	184.6708
	IFIN	0.910710	111.178	0.934430	120.8221
	IOIL	0.930490	151.0746	0.941380	170.0591
	IWEM	0.912260	116.3738	0.936300	139.8826
	IWRLD	0.931440	224.6667	0.942310	232.0374
	CAP	0.919300	143.5889	0.942420	167.0751
	CUS	0.930080	217.8694	0.942290	216.3368
	CUSFS	0.926840	190.1581	0.935630	185.4837
	CWFS	0.926570	193.1442	0.936160	192.4499
Lambda 2	IAP	0.064913	15.0065	0.047924	12.7946
	IFIN	0.080441	11.4612	0.058584	8.958
	IOIL	0.058723	12.2775	0.048746	11.3275
	IWEM	0.072389	12.1384	0.052114	10.3449
	IWRLD	0.059980	17.9089	0.050367	15.3636
	CAP	0.062454	14.0811	0.045832	11.553
	CUS	0.060890	17.6467	0.050417	14.2925
	CUSFS	0.063810	16.1299	0.056990	13.6195
	CWFS	0.064748	16.4913	0.056908	14.0182
Delta 1		0.966250	710.363	0.967000	693.6631
Delta 2		0.028307	30.5162	0.027286	28.3288
Max. Log Likelihood		96,086.60		96,643.10	
Degrees of Freedom				9.69680	20.7298

From our results, it is evident that all estimates are highly significant implying gradual volatility decay for all indices. Also if we analyze the sum of lambda 1 and lambda 2 values for different indices we observe that their summation is less than one, pointing that the indices are not following I-GARCH; which means that shocks to the volatility is not permanent. We observe from our results that the maximized log-likelihood value for t-distribution 96,643.10 is larger than the maximized log likelihood under normal distribution 96,608. This implies that the student t-distribution is a more appropriate representation of the fat tailed nature of indices' returns. These findings are in agreement with findings of Pesaran & Pesaran (2009). To further substantiate this we observe the degrees of freedom which is 9.6968, well below the critical level of 30. Henceforth our analysis of the study works with the t-distribution estimates.

The following table representing the unconditional correlation and volatility matrix for the nine indices within our study helps us to further delve into the correlations between the indices and their unconditional volatiles. The estimated unconditional volatilities are the diagonal elements highlight and in bold while off diagonal elements represent unconditional correlations.

Table-4
Estimated Unconditional Volatility & Correlation Matrix for the Indices

	IAP	IFIN	IOIL	IWEM	IWRLD	CAP	CUS	CUSFS	CWFS
IAP	0.013036	0.267320	0.302150	0.731650	0.396410	0.973020	0.222800	0.152840	0.322100
IFIN	0.267320	0.016860	0.502440	0.417890	0.612300	0.224330	0.686220	0.670980	0.661480
IOIL	0.302150	0.502440	0.016072	0.519270	0.838740	0.267910	0.731680	0.574580	0.655540
IWEM	0.731650	0.417890	0.519270	0.013257	0.594320	0.664250	0.429150	0.341460	0.488360
IWRLD	0.396410	0.612300	0.838740	0.594320	0.011341	0.357190	0.918620	0.743290	0.839240
CAP	0.973020	0.224330	0.267910	0.664250	0.357190	0.012775	0.188990	0.126130	0.302710
CUS	0.222800	0.686220	0.731680	0.429150	0.918620	0.188990	0.013566	0.888470	0.895780
CUSFS	0.152840	0.670980	0.574580	0.341460	0.743290	0.126130	0.888470	0.021488	0.952630
CWFS	0.322100	0.661480	0.655540	0.488360	0.839240	0.302710	0.895780	0.952630	0.015342

A perfunctory glance at the unconditional volatility numbers shows the highest volatility for the Conventional US Financial Services Index, as expected and is similar to our earlier observation.

An interesting observation from the volatilities is the Islamic Oil Sector index as having the second highest volatility just ahead of Conventional World Financial Services Index. Now this high volatility in the view of authors emancipates from the focus of oil and gas sector companies in Islamic markets to crude oil specifically. The crude oil prices during the past decades have shown a tremendous increase, translating into windfall gains for the oil companies, the movement of oil prices has been erratic. The main volatility in oil prices arises from the speculative trading as well as geo political issues. This erratic behavior and high volatility in oil prices, directly impacts the returns and stock values of the oil companies.

Owing to the financial meltdown in US, which resulted in spillover effect to other sectors of economy in US very rapidly, the Dow Jones US Index has a relatively higher unconditional volatility parameter of 0.013556 amongst conventional indices. Surprisingly enough the volatilities of Islamic indices is relatively high as well in the period from 2001 to 2011, with their volatilities ranging from 0.01 to 0.013. An interesting observation from the unconditional volatility and unconditional correlation matrix is the very low volatility of the Islamic World Index. The plausible reason for this observation, in the view of authors is the composition of Islamic index. Most of the Sharīʿah compliant stocks arise out of low volatility sectors of the economy and are mainly concentrated in BRIC and ASEAN countries.

A glimpse on the economic progress and their interdependence amongst the world economies professes that these countries have moved from heavily reliant on US economy for trade and financing activities to a more balanced global mix skewed towards China and India. At this point, our research question stays unanswered, and requires an intuitive interpretation of the unconditional correlations between conventional and Islamic indices. Reverting to our research question to analyze the correlation of Islamic indices we refer to table 5, which ranks them with respect to highest to lowest.

In the first panel of Table 5, we observe that Conventional Asia Pacific Index has a very high correlation with Islamic Asia Pacific and a relatively higher correlation of 0.664250. The first part of the earlier statement is self-explanatory, with both categories of the index arising out of the same base countries and some stocks, the correlation amongst them is natural as the herd mentality affect in a market tends to carry the whole market in similar directions. The reason for relatively higher correlations with the Islamic World emerging markets of Conventional Asia Pacific Index is similar to our earlier reason. When we consider the breakdown of Emerging Market Economies, we observe that it is positively skewed towards ASEAN nations,

and India and China. All these countries also form the crux of the CAP constituent list as well.

Table-5
Unconditional Correlations Ranked by Value.

CAP		CUS		CUSFS		CWFS	
IAP	0.973020	IWRLD	0.918620	CWFS	0.952630	CUSFS	0.952630
IWEM	0.664250	CWFS	0.895780	CUS	0.888470	CUS	0.895780
IWRLD	0.357190	CUSFS	0.888470	IWRLD	0.743290	IWRLD	0.839240
CWFS	0.302710	IOIL	0.731680	IFIN	0.670980	IFIN	0.661480
IOIL	0.267910	IFIN	0.686220	IOIL	0.574580	IOIL	0.655540
IFIN	0.224330	IWEM	0.429150	IWEM	0.341460	IWEM	0.488360
CUS	0.188990	IAP	0.222800	IAP	0.152840	IAP	0.322100
CUSFS	0.126130	CAP	0.188990	CAP	0.126130	CAP	0.302710
CAP	0.012775	CUS	0.013566	CUSFS	0.021488	CWFS	0.015342

Islamic World Index shows one of the highest correlations with the Conventional US index which implies that any crisis in US which affects the US market would bring down the Islamic World index as well. At this point this observation is countering our initial research question. In the opinion of authors after studying the composition of world indices, the main reason for such a remarkable high correlation can be attributed to positively skewed composition towards US market. This seems logical, since in the Dow Jones Universe, US is the largest and most liquid market, and any world level index would heavily be dependent on US listed equities.

Going further to analyze the third and fourth panel of the Table 5, it is evident that Islamic indices have a relatively medium-high correlation with Conventional US Financial Services index and the World Financial Services Index. These two panels are of utmost importance to our study, and analyzing them we see that Islamic investments would have suffered in the recent financial crisis. The point to remember, at this time, is that these numerical values we are exploring are unconditional correlations, with the underlying restriction that firstly indices follow a Brownian motion, and secondly these volatilities are not dependent on each other's lagged values.

The correlations of Islamic indices, ranging in 0.6 range, implies in our understanding that investing in stocks mimicking Islamic indices, would partially protect the investors from a financial sector crisis, as the world experienced starting of 2007. An interesting observation in all the panels of Table 5 is the very low correlation numbers, the Islamic Asia Pacific Index and Islamic World Emerging

Market Index returned. The plausible reasons for this low correlation number have been identified in detail earlier, as the breakdown of these indices and the component countries.

While exploring the economic development of the Asia pacific region and emerging markets over the past decade it is observed, that these economies have developed booming financial sectors and increased trade amongst themselves and to China and India considerably. This implies that the dependence of the economy and the firms in this region has decreased on United States, which is evident from the very low correlations these indices have in respect to Conventional United States and Conventional United States Financial Services Indices.

Sharīʿah Screening Criteria removes conventional financial institutions from the Islamic indices, these results in a misconception there would be zero correlation between Islamic indices and convention US Financial and World Financial services indices. But our results show a different picture, the reason being two fold. The first being, that Sharīʿah screening criteria removes the conventional financial institutions, not Islamic institutions. The World financial services indices have quite a number of Muslim economies in the coverage and thus encompass Islamic financial institutions form part of the constituent list as well. More important is the inter-linking of all sectors of economies, and heavy dependence of corporations on financial sector for financing.

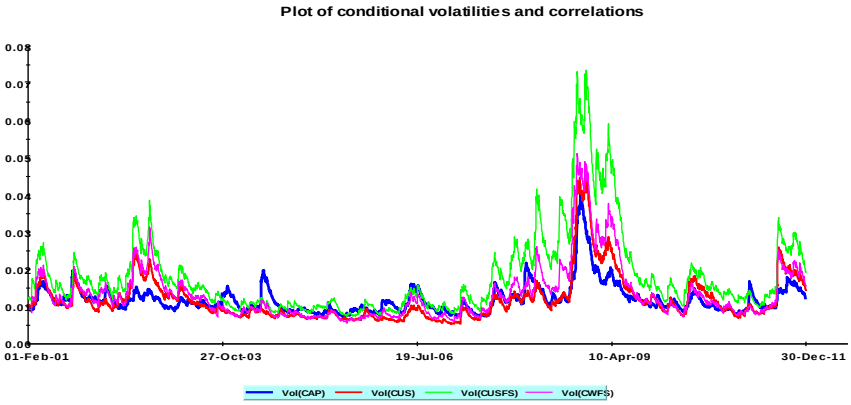
Any crisis in the financial sector spills over and impacts other sectors of economies in the form of high cost and unavailability of funds. This leads to vicious cycle of enhanced costs, low profitability's affecting the intrinsic value and the equity prices of the corporation. To understand this further we have also included the Islamic Financial Services Index (IFIN). Amongst the correlations we see a medium to high correlation of IFIN with all other conventional indices. This is owing to the heavy reliance of the Islamic financing sector on the real sector activities. A downward pressure on real sector in recessions or increased financial health of firms in boom, directly impacts the health of Islamic financial institutions.

5.3. Dynamic Conditional Correlations

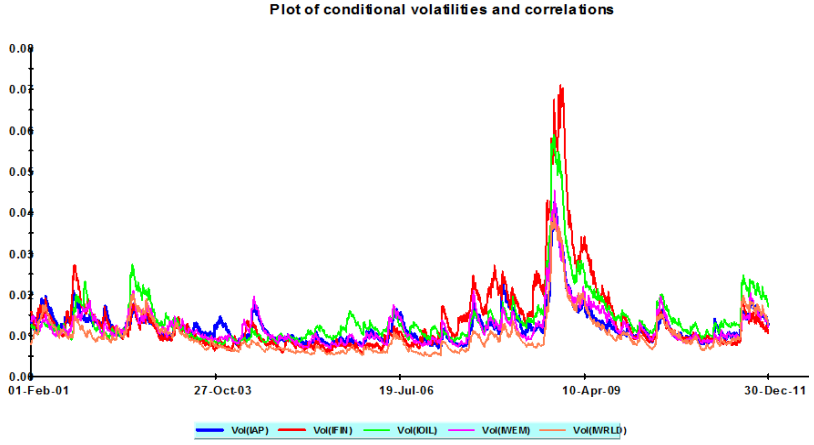
At this point in time, our empirical findings show contrasting and vague opinions regarding our research question. Until now, our analysis and interpretations have focused on unconditional volatilities and unconditional correlations. In simpler terms, our analysis has been constrained by the assumptions that volatilities and correlations stay constant over the period of study. On an intuitive note these

assumption restrict conditions of reality as ever evolving and changing dynamics of the capital markets and socio-political-economic landscape would mean variability of volatilities and correlations. It is closer to reality and logical to comprehend that the volatility and correlation are dynamic in nature, and owing to this aspect we utilize the Dynamic Correlation Coefficient (DCC) model in our study.

Graph-1
Conditional Volatilities of Conventional Indices



Graph-2
Conditional Volatilities of Islamic Indices



To build on and further investigate, we first delve into dynamic conditional volatilities of all indices. For comprehension and comparative purposes, the volatility Graphs are clubbed in sets of conventional indices and Islamic indices in Graph 1 and Graph 2.

The conditional volatilities plot for conventional indices reaffirm the earlier findings of US Financial services as being highly volatile followed by World Financial Services Index. The major spike in the volatility of returns is prominent starting from middle of 2007 to early 2009. This is the era of the worst financial turmoil to have hit the world since the great depression of 1930s. The highest peaks of the financial indices volatility is observed in late 2008 which was as expected by the authors, owing to the collapse of Lehman Brothers which led to an unprecedented credit crunch in the US financial system. The conditional volatilities of the other non-finance specific indices show a similar spike during that era as well. This in our opinion was caused through firstly the spillover effect and the freezing of credit availability to corporates, and secondly to the contagion amongst markets and sectors.

An earlier high volatility period is also observed from Graph 1 in 2001-2002. The reasons for this volatility in all the indices and specifically larger in the US market related indices are two fold; firstly the markets in US were shaken by the September 2001 terror attack on World Trade Centre. The markets were still reeling from that unusual and unprecedented situation when in 2002 the dot com bubble burst, sending internet giants like Webvan, Exodus Communications, and Pets.com to bankruptcy, while amazon, yahoo and EBay share prices took a pounding. The near collapse of the technology sector, in the US market's impact on the equity market exponentially increased in mid-2002 with the outbreak of Accounting scandals, at Arthur Andersen, Adelphia, Enron and WorldCom.

Turning towards the Islamic indices conditional volatilities, the key observation is the mimicking of Islamic indices volatility of conventional indices. A key difference is that the conditional volatilities are much closer to each other, with less absolute variation between different indices. We notice a high volatility of the Islamic financial services index during the global financial crisis. This is a unique observation since the underlying assumption is that owing to the prohibition of interest rates, the Islamic financial sector should not have been impacted in the crisis since it started from complex interest rate linked derivatives and credit default swaps. The high conditional volatility does not have any valid explanation in literature. Though authors believe that since most Islamic financial institutions operate in dual financial environment, the contagion effect and the close interaction of profit rates

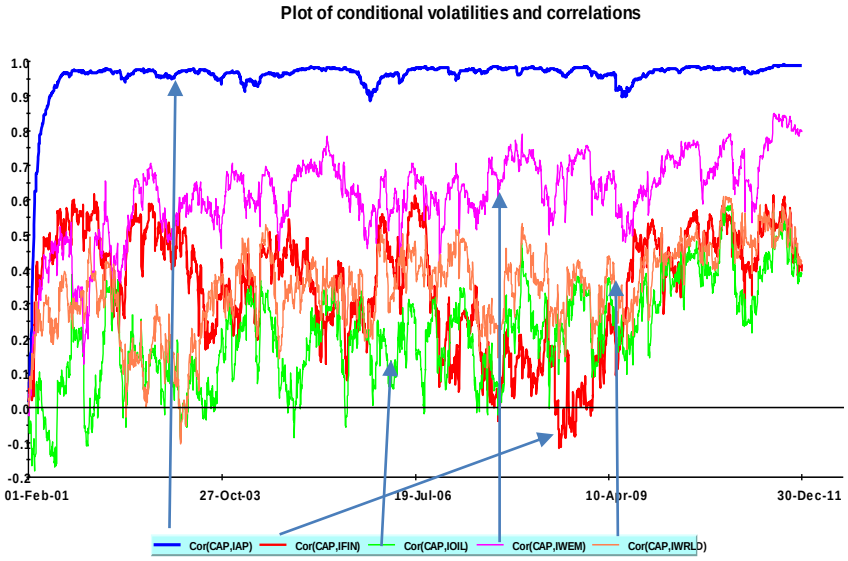
of Islamic financial institutions with conventional interest rates may be a plausible reason for this.

The conditional volatility plots suggest socio-political-economic events have a similar impact on conventional and Islamic indices. To further investigate for our research objective with a greater degree of certainty we use dynamic conditional correlations between Islamic indices and our proxies for global conventional benchmarks i.e. Conventional US Financial Services Index, Conventional World Financial Index and the Conventional Asia Pacific Index. The Conventional Asia Pacific Index has been used to further study and understand the interactions of Islamic indices, mainly since most of the Muslim economies are based in this region, and also Asia Pacific as a group has been the fore runner in driving economic growth over the past decade.

The authors have made a cautious attempt to investigate conditional correlation in three steps. Firstly we would dwell into dynamic conditional correlation plots of Islamic Indices and Conventional Asia Pacific Index (CAP). This would be followed on by investigation which is more relevant to our research objective, where we study the conditional correlation plots of Islamic indices with Conventional US Financial Index (CUFS), and Conventional World Financial Index (CWFS). The attempt is to understand if conditional correlations vary according to economic scenario or they remain constant throughout the decade of study.

In reference to Graph 3 of conditional correlation plot of CAP with Islamic indices, on the top part of the plot we see a steady near unity conditional correlations between the CAP and IAP. This observation is in line with author's expectation which was earlier discussed in Section 5.2, and is based on the concept of same markets and constituent list. It is observed in the plot a very erratic behavior of Islamic Oil Index and CAP correlations. In the view of authors and relevant literature, this is considered insignificant, since the IOIL index component companies, prices are strongly dependent on the world oil prices, which are dependent on exogenous, non-equity market related factors like geo-political situation, world consumption and energy needs.

Graph-3
Dynamic Conditional Correlations of Conventional Asia Pacific with Islamic Indices.



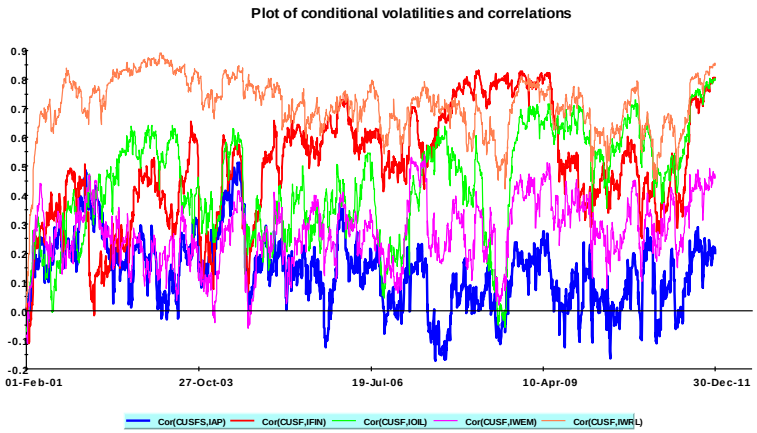
More interesting result is that of the conditional correlation plots of CAP with IFIN, CAP with IWEM and CAP with IWRLD. If we notice that there is no specific trend that can be deduced amongst all these conditional correlation, but one unique factor that is common in all is the dip in conditional correlation during the period of 2007 to 2009, the crisis period. Earlier we had observed that CAP is not very highly correlated with the CWFS or CUSFS index, so the impact of financial crisis should not have been severe on the Asia Pacific region. The plausible explanation for this dip in the view of authors is that though since all other Islamic indices except IAP are more global and encompass non Asia Pacific markets, the negative conditional correlations arise out of a more volatility for Islamic indices due to financial crisis as compared to the rather steady and low volatility of CAP.

The reasons for CAP staying partially insulated is the lower dependence of Asian economies in past decade on US as trading partner or financial sourcing alternative. Within the context of our research question our findings from unconditional correlation matrix and dynamic conditional correlations do not provide any solid evidence to either negate or to reaffirm our viewpoint, of Islamic indices as being a safer haven in crisis periods at global level. The only conclusion we could draw from

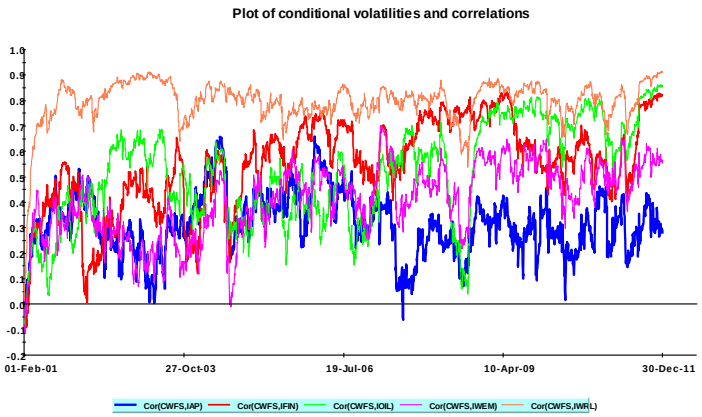
this plot is the fact that as a multi portfolio investor in the Asia Pacific region, we would be better off if we had invest in Islamic indices for diversification benefits.

After establishing the dynamic conditional correlation patterns for CAP and Islamic Indices, we delve into the DCC of Islamic Indices and CUSFS and CWFS.

Graph-4
Dynamic Conditional Correlations between Conventional US Financial Services and Islamic indices.



Graph-5
Dynamic Conditional Correlations between Conventional World Financial Services and Islamic indices.



In Graph 4 it is evident that conditional correlations between the US financial services indices and Islamic indices follow a very volatile path. Not surprisingly the observed behavior of conditional correlations of Conventional Financial Indices with IWRLD and IWEM is highly volatile. This was expected for authors owing to the earlier observations and elaborations of reasons. The conditional correlations plot for them does not follow any trends. A plausible reason is also that financial exclusion from Islamic indices, reduce any correlation between the financial sector and Islamic indices. The traces of an existence of a relationship in authors opinion is purely out of the dependence of all other business on health and performance of financial sector.

In context of our research question from both the plots we observe that there is a trend of conditional correlations between financial indices and Islamic indices, with near zero conditional correlation in middle of 2008, which was the peak of the crisis. The real life implications for these findings are unique and positive for Islamic financial development. It is observable that the Sharīʿah screening criteria creates a set of underlying stock selection which tends to have dampening conditional correlations with the global financial services indices, providing unique partial insulation to Islamic investors in financial turmoil. It implies that as an investor, who attempts to follow the Islamic indices would experiences low correlations with the financial indices and decreasing one during crisis period. In the context of economic crisis originating from financial sector, Islamic equity indices provides not complete insulation but dampened negative effect.

6. Conclusion

To summarize our analysis, recall our research question set forth at the onset of this paper: Do Islamic indices show lower dependence on conventional counterparts in times of crisis?

Firstly, our research shows strong evidence that conditional correlations between Islamic Indices and conventional financial indices show a negative trend during the times of recent crisis. This relationship helps us better understand the interaction of Islamic indices and their conventional counterparts by relaxing stiff assumptions of earlier statistical tools via employment of Multivariate GARCH, DCC methods. The initial belief of authors, about Islamic indices providing a better alternative if reaffirmed through the study of dynamic volatilities and conditional correlations, which point towards a changing correlating relationship between Islamic and conventional indices.

The focus of our study was the correlation dynamics of Islamic indices and conventional financial benchmarks. The evidence via plots of conditional correlation and volatilities suggest towards a dampening correlation between them especially through the financial crisis of 2007 to 2008. The authors view it as a positive omen and take a cautious stance that the exclusion of financial stocks due to Sharīʿah screening methodology has benefited the Islamic indices during the crisis periods. The implication of these findings though not groundbreaking, but are positive and beneficial in the favour of framing of Islamic finance as a solid and robust alternative investment channel. From an investors point of view the results of this study indicate that an investor following the Islamic indices, would be better protected in times of economic crisis originating from financial sector, as well as being in line with Sharīʿah standards and Halal investments.

The inherent philosophy of Islamic finance that promotes risk-sharing instruments and prohibits interest bearing business (modern day conventional banks) has its benefits in the modern capital markets. Our analysis suggests Islamic equity investments though they follow a similar return pattern as conventional in times of economic growth, but in downturns, are a safer alternative.

6.1. Limitations

The authors believe that it is of utmost importance that we are honest and understand the limitations of our study. In our understanding the following limitations exist in our study:

- The duration of the study spans 12 years, and an extended study encompassing previous decades would make the study more robust.
- Our research has taken a sample of 9 indices from the family of 42 available Islamic indices in Dow Jones Islamic indices universe. Addition of further indices can make the study more robust.
- This study focused on the financial indices from conventional side and was more aligned towards the Asian and Emerging market indices in Islamic side. This study can be expanded and findings be tested for validity for other regions and country specific indices using the same methodology.

It should be noted that the purpose of this study was exploratory and to provide a holistic empirical evidence of Islamic indices as being a safer investment option during crisis period. By analyzing this study in isolation, we cannot make judgments and decisions for the whole Islamic financial markets.

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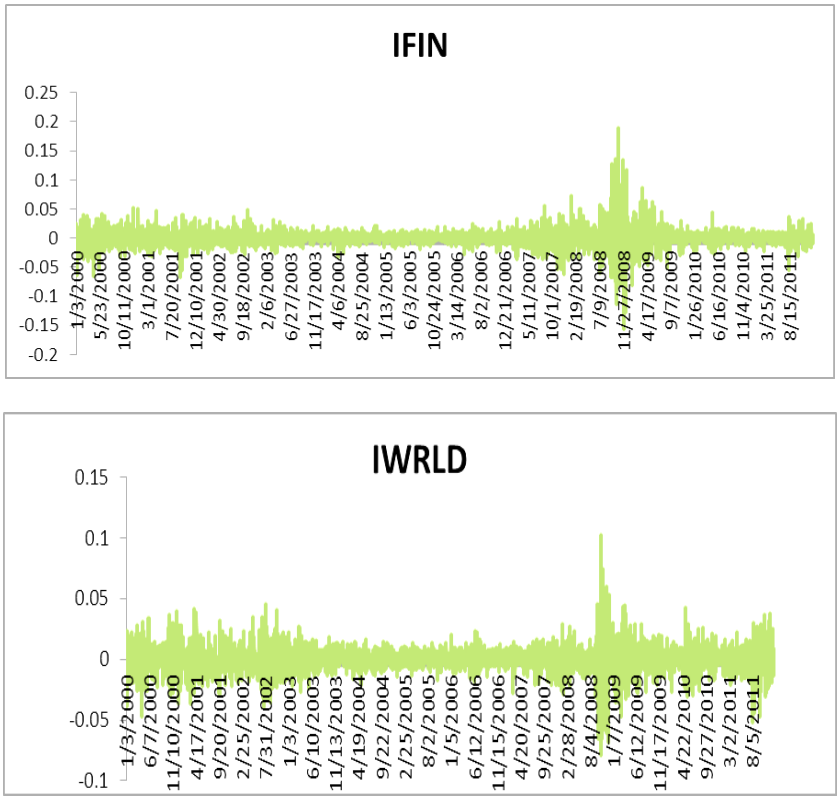
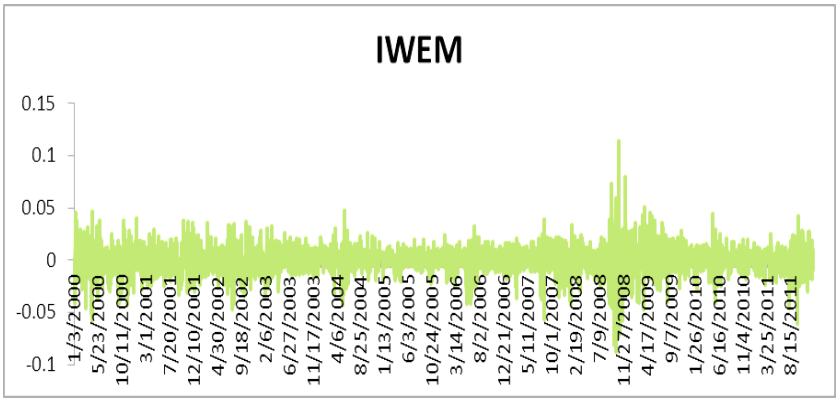
Appendix

Appendix-A: Graphs of daily returns of conventional and Islamic indices (2001-2011)

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0.05
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5/23/2000
10/11/2000
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4/30/2002
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2/6/2003
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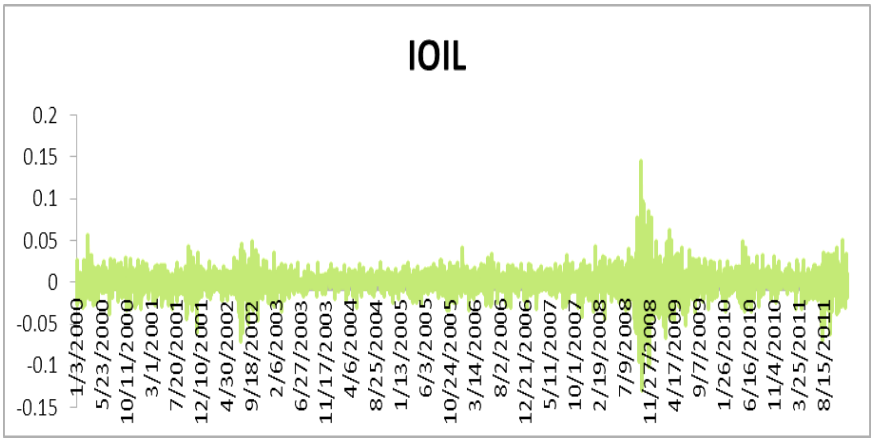
3/25/2011
8/15/2011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5/23/2000
10/11/2000
3/1/2001
7/20/2001
12/10/2001
4/30/2002
9/18/2002
2/6/2003
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4/6/2004
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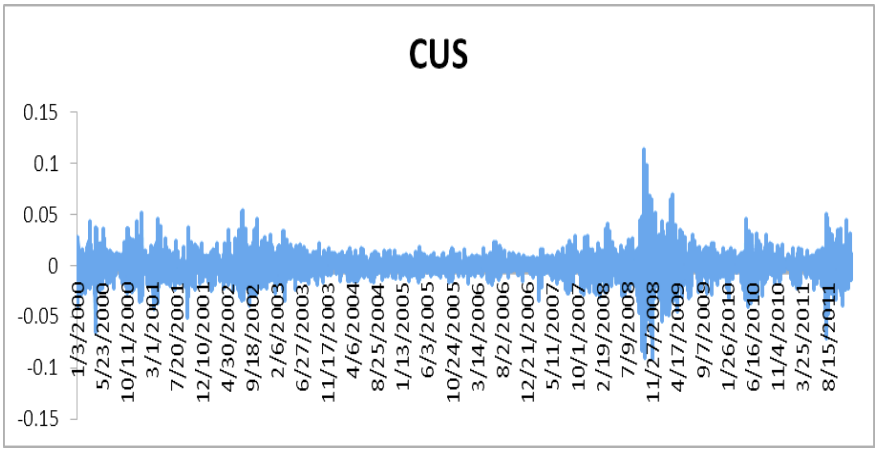
3/25/2011
8/15/2011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-0.15
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5/23/2000
10/11/2000
3/1/2001
7/20/2001
12/10/2001
4/30/2002
9/18/2002
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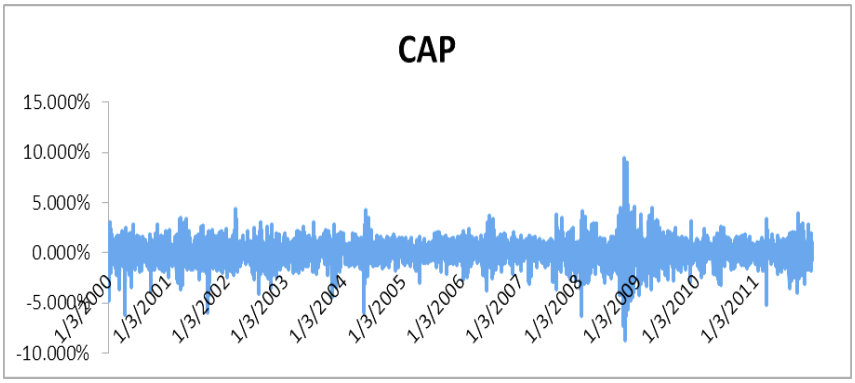
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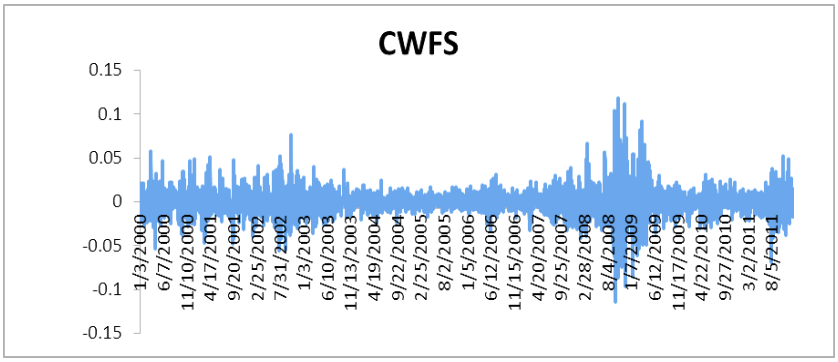
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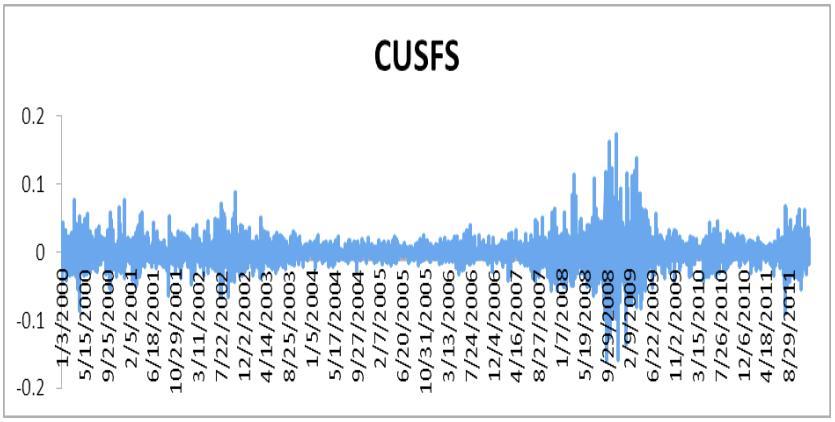
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Public Sector Funding and Debt Management: A Case for GDP-Linked *Ṣukūk*

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Abstract

Despite the huge amount of wealth in the hand of Muslims, most countries with Muslim majority population fall in the category of developing nations. The development of infrastructure has been proven to be an effective means for economic growth and poverty reduction. Usually governments have recourse to conventional debt financing to undertake infrastructure projects. However, this form of financing is unsuitable in an Islamic framework due to the prohibition of interest. Moreover, the recurrent sovereign debt crises over the last few decades stresses the importance of debt management that helps avoid the high costs of these forms of catastrophe. Debt indexation to some indicators from the real economy (like GDP or Commodity price) has been identified as an effective means for the reduction of sovereign default. Such an idea has the property of strengthening the linkage between the real and the financial sectors of the economy and allows risk sharing between the parties involved in the transaction. In spite of the convergence of such an idea with the spirit of Islamic finance, the Ṣukūk market has not yet taken advantage of it. The objective of this paper is, therefore, to propose an innovative model of Ṣukūk for financing non revenue generating public sector projects whose

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return is linked to the GDP development of the issuing country. The paper examines the potential benefits and obstacles of the GDP-Linked Ṣukūk (GLS) model, which is based on Forward Ijārah, as well as its risk-return profile. Furthermore, a framework for pricing GLS is put forth. Based on a sample of countries from five regions of the Muslim world, the theoretical properties of the GLS are validated through backtesting method. The model is shown to be a new asset class between the traditional debt and equity instruments and offers interesting diversification opportunities. Besides its theoretical contribution, the model proposed in this paper addresses in an effective way the issue of debt management, in an interest-free context, and the issue of benchmarking sovereign Ṣukūk against the interest rate.

Keywords: GDP-Linked *Ṣukūk*, Forward *Ijārah*, Backtesting.
JEL Classification: H630, H600, P400.
KAU-IEI Classification: J0, L41.

1. Introduction

Despite the huge amount of wealth in the hand of Muslims, most countries with Muslim majority population fall in the category of developing nations. The development of infrastructure has been proven to be an effective means for economic progress (Estache and Fay 2007). Thus, it has been shown that the quantity and quality of the infrastructure have a positive impact on economic growth and are negatively correlated to income inequality implying that the development of infrastructure could be an effective way to combat poverty (Calderon and Serven 2004). Usually governments have recourse to conventional debt financing to undertake infrastructure projects. However, this mode of financing is unsuitable in an Islamic framework due to the prohibition of interest.

Over the last decade, *Ṣukūk* (sing. *Ṣakk*) have been seen as an alternative to interest-based financing, in the Islamic capital market. *Ṣukūk* represent proportionate beneficial ownership of an asset or a pool of assets for a defined period when the risk and return associated with the cash flows generated by underlying assets are passed to the *Ṣukūk* holders (Iqbal and Mirakhor 2007, p.177). The euphoria which accompanied the phenomenal growth of the *Ṣukūk* market over the recent years is, however, tarnished by various criticisms raised about the Sharīʿah compliance and /or the economic efficiency of many of the current *Ṣukūk* structures. This led to the famous AAOIFI's statement in 2008.

On the other hand, the recurrent sovereign debt crises during the last few decades stresses the importance of debt management that helps avoids the high costs of these forms of catastrophe. Borensztein and Panizza (2009) document short-lived but

significant sovereign default costs which can take various forms. Thus, in addition to its negative effect on GDP growth, sovereign default is shown to cause reputational costs[1], international trade exclusion costs[2], costs to the domestic financial system[3] and political costs to the authorities.

Debt indexation to some indicators from the real economy (like GDP or Commodity price) has been identified as an effective means for the reduction of sovereign default. Despite the potential benefits of indexed-bonds, acknowledged in the literature, little work is done to investigate their adaptability in the context of Islamic finance. The objective of this paper is, therefore, to show the pertinence of this indexation within the framework of Islamic finance and to propose a design of GDP-Linked *Ṣukūk*. To this end, the next section will be devoted to a review of selected literature pertaining to the potentials of *Ṣukūk* for the public sector and some relevant issues. The second part of this review investigates the potential benefits and shortcomings of GDP-Linked bonds and examines the possibility of their adoption in the Islamic finance industry. Section 3 is concerned with the design, the pricing and the Sharīʿah justification of GDP-Linked *Ṣukūk*. The theoretical characteristics of this model of *Ṣukūk* will be tested empirically using backtest method in section 4. The conclusion will end the paper.

2. Literature Review

The principal message of this section is to point out to the potentials of the *Ṣukūk* for the public sector and to discuss the issues that could impede their realization. We have argued that to address these issues and take full advantage of the potential benefit we need to be innovative. Wisdom can be taken from anywhere, and conventional finance has some good aspects that can be useful to Islamic finance. In this regard, the idea of GDP-linked bond is explored. This idea presents opportunities for risk sharing and for integrating the financial sector to the real sector of the economy. Both of them fit well to the principles of Islamic finance.

[1] Reputational costs can be in the form of full exclusion from capital market and credit rating downgrade that will result in higher borrowing costs later.

[2] International trading costs could be in the form of net decrease of bilateral trade and decline of of the trade credit of the defaulted country.

[3] This can take the form of an increase of the probability of banking crisis. (See Borensztein and Panizza, 2009, for more elaboration).

2.1. Ṣukūk: Potentials for the Public Sector and Issues
2.1.1. Potentials of Ṣukūk for the Public Sector

As developing countries, Muslim nations have a large demand for infrastructure projects, such as schools, hospitals, roads, water, electricity etc. However, in most cases the governments in the developing countries do not have sufficient revenues to fund these types of projects which are vital for sustainable development. To meet this form of demand, Iqbal and Khan (2004) suggest the utilization of Build-Operate-Transfer (BOT) and its variants along with the *Ṣukūk* structures as a better alternative to the conventional financing which is based on interest. The reason for that is, at least, twofold: first, given that *Ṣukūk* and Islamic financing in general are based on real assets, they are expected to enhance the stability of the financial institutions and markets. This feature ensures a stronger connection between the financial sector and the real sector of the economy and renders the system less prone to speculative activities which are the cause of many crises. Second, such a policy consisting of financing government expenditure through Islamic financial instruments is expected to discipline public expenditure as availability of finance without an asset will be very limited. As a result, greater prudence will be introduced in the overall macroeconomic management as well as in the efficiency of microeconomic units operating in an economy.

Indeed, *Ṣukūk* have already been used as a tool for macroeconomic management in some Muslim countries. Referring to the Sudanese experience, Eltegani (2005) mentions that *Ṣukūk* can be used by governments as well as the Central banks for monetary policy and for liquidity control. Thus, when *Ṣukūk* are sold to the public money is withdrawn from the market, and this has its effect on money supply. Money withdrawn will be kept by the Central Bank. On the other hand, when need arises such money or part of it will be poured again into the market by buying *Ṣukūk*.

In addition to its function as tool for macroeconomic policy, *Ṣukūk* is, thus, claimed to enhance the efficiency of the financial system, through the linkage of credit supply with real asset (Siddiqi 2006) and improve the equity within the system by allowing many small savers to invest and benefit from the true profits resulting from investments that conform with Sharīʿah principles (Usmani 2007). However, many writers have questioned the validity of such claims based on the current practice in the *Ṣukūk* market. The issues raised against many of the *Ṣukūk* structures relate to different aspects encompassing Sharīʿah compliance, economics, regulatory and legal framework. Here we shall focus on the Sharīʿah compliance and the economic aspects only as the legal and the regulatory aspects may be too variable from a jurisdiction to another and from a period to another.

2.1.1. Sharīʿah *Issues*

Oh et al. (2009) discuss two forms of product efficiency: the technical efficiency and the allocative efficiency. In the price-quality space, a product is technically efficient if it has higher quality for lower price. However, an efficient product may not be selected by consumers, even when it has the highest quality and lowest price. The reason is not the absolute level of quality, but the mix of qualities which does not match the consumer's preference structure. The allocative efficiency refers to the degree of match of quality mix with the preference structure. Adopting these definitions and applying them to financial product, we can say that a *Ṣukūk* product is technically efficient if it provides higher return compared to other financial instruments with the same level of risk. Furthermore, we consider that tradability in addition to Sharīʿah compliance are essential constituents of the 'allocative efficiency' in the *Ṣukūk* market.

Haneef (2009) identifies three hallmarks in the development of the *Ṣukūk*. He showed that *Ṣukūk* evolved from asset-backed model, where the *Ṣukūkholders* have ownership rights over the underlying asset, as per Sharīʿah requirements, to asset-based model. With the latter model, the *Ṣukūkholders* rank *pari passu* with unsecured creditors. Indeed, for all international bonds there is a negative pledge which restricts the borrowing entity from issuing any bond in future that is not in *pari passu* with existing unsecured bonds. The third stage of the *Ṣukūk* structures evolution was marked by the emergence of models that were mainly based on partnership contracts but violate some of their basic Sharīʿah requirements. Those structures in particular have drawn various criticisms that culminate with Sheikh Taqi Usmani's declaration which considered that 85% of those *Ṣukūk* non-Sharīʿah compliant. This led the AAOIFI's statement in 2008.

(Al-Amine 2008) points out to the controversy among Muslim scholars over the permissibility for one of the *Mushārakah* partners to give an undertaking to purchase the shares or units of other partners at predetermined price. The rationale for the objection is that the very nature of a *Mushārakah* is the sharing of profit and loss among the partners. The undertaking to purchase the share of a partner at predetermined price defeats that spirit of *Mushārakah* as one partner will have a guaranteed return, whatsoever is the outcome of the venture.

The combination of many Sharīʿah endorsed contracts to produce a *Ṣukūk* structure with a desired cash flow is common in the current Islamic finance industry. Al-Amine (2008) analyses the structure of many of these combined contracts in the

light of *Bai'* al-*Wafā*, *Bai'* al-*Istighlal* and *Bai* al-'*Inah*. It is found that all these transactions are controversial and accepted by only a minority of Muslim jurists. Those who reject them consider these forms of transaction as mere *hiyal* (legal tricks) meant to circumvent the prohibition of interest-based lending. Thus, even though the form may adhere to the requirements of Sharīʿah in exchange contract, the substance does not (Al-Zuhayli 2003; Al-Amine 2008).

Another issue which has drawn the attention of the scholars is the third party guarantee present in many *Ṣukūk* structures. Al-Amine (2008) argues that theoretically, a benevolent third party guarantee without fee or consideration can be acceptable in Islamic law. However, in practice guaranteeing the principal in *Ṣukūk Mushārakah*, or *Ṣukūk Muḍārabah* or *Ṣukūk Ijārah* is problematic. This is due to the fact that if the guarantee is provided by a government it shall be declared non-permissible to use the property of the whole community for the benefit of private entities. Likewise, it is hardly conceivable for a private entity to provide a benevolent guarantee to another entity without a consideration.

2.1.2. Economic Issues

The discussion on the economics of *Ṣukūk* will focus on few issues, such as the efficiency, the tradability and the pricing mechanism of *Ṣukūk* that have drawn most attention among the players. Another aspect which needs consideration, in this context, is the equity and fairness of the transaction. This equity aspect, as reflected in the pricing mechanism, has been addressed in various ways in the literature. Even though all these issues have Sharīʿah dimension, here we will mainly focus on their economic aspects.

Ali (2008) holds that the combined contracts, in the *Ṣukūk* structures, attempt to replicate conventional financial products while trying to remain within Sharīʿah bounds. The end result is complicated products which are hard to understand, costly to construct and implement and which may contradict the objectives of Sharīʿah.

It can be argued that the complexity of a structure increases costs stemming from the need of more sophisticated legal documentation and more efforts for advertisement of the new strange product; as a result the *Ṣukūk* become less profitable either for the investors or for the issuers or for both which means a loss of efficiency in the technical sense.

The tradability of some category of *Ṣukūk*, in the secondary market, is a subject of concern for many players in the Islamic capital markets as it constrains drastically

the liquidity in the *Ṣukūk* market. The *Ṣukūk* structures based on sale contracts are not tradable, according to AAOIFI Sharīʿah Standard, as this would be tantamount to debt trading which is prohibited by the majority of Muslim jurists except if it is at par. However, this stance is challenged by a minority of scholars, particularly in Malaysia, who allow the sale of debt at discount (Rosly and Sanusi 1999). Their stand is based on the view of some classical jurists who allowed the sale of debt under some conditions. To these Malaysian scholars those conditions are met when there is a transparent regulatory system safeguarding the interests of the market participants. Furthermore, they invoke the concept of *Dha' wa ta'ajjal*[4] to strengthen their argument[5]. However, both arguments fail to address the main issue in the transaction which is the involvement of *Ribā,* as there is a contractual increase of the amount to be repaid later in a loan contract. Moreover, *Maṣlaḥah* is not a valid argument when the transaction in question violates a clear cut text. In this case the text prohibiting *Ribā* is decisive in nature. Similarly, the majority of the Muslim scholars reject the concept of *Dha'* wa *ta'ajjal* particularly when it is a condition in the contract.

The use of interest rate benchmarks such as LIBOR for pricing purposes, though not desirable, is deemed acceptable from a Sharīʿah perspective as long as the pillars and conditions of the contract in question are present (Usmani 1999a). Thus, the use of these conventional benchmarks can be seen as a transitory step towards the establishment of a mature Islamic finance industry with its own benchmark. El-Gamal (2006) while recognizing the potential benefit of using additional benchmarks related to the underlying assets to reflect the spirit of Islamic commercial law, argues against the replacement of the conventional benchmarks by an Islamic one. He considers such a move unnecessary, impractical and dangerous. This is because there is no reason to be embarrassed about using the conventional benchmarks and, more importantly, there is a lack of depth and liquidity of homogenous Islamic financial assets.

However, the majority of those who have written on the subject consider it aberrant to use a tool that Islamic finance was supposed to remove since its very beginning. Furthermore, it is remarked that by using money market rate as benchmark, the return to the *Ṣukūkholders* will reflect the prevalent rate of interest instead of the actual performance of the underlying asset of the *Ṣukūk* (Al-Amine 2008; Jabeen and Khan 2008; Siddiqi 2006). This could defeat what is thought to be

[4] The concept is referred to when a creditor forfeits a part of debt when the debtor settles the balance of the debt earlier than scheduled.

[5] Syariah Advisory Council's Resolution, accessed on 14 March 2011 at http://www.sc.com.my/main.asp?pageid=450&menuid=554&newsid=&linkid=&type=.

one of the features of Islamic finance that is the integration of the real and the financial sectors. In the same vein, Siddiqi (2006) maintains that the disconnection between the two sectors mostly occurs with the over reliance on debt instruments as the case is in conventional finance, while it is admitted that the greater the role of debt the lesser will be the ability of the financial system to absorb real shocks. It also limits the ability of monetary authorities to take corrective actions because of fear of instigating widespread defaults. He further proposes the linking of the returns to *Ṣukūk* to the actual productivity, as with this arrangement justice and fairness will be ensured. The rationale is fairness requires that uncertainties attending upon productive enterprise be shared. At the same time, justice and fairness require that losses, if and when they occur due to the uncertainties in the business environment, be borne by those who claim the profits when there are profits.

An analysis of all these issues shows that this incongruence observed in the *Ṣukūk* structures emanates from the desire to reconcile two different paradigms in financing. In the conventional setting, the traditional debt financing allows the issuer to get funds without getting rid of some of its assets. On the other side, the investors get tradable securities whose return is determined ex ante. With the prohibition of interest in the Islamic framework, this form of financing (bonds) is not acceptable. Instead, methods endorsed by Sharīʿah entail either a profit and loss sharing scheme or a transfer of asset with all the rights and obligations. The incongruity arises when the Sharīʿah contracts are combined to reproduce the substance of financial instrument which is repugnant to their nature and to the Islamic paradigm in finance. The literature that we have examined unveils that the innovation in the *Ṣukūk* market has been more legal than financial i.e. the forms and the legal documentations of the *Ṣukūk* may be different from the existing instruments; however, they are very much like the conventional debt instruments in term of cash flow and risk return profile and may contradict some of the principles of Islamic finance.

Thus, as we have seen above, *Ṣukūk* comport numerous potential benefits. However these potential benefits could be hampered by the increasing controversies over the Sharīʿah compliance of many of the *Ṣukūk* structures in the market. These controversies affect negatively the allocative efficiency of the *Ṣukūk*, in the long term, as many pious Muslim investors would prefer to put their funds in other investment vehicles. A result of such a move would be less investor base for *Ṣukūk* that leads to higher required rate of return for the funds suppliers or higher cost of capital for issuers translating into less efficiency in the technical sense.

Therefore, for a sustainable growth, we argue that financial innovation is necessary as advocated by many Muslim economists who consider financial

engineering a vital area for Islamic finance. In the next paragraphs we review the literature pertaining to GDP-Linked bonds, a concept that is of relevance to Islamic finance, as it shares some common features with it.

2.2. GDP-Linked Bonds: Potential Benefits, Obstacles and Adaptability

In the bond pricing literature there seems to be a growing interest in indexation whereby either coupon or principal payment or both are linked to a given indicator such as inflation, GDP or a commodity price. Though the popularization of indexed bonds is quite recent, distinguished economists like Marshall, Irving Fisher, Keynes, Milton Friedman, have been strong proponents of such an instrument (Price 1997).

A number of reasons have been put forth in favor of indexed bonds. First, GDP-linked bond is shown to improve debt sustainability for sovereigns in times of economic downturn and allows countries to avoid pro-cyclical fiscal policy (Borensztein and Mauro 2004). This is because GDP-linked bond matches the payment obligation to the economic performance. Government revenues, which are mainly constituted of tax income, increase with good economic performance. Thus, with this scheme economic growth risk is shared between borrowing country and its creditors as the latter will receive more cash flow in times of good economic performance, and less when the economy is bad. Notwithstanding the higher risk that the creditors face with this instrument, as compared to straight bond, these indexed bonds provide opportunity to take advantage of the benefits of investing in growing economies. Furthermore, these bonds are of nature to lower the likelihood of defaults and financial crises that could result in costly litigation and sometimes in outright losses[6] (Borensztein, and Mauro 2002; Miyajima 2006; Griffith-Jones and Sharma 2006).

Another argument in favor of indexed bond is market completeness. With the development of financial markets around the world, there exist many institutional investors with various risk appetite that would be willing to invest in these securities to diversify their portfolios. This is particularly relevant, if we take into consideration the fact that available financial instruments represent a relatively small portion of the real wealth of the nation, making, thus, the supply of instruments indexed to GDP an opportunities for greater diversification (Price 1997; Schroder, Heinemann and Kruse 2004; Kamstra and Shiller 2009).

[6] The costs of sovereign default will not be born solely by the defaulted country and its creditors. Indeed, the international community will also bear its share as evidenced by the current European debt crisis whereby the bailout package to Greece, Ireland and Portugal advanced by IMF and EU amounts to € 110 billion, € 85 billion, and € 78 billion respectively.

Quite a few concerns have been raised about some potential risks to investors for the implementation of GDP-linked bond. These can be in the form of GDP data misreporting or moral hazard where the issuing country may lose incentives for promoting growth policies.

However, it is unlikely for a government to lower economic growth as the political and social consequences would be undesirable. On the other hand, underreporting economic growth would make new fund raising more costly. Thus, the parties involved in these GDP-linked bonds may seek the involvement of international financial institutions such as International Monetary Fund and World Bank to ensure the accuracy of the data (Miyajima 2006; Griffith-Jones and Sharma 2006).

Although the indexed bonds constitute debt instruments with interest payments we argue that the rationale behind the design of these securities can be acceptable even in an Islamic framework. The reason for this argument can be twofold:

First, the design of these bonds permits the integration of the real sector of the economy with the financial sector, since the return to the bondholders is contingent to the performance of some economic indicators; an element that does not necessarily exist with straight bonds.

Second, the indexed bonds allow cooperation between the parties involved as there is sharing of the upsides and downsides of some real economic activities. Both elements are consonant to the principles of Islamic finance. Indeed, Chapra (2007) argues that risk sharing contributes to the promotion of justice and enhances the stability of the financial system; thus, benefits from the transactions are potentially fairly distributed and the burden of losses is not shifted to only one party. Furthermore, Mirakhor and Zaidi (2007) point out the role of risk sharing in establishing a strong link between the financial sector and the real sector, an aspect that is missing in the interest–based financial system.

Besides the above mentioned benefits, the Islamic finance industry can take advantage of this innovative pricing mechanism, as a second best solution, to address one of major criticism against *Ṣukūk Ijārah* that is the benchmarking against interest rate.

Wilson (2008) simulated the pricing of *Ṣukūk Ijārah* based on GDP, for 2 countries, and compared it with the pricing based on interest rate benchmark.

Wilson's results are inconclusive as the returns to investors would have been more stable had Saudi Arabia priced the Sovereign *Ṣukūk* based on non-oil GDP. For the other country, Malaysia, the opposite would be true. However, Wilson's study has several limitations. First, his sample is too small (only 2 countries). His time frame (seven years) does not allow the assessment of the performance of *Ṣukūk* over a whole economic cycle. Thus, the period he considered does not cover any major economic crisis that would help assess the effectiveness of the model as per its declared rationale.

The above review shows that despite the potential benefits of GDP-Linked Security that are acknowledged within the context of Islamic economics, very little works are undertaken to investigate their adaptability. This study aims at filling that gap by proposing an innovative model of *Ṣukūk* to raise fund for non revenue generating public sector projects which, at the same time, could help for a better management of sovereign debt.

3. GDP-Linked *Ṣukūk*: Theoretical Analysis

The theoretical analysis of the GDP-Linked *Ṣukūk* comprises two main phases: The economics of the model and its justification from Sharīʿah perspective.

3.1. The Economics and Mathematical Formulation

The literature reviewed in the previous section presented some of the potential benefits and obstacles to a successful introduction of GDP-Linked bonds. Thus, in this sub-section other aspects of these instruments pertaining to risk and return are discussed. The discussion will concern particularly, the design and the pricing. The design is done to reflect the desired risk return profile, whereas the discussion on the pricing is meant to provide a framework for their valuation in the secondary market.

The importance of this step lies in the fact that risk and return are key element for both investors and issuers. Investors look for assets that provide good return or offer diversification opportunities when included in their portfolio. On the other hand, the main objective of an issuer is to get stable funding at lower cost (Kamstra and Shiller 2009). Satisfying the needs of these two parties is not necessarily an easy task. Unless the model is attractive, economically speaking, to the parties involved, it does not have any chance to be successful.

3.1.1. The Design of the Model

Schroder et *al.* (2004) identified various indexations of GDP-Linked bonds. On the one hand, the instrument can be in the form of a forward on the economic performance of the issuing country, whereby the investors will share both upside and downside of the GDP development. The indexation can also be in the form of options whereby a ceiling or a floor is applied to the payment obligations. On the other hand, the coupon and/or the principal can be linked to the development of the GDP over the period of the contract. Schroder et *al.* (2004) found that for short period (e.g. 3 years) the linkage of both coupon and capital could be suitable; however, for longer period the indexation of coupon is preferable for otherwise there could be a big divergence between the face value and the redemption value.

Besides the above forms of GDP indexation, Kamstra and Shiller (2009) suggest another form, very much similar to a company share, which would be long term in maturity or even perpetual. The instruments thus, designed would pay annually a fraction of the 'earnings' (i.e. GDP) of the issuing country to investors as dividend[7].

The indexation method chosen for GDP-Linked *Ṣukūk* (GLS, thereafter) in this study consists of linking the profit portion to the GDP development of the issuing country. Such an indexation takes into account the findings of Schroder et *al.* (2004) and confines the *Ṣukūk* model into less risky asset classes that fit the needs of some specific types of investors.

We assume that the GLS is issued in US dollars. This is consistent with the finding of Ruban et *al.* (2008), suggesting that issuance in local currency is much more expensive than in foreign currency[8].

The flow of the transaction can be briefly described as follows:

A country plans to build a non revenue generating project that requires a capital K. The required fund can be raised in a Sharīʿah compliant way, through the issuance of GLS. The two counterparts in the contracts (i.e. the government and the *Ṣukūkholders*) agree to link the return to the GDP development of the country, with initial profit rate of $x^o\%$. For the simplicity of the analysis, an annual periodic

[7] The authors named this new instrument 'Trill' referring to the value of the annual dividend payment which would be one – trillionth of the US GDP.

[8] It is worth mentioning that other authors (e.g. Costa, et al. (2008)) are of different view as they consider that external liabilities denominated in foreign currency played a central role in many emerging countries crises.

payment of the profit is assumed. For a given year k, the profit rate x^k % is variable, and depends on the GDP development (i.e. the country economic performance) and on the GDP growth rate chosen as baseline.

With this background information, the Annual Return in year k (AR^k) on the GLS can be written as follows:

$$AR^k = x^k\,\% = I^k \times x^o\% \qquad (1)$$

And

$$I^k = \frac{G^k}{G^0} \qquad (2)$$

Where:

- $x^o\%$ is the initial rate of profit agreed upon by the parties at the beginning of the contract.
- x^k % is the rate of return at the kth year, after issuance.
- G^o is the growth rate of the GDP agreed upon by the contracting parties as baseline in year 0, i.e. at the beginning of the contract.
- G^k is the growth rate of the GDP at year k.
- I^k is an index that measures an increase or a decrease of the growth rate of the GDP in year k, as compared to that of the baseline.

It may happen that the issuing country experiences a negative growth rate; in that case I^k will be negative which would result in a negative payment. To avoid such a scenario, the contracting parties may agree on a minimum rate to be paid if the growth is to be negative. In this study the minimum rate is assumed to be 0. With this additional condition, equation (1) becomes:

$$AR^k = \max[x^k\% \;;\; 0\,] \qquad (3)$$

It is clear that the minimum return of 0 is just for the purpose of the simulation to see the extreme cases as it would not be fair to the *Ṣukūkholders* whose money would have already been put for good use regardless of the economic situation of the issuing country.

Two cash flow structures for the GLS are possible:

- The principal K is divided into n equal shares and paid along with the annual profit over the tenor. In this case, the *Ṣukūkholders* receive, in year k, an Annual Payment AP^k of:

$$AP^k = \frac{K}{n} + AR^k \times K = K \times (\frac{1}{n} + AR^k) \quad (4)$$

- The principal K is paid at maturity in year n, and every year only the profit portion is paid:

$$AP^k = K \times AR^k \quad (5)$$

The payment can be annual or semi-annual as agreed upon by the parties. The amount to be paid is calculated based on the GDP figure of the previous year or half a year.

With this design, the profit rate is variable, as the case would be if the returns to the *Ṣukūk* were linked to another indicator like LIBOR and the principal is protected. Thus, the GLS provides an avenue for addressing the issue of benchmarking the return on some Sharīʿah compliant financial instruments against interest rate.

3.1.2. Pricing the GLS

The assumption made for this valuation as well as for the simulations is that the investors have long term horizon and their intention is to 'buy-and-hold' the *Ṣukūk*. They liquidate their position only when some unforeseen circumstances force them to do so. This assumption, which is consistent with the prevalent behavior in the *Ṣukūk* market, implies that only the future cash flows, in the form of periodic profit and principal payment at maturity, matter for the *Ṣukūkholders*. It has the advantage of isolating the negative impact that speculators would have on the *Ṣukūk* price, meaning that only the real performance of the economy imports for the yield. The assumption is theoretically well grounded. The prominent economist Keynes (1936) severely charged the speculative activities which consist of forecasting the psychology of the market that he distinguished from enterprise, defined as the activity of forecasting the prospective yield of assets over their whole life. He further maintained that:

> *Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done."* (Keynes 1936; pp. 102-106).

With this in mind, the valuation of the GLS, in the secondary markets, at any point of time before maturity follows the same logic as the valuation of bonds which consists of calculating the present value of future cash flows.

To simplify the discussion, we consider the second scenario presented above whereby the periodic payment is constituted of only the profit portion AP^k while the principal K will be paid at maturity. The price of GLS at any point of time before maturity is given by:

$$PV = \sum_{k=1}^{n} \frac{AP^k}{(1+r)^k} + \frac{K}{(1+r)^n} \qquad (6)$$

Where:
PV = the present value of GLS;
n = the number of periods (e.g. years) from the date of valuation to the maturity date;
AP^k= the cash flow at period " k " which represents the value of the share of profit at that period. AP^k is obtained based on equation (5).
K = is the principal that the *Ṣukūkholders* disbursed for the development of the project.
r = is the required rate of return to the *Ṣukūkholders*.

There are two unknowns that need to be estimated for the determination of PV, i.e. the fair price of GLS: the periodic cash flow AP^k and the required rate of return r. It is worth remarking that the required rate of return is positively related to the uncertainty or risk associated with AP^k. Therefore, the key point in the pricing exercise resides in the accurate estimation of the risk associated to AP^k which depends on the economic performance of the issuing country in year k.

According to Costa et *al.* (2008), who studied price behavior of the Argentina-Indexed Warrant, after its successful introduction to the market, the yield at which these new instruments were implicitly discounted can be broken down in three components: (1) the risk free rate which represents an opportunity cost, (2) a default premium, (3) a residual premium, identified as novelty premium. For the GLS, all these components would be relevant beside the economic growth risk premium that would compensate the investors for bearing the country growth risk.

An issue that may arise is the determination of a proxy for the risk free rate knowing that in an Islamic finance framework interest is banned and any gain should be associated with risk as stipulated by the famous legal maxim '*al ghunm bil ghurm'*. However, for the simplicity of the analysis, we consider the return on *Muḍārabah* deposits as proxy for opportunity cost. *Muḍārabah* deposit carries, in

practice, a return similar to conventional fixed deposits, although there are very different in theory (Rosly and Zaini 2008). Hence, the risk free rate component, which is a proxy for opportunity cost, would be replaced by the return to *Muḍārabah* deposits, assuming that the *Ṣukūkholders* would be able to put their money in a *Muḍārabah* account if they wish.

The *Ṣukūkholders* will be exposed to the default risk. However, the risk would be lower compared to the credit risk carried by a plain vanilla bond or a *Ṣukūk* linked to a variable interest rate benchmark. This stems from the construction of the GLS which matches the payment obligations to the payment ability. When the GDP growth is low, government revenues proportionally decline but the payment to the *Ṣukūkholders* declines too. This feature makes the probability of default for GLS lower than the conventional bond and it is translated into a lower default premium (Ruban *et al.* 2008).

Growth risk is another element that needs to be accounted for the determination of the discount rate for the GLS. As indicated by equation (1), x^k % is a function of x^o % and I^k. The latter variable depends on the baseline growth rate and the rate of growth in year k. While G^o is a matter of agreement between the parties, G^k is rather determined by the economic conditions of the issuing country, and it represents the key variable meant to capture the economic rationale of GLS. This is because the Annual Return will vary in function of the variations of G^k.

Lastly, Costa et *al.* (2008) show that investors require a premium for new financial instrument termed as novelty premium. The findings of the authors, nonetheless, suggest that this type of premium is likely to decay fast over time, as the market participants became familiar to the instrument. This is confirmed by the results of the study carried out by Borensztein and Mauro (2004) as well as that of Kamstra and Shiller (2009) who found that the premium would be relatively small.

In sum, the forgoing analysis points out that the components of the discount rate r for the determination of the present value of the GLS at any point of time before maturity are as follows:

$$r = r_d + \text{default premium} + \text{growth risk premium} + \text{novelty premium}.$$

Since the GLS are assumed to be issued in US dollars, the exchange rate risk is relatively negligible for foreign investors.

The discussion thus far carried out shows that the GLS are likely to be priced higher than the conventional debt instruments, particularly in the first stage of their introduction to the market. However, the opportunities that they offer for a better management of a country debt make it worthwhile to pay for the additional costs. The recent debt crisis in some countries of the European Union proves that, when they occur, debt crises are costly not only for the country in question, but also for the investors and the international community.

Having thus, discussed the economics and the mathematical formulation of the GLS, the next step is to discuss few issues that may arise from a *Fiqhi* perspective.

3.2. An Analysis of the Model from Sharīʿah Perspective

3.2.1. Sharīʿah justification of GLS

Sharīʿah compliance is a necessary condition for any product to be acceptable in Islamic finance. Two main aspects of Sharīʿah compliance can be identified:

- Conformity to the key Sharīʿah rulings pertaining to commercial transactions, such as the principle of mutual consent, the prohibition of *Ribā*, *Gharar*, *Maysir* and illicit goods.
- Upholding *Maqāṣid al-*Sharīʿah (the objectives of Sharīʿah) in transactions which consist of the realization of *Maṣlaḥah* in the outcome and the achievement fairness in the terms of the contract[9].

Showing the Sharīʿah compliance of the GLS requires, therefore, testing them against the elements in the two aforementioned aspects.

Analyzing the conformity of a product to Sharīʿah principles in the light of the first aspect (i.e. key Sharīʿah ruling in commercial transactions) can be carried out in two equivalent ways. The analysis can be done indirectly, by showing that the product is in conformity with each of the five elements mentioned under that aspect. The analysis can also be done directly by proofing that the underlying transaction fits one or a combination of Sharīʿah nominate contracts. We adopt the latter method as it appears more convenient.

Istiṣnāʿ would certainly be the most appropriate concept for project development. However, the non-tradability of *Ṣukūk Istiṣnāʿ* makes them less

[9] See Diaw and Boon Ka (2010) for elaboration.

attractive as a fund raising instrument in the capital market. On the other hand, a simple *Ijārah* would require the delivery of the asset to justify the rental payment. Forward *Ijārah* (*Ijārah al-mawsūfah fī al-dzimah*) overcomes this shortcoming and can be taken as the underlying *Fiqh* concept for GLS. This structure allows the *Ṣukūkholders*, through their representative, to undertake the construction of the project, lease it to the government and receive the payments (principal + profit), over the tenor of the project.

Forward lease is a sale of future benefits or usufructs for a price which can be paid in advance or deferred. The concept could be used for infrastructure projects whereby the government fully describes the specifications of the infrastructure to be delivered in the future. Thus, a SPV can enter into a contract of forward lease with the government for the usufruct of an asset to be delivered, and then issues *Ṣukūk* for the needed amount. This method is stronger than a mere promise to rent which is not binding and its non-fulfillment only implies compensation for actual damage (Lahsasna 2010; Abu Ghuddah, (n.d.)). According to Nasar (2009, [2]) Forward lease is endorsed by the majority of the Muslim jurists (*Mālikīs*, *Shāfi'īs* and *Hanbalīs*) who consider it a form of Salam contract. Thus, the legality of Forward *Ijārah* is derived from that of two basic contracts which are Salam and *Ijārah*.

Once the contract is concluded in this stage the delivery of the project as specified is on the liability of the *Ṣukūkholders* whereas the Government is liable to pay the price K+P (i.e. invested capital plus profit). With the forward lease contract, the *Ṣukūk* will be tradable in the secondary market, once the project starts.

If the first mode of payment (as in equation (4)) is adopted, then the transfer can be done for free at the end of the contract. But if the second mode is adopted (as in equation (5)), then the *Ṣukūk* are to be redeemed at their nominal value, for instance. AAOIFI (2004a) and Islamic Fiqh Academy, in its Resolution No. 110(4/12), have accepted the transfer of ownership through a separate contract of gift. AAOIFI has also endorsed the redemption of *Ṣukūk Ijārah* for nominal value, in its 2008 statement.

Since *Ijārah* is a sale of usufruct, the price should be known at the beginning, for otherwise there will be *Gharar*. Nevertheless, it is allowed to have different lease contracts for subsequent periods with different rentals agreed upon at the beginning of each contract. For instance, a country X may issue GLS in March 2010, with tenor of 5 years and a rental payable annually in June, every year. This contract can be considered as a succession of 5 lease contracts of one year each. At the beginning of each period, i.e. in March, the contracting parties sign the new contract which lasts

for one year. The first annual payment would occur in June 2010, based on the GDP figure of 2009. Such an arrangement would allow taking into account the usual lag for publishing GDP data and the collection of the taxes.

As for the second aspect of Sharīʿah compliance i.e. upholding the objectives of Sharīʿah in transactions, the GLS clearly constitutes a *Maṣlaḥah*. This is because, not only they allow deals that benefit the contracting parties but also they do it in a better way than many traditional investments. Investment is supposed to support productive activities, however, it is not evident that many investments in the stocks market and mutual funds serve the real economy. The GLS, as designed above, do. The proceeds from the *Ṣukūk* issuance are normally used by the issuer for developing infrastructure projects that ultimately add value to the economy. Hence the GLS constitute a *Maṣlaḥah* in that their outcomes are beneficial to the society.

The terms of the contracts in the GLS model are balanced. This is evidenced by its risk sharing characteristics. By accepting to have an exposure to the economic performance of the issuing country, the *Ṣukūkholders* share with it the upside and downside of its economy. Thus, the interests of the contracting parties move in the same direction, and that constitutes a form of fairness in the terms of the contract.

3.2.2. The Issue of indexation

The issue of indexation has, for a long time, drawn the attention of the contemporary Muslim scholars as evidenced by the numerous seminars held under the auspice of Islamic Fiqh Academy, to discuss the issue. One of the reasons for this particular attention is the fact that with the prohibition of *Ribā* in all its forms, the amount of a debt should remain unchanged even though the purchasing power of the currency falls for one reason or another. This could put a creditor in an uncomfortable situation. Thus, based on the experts' research on the matter, the Islamic Fiqh Academy Resolution No. 115 (9/12), states that:

> *"In principle debts that have already been created in terms of a certain currency should be repaid in terms of that same currency and not in terms of an equivalent value, because a debt has always to be settled with its exact similar. It is therefore impermissible to link the already existed debts, whatever their source might be, to price level"*

Further in the same Resolution, the Academy emphasizes that it is impermissible from a Sharīʿah viewpoint to link, at the time of concluding a debt, the repayable amount to variable, like gold and silver, growth rate of Gross national Product

(GNP), interest rate, price of a basket of commodities. The prohibition is due to the presence of a great deal of *Gharar* and uncertainty in that indexation, since neither of the parties knows what will be the commitment at the end.

The indexation in the GLS model is, however, different from that one dealt with in the Resolution. In the Resolution the condition of the variability of the amount to be repaid is contained in the same contract that creates the debt. But in the context of GLS, there is a succession of *Ijārah* contracts and the rental of each is known at the beginning. It is the same procedure that is used to link the return in *Ṣukūk Ijārah* to LIBOR. It follows from this basic difference that the prohibition in the Resolution does not concern the form of indexation practiced with GLS.

4. GDP-Linked *Ṣukūk*: Empirical Analysis

The GLS are new model which is not yet introduced to the market. Therefore, it is not possible to observe the behavior of their returns. Thus, to test the effectiveness of the model we look into the characteristics of the returns by applying backtesting method.

Thus the simulations permit the study of the behavior of the proposed models under various scenarios to unveil their risk-return profiles. They also make it possible to compare their hypothetical returns to that of some standard benchmark for debt and equity instruments. With the simulations results the diversification opportunities offered by the models are also examined.

4.1. Backtesting GLS: Method and data

Backtesting is a method that permits the comparison of the ex ante forecast from a model to the actual or ex post realization of the variable of interest. (Christoffersen 2008).

Backtesting has been used in the academia as well as in the finance industry to detect possible flaws in a model and check the consistency of its predicted properties. In risk management backtesting has been employed systematically to test the accuracy and efficiency of the Value-at-Risk (VaR) models which are extensively used to manage market risk. The Basel Committee on banking Supervision (BCBS) has endorsed the use of backtesting in conjunction with the internal models approach to determine market risk capital requirements. Thus, the backtest help evaluate and validate the model being used internationally by banks in agreement with the regulatory body (BCBS 1996; Lehikinen 2007, p.24).

The objective of the backtesting is to see what would have happened if the GLS were issued in some selected developing countries few years back. Thus, five countries from different regions of the Muslim world are chosen. These are: Algeria, Bahrain, Malaysia, Senegal and Uzbekistan. It is expected to get useful insight from this diversity, given the relative integration of economies from a same region. Thus, each of the five countries comes from a different region of the Muslim world. Table 1 shows the correlations coefficients between the selected countries and their respective regions from 1990 to 2009.

Table-1
Correlation Coefficients between GDP Growth Rate of the Selected Countries and that of their Respective Regions from 1990 to 2009

	World	North Africa	Middle East	South East Asia	Sub Saharan Africa[10]	Former Soviet Union[11]
Algeria	0.228	0.607	0.231	-0.324	0.740	0.642
Bahrain	-0.012	-0.241	0.443	0.248	-0.087	-0.028
Malaysia	0.449	-0.304	0.403	0.969	-0.157	-0.339
Senegal	0.585	0.506	0.245	-0.094	0.591	0.496
Uzbekistan	0.204	0.463	0.255	-0.288	0.768	0.909

Except Bahrain, for each of the selected countries the correlation coefficient of the GDP growth rate with that of its corresponding region is grater than 0.5. This strong correlation suggests that the results of the backtest obtained from the sample would be valid for the vast majority of Muslim countries which are the potential issuers of the GLS.

The real GDP of the selected countries from 1969 to 2009, in 2005 dollars, are obtained from Economic Research Service of the United States Department of Agriculture. The choice of real GDP is explained by the fact that it isolates the effect of inflation on GDP figures and, thus, constitutes a more accurate measure of economic performance than the nominal. We retrieved from the internet[12] the 6-Month LIBOR rates for the specified period, and then computed the annual average. The annual returns for the MSCI World are also collected from DataStream. MSCI World is a stock market index of 1500 stocks from 23 developed countries. LIBOR

[10] Excluding South Africa.
[11] Excluding Russia and Ukraine.
[12] www.wsjprimerate.us, accessed on July 11, 2010.

and MSCI World can be considered as global benchmarks for two asset classes (i.e. debt and equity). The correlation coefficients between the countries indices and the annual rates of return for LIBOR and MSCI are computed to examine the diversification opportunities that the introduction of GLS would provide to those portfolios which are highly correlated to these 2 benchmarks.

The construction of the Annual Returns for each country is as follows:

i. The Index I, as in equation (2) is first constructed using the GDP data:

$$I^k = \frac{G^k}{G^0}$$

Where:

- G^o is the growth rate of the GDP agreed upon by the contracting parties as baseline in year 0. For this backtest, 1995 is taken as year 0 and G^o represents the moving average of the growth rate of the country from 1970 to year kth. Where $1 \leq k \leq 11$, i.e. from 1996 to 2006. The moving average is of nature to reduce the volatility of the index as compared to the normal average, since it also captures the most recent development of the GDP.
- G^k is the growth rate of the GDP at year kth.
- I^k is an index that measures an increase or a decrease of the growth rate of the GDP in year kth, as compared to that of the baseline.

Thus, I^5 represents the value of the index in the 5th year, i.e. in 2000, and G^0 the average rate of growth from 1970 to 2000.

ii. The following step is the computation of the Annual Return, based on equation (3):

$$AR^k = \max[x^k\% \ ; \ 0\ ] \ = \ \max[I^k \times x^o\% \ ; \ 0\ ]$$

- $x^o\%$ is the initial rate of profit agreed upon by the parties at the beginning of the contract. For the sake of comparability $x^o\%$ is set at 5% which is close to that of 6-Month LIBOR rate in January 1996.
- $x^k\%$ is the rate of return at the kth year, after issuance.

4.2. Analysis of the results

Tables 2, provides a summary statistics for the annual values of the indices and the annual rates of returns of the GLS over the 11 years.

Table-2
Summary Statistics for GLS for the period 1996-2006

	Index (I)	Average Return	Annual average 6-Month LIBOR	MS WRLD$ Index Average Return
Algeria				
Average	0.97	4.87	4.28	8.01
Std Dev.	0.44	2.19	1.90	17.53
Bahrain				
Average	1.51	7.57	4.28	8.01
Std Dev.	0.34	1.69	1.90	17.53
Malaysia				
Average	0.76	3.80	4.28	8.01
Std Dev.	0.40	1.99	1.90	17.53
Senegal				
Average	1.53	7.66	4.28	8.01
Std Dev.	0.59	2.96	1.90	17.53
Uzbekistan				
Average	2.79	13.95	4.28	8.01
Std Dev.	0.83	4.16	1.90	17.53

For 3 countries (Bahrain, Senegal, Uzbekistan), the average value of the Index would have been greater than 1 implying higher costs for the issuing countries (but higher return for the investors). The highest increase was recorded with Uzbekistan whose average payment obligation would have increased by 179%. On the other hand, the lowest average Index is that of Malaysia, with a value of 0.76, implying a decrease of 24% of the average payment obligation as compared to its initial value. Except Uzbekistan, the average returns and the standard deviations of the GLS are less than that of MSCI Index.

A closer investigation of the reasons for the contrast between the Malaysian scenario and that of Uzbekistan corroborates a point that we made earlier pertaining to the variables that would have greater impact on the value of the Index or the Annual Return. By considering the average growth rate of these two countries in the two sub-periods before the issuance (i.e. 1970 – 1995) and after the issuance (i.e. 1996 – 2006), it appears that the two economies evolved in a contrasted fashion. For the first sub-period, the average growth rate is 7.4% and 1.6% for Malaysia and Uzbekistan respectively, whereas the figures are 4.84% and 4.88% in the second sub-period. It is worth noting that Malaysia was hit by a severe financial crisis in 1997

that badly affected the economic performance of the country in subsequent years. Whereas, Uzbekistan experienced an economic improvement after the dislocation of the Soviet Union to which it belonged. Thus, if the changes in the Index for Malaysia are within acceptable limits - as they are in line with the economic rationale of the GLS - that is not the case for Uzbekistan which would have been overburden due to a poor design of the instrument. It follows from this remark that some precautions should be taken when designing the GLS. First, a reasonable forecast of the growth prospects of the issuing country is key element for the choice of the baseline growth and hence for the avoidance of sharp fluctuations. Second, the setting up of ceiling and floor for maximum and minimum payments is also important to avoid the bad effects of wrong forecast or inaccurate estimations that may lead to extreme fluctuations.

For the sake of comparison, the 5-years Malaysian sovereign bonds over the same period (i.e. 1996 – 2006) had an average yield of 4.9%, while the average return on the Malaysian Global *Ṣukūk*, issued in 2002, is 3.93%. both figures are higher than the average return on GLS over the period of the study which is 3.8%. This result substantiates the point that GLS is not necessarily more expensive than the traditional instruments already in the market.

The results of the backtest show that, as they are designed, the GLS would satisfy the main purpose of their introduction. Thus, Algeria and Malaysia which had economic difficulties during the period would have made lower payment and the contrary is true for the other countries.

Graph 1 shows the evolution of the GLS annual returns over the period of study. Uzbekistan recorded the highest and most volatile annual return for the whole period, whereas Malaysia is the only country which would have not payment in one occasion (i.e. in 1998, after the Asian crisis).

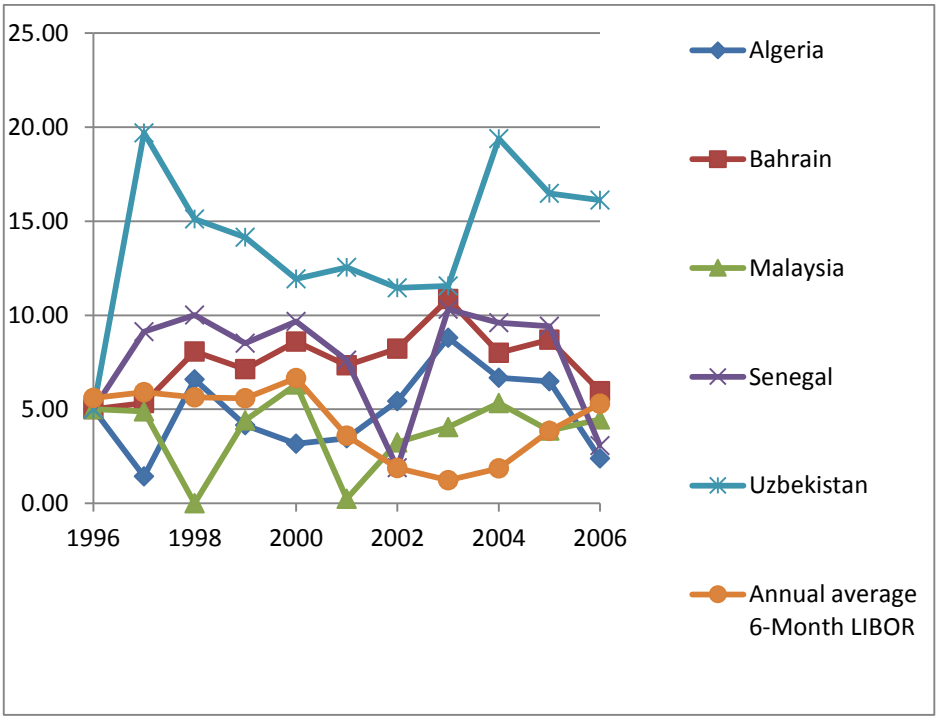
Between these 2 extremes the remaining GLS annual returns exhibit different behaviors, with values that vary within the range of 1% to 11%.

From the investor perspective, the choice to include the GLS to his portfolio depends very much on the diversification opportunities that they provide. To analyze this aspect, we follow Schroder *et al.* (2004) by considering a method of portfolio optimization in the Markowitz mean–variance framework. This method indicates that to include a new financial asset A in a portfolio P the following equation should hold:

$$\frac{R_A - r}{\sigma_A} > \frac{R_P - r}{\sigma_P} \cdot \rho_{A,P} \qquad (7)$$

Where R_A and R_P are the average returns of A and P; $\rho_{A,P}$, σ_A , and σ_P represent respectively the correlation coefficient and standard deviation of A and P; r is a risk free rate. Within this framework, a financial asset is eligible for inclusion to the portfolio if its Sharpe Ratio (i.e. the left-hand side of (7)) is greater than the Sharpe Ratio of the portfolio time the correlation coefficient of the two (i.e. the right-hand side of (7)). Thus, the value of the correlation coefficient is crucial, as, for instance, if the Sharpe Ratio of the portfolio is 2 times greater than that of the new asset, the latter could be included to the portfolio if the correlation coefficient is less than 0.5.

Graph-1
GLS (hypothetical) Annual Returns for the period 1996-2006



This intuitive approach shows, without need to any detailed calculations, that the GLS would provide a good avenue for diversification to all the portfolios that are highly correlated to LIBOR and MSCI Index, as suggested by the results in Table 3.

Indeed, all the correlation coefficients are less than 0.4, some having even negative values.

Table-3
Correlation Coefficients between the GLS Annual Returns and Selected Benchmarks

	Algeria	Bahrain	Malaysia	Senegal	Uzbekistan
Cor. Coef. (I, LIBOR)	-0.67	-0.60	0.13	0.06	-0.04
Cor. Coef. (I, MSWRLD$)	0.34	0.02	0.10	0.38	0.21

4.3. Hypothetical example

A Muslim Country X has an important program for infrastructure development in the next decade. Given the illiquidity in the credit market as a consequence of Global Financial Crisis, Country X wants to diversify it funding sources and tap the excess liquidity in the GCC region by issuing *Ṣukūk*. On the other hand, the debt crisis in the Euro zone constituted a compelling argument for the government authorities in Country X to fund an important share of these infrastructure projects through state-contingent *Ṣukūk* (e.g. Commodity-Linked *Ṣukūk* and GDP-Linked *Ṣukūk*). An amount K= $ 1 billion is needed to build schools, universities and hospitals in different districts of Country X. Country X decides to raise the capital K= $ 1 billion through the issuance of a 10-year GLS, in March 2011 with initial annual profit rate of 8% (i.e. the amount of the first year rental = $ 80 million). As the owners of the projects, the *Ṣukūkholders* will lease the assets (i.e. schools, universities and hospitals) to Country X government which will buy them at maturity for $ 1 billion. Based on the forecast made by some international financial institutions, Country X GDP growth rate over the next ten years has been estimated and the parties agreed on the baseline GDP growth rate. Further, the parties agreed to set a ceiling and a floor of 50% up and down of the Index (I)[13]. This means that with an initial value of I =1, the maximum and the minimum values that I can take are 1.5 and 0.5 respectively. Thus, the various estimated I and the corresponding Cash Flow (CF_k)[14] are as in the following table:

[13] Based on equation (2).
[14] Based on equations (5).

Table-4
Hypothetical Values of I and CF_k for Country X GLS

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
I	1	1.08	0.96	0.79	0.68	0.5	0.73	1.03	1.44	1.5
CF_k ($ Mil.)	80	86.4	76.8	63.2	54.4	40	58.4	82.4	115.2	120

For this type of *Ṣukūk* the investors currently require a 7% rate of return. Given that the face value of unit of GLS is $ 1,000, Country X needs to evaluate the Present Value (PV) of cash flows, to determine the number of units of *Ṣukūk* to be issued. Thus we have:

$$PV = \sum_{k=1}^{10} \frac{CF_k}{(1.07)^k} + \frac{K}{(1.07)^{10}} = \$\ 1{,}042.92\ Million$$

To raise the needed fund, the government of Country X has to issue 958847 units of GLS at $ 1,042.92 per unit.

5. Conclusion

In this paper we made a case for GDP-Linked *Ṣukūk* as an effective tool for non revenue generating infrastructure projects financing in a Sharīʿah compliant way. The GLS allow the synchronization of the payment obligation of the issuing government with its payment ability. With the GLS, the investors' capital is guaranteed but the profit rate is function of the performance of the economy. The theoretical analysis as well as the empirical evidence suggests that the returns on the GLS are higher than that on comparable straight bond as the risk is higher with the former. However, the results of the simulation suggest the presence of interesting diversification opportunities with the GLS. From the issuer perspective, GLS appear more expensive than the traditional debt instruments for fund raising, but GLS offer better opportunities for debt management. To prevent sharp fluctuations of the profit rate, we propose the setting of ceiling and floor for that rate.

In the *Ṣukūk* literature, many writers have complained of the complexity of certain *Ṣukūk* structures whose construction involves necessarily additional advisory fees compared to the standards financial instruments. We claim that the GLS model is simple by design as only one Sharīʿah concept is involved. Therefore, the contracting parties do not need to disburse exorbitant advisory fees for the construction and the endorsement of the structures. If we add to this characteristic the tradability of GLS

and its adherence to Sharīʿah principles, we reach the conclusion that the model is efficient in both technical and allocative sense, as defined above.

Kamstra and Shiller (2009) maintained that there is a trade off, in debt management, between low cost but volatile short-term debt and higher cost but more stable long-term debt. A government will certainly be concerned with the risk of a sharp increase of the cost of debt servicing during economic down turn when its budget can least afford it. They, thus, made a case for diversifying government obligations to reduce the budget crisis even though it means higher average cost for fund raising. The recent debt crisis in Europe gives credit to this argument. Financial instruments like GLS offer Muslim governments the opportunity to diversify their fund raising and address the issue of benchmarking the *Ṣukūk* against the interest rate. GLS would also be a suitable instrument to be used by institutions like Islamic Development Bank, International Monetary Fund and World Bank to finance projects in Muslim countries.

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[1] بحوث ندوة (الصكوك الإسلامية: عرض و تقويم) المنعقدة في جدة 10-11 جمادى الآخرة 1431 هـ, الموافق 24 – 25 مايو 2010 م, بالتعاون بين مركز أبحاث الإقتصاد الإسلامي و مجمع الفقه الإسلامي الدولي التابع لمنظمة المؤتمر الإسلامي, والمعهد الإسلامي للبحوث والتدريب عضو مجموعة البنك الإسلامي للتنمية.

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Portfolio Determination of A Zero-Interest Financial System Entity

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Abstract

Beginning in the 1930s and increasing significantly post-colonialism, some Muslims scholars have wondered about the divine edict of interest-free nominal sector and how to realize it in the context of modern mass deposit institution and wide, concentrated financing demand for trade, entrepreneurship and consumption ends. This undertaking has faced challenges posed by the interest-based nominal sector. Evidence has mounted about the limitations of interest-free banks in the way they are organized and, of late, the largely a theoretical way they do business and their business and political operative environment. For explaining the phenomenon and predicting events, a risk-discounted, expected profit objective function produces rules for inter and intra-sectoral allocation of funds. The non-homogeneity of mark-up and profit-loss-sharing products leads to adopting the average sizes of outlays in the two sectors as the choice variables. Identifying allocation rules for resources will benefit empirical analysis, banking policy and the central bank's monitoring effort.

Keywords: Islamic Finance, Interest, *Ribā*, Diversification, Portfolio, Risk Return, *Mushārakah*, *Muḍārabah*, *Murābaḥah*, Mark-up, PLS
JEL Classification: G10, G11
KAU-IEI Classification: F21, I0.

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1. Introduction

The interest-based financial system (IFS) and zero-interest financial system (ZIFS)[1] are two financial systems currently prevalent in the world. Since the 1980s, inspired by divine authority [Deuteronomy-23:19[2], Psalms-15:5 (WEB)[3]; Quran-2:275 (Asad)[4]], political reconfiguration and evolving financial clout, there has been a large-scale growth in ZIFS as a parallel system in parts of Africa, the Middle East and South and South East Asia. Although IFS is overwhelming in the lending market, according to Earnst & Young December 2012 report, ZIFS assets, which had been growing 50% faster than the overall banking sector assets with an average annual growth of 19% over the past four years, grew to $1.3 trillion in 2011, and is forecast to grow beyond $2 trillion by 2014.

So far as the IFS is concerned, a group of scholars view it as unjust (reward of a project is distributed in an inequitable manner first between the depositors and the bank, and then the bank and the borrowers; while the nominal factor's unearned income is guaranteed upfront payment much like real factors, the risks are being mainly borne by the borrower.) and inefficient (creditworthiness is stressed over promise of project productivity). They also believe that IFS is detrimental to stability during cyclical downturn when liabilities tend to exceed assets. Further, IFS creates money disregarding the potential end results of failed projects on inflation and business cycle fluctuations that affect society's welfare. However, as to ZIFS, even with many adherents as well as "successes"[5], the debate rages as to what constitutes it, whether it is operating per expectations and how efficient it has been.

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[1] Editor's note: The authors have used ZIFS to underscore its non-denominational, universal scope. However, Islamic finance is more than zero interest financial system.

[2] You shall not lend on interest to your brother; interest of money, interest of food, interest of anything that is lent on interest.

[3] He who doesn't lend out his money for usury nor take a bribe against the innocent, He who does these things shall never be shaken.

[4] Those who gorge themselves on usury behave but as he might behave whom Satan has confounded with his touch; for they say, "Buying and selling is but a kind of usury" - the while God has made buying and selling lawful and usury unlawful. Hence, whoever becomes aware of his Sustainer's admonition, and thereupon desists [from usury], may keep his past gains, and it will be for God to judge him; but as for those who return to it -they are destined for the fire, therein to abide!

[5] The empirical literature does find it wanting in many regards.

Regarding ZIFS, no doubt, there has been sizable comparative empirical evaluation of its practices, but one issue has gone unattended. While theoretical points have been made, there has been a lack of systematic economic modeling of this idea. Thus, the considerations, concerns and criticisms aside, other than applied banking activities conducted on an ad hoc theoretical basis, there is yet to be a formal understanding of the underlying objective function of the ZIFS entity and the associated conditions for optimization. It is not clear, perhaps due to modeling asymmetry that the typical marginal rules of optimization for a firm will apply here. So, no theoretically grounded comparative static analysis is possible that will guide bankers, researchers, and policy makers to assess whether the ZIFS is functioning efficiently. We hope to bring some technical order to this profoundly important but nascent subject matter.

In section 2, we give a brief literature survey relevant to our work. In section 3, we present our methodology and model, while before concluding in Section 5, Section 4 shows the results of our analysis.

2. Literature Survey

ZIFS approves two broad modes of financing. The most desirable (Siddiqi, 1988; Khan, 1992; Mirakhor, 1987; and Ahmed, 1985) and profitable one is the profit-loss-sharing (PLS) equity financing – *Muḍārabah* and *Mushārakah* - where return on capital depends on productivity, and allocation of funds is based on quality of the project rather than the credit worthiness of the borrower (Zaher and Hassan, 2001). It also approves mark-up (MU) financing – *Murābaḥah* – where an existing tangible asset is initially purchased by the bank at the request of the credit-seeking buyer and then resold to the buyer with a cost-plus profit on a deferred sale basis - where legal ownership is transferred following the last payment to the bank. An alternative version of this – *Istiṣnāʿ* - would be when, under a similar credit arrangement, "large", currently non-existent, tangible asset is ordered to be produced, such as a power plant or a ship.

Multiple theoretical and empirical analyses investigate the sectoral distribution of funds between MU and PLS. Khan (1995) documents that in financing investments MU has dominated PLS in spite of the prospect of higher profitability of PLS. Ahmed (2002) refers to similar finding. Contrary to the common expectations, this has been the case shortly after ZIFS financing was introduced. Khan (1983) explained this with the moral hazard hypothesis (MHH) which stipulates that the existence of an economic incentive not to report actual profit for personal gain leads to financial loss of the banks under PLS. As an instance of MHH

for Nigeria, Aburime and Alio (2009) cite tax avoidance as one reason for underreporting earnings by investors, while small businesses are shoddy at record keeping and large businesses understandably want to keep their financial accounts private. This, of course, disadvantages the ZIFS bank. So far MHH was the dominant reasoning accepted in the literature for the explanation of the dominance of MU system in ZIFS (Tag El-din, 1991; Siddiqi, 1988, 1993; al Qari, 1993). Khan (1995) argues that if MHH is the only reason for the dominance of MU financing, then the problem can very well be solved by designing a diminishing PLS contract where entrepreneur can buy the project out of the profits generated by the project, a share which has been heretofore fixed and permanent. Now, a permanent partnership would appear to be a backdoor means to asset ownership giving ZIFS banks dual economic goals – to finance and to own. Further, it would appear to contravene another pertinent Qur'ānic edict wherein the borrower drafts the contract [Quran-2:282 (Asad)]. How many borrowers would want their bankers to be permanent partners in ownership? The reward horizon benefitting the bank is simply too deep especially when the PLS borrower may be in a position to conclude that relationship and reduce its managerial obligations.

Khan (1995) points out that a new-comer investor would want a PLS contract because of the risk-sharing advantage. However, the ZIFS banker is not sure about such an entity because of potential Adverse Selection (ADS) problem. According to him, although disputable, even posting collateral does not allow proper differentiation as to investor's bankability. Regardless, one senses that Khan (1995) is struggling with the issue of allocation of funds under ZIFS: what was expected and what is happening, and how the differential may be remedied. Zahir and Hassan (2001) state that "MU contracts may open back door to interest. So, while permissible, it should still be restricted or avoided." While recognizing both MU and PLS, Chapra (1985), and Kahf and Khan (1992), realize that the former is more likely to violate the underlying religious bidding.

Further in the case of Pakistan, according to Khan (1995), the government borrows directly from the public at a very high, tax free interest rate (14%) while also seeking MU financing for some of its purchases. This likely raises expected mark-up rate and depletes incentive for ZIFS banks to explore PLS portfolio options more aggressively. Thus, the use of *Istiṣnā'*, although legal by the Letter of the Law, would appear to expand the reach of MU beyond what is sanctioned by the Spirit of the Law. Also, to the extent ZIFS banks use international money market rate (e.g., LIBOR) in determining the mark-up rate, (Zahir and Hassan, 2001), concern arises again as to whether that compromises the underlying ethics of this undertaking, while at the same time over-riding their own economic cost and local

market signal determining that rate. So, MU may be insulated and made artificially more profitable than it really is.

On the other hand, Hassan (2006) argues that the ZIFS entities lag in both technical and allocative efficiency. In his empirical analysis, from the relative point of best practice, ZIFS entities seem to operate at 84% technical efficiency and 73% allocative efficiency. The technical inefficiency is dubbed by him as X-inefficiency arising from managerial, structural, labor related, or other dysfunctions. That is, given the resources deployed regardless of allocative efficiency, they do not function at a level of relative technical efficiency comparable with alternative IFS banks. He thinks that perhaps limiting political appointees and increasing the number of properly trained stewards would mitigate such awkward performance. Regarding allocative inefficiency, Hassan (2006) uses three measurement tools, one of which is the cost minimization rule. Our model, however, will focus on profit maximization rule instead.

In this paper, we will show how ideally a profit maximizing ZIFS bank allocates funds between PLS and MU. We will also explain how an optimal sum deployed in either portfolio is further optimally allocated among multiple portfolio choices within the sector to achieve allocative efficiency. In the process, we will discover ways to regulate the flow of funds in either direction. Explanations are found why MU is dominating PLS in the current lending market.

3. Methodology and Model

Cost minimization and profit maximization are the two different ways of formulating optimization models in Economics and Finance. In measuring the efficiency of a bank, DeYoung and Nolle (1996) argue that cost-based models have the danger of misrepresenting the nature and the extent of inefficiency in banks. Berger and Mester (1997) are also of the opinion that profit maximization is superior to cost minimization to study firm performance as the former takes into account both revenue and cost into consideration. Because of the essential asymmetry to the two portfolio choices of a ZIFS bank that faces uncertain returns from projects undertaken, we formulate the objective function with an expected profit model that takes into account average amounts of investment per project. Also because of the risk differentials, we discount each sector's profit by the risk factor for each of the two possible portfolio choices as justified by Sharpe (1994).

Our objective here is to partition a fixed sum of loanable funds so that the expected rate of profit per unit of risk is equalized between the two choices. The

outcrop of this will be to obtain the optimal sectoral allocations of the total volume of available loanable funds together with the optimal average size of investment and the corresponding number of projects in each sector. Salvaged investment is included in our objective function as a part of the net profit. Also, compared to MU, for PLS, there is typically a delay before cash flow commences. Our objective function addresses this element by including a time variable to measure the opportunity cost that arises in choosing PLS over MU. So, our risk discounted expected profit function becomes:

$$DE(\pi) = \frac{Lb\left\{\frac{P_r r_r}{k_r} + (1 - P_r)S_r\right\}}{\sigma_r} + \frac{L(1-b)\{\frac{P_m r_m}{k_m} + (1-P_m)S_m - \frac{tP_r P_m r_r}{k_r}\}}{\sigma_m} = L\left[\frac{bA}{\sigma_r} + \frac{(1-b)B}{\sigma_m}\right] (1.0)$$

Here,

L = available loanable funds

b = fraction of money deployed as MU investments (sector r), $0 \leq b \leq 1$

(1 – b) = remaining fraction of money deployed as PLS investments (sector m)

P_i = Probability of successful investments in the i^{th} sector, where $0 \leq P_i \leq 1$, (i = r, m)

σ_i = Standard Deviation of number of successful investments in the i^{th} sector

S_i = Fraction per unit of unsuccessful investments in the i^{th} sector that is salvaged, $0 \leq S_i \leq 1$

t = Mean time difference between commencing PLS and MU cash flows, $t \geq 0$, implying PLS taking longer to mature

k_i = Average amount of investment per project in the i^{th} sector, $0 < k_i$

λ_i, δ_i = State (i.e., natural, political, or economic) variable that, respectively, positively and negatively affect the average profitability of the i^{th} sector

$r_i(b, k_i; \lambda_i, \delta_i)$ = Average per project of aggregate cumulative profit on investments in the i^{th} sector, where $r_{rb} < 0$, $r_{mb} > 0$, $r_{ik} > 0$; and $r_{i\lambda} > 0$ and $r_{i\delta} < 0$, where $r_i = \frac{\sum_{j=1}^{n_i}\sum_{t=1}^{T}(e_{i_{tj}} - c_{i_{tj}})}{n_i}$, and e_{itj} and c_{itj} are earning and cost (includes direct operational costs plus loan/investment outlay), respectively; T = average duration of any contract ($0 \leq T \leq N$, with N = average life-time of project)

$\frac{P_i r_i}{k_i}$ = Risk unadjusted expected average profit per project per unit of average investment outlay per project in the i^{th} sector

$(1 – P_i)S_i$ = Fraction of total outlay of unsuccessful investment in the i^{th} sector that is salvaged

$\frac{tP_r P_m r_r}{k_r}$ = Opportunity cost per unit of successful PLS investment in terms of foregone return on MU investment

$A = \frac{P_r r_r}{k_r} + (1 - P_r)S_r$

$B = \frac{P_m r_m}{k_m} + (1 - P_m)S_m - \frac{tP_r P_m r_r}{k_r}$

$DIF = \frac{A}{\sigma_r} - \frac{B}{\sigma_m}$ = Differential between risk discounted expected profit per unit of MU and PLS outlays, respectively.

Next, we derive the optimum values of the three choice variables (b^*, k_m^* and k_r^*) from the first order conditions from Equation (1.0)[6].

Then, from the first order condition $\frac{\partial DE}{\partial b} = 0$[7], we calculate the optimum value of b^*:

$$b^* = \frac{DIF^* + \frac{\left\{\frac{P_m r_{mb}}{k_m^*} - \frac{tP_r P_m r_{rb}}{k_r^*}\right\}}{\sigma_m}}{\frac{\left\{\frac{P_m r_{mb}}{k_m^*} - \frac{tP_r P_m r_{rb}}{k_r^*}\right\}}{\sigma_m} - \frac{P_r r_{rb}}{k_r^* \sigma_r}} = \frac{N}{D} \qquad (2.0)$$

Since $0 \leq b^* \leq 1$, and $D > 0$, N has to be ≥ 0.

For $b^* \geq 0$, $\quad DIF^* \geq -\frac{\left\{\frac{P_m r_{mb}}{k_m^*} - \frac{tP_r P_m r_{rb}}{k_r^*}\right\}}{\sigma_m}$ (3.0)

Again, for $b^* \leq 1$, $\quad DIF^* \leq -\frac{P_r r_{rb}}{k_r^* \sigma_r}$[8] (4.0)

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[6] $\partial A/\partial b = P_r r_{rb}/k_r < 0$ (i)
$\partial B/\partial b = P_m r_{mb}/k_m - tP_r P_m r_{rb}/k_r > 0$ (ii)
$\partial A/\partial k_r = P_r[k_r r_{rk} - r_r]/k_r^2$ (iii)
$\partial B/\partial k_r = -tP_r P_m[k_r r_{rk} - r_r]/k_r^2$ (iv)
$\partial A/\partial k_m = 0$ (v)
$\partial B/\partial k_m = [P_m(k_m r_{mk} - r_m)]/k_m^2$ (vi)

[7] $L[(A + b\partial A/\partial b)/\sigma_r - \{B - (1 - b)\partial B/\partial b\}/\sigma_m] = 0$
Substituting (i) & (ii) above and simplifying,
$[\{A + bP_r r_{rb}/k_r\}/\sigma_r - \{B - (1 - b)\{P_m r_{mb}/k_m - tP_r P_m r_{rb}/k_r\}\}/\sigma_m] = 0$
Next, substituting for 'A' and 'B' above,
$[\{P_r r_r/k_r + (1 - P_r)S_r + bP_r r_{rb}/k_r\}/\sigma_r - \{P_m r_m/k_m + (1 - P_m)S_m - tP_r P_m r_r/k_r$
$- (1 - b)\{P_m r_{mb}/k_m - tP_r P_m r_{rb}/k_r\}\}/\sigma_m] = 0$
Or $\quad bP_r r_{rb}/k_r/\sigma_r - b\{P_m r_{mb}/k_m - tP_r P_m r_{rb}/k_r\}/\sigma_m = -\{P_r r_r/k_r + (1 - P_r)S_r\}/\sigma_r + \{P_m r_m/k_m + (1 - P_m)S_m - tP_r P_m r_r/k_r - \{P_m r_{mb}/k_m - tP_r P_m r_{rb}/k_r\}\}/\sigma_m$
Or $\quad b = [-\{P_m r_m/k_m + (1 - P_m)S_m - tP_r P_m r_r/k_r - P_m r_{mb}/k_m + tP_r P_m r_{rb}/k_r\}/\sigma_m + \{P_r r_r/k_r + (1 - P_r)S_r\}/\sigma_r] /[-P_r r_{rb}/k_r\sigma_r + P_m r_{mb}/k_m\sigma_m - tP_r P_m r_{rb}/k_r\sigma_m]$

[8] For $N/D \leq 1$, $[DIF^* + \{P_m r_{mb}/k_m^* - tP_r P_m r_{rb}/k_r^*\}/\sigma_m] \leq [-P_r r_{rb}/k_r^*\sigma_r + P_m r_{mb}/k_m^*\sigma_m - tP_r P_m r_{rb}/k_r^*\sigma_m]$

Equations (3.0) and (4.0) determine the upper and lower limits of the risk discounted expected profit per unit differential between PLS and MU investments.

$$-\left[\frac{\left\{\frac{P_m r_{mb}}{k_m^*} - \frac{tP_r P_m r_{rb}}{k_r^*}\right\}}{\sigma_m}\right] \leq DIF^* \leq -\frac{P_r r_{rb}}{k_r^* \sigma_r} \qquad (5.0)$$

When DIF^* is equal to the right-hand side, the risk discounted expected profit per unit from MU investment is large enough to channel all funds into MU. As DIF^* falls short of the right-hand side, b^* decreases, and a combination of MU and PLS investments ($0 < b^* < 1$) becomes profitable. Again, when DIF^* is small enough to equal the negative left-hand side term, $b^* = 0$, and all loanable funds are invested in PLS.

Next, we derive the optimum values of the two choice variables (k_m^* and k_r^*) from the first order conditions from Equation (1.0)[9],

$$\frac{\partial DE}{\partial k_m} = 0$$

Or

$$L(1-b)\frac{\left[\frac{P_m(k_m r_{mk} - r_m)}{k_m^2}\right]}{\sigma_m} = 0$$

Or

$$k_m^* = \frac{r_m}{r_{mk}} \qquad (6.a)$$

We may rewrite Equation (6.a) as average profit per unit of average outlay being equal to the marginal of average profit:

$$\frac{r_m}{k_m^*} = \frac{\partial r_m}{\partial k_m^*}\ ^{10} \qquad (6.b)$$

It may also be rewritten to take an expression of elasticity. Thus,

$$\frac{\partial r_m}{\partial k_m^*} \cdot \frac{k_m^*}{r_m} = 1 \qquad (6.c)$$

Again, using Equation (1.0),

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[9] $\partial A/\partial k_r = P_r[k_r r_{rk} - r_r]/k_r^2$ (i)
$\partial B/\partial k_r = -tP_r P_m[k_r r_{rk} - r_r]/k_r^2$ (ii)
$\partial A/\partial k_m = 0$ (iii)
$\partial B/\partial k_m = [P_m(k_m r_{mk} - r_m)]/k_m^2$ (iv)

[10] Substituting above from (iii) & (iv)

$$\frac{\partial DE}{\partial k_r} = 0$$

Or $$L[\frac{b\frac{(\partial A)}{\partial k_r}}{\sigma_r} + \frac{(1-b)\frac{\partial B}{\partial k_r}}{\sigma_m}] = 0$$

Or $$k_r^* = \frac{r_r}{r_{rk}} \qquad (7.a)$$

We may rewrite Equation (7.a) as average profit per unit of average outlay being equal to the marginal of average profit:

$$\frac{r_r}{k_r^*} = \frac{\partial r_r}{\partial k_r^*} \text{ [11]} \qquad (7.b)$$

In elasticity term, we get,

$$\frac{\partial r_r}{\partial k_r^*} \cdot \frac{k_r^*}{r_r} = 1 \qquad (7.c)$$

The expected signs associated with the change in b^* with respect to t, S_m, S_r, P_m, σ_m, P_r, and σ_r are given below. However, only the first three inequalities [(8.0), (9.0) and (10.0)] are unambiguously proven to be as anticipated. The rest of the signs are not definitive as expected because the magnitudes of certain variables are unknown:

$$\partial b^*/\partial t > 0 \text{ [12]} \qquad (8.0)$$
$$\partial b^*/\partial S_m < 0 \text{ [13]} \qquad (9.0)$$
$$\partial b^*/\partial S_r > 0 \text{ [14]} \qquad (10.0)$$
$$\partial b^*/\partial P_m < 0 \text{ [15]} \qquad (11.0)$$
$$\partial b^*/\partial \sigma_m > 0 \text{ [16]} \qquad (12.0)$$
$$\partial b^*/\partial P_r > 0 \text{ [17]} \qquad (13.0)$$
$$\partial b^*/\partial \sigma_r < 0 \text{ [18]} \qquad (14.0)$$

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[11] Substituting (i) & (ii)

[12] $\partial b^*/\partial t = [D(-P_mP_rr_{rb}/k_r\sigma_m + P_rP_mr_r/k_r\sigma_m) + NP_mP_rr_{rb}/k_r\sigma_m]/D^2 = [(N - D)P_mP_rr_{rb}r_{rk}/r_r\sigma_m + DP_rP_mr_{rk}/\sigma_m]/D^2 > 0$

[13] $\{-(1 - P_m)/\sigma_m\}/D < 0$

[14] $\{(1 - P_r)/\sigma_r\}/D > 0$

[15] $[D\{-r_m/k_m\sigma_m + S_m/\sigma_m + tP_rr_r/k_r\sigma_m + r_{mb}/k_m\sigma_m - tP_rr_{rb}/k_r\sigma_m\} - N\{-tP_rr_{rb}/k_r\sigma_m + r_{mb}/k_m\sigma_m\}]/D^2$
$= [(D - N)(r_{mb}/k_m\sigma_m - tP_rr_{rb}/k_r\sigma_m) - D(r_m/k_m\sigma_m - S_m/\sigma_m - tP_rr_r/k_r\sigma_m)]/D^2 > 0$, when $[r_m/k_m - S_m - tP_rr_r/k_r] < 0$

[16] $[D\{P_mr_m/k_m + (1 - P_m)S_m - tP_rP_mr_r/k_r\}/\sigma_m^2 - (D + N)\{P_mr_{mb}/k_m - tP_mP_rr_{rb}/k_r)\}/\sigma_m^2\}]/D^2 > 0$, when $[P_mr_m/k_m + (1 - P_m)S_m - tP_rP_mr_r/k_r > (1 + b)(P_mr_{mb}/k_m - tP_mP_rr_{rb}/k_r)$

[17] $[D\{(r_r/k_r - S_r)/\sigma_r + tP_mr_r/k_r\sigma_m - tP_mr_{rb}/k_r\sigma_m\} + N\{r_{rb}/k_r\sigma_r + tP_mr_{rb}/k_r\sigma_m\}]/D^2 > 0$, when $\{(r_r/k_r - S_r)/\sigma_r + tP_mr_r/k_r\sigma_m - tP_mr_{rb}/k_r\sigma_m\} > -b\{r_{rb}/k_r\sigma_r + tP_mr_{rb}/k_r\sigma_m\}$

[18] $[-D\{P_rr_r/k_r + (1 - P_r)S_r)\}/(\sigma_r)^2\} - N\{P_rr_{rb}/k_r\}/(\sigma_r)^2\}]/D^2 < 0$, when $[P_rr_r/k_r + (1 - P_r)S_r)] > -b[P_rr_{rb}/k_r]$

4. Results

Our formulation of the objective function is based on profit maximization, under perfect competition, using average revenue and average cost which necessarily deviates from the standard formulation based on total revenue and total cost. Our formulation is suitable in this case where neither MU nor PLS investments are homogeneous like 'Q' in [$\pi = PQ - C(Q)$] model. The adoption of average values for them as choice variables allows a form of homogeneity which makes formulation of the objective function easier. However, the advantage of using the average perspective for intra-sectoral allocation determination lies in the fact that the ZIFS bank will have wide latitude to vary the amounts of MU and PLS investments around the average amount. This converges with the practical reality of how any such bank generally operates. Although our derived rules are unique, they pose a challenge to interpret and use.

Equation (2.0) determines optimal inter-sectoral allocation, while equations (6.a), (7.a), (6.b), and (7.b), (6.c.) and (7.c) give symmetric results that suggest optimal intra-sectoral allocation. Equations (6.a) and (7.a) give us the optimal average MU and PLS investments that a ZIFS institute should put out, i.e., k_r^* and k_m^*. Given the optimal inter-sectoral allocation b^*, and that $k_r^* = \frac{b^* L}{n_r^*}$ and $k_m^* = \frac{(1-b^*)L}{n_m^*}$, we are simultaneously able to derive the optimal number of projects per sector, i.e., n_r^* and n_m^*. At equilibrium, according to equations (6.b) and (7.b), k_r^* and k_m^* are such that the average profit per unit of average outlay and the marginal of the average profit with respect to average outlay are equal.

Also at equilibrium, according to equations (6.c) and (7.c), another alternative explanation says that k_i^* is such that the elasticity of net average profit per project with respect to average amount of investment is equal to one (1) in both the sectors. In other words, with an optimal allocation, the percentage change in total outlay in MU/PLS must equal the percentage change in corresponding total profit. Thus, given the available loanable funds in a sector, the optimal number of projects within each sector should be such that the unit elastic point of this elasticity measure is reached. Note that uncertainty and risk play no role in the solution set identifying the optimal intra-sectoral allocation of average investment.

The inequality (5.0) shows that the amount of investment in MU/PLS depends on DIF*, the risk discounted expected profit per unit differential between PLS and MU investments. The lower is the DIF*, the lower is PLS investment. The conditions under which MU funding will dominate PLS funding include: high P_r, low P_m, low σ_r, high σ_m, high t and low S_m. Obviously, more funds will be in PLS in a region where P_m is significantly higher than P_r. Policy makers can increase S_m through subsidies (i.e. tax break for losses in PLS investments) or insurance to protects against losses in order to attract more funds into PLS. Also, ways to reduce σ_m and t will reduce reliance on MU and move funds to PLS if so desired. Effects of policy changes are explained in detailed below.

Effects of Policy Changes

To see the impact of a change in state variables (λ or δ) such as subsidies, taxes, tariffs, exchange rate, quotas, regulations, utility or industrial/export zone provision, minimum wages, better forecasting, improvement in public sector training of workforce, enforcement of the Rule of Law, etc., we will consider changes in b^*, k_m^* and k_r^* as outcomes of changes in relevant 'λ_i' or 'δ_i' (i = r, m) Thus, increases in λ_i and δ_i are understood to, accordingly, increase and decrease the profitability of projects supported by type-i loans. Since δ_i impacts in exactly the opposite way as does λ_i, so only derivatives with respect to the latter will be taken.

$$\frac{\partial b^*}{\partial \lambda_m} = \frac{-\frac{P_m r_{m\lambda}}{k_m^* \sigma_m}}{\frac{\left\{\frac{P_m r_{mb}}{k_m^*} - \frac{tP_r P_m r_{rb}}{k_r^*}\right\}}{\sigma_m} - \frac{P_r r_{rb}}{k_r^* \sigma_r}} < 0 \qquad (15.0)$$

$$\frac{\partial b^*}{\partial \lambda_r} = \frac{\frac{P_r r_{r\lambda}}{k_r^* \sigma_r} + \frac{tP_r P_m r_{r\lambda}}{k_r^* \sigma_m}}{\frac{\left\{\frac{P_m r_{mb}}{k_m^*} - \frac{tP_r P_m r_{rb}}{k_r^*}\right\}}{\sigma_m} - \frac{P_r r_{rb}}{k_r^* \sigma_r}} > 0 \qquad (16.0)$$

$$\frac{\partial k_m^*}{\partial \lambda_m} = \frac{r_{m\lambda}}{r_{mk}} > 0 \qquad (17.0)$$

$$\frac{\partial k_r^*}{\partial \lambda_r} = \frac{r_{r\lambda}}{r_{rk}} > 0 \qquad (18.0)$$

Equation (15.0) states that policies that increase the profitability of the PLS projects (subsidies, etc.) will reallocate funds from MU to PLS investments. Equation (17.0) indicates that an increase in the same variables additionally increases the average amount of investment per project in that sector, implying also that the optimal number of projects supported with loans will diminish. Equations (16.0) and (18.0) show symmetric results for MU investments.

For example, if in an economy wages and benefits are raised in the PLS sector (owing to subsidized lifestyle of citizen civilian population capable of working in this sector thereby raising expectation incommensurate with their potential productivity), while they are depressed in the MU sector (owing to the availability of low paid immigrant, blue collar and pink collar labor), profitability will decrease in the former sector and increase in the latter. According to equations (15.0 and 16.0), funds will be driven from PLS sector to MU. Of course, this is in the context of nascent industrial undertakings since established firms are likely to expand using their own resources.

Further, in the presence of trade surplus and low population pressure, commodity trade may be used extensively to substitute for goods produced domestically. Business in such products is readily amenable to MU loans (since prior-to-lending physical possession is easy) and when tangible profit flow is ignored as a criterion not to provide such loans. So, with limited drive for import substitution, MU is strengthened many folds.

Below, we check the cross-effects of λ_m (λ_r) on k_r^* (k_m^*). From Equations (6.a) and (7.a), respectively, we calculate $\frac{\partial k_m^*}{\partial b} = \frac{r_{mb}}{r_{mk}} > 0$ and $\frac{\partial k_r^*}{\partial b} = \frac{r_{rb}}{r_{rk}} < 0$. So,

$$\frac{\partial k_m^*}{\partial \lambda_r} = \frac{\partial k_m^*}{\partial b} \cdot \frac{\partial b}{\partial \lambda_r} > 0 \qquad (19.0)$$

$$\frac{\partial k_r^*}{\partial \lambda_m} = \frac{\partial k_r^*}{\partial b} \cdot \frac{\partial b}{\partial \lambda_m} > 0 \qquad (20.0)$$

In other words, the effect of policies that increase profitability in PLS (MU) sector is such that optimal average outlay in the counterpart MU (PLS) sector is increased. Interestingly, these symmetric and positive cross-reactions are the same as those in equations (17.0) and (18.0). It can also be shown that policies to increase profitability in PLS (MU) sector will also increase the average profit per project in the other sector, i.e., $\frac{\partial r_i}{\partial \lambda_j}$ is positive (i, j = r, m; i ≠ j)[19]

The effects of sectorial profitability, i.e., favorable change in λ_m and λ_r, (δ_m or δ_r), respectively, on n_m^* ($= \frac{(1-b^*)L}{k_m^*}$) and n_r^* ($= \frac{b^*L}{k_r^*}$) are captured below. While optimal fund allocation decreases [equations (15.0) and (16.0)] and optimal average outlay

[19] $(\partial r_i/\partial \lambda_j) = (\partial r_i/\partial k_i)(\partial k_i/\partial \lambda_j) > 0$ (i, j = r, m; i ≠ j) (+) (+)

increases [equations (19.0) and (20.0)] with increased cross-profitability in the other sector, we expect and show that the optimal number of outlays also fall.

$$\frac{\partial n_m^*}{\partial \lambda_r} = \frac{-Lk_m^*\frac{\partial b}{\partial \lambda_r} - (1-b)L\frac{\partial k_m^*}{\partial \lambda_r}}{(k_m^*)^2} < 0 \qquad (21.0)$$

$$\frac{\partial n_r^*}{\partial \lambda_m} = \frac{Lk_r^*\frac{\partial b}{\partial \lambda_m} - bL\frac{\partial k_r^*}{\partial \lambda_m}}{(k_r^*)^2} < 0 \qquad (22.0)$$

Finally, we note that when more money flows into a sector [equations (15.0) and (16.0)], an increase in the optimal average outlay [equations (17.0) and (18.0)] may be accompanied by either an increase or a decrease in the optimal number of outlay:

$$\frac{\partial n_m^*}{\partial \lambda_m} = \frac{-Lk_m^*\frac{\partial b}{\partial \lambda_m} - (1-b)L\frac{\partial k_m^*}{\partial \lambda_m}}{(k_m^*)^2} < 0 \text{ or } > 0 \qquad (23.0)$$

$$\frac{\partial n_r^*}{\partial \lambda_r} = \frac{Lk_r^*\frac{\partial b}{\partial \lambda_r} - bL\frac{\partial k_r^*}{\partial \lambda_r}}{(k_r^*)^2} < 0 \text{ or } > 0 \qquad (24.0)$$

As to the impact of a change in δ_i, it will be exactly opposite the change affected by a changing λ_i.

5. Conclusion

This paper sought to better enunciate the problem of loanable funds allocation faced by ZIFS entities. Studies, to date, in this area have focused on the ethics and the normative expectations, empirical evaluation, analysis of the validity of various financial instruments adopted for this end, and theories to explain some of the characteristics or behaviors exhibited by the various players. Some of the concerns have included: allocative efficiency as well as the apparent aversion to engage in PLS.

Since both of the above issues pertain to allocation, we formulate a risk discounted, expected profit function with two possible portfolios choices. In the formulation, we use Proportional distributional parameters, total profit function in terms of averages, and differential time to accrual of initial profit to determine the division of loanable funds between the two portfolio choices as well as the average outlay sums within each portfolio type. Our results on inter-sectoral allocation of loanable funds and the nature of intra-sectoral allocation of designated monies clearly side with anticipated relationship, whether it is with the distributional parameters, time dimension, profitability, etc.

In sanctioning MU sector under ZIFS banking, there is no specification about what constitutes MU rate or how it should be arrived at. Also, in that very process,

there has been a lack of consideration that both the banks and the public sector could drag the definition of MU to expand to such an extent that the domain of PLS could practically disappear.

Thus, for example, a more formal, comprehensive consideration is needed to determine the criteria under which a credit request could be converted to MU form. The criteria could be: whether there is a tangible profit flow in the use of the loan, whether the debt is for durable consumption goods, trade, small businesses or public goods, and the lifetime of the debt. Some of these elements could lead to specifying the amount of the credit request that could be served through MU. On the other hand, understanding is needed as to what extent MU may be used for deficit financing the Government or for acquisition of public goods, especially when it may opportunistically resort to both interest based and MU debts, thereby crowding out private borrowers with significant consequence for the PLS sector.

However, some of the contradictions that researchers in the field are trying to explain and resolve, including the likely demand diminishing, permanent and fixed partnership under PLS, may not be amenable to a quick fix if only the interpretation of textually sanctioned options are debated without considering the underlying spirit of equity as well as other related Qur'ānic verse(s). Further, the apparent anomalies or overreach allows for cynicism on the part of critics as well as making room for competing secular banks to exploit the needs of well-meaning but gullible depositors and credit seekers thereby undermining the basic proposition.

Regardless, we expect our results to serve several ends: clarify the overall nature of the problem, give it a more scientific footing by removing it from the arena of invocations and assertions, explain what drives the allocation, and give a proper technical perspective to ethicists, researchers, policy makers, bankers, borrowers and investors. Now, our perspective has been from the supply side. Any deficiency in the current system emanating from the demand side demands a separate study.

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EVENTS AND REPORTS

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Reflections on Global Forum on Islamic Finance 2014

The Global Forum on Islamic Finance (GFIF) 2014, organised by COMSATS Institute of Information Technology with the support of the Islamic Research and Training Institute (IRTI) was held in Lahore, Pakistan on 10-12 April 2014, brought together an extensive range of representatives and their variety of experience and presented topics.

The second in an annual series, this event benefited not only from the breadth of the offering but also from the exchange of ideas from different segments of the sector, namely researchers, regulators, and those engaged in the business of Islamic finance itself.

Various concerted discussions viewing the subject through distinct prisms of observation of international delegates have indeed gathered diverse sources of knowledge and insights.

Collaboration indeed was a keyword to be digested by the gathering, inevitably considering the sheer scale of the possibilities among a range of audiences and customers, and the necessity of interconnectedness of the industry on a cross-border basis.

The 2nd International Forum for Islamic Banks and Financial Institutions, Luxembourg

General Council for Islamic Banks and Financial Institutions organised the 2nd International Forum for Islamic Banks and Financial Institutions jointly with Arab-Belgium-Luxembourg Chamber of Commerce. The forum entitled "Islamic finance in Europe: Lessons from Previous Experiences" took place in Double Tree Hilton Hotel, Luxembourg and was attended by around 150 participants. The participants were mostly bankers, lawyers, financial experts, representatives of various ministries, academics as well as students. The forum was spread across 7 main sessions consisting of both academic and professional sessions, during which IRTI representative made presentations on the following themes: 1) Success Story of

Islamic Financial Services Industry in Indonesia, and 2) The Role of Multilateral Development Bank in Islamic Financial Services Industry.

"IIFM Industry Consultative Meeting on *Ṣukūk* Standardisation"
Dubai International Financial Centre, Dubai, UAE

The International Islamic Financial Market (IIFM) organised "The IIFM Industry Consultative Meeting on *Ṣukūk* Standardization" hosted by Dubai International Financial Centre (DIFC) on Wednesday, 16th April 2014 at DIFC, Dubai, United Arab Emirates. The consultative meeting was a continuation of a workshop on "*Ṣukūk* Restructuring" jointly organised by IIFM and IRTI held in November 2013.

The meeting was attended by more than 60 participants comprising prominent Sharīʿah scholars, regulators, Islamic financial institutions, law firms, infrastructure institutions, multilateral development institutions and other industry stakeholders.

The main objective of this consultative meeting is to establish the market needs of developing *Ṣukūk* documentation & product standardization and guidance notes. It was clear from the discussion throughout the meeting that the guidelines on *Ijārah Ṣukūk* will be developed due to its prominence.

The discussions of the meeting which spread across two main sessions revolved around the following points:

1. Develop Standard Terms & Conditions that would apply to all *Ṣukūk* irrespective of the structures.
2. Develop general guidance notes for market participants such as process flow on developments and performance of the underlying assets, build- in provisions to make an exchange program in the event of default i.e. convert a capital market issue into a debt (can it be mandatory for all *Ṣukūk*.)
3. Follow one *Ṣukūk* Structure at a time and establish priority.
4. Develop Guidance notes specific to the selected *Ṣukūk* structure.
5. Improve transparency, provide disclosure guidance notes on implication on Balance sheet, Capital, Sharīʿah and risk disclosures.
6. Naming of *Ṣukūk* SPV correctly and clearly (in order to help identify the credit risk and the issuer. Names like Wings, Danga etc., does not provide any immediate indication of the actual credit risk). Standard or guidelines to be provided. (Should *Ṣukūk* name also identify the Sharīʿah Structure?).

7. SPV ownership - Independence of SPV- (Should the issuing Corporate control the SPV or it must have independence? Should the purpose of establishing SPV to be logistical purpose only or it should have a greater role
8. Condition on Use of Funds and type of Asset or Business that would comply for *Ṣukūk*.
9. Purchase Undertaking (need to address, clarify, define Purchase undertaking by the issuer of a *Ṣukūk*, especially in terms of buying back at Initial price, market price, or by a formula agreed at inception.
10. Role of purchase undertaking for convertible *Ṣukūk*
11. What exceptions if any can be considered when Sovereign is issuing a *Ṣukūk*.
12. Continuous Sharīʿah monitoring of *Ṣukūk* terms for Non compliance. Should each *Ṣukūk* have a Sharīʿah monitoring till maturity, either by a Sharīʿah scholar, a panel of Sharīʿah Scholars or by the Lead Managers Sharīʿah team.
13. Role of trustee – In *Ṣukūk*, Should Trustee be involved in *Ṣukūk* offering documentation, its role with ongoing processes / Redemption and Event of Default.
14. The role of trust and does the trustee need to be empowered to protect the certificate holders on certain issues such as indemnities required by the lead bank third party guarantee – Should there be fee payment. What about Guarantee by Parent or by another sister Company?
15. Secondary market trading of *Ṣukūk* at discount or at par when tangible assets are either not there or has fallen below an agreed threshold.
16. Late payment of Periodic payment or late payment at maturity.
17. Methodology for dealing with minority creditors
18. Information flow between the lead manager and paying agent in special circumstances
19. Asset Based *Ṣukūk* versus Asset Backed *Ṣukūk* (obstacles and ways to promote issuance of Asset Backed *Ṣukūk*)
20. Assist due diligence process particularly for private deals the transaction document to be more informative
21. In case of restructured *Ṣukūk* perhaps requirement of new assets as a replacement could be explored
22. Framework that support securitization and risk transfer mechanism

23. The restructuring of *Ṣukūk* and how differences, if any, in the case of restructured/renegotiated *Ṣukūk* are to be treated. Question will be when renegotiated amounts are lower than the original *Ṣukūk* issue amount then how should the difference be treated in the books of the issuer? Would the difference be income or an item of equity? What level of disclosure should be provided by the issuer in these circumstances?

Notes on the Mid-Term Review of the Islamic Financial Services Industry

The Islamic Research and Training Institute (IRTI) of Islamic Development Bank in collaboration with the Islamic Financial Services Board (IFSB) published The Islamic Financial Services Industry (IFSI) Development: Ten-Year Framework and Strategies (Framework) report in March 2007.

Recently, the respective entities, in collaboration with prominent institutions such as Fajr Capital, Durham University, Afkar Consulting, and INCEIF have completed a project to review the Framework to ensure that it remains relevant as a platform for various Islamic finance jurisdictions to assist them in orchestrating the future direction of the industry. A draft report (the Mid-Term Review, MTR) has been circulated, taking into consideration feedback from a roundtable and forum in 2013, and other review committee meetings and soundings.

The MTR document, which has recently been approved by IFSB Council has generated the following key findings:

(i) The industry has shown growth and resilience, with growing market share and profitability, an expanding number of institutions, and numerous industry-level initiatives under way, reflecting customer confidence in the sector, whose concept is proven in many markets.

(ii) Macroeconomic events or external factors have brought both challenges and opportunities for the sector, which has not been immune to the effects of the global financial crisis, by way of the economic impact, the approach to financial regulation, the strength of partners and counterparties, and the value of assets and investments. Nevertheless, member countries have acted as important centres of growth as the global economy has stumbled. Political developments in recent years have also made several member countries more open to Islamic financial services. Technological innovations such as branchless financial services are now available, and can allow the industry to broaden its future reach.

(iii) The development of the industry has varied by sector, while estimates of its total asset size and growth rate vary significantly (either near or well above USD 1 trillion). As a key example, Islamic microfinance has transitioned from a concept with isolated case studies to a fledgling sector across multiple markets. Moreover, although the market values of certain Sharīʿah-compliant instruments have shown mixed performance due to overall capital market challenges, and Sharīʿah-related challenges remain, the breadth and sophistication of such instruments has improved.

The 13 Framework Recommendations proposed in the Ten-Year Framework and Strategies Report remain pertinent, though now grouped under three themes: (a) Enablement -- fostering conditions for the industry to thrive; (b) Performance -- enhancing the effectiveness of institutions active in the industry; and (c) Reach -- expanding the set of potential beneficiaries of the industry.

Progress made on the original Recommendations has been mixed. For instance, many countries have adopted international standards specific to Islamic financial services; however, many have not yet fully done so. At this mid-term juncture, most Recommendations require greater focus from member countries in order to reach the aspirations envisioned. Metrics for tracking progress were generally not originally articulated, but are crucial for assessing progress.

Consequently, the MTR proposes a set of Key Performance Indicators (KPIs), for which member countries are urged to set national targets. A stronger implementation plan has also been proposed. Even so, member countries are a diverse group of nations, spanning a range of regions, cultures and stages of economic development. They adopt a range of Islamic law, common law, and civil law jurisdictions. The report's sponsors and the Review Committee appreciate that expectations must vary from country to country.

While diversity is appreciated, however, a key underlying theme is that a supportive public policy stance is essential for enabling the industry to reach its full potential. The report does urge that well considered strategies be formed, so that the Islamic financial services that offer benefits to the people and economies of member countries may best be utilised.

Seminar/Workshop "Towards a *Maqāṣid* al-Sharīʿah based Index of Socio-Economic Development"

The Seminar/Workshop "Towards a *Maqāṣid* al-Sharīʿah based Index of Socio-Economic Development" (from 30 April to 01 May 2014 at the IDB HQ) concluded with important recommendations to carry the work forward. Fifteen papers presented over the two days focused on clarifying the dimensions to be measured and the methodology of their measurement. The researchers and policy makers shared their work in which they have used various data sets and techniques to come up with multidimensional indices. The full set of papers and seminar highlights are available for your reading and download at www.irti.org under the events listing.

Key findings and recommendations of the seminar/workshop are:

- Multidimensional indices with some desirable characteristics are possible. It is desirable for these measures to be:
  - Disaggregated enough to facilitate policy making and at the same time aggregation friendly and collapsible.
  - A good summary of progress towards the objectives of Sharīʿah.
- Measures that are constructed based on axiomatic foundations stand out as promising lead direction for development of *Maqāṣid* al-Sharīʿah based index.
- The techniques of fuzzy logic and multi-dimensional graphical representation of data would simplify measurement and its representation, hence useful.
- The seminar papers have explored various databases and used variables from these databases to create experimental indices. There is a need to systematically explore and survey what databases are available, variables covered in them, and analysis of actual survey questions to determine feasibility of their use for *Maqāṣid* al-Sharīʿah based index.
- There is a need to explain and convince data collecting agencies and policy making bodies in the OIC countries about the importance of *Maqāṣid* al-Sharīʿah based multi-dimensional development index so that 'direct measure data' is collected by data collecting agencies.
- There is a need to initiate active policy dialogues with the social and economic policy making bodies in the OIC countries to let them know the usefulness of *Maqāṣid* al-Sharīʿah based development index as a tool in policy making that is

geared towards a comprehensive socio-economic development. This dialogue will also bring to attention the needs of policy makers which would help refine the index itself and further develop it.

- Each participant was asked to think what they can contribute towards the development, refinement and promotion of *Maqāṣid* al-Sharīʿah based development index. In this regard the participants stated their short-term and long-term targets that they intend to pursue. This is very promising and encouraging in engaging academic institutions, policy making bodies, individual researchers and IRTI-IDB to collaborate and synchronize their efforts for the development (and use) of *Maqāṣid* based and policy relevant index.
- A network of researchers and policy makers was also initiated at the event that will work for refinement of a prototype index that IRTI is already working to produce.

The seminar/workshop was very fruitful. The outcome and further progress on a prototype index will be presented at the IDB Annual Meetings in Shabaan 1435H (June 2014). The second seminar of this effort is going to take place insha Allah in June 2014 in Yogyakarta, Indonesia.

BOOK REVIEW

Islamic Economic Studies
Vol. 22, No.1, May, 2014 DOI No. 10.12816/0004138

Economic Development and Islamic Finance

Authors: Zamir Iqbal and Abbas Mirakhor eds., 2013
(Washington, DC: The World Bank: Series on Directions in Development)

Reviewed by: Dr. M. Umer Chapra•

This is a valuable book edited by two eminent scholars, Drs. Zamir Iqbal and Abbas Mirakhor. Dr. Iqbal is Principal Financial Officer of the 'Quantitative Strategies, Risk and Analytics Department' in the Treasury of the World Bank in Washington, while Dr. Mirakhor is now the First Holder of the INCEIF chair of Islamic Finance in Malaysia after having served as Executive Director at the IMF for a long period. The other contributors are Professors Habib Ahmed, Hussein Askari, Obiyathulla Bacha, Wang Yong Bao, Murat Clzakca, S. Nuri Erbas, Azura Othman, Scheherzade Rehman, Kamaruddin Sharif, Andrew Sheng and Ajit Singh. The enviable credentials of both the editors as well as some of the eleven other contributors to the volume are themselves enough to lead the reader to believe that the book is a valuable addition to the literature available on the subject. This belief gets a further boost after a careful reading of the book's contents.

After a brief general discussion of the Islamic and conventional concepts of economic development in the 'overview', the book gets into a relatively more detailed discussion of the subject in twelve papers divided into three parts: theoretical foundation (three papers), development aspects (seven papers), and policy formulation (two papers). On the whole the book highlights some of the key features of Islamic finance that can help create a better understanding of the positive role that Islamic finance can play in promoting the kind of economic development that is necessary to ensure the actualization of socio-economic justice and overall human well-being as envisaged by Islam.

• Adviser, Islamic Research & Training Institute (IRTI) a Member of Islamic Development Bank.

Islamic financial assets have, according to the authors, grown at the rate of about 15 to 20 percent per annum over the last two decades and are presently estimated to be around $1.3 trillion. There is no doubt that this amount is very small compared to the overall size of financial assets around the world as well as the minimum amount that is necessary to enable the Islamic system to play a catalytic role in the financial and economic development of Muslim countries in conformity with the Islamic vision. It is, nevertheless, very encouraging if we take into account the fact that this development has not only taken place over a very short period of around two decades but has also been able to generate a significant Interest in, and respectability for, Islamic finance around the world. Of particular significance is the development of *ṣukūk,* which are essentially *Shari'ah* compliant bonds backed by real assets and the return on them is linked to a real sector activity. This helps indicate that the Islamic financial system is structurally designed to be free from the kind of speculative rise in financial transactions of a gambling nature which played a major role in the international financial crisis that took place in 2007. The world continues to suffer from the aftereffects of this crisis even now after the passage of around seven years. Moreover, the potential for the expansion and development of *ṣukūk* and for their being able to play a catalytic role in the financial and economic development of Muslim countries has already become well recognized.

The book also brings out vividly the Islamic vision of comprehensive human development which stands for a balanced satisfaction of all the different material, social and spiritual needs of the human personality instead of just the economic. Fulfilling primarily the material needs at the expense of all the other needs carries the danger of leading to socio-economic disequilibrium which may tend to have a built-in tendency to promote moral decline, family disintegration, juvenile delinquency, social unrest, and anomie, all of which may lead ultimately to even economic decline. This is because concentrating on only the serving of self-interest and profit maximization, as eulogized by a number of mainstream economists, is likely to hurt other sectors of life which are as important as the economic for ensuring sustained development and overall human well-being. As rightly emphasized by Ibn Khaldun in his magnum opus book, the *Muqaddimah*, all sectors of human life are interlinked, and a continuous decline in one sector is likely to lead ultimately to a decline in all other sectors of life, including the economic.

In addition to this philosophical perspective related to the worldview, the book elaborates the basic principles of Islamic economic and financial systems. Some of the most important of these are: sanctity of contracts and private property, money as potential capital and not actual capital (which role it plays only when it joins hands with other resources to undertake productive activity), prohibition of destabilizing

speculative behavior, and promotion of risk-sharing instead of risk-shifting. All these principles are closely interwoven into the Islamic economic system which is a morally-oriented social-welfare programme having the vision of establishing a just and humanitarian social order where socio-economic justice is an inviolable principle of human interaction and honouring of contracts and agreements is not just a legal requirement but also an inviolable moral obligation. In this system, real assets are exchanged for real assets and all transactions are an integral part of the real economy. Accordingly, interest is prohibited because interest-based contracts are instruments for risk-shifting and not risk-sharing. Since the lender does not participate in the risk, there is a tendency on his part to be lax in evaluating the project and thus resort to excessive lending, which is now generally accepted to be one of the major causes of international financial crises.

On the whole, the book is a valuable addition to the literature on Islamic economics and finance. It shows how profit-and-loss sharing can contribute to not only growth in investment, full employment and accelerated development but also a more equitable redistribution of wealth which is necessary for ensuring social peace and sustained development. It is, thus, fair to say that this book is worth being a part of every library, irrespective of whether it is that of individuals or institutions.

ANNOTATED LIST OF IRTI'S RECENT PUBLICATIONS

Islamic Economic Studies
Vol. 22, No.1, May, 2014 DOI No. 10.12816/0004139

Islamic Microfinance for Sustainable Development

Authors: Nasim Shah Shirazi, Abdelrahman Elzahi and Ishraga Khattab

Published by: Islamic Research and Training Institute (IRTI)
A Member of Islamic Development Bank Group (IDB)
ISBN: 978-9960-32-274-2
L.D. No.1434/8108
1435H (2014), pp. 283 + (xxiv)

A recently published book on "Islamic Microfinance for Sustainable Development" edited by Nasim Shah Shirazi, Abdelrahman Elzahi and Ishraga Khattab consists of 13 selected papers, which were presented during the second International Conference on "Inclusive Islamic Financial Sector Development: Enhancing Islamic Financial Services for the Microenterprises. In addition to the introduction, the book covers 13 chapters that are organized under five broad areas such as microfinance institutions experiences; efficiency and stability of microfinance institutions and microenterprises; microfinance models and job creation; Financial inclusion and Sharīʿah modes for microfinance; and microfinance and its relation with poverty reduction and women empowerment. The topics covered in the book draw on country experiences including Bangladesh, Indonesia, Nigeria, Pakistan and Sudan.

Islamic Social Finance Report 2014

Contributors: Mohammed Obaidullah, Nasim S. Shirazi, Dadang S. Muljawan and Hylmun Izhar

Published by: Islamic Research and Training Institute (IRTI)
A Member of Islamic Development Bank Group (IDB)
pp.125

This is a report on the Islamic social finance sector comprising institutions rooted in Islamic philanthropy, e.g. *zakāt*, *ṣadaqah* and *awqāf*. The report presents the historical trends, future challenges and prospects for the various segments of

the Islamic social finance sector in South and South-East Asia, e.g. Indonesia, India, Pakistan, Bangladesh, Malaysia, Singapore and Brunei Darussalam. It examines the broad regulatory and policy environment at the macro level as well as good and bad practices at the intermediate and micro levels to suggest several policy alternatives with a view to encouraging healthy deliberations around them:

Zakāt:

1. Contrary to commonly held perceptions regarding lack of dependability in flow of donations, *zakāt* is sustainable, dependable and could be a growing source of funds for institutions that acquire the necessary professionalism in fund-raising and seek continued betterment in their social credibility through integrity, transparency and good governance.
2. At a macro-level growth in *zakāt* mobilization appears to be influenced more by incentives that make *zakāt* payment an attractive proposition and less by penalties and punishments.
3. There seems to be nothing inherently wrong with coexistence of public and private agencies as *zakāh* collectors.
4. 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.
5. Corporatization that implies use of a large network of private institutional collectors for *zakāt* mobilization is seen to be far more efficient as compared to a large number of unconnected private individual collectors.
6. In the light of various legal opinions relating to distribution of *zakāt* among eligible beneficiaries there is a case in favor of a scheme of prioritization among different types of beneficiaries with highest priority being given to the needs of the ultra-poor.
7. Basic consumption needs are, by definition, more urgent than needs that may be deferred to a future date. However, there is also merit in using *zakāt* to enhance the wealth-creating capacity of the poor so that they are able to get out of the vicious circle of poverty and find lasting solutions to their needs.
8. Arguably, a professionally managed *zakāt*-financed microfinance program can potentially serve a much larger population of the poor as compared to the prospect of grant-making to a small number of beneficiaries. Further, a scenario where the poor are also made the sole owner of the revolving fund is on far stronger grounds.

9. *Zakāt* payment is an act of worship (*ʿibādah*) for the *zakāt* payer or *muzakki*. It is a matter of grave concern for the *muzakki* to ensure that his/her *zakāt* is not only paid, but also distributed in conformity with the norms of the Sharīʿah.
10. Separation of *zakāt* funds from other forms of donations is a primary concern for a *zakāt* institution acting as an agent of the *zakāt* payer or *muzakki* for distribution of *zakāt*.
11. A part of the *zakāt* mobilized by the institution may be utilized to absorb the administrative and operational costs of the *zakāt* institution.
12. There is a case in favor of using *zakāt* for covering genuine credit defaults by the poor, since such borrowers qualify as eligible beneficiaries in the eyes of Sharīʿah.

Waqf:

1. *Waqf* law should provide a comprehensive definition of *waqf* that includes both permanent and temporary *waqf*.
2. The legal framework must clearly articulate the permanent nature of *waqf*. At the same time, it 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.
3. The legal framework must not put undue restriction on creation of new *waqf* and should actually encourage creation of new *waqf* by minimizing financial and non-financial costs of *waqf* creation and management.
4. Incentivizing *waqf* in a manner similar to secular trusts and other forms of not-for-profit organizations, e.g. tax rebate on contributions for the donor/ endower would make the system both efficient and fair.
5. Whether ownership and management of *awqāf* should be in private hands or with the state has no clear answer. Contrary to general belief, state control may not necessarily hamper creativity and innovation in *awqāf* development.
6. Where *waqf* management is in private hands, 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.
7. There is every reason for the state to take punitive action against *mutawallis* who fail the tests of efficiency, integrity, transparency.

8. *Waqf* development must be a mandatory obligation of the *waqf* management. Innovating financing methods may be employed that bring in new *waqf* capital for development of existing *awqāf*.
9. Financial penalties, especially when these are expressed in absolute numbers tend to lose their effectiveness as deterrents with time. These should either be subjected to continuous revision or be linked to the quantum of misappropriation. Physical punishments are potentially more effective.
10. It is compulsory to invest *waqf* assets. It would be rational to seek risk minimization through diversification or avoidance of high-risk investment avenues.

Islamic Financial Cooperatives & Non-Profit Organizations:

1. There are sound economic reasons why conventional microfinance and especially micro-credit may not be appropriate for the chronically poor and the destitute.
2. Given the Islamic emphasis on avoidance of debt, an Islamic MFI should refrain from seeking to entrap a client in ever-rising levels of debt.
3. *Zakāt* can form the basis of designing a range of programs for the poor, e.g. (i) safety net programs to meet basic consumption needs, health and education; (ii) economic empowerment programs involving skill enhancement and business development services; (iii) programs to provide emergency grants or credit; (iv) programs to provide micro-*takāful*; and (v) programs to provide guarantee against credit default.
4. The issue of high cost microfinance may be addressed by creating *waqf*s whose benefits may now be dedicated for absorption of specific cost elements so as to make microfinance affordable to the ultra-poor.
5. There seems to be merit in having a uniform regulatory framework for all forms of organizations that are engaged in microfinance activities.
6. Creative *fiqhī* solutions should be encouraged for addressing unique requirements of microfinance.
7. For-profit Sharīʿah compliant modes offer no in-built protection against exploitation and abuse through over-pricing. Identifying appropriate organizational structure may offer a bulwark against possible exploitation.
8. There is no consensus on how to estimate the actual cost of operations chargeable to the beneficiary under not-for-profit modes, such as, *qarḍ* and *kafālah*. There is a need to develop accounting standards for estimation of actual cost of operations.

9. A conventional MFIs seeking to transform into Islamic MFI is confronted with a range of issues at various levels. Law must recognize the special status of Islamic MFIs that are financial intermediaries as well as players in the real economy at the same time.
10. There is merit in the argument that Islamic MFIs should aim to empower families and not women alone.
11. Given the discomfort associated with high cost of microfinance making it unaffordable to the ultra-poor, the institutionalization of charity as well as voluntarism is a creative strategy that has the effect of drastically cutting down operational costs.
12. Models offering philanthropy and for-profit finance under one umbrella, as in case of BMTs may involve problems due to conflicting organizational culture and conflicting policy and regulatory framework.

ABSTRACTS OF ARTICLES PUBLISHED IN *DIRASAT IQTISADIAH ISLAMIAH* IN VOL. 20 No. 1

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إدارة مخاطر الصكوك الإسلامية الحكومية
دراسة تطبيقية على الصكوك الحكومية السودانية

سليمان ناصر♦ وأ. ربيعة بن زيد*

مستخلص

(Published in Dirasat Iqtisadiah Islmiah Vol. 20 No.1)

تعتبر الصكوك الإسلامية من أبرز منتجات الهندسة المالية الإسلامية، التي استطاعت أن تجد لها مكانة بارزة في أسواق المال العالمية، في ظل الاهتمام العالمي بالتمويل الإسلامي، خاصة بعد الأزمة المالية العالمية الأخيرة.

وفي ظل ذلك الاهتمام العالمي أيضاً، برزت الصكوك الإسلامية الحكومية بوصفها نوعا من الأدوات المالية التي تساعد الدول والحكومات على تعبئة الموارد وتغطية العجز في الموازنة العامة، وتمويل المشاريع، خاصة ما يتعلق منها بالبنية التحتية. وتبعاً لهذا الاهتمام بالصكوك الإسلامية بما فيها الصكوك الحكومية، كانت الحاجة واضحة وملحة إلى أدوات لإدارة المخاطر المتعلقة بإصدار وتداول هذه الصكوك والتحوط منها، وهو ما يسعى هذا البحث إلى دراسته، خاصة فيما يتعلق بالصكوك الإسلامية الحكومية، سواء في الجانب النظري، أو بالتطبيق على صكوك حكومية مصدرة ومتداولة تم اختيار السودانية نموذجاً لها.

لذلك فإن الإشكالية الأساسية التي يعالجها البحث تتمثل في: ماهي أهم المخاطر التي تواجه الصكوك الإسلامية الحكومية؟ وكيف تتم إدارتها؟ وماهي أهم الآليات المطبقة منها في إدارة الصكوك الحكومية السودانية؟

وقد تمت معالجة هذا الموضوع من خلال جزأين نظري وتطبيقي، ومن خلال أربعة محاور هي:

- مفهوم الصكوك الإسلامية ودورها في تمويل عجز الموازنة ومشاريع الدولة.

♦ جامعة ورقلة – الجزائر.

* جامعة ورقلة – الجزائر.

- مخاطر الصكوك الإسلامية وكيفية ظهورها في الصكوك الحكومية.
- إدارة مخاطر الصكوك الإسلامية عامة والصكوك الحكومية خاصة.
- دراسة تطبيقية على الصكوك الحكومية السودانية للفترة: 2005 – 2010.

Risk Management of Sovereign Islamic *Ṣukūk*
Application Study on Sudan Sovereign *Ṣukūk*

SULIMAN NASSIR

RABEE'A BIN ZAYD

Abstract

Islamic *Ṣukūk* are considered of the most famous Islamic financial products, which were able to have a prominent place in the global financial markets ,in light of the global interest in Islamic finance ,especially after the recent global financial crisis.

Also in light of this world interest, the Islamic sovereign *Ṣukūk* emerged as financial instruments that help states and governments mobilize resources, cover the deficit in public budget ,and finance projects ,especially infrastructure.projects. Consequently to the growing interest in Islamic instruments ,including sovereign *Ṣukūk*, there was an obvious and urgent need for tools to manage risks related to *Ṣukūk* issuance , trading and hedging. This is what the present research seeks to address, especially with regard to the Islamic sovereign *Ṣukūk*, both in theory and in application to issued and traded *Ṣukūk*. The Sudanese model was chosen for this purpose.

Therefore ,the basic problems addressed by the research are: What are the risks faced by the Islamic sovereign *Ṣukūk*? How are these risks managed? And what are the most important mechanisms applied in the management of Sudanese sovereign *Ṣukūk*?

This issue has been addressed in its theoretical as well as practical aspects, and through four axes:

- The concept of Islamic *Ṣukūk* and their role in financing the budget deficit and public projects.
- The risks of Islamic *Ṣukūk* and how they appear in the sovereign *Ṣukūk* -.

- Risk management of Islamic *Ṣukūk* in general and sovereign *Ṣukūk* in particular.
- Application study on Sudanese sovereign *Ṣukūk* for the period 2005-2010.

تطوير صيغ التأمين الإسلامي

سامي إبراهيم السويلم*

مقدمة

الحمد لله والصلاة والسلام على رسول الله وعلى آله وصحبه ومن والاه، وبعد.
تقوم الصناعة المالية عموماً على ركنين أساسيين: التمويل وإدارة المخاطر. وبينما تقوم المصارف الإسلامية بدور مهم في تقديم التمويل الإسلامي من خلال الصيغ الشرعية، فإن مجال إدارة المخاطر في المالية الإسلامية لا يزال محدوداً. وتقوم مؤسسات وشركات التكافل أو التأمين الإسلامي بدور مهم في بعض أنواع المخاطر، مثل مخاطر ملكية الأعيان والمنافع، المخاطر المتعلقة بالجوانب الصحية ونحوها.

وكما هو الشأن في الجانب المصرفي، فإن صناعة التكافل حذت حذو النموذج التقليدي للتأمين، مع محاولة تعديل النظم والآليات لتستوفي المتطلبات الشرعية. ولا حرج من حيث المبدأ في سلوك هذا المنهج في أسلمة جوانب الحياة العملية، لكن الخلل ينشأ من حصر النموذج الإسلامي في نطاق ضيق ونمط وحيد، بما قد يؤدي إلى تراجع مصداقية البديل الإسلامي وغلبة منهج المحاكاة للنموذج التقليدي.

للخروج من هذه الحلقة المفرغة نحتاج أن نلقي نظرة خارج الصندوق، ونستطلع فرص إيجاد صيغ وبدائل إسلامية في مجال التأمين وإدارة المخاطر عموماً، على نحو أكثر مصداقية من الناحية الشرعية، وأكثر كفاءة من الناحية المالية. هذه الورقة محاولة في هذا الاتجاه، وهي تبني على مشاركة الكاتب في ملتقيات التأمين التعاوني السابقة التي نظمتها مشكورة الهيئة الإسلامية العالمية للاقتصاد والتمويل.♥

* مدير مركز تطوير المنتجات المالية الإسلامية بمجموعة البنك الإسلامي للتنمية.
♥ الملتقى الثاني للتأمين التعاوني، 27-28 شوال 1431ه، 6-7 أكتوبر 2010م، والملتقى الثالث للتأمين التعاوني، 11-12 محرم 1433ه، 7-8 ديسمبر 2011

سنتناول أولاً رؤية الاقتصاد الإسلامي للمخاطر، وفي ضوء ذلك يتم تقويم التأمين التجاري. يلي ذلك مناقشة البدائل المناسبة للتأمين من منظور إسلامي.

Development of Islamic Insurance Modes

SAMI IBRAHIM AL-SUWAILIM

Introduction

Praises be to Allah, may Allah's Peace and Blessing be upon His Messenger, his Family and Companions.

The financial industry is generally based on two pillars: finance and risk management. While the Islamic banks play an important role in the provision of Islamic finance through modes compatible with Sharia, risk management in Islamic finance is still of limited scope. Some companies and institutions working in the field Takaful or Islamic insurance play an important role in certain types of risks, such as risks related to the ownership of tangible assets and benefits, and risks related to health and other aspects.

As is the case in banks, Takaful industry followed the traditional model of insurance, with an attempt to modify the systems and mechanisms to meet Sharia requirements. There is no harm, in principle, in adopting this approach in the Islamization process of all aspects of life, but the defect arises from limiting the Islamic model to a narrow range and a unique pattern, possibly resulting in a decline in the credibility of the Islamic alternative approach and the predominance of the traditional model of simulation.

To get out of this vicious circle we need to take a look outside the box, and explore opportunities to find Islamic modes and alternatives in the field of insurance and risk management in general, in a manner that is more credible in terms of Sharia compatibility, and more efficient in practice. This paper is an attempt in this direction, it builds on the author's participation in the previous fora on cooperative insurance organized by the Islamic International Foundation for Economics and Finance.

We will first discuss the Islamic economics vision of risk, and will assess in light of this discussion the commercial insurance. This is will be followed by a discussion of suitable Insurance alternatives from an Islamic perspective.

RESOLUTIONS OF OIC *FIQH* ACADEMY

Islamic Economic Studies
Vol. 22, No. 1, May, 2014 DOI No. 10.12816/0004141

Resolution of OIC Fiqh Academy
(related to Islamic Economic and Finance)

بسم الله الرحمن الرحيم

Resolution 188 (3/20)

Completion of the Issue of Islamic Bonds (*Ṣukūk*)

The Council of the International Islamic Fiqh Academy of the Organization of Islamic Cooperation meeting in its 20th Session in Oran (People's Democratic Republic of Algeria) from 26 Shawwal to 2 Dhul-Qaedah, 1433H (13-18 September, 2012)

Having considered the researches received from the Academy on the completion of the issue: "Islamic *Ṣukūk* (Bonds)", and having listened to the discussions on the matter; and

Having also considered the recommendations of the Symposium on Islamic *Ṣukūk* held in Jeddah under the auspices of the Islamic Economic Research Center (King Abdel Aziz University) from 10 to 11 Jumada II 1431 H (24-25 May, 2010) with the participation of the International Islamic Fiqh Academy, the Islamic Research and Training Institute (member of the Islamic Development Bank Group) and having listened to the deliberations on the issue,

DECIDES as follows:

First: General Regulations

(1) Islamic *Ṣukūk* should achieve the objectives of the Sharīʿah in terms of developing and supporting real activities and the administration of justice among people.

(2) *Ṣukūk* contracts should fulfill all the requirements whereby ownership is legitimately and legally proven, resulting in the ability to act and afford insurance. Contracts should be free from fraud and sham and

insuring that they will ultimately guarantee safety from the Sharīʿah point of view.

(3) *Ṣukūk* documents should contain the necessary mechanisms to regulate the application and ensure that they are free from fraud and sham, as well as to correct any potential flaws.

Periodic reviews should be conducted in order to insure the sound use of the proceeds of *Ṣukūk* for the specific purpose of issuance and the application of all the requirements of the contracts in the manner consistent with the intentions of Sharīʿah.

(4) Islamic bonds "*Ṣukūk"* must to demonstrate the fundamental differences between them and usury bonds in terms of structure, design, construction, and the need to reflect them on the marketing mechanisms and pricing.

Second: Obligations

(1) No *muḍārib*, partner, or agent shall commit to carrying out any of the following:

(a) Buying *Ṣukūk* or *Ṣukūk* assets at their nominal value or with a predetermined value leading to capital guarantee or to current cash for deferred cash, save in cases pertaining to abuse and negligence, which require the guarantee of the rights of *Ṣukūk* holders.

(b) Lending to *Ṣukūk* holders when the real return on *Ṣukūk* falls below the projected return thus leading to borrowing and selling or obtaining loans with interest. A reserve may be created from profits to cover potential shortfalls.

(2) Hedging measures may be taken against *Ṣukūk* capital and other risks through cooperative insurance and *takāful* insurance which are governed by the rules of the Sharīʿah.

Third: Leasing an Asset to the Seller

An asset may not be sold at a cash price with the condition that the seller leases this asset as a lease coupled with a promise of ownership at a total of lease and price exceeding the cash price whether this condition is explicit or implicit as this type of sale is prohibited by Sharia. It is therefore not permissible to issue *Ṣukūk* on the basis of such a mode.

Fourth: Lease Based on Description

(1) Properties based on description may be leased in a manner that does not contradict the rules of transactions according to the Sharīʿah, and *Ṣukūk* may be issued accordingly.

(2) The problem with this mode may stem from two sources:

a) Rule on postponement of lease till the meeting of the parties.

b) Rule on dealing in *Ṣukūk* of lease properties based on description before determining the place of leasing.

The Academy recommends that the Secretariat of the Academy constitute a team of scholars and experts to examine this mode in the light of what was presented earlier and submit a detailed study prior to the convening of the next session of the Academy.

Fifth: Dealing in *Ṣukūk*, Shares or Units

(1) If the securities assets are turned into cash money and debts, dealing in them is subject to the provisions governing exchange and debt selling.

(2) If the securities assets are turned into property, benefits and rights, dealing in them may be at the rate agreed upon.

(3) If the stock exchange assets are a mixture of cash money, debts, property, benefits and rights, there are two situations:
   (a) Cash money and debts should belong to the real principal and the stock exchange be included in the ownership of the principal. In such a case, dealing may take place without taking into account the percentage of cash and debt to the assets.
   (b) Separation of the ownership of the cash money, debts or failure to add stock exchange to the ownership of the principal. In this case dealing is subject to majority provisions.

(4) If the company or project which the securities represents has not actually commenced work or is under liquidation, dealing is subject to majority provisions.

(5) It has emerged from the researches presented so far that dependency may be established through the ownership of the operator, operation or activity. The scope of the criterion of majority has also widened. Given the need for identifying the criteria for dependency and establishing its types, as well as identifying the criteria for the majority and establishing its types, the

Academy recommends that its secretariat constitute a team of scholars and experts to examine these criteria in the light of the above and submit a detailed study before the convening of the next session of the Academy.

Sixth: The Impact of the Resolutions on the Previous Contracts

(1) Resolutions passed by the Academy enter into force from the date they are issued and do not affect any contracts entered into earlier such as the *Ṣukūk* which are based on considered religious rulings.
(2) Muslims should follow the rulings of the pure Sharia in all their affairs and deeds to the best of their ability and strength as Allah says" Be mindful of Allah as much as you can." Surat al-Tagabun, Verse 16. And the Saying of Allah, "Allah does not charge a soul than what it can bear". Surat al-Baqara, Verse 286. Muslims are therefore called upon to work assiduously to alleviate disabilities and refrain from circumstantial provisions to supplement the wisdom of Sharīʿah. They should work towards setting the Muslim community on the path of the Sharīʿah.

Allah Knows Best

Resolution 190 (20/5)

The Role of the Fiqh (jurisprudence) Academies in Rationalizing the Progress of Islamic Financial institutions: Mechanisms and Formulas

The Council of the International Islamic Fiqh Academy of the Organization of Islamic Cooperation meeting in its 20th Session in Oran (People's Democratic Republic of Algeria) from 26 Shawwal to 2 Dhul-Qaedah, 1433H (13-18 September, 2012)

Having considered the researches received from the Academy on the Role of Fiqh (jurisprudence) Academies in Rationalizing the Progress of Islamic Financial Institutions: Mechanism and Formulas; and Having listened to the deliberations on the subject,

It is of the opinion that the Fiqh academies and Islamic financial institutions and banks constitute one of the great achievements in the modern era. The Academy expresses its appreciation for the prominent role being played by the Islamic Sharīʿah supervisory bodies and financial institutions in our times in reviving the contemporary Islamic finance and consolidating trust and confidence in them.

It is also of the opinion that:

(1) There is a need for forging cooperation between Islamic Sharīʿah supervisory bodies, the Fiqh and International Academies for the purpose of coordination, cooperation and exchange of opinions.
(2) There is a need for coordination between the Islamic Sharīʿah supervisory bodies within the Islamic financial institutions.
(3) The need for the Academy to facilitate the conduct of useful studies in order to assist Islamic financial institutions in the implementation of Sharīʿah and finding appropriate solutions to their problems and crises.
(4) There is a need for the Academy to prepare a comprehensive law on Islamic financial transactions to provide guidance in such transactions.

The Academy Council recommends the following:

(1) **CALLS UPON** Islamic financial institutions to adopt the resolutions of the Fiqh Academies.

(2) **CALLS FOR** continued dialogue with central banks and supervisory authorities in Islamic countries to enable Islamic financial institutions to play their role in the national economic and developmental life under the rules of control in a manner compatible with the characteristics of Islamic financial functions.

(3) **CALLS UPON** the Academy to communicate all its resolutions to all Islamic financial institutions and banks, scientific and educational institutions and local and international research centers, and to make them accessible through media outlets and social communication networks.

Allah Knows Best

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The thrust of this study is on mobilizing and utilizing financial resources in the light of Malaysian Tabung Haji experience. It is an excellent example of how a specialized financial institution can work successfully in accordance with the Islamic principle.

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This paper tackles stock of developments in Islamic Banking over the past two decades and identifies the challenges facing it.

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Munawar Iqbal
This paper studies the fiscal problems facing many of the Muslim countries using the experience of Pakistan. It tries to identify the causes of fiscal problems and makes an attempt to suggest some remedial measures.

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The paper focuses on the contemporary Zakāh management in four Muslim countries with observation on the performance of Zakāh management.

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The paper discusses primarily the crucial question of how to apply the international regulatory standards to Islamic Banks.

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The study discusses Islamic Equity Funds as the Mode of Resource Mobilization and Placement.

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The paper develops a microeconomic model of an Islamic bank and discusses its stability conditions.

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The study discusses the rationale of the prohibition of *Ribā* (interest) in Islam and presents the alternative system that has evolved.

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Munawar Iqbal and *Tariqullah Khan*
The occasional paper addresses the challenge of financing public expenditure in Muslim countries, provides an Islamic perspective on the subject and discusses the potential of the alternatives available to alleviate the problem.

☐ **ROLE OF ZAKĀH AND AWQĀF IN POVERTY ALLEVIATION (2004),** pp. 150 **Price $ 10.00**
Habib Ahmed
The occasional paper studies the role of *Zakāt* and *Awqāf* in mitigating poverty in Muslim communities. The study addresses the issue by studying the institutional set-up and mechanisms of using *Zakāt* and *Awqāf* for poverty alleviation. It discusses how these institutions can be implemented successfully to achieve the results in contemporary times using theoretical arguments and empirical support.

☐ **OPERATIONAL STRUCTURE FOR ISLAMIC EQUITY FINANCE: LESSONS FROM VENTURE CAPITAL (Research Paper No. 69), (2005),** pp.39 **Price $ 10.00**
Habib Ahmed
The paper examines various risks in equity and debt modes of financing and discusses the appropriate institutional model that can mitigate theses risks.

☐ **ISLAMIC CAPITAL MARKET PRODUCTS DEVELOPMENTS AND CHALLENGES (Occasional Paper No. 9**), **(2005),** pp.93 **Price $ 10.00**
Salman Syed Ali
The paper will serve to increase the understanding in developments and challenges of the new products for Islamic financial markets. The ideas explored in it will help expand the size and depth of these markets.

☐ **HEDGING IN ISLAMIC FINANCE (Occasional Paper No.10), (2006)**, pp.150 **Price $ 10.00**
Sami Al-Suwailem
The book outlines an Islamic approach to hedging, with detailed discussions of derivatives, *gharar* and financial engineering. It accordingly suggests several instruments for hedging that are consistent with Sharī‘ah principles.

☐ **ISSUES IN ISLAMIC CORPORATE FINANCE: CAPITAL STRUCTURE IN FIRMS (Research No.70),** (2007), pp. 39 **Price $ 10.00**
Habib Ahmed
The research presents some issues concerning capital structure of firms under Islamic finance.

☐ **ROLE OF MICROFINANCE IN POVERTY ALLEVIATION: LESSONS FROM EXPERIENCES IN SELECTED IDB MEMBER COUNTRIES (Occasional Paper),** (2008), pp.73 **Price $ 10.00**

Mohammed Obaidullah

The book proposes a two-pronged strategy to poverty alleviation through micro-enterprise development based on the dichotomy between livelihood and growth enterprises. With a focus on provision of Sharī'ah-compliant financial services for micro-enterprises, it reviews thematic issues and draws valuable lessons in the light of case studies from three IsDB member countries – Bangladesh, Indonesia, and Turkey.

☐ **ISLAMIC ECONOMICS IN A COMPLEX WORLD: AN EXTRAPOLATION OF AGENT-BASED SIMULATION, (2008), pp. 149** **Price $ 15.00**

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This research paper (book/occasional paper) discusses the possible use of recent advances in complexity theory and agent-based simulation for research in Islamic economics and finance

☐ **ISLAMIC MICROFINANCE DEVELOPMENT: INITIATIVES AND CHALLENGES (Dialogue Paper No. 2), (2008), pp. 81.** **Price $ 10.00**

Mohammed Obaidullah and Tariqullah Khan

This paper highlights the importance of microfinance as a tool to fight poverty. It presents the "best practices" models of microfinance and the consensus principles of microfinance industry.

☐ **THE ISLAMIC VISION OF DEVELOPMENT IN THE LIGHT OF *MAQĀṢID* AL-SHARĪ'AH**, (**1429H, 2008),** pp.65 **Price $ 15.00**

M. Umer Chapra

This paper asserts that comprehensive vision of human well-being cannot be realised by just a rise in income and wealth through development that is necessary for the fulfilment of basic needs or by the realization of equitable distribution of income and wealth. It is also necessary to satisfy spiritual as well as non-material needs, not only to ensure true well-being but also to sustain economic development over the longer term.

☐ **THE NATURE AND IMPORTANCE OF SOCIAL RESPONSIBILITY OF ISLAMIC BANKS, (1431H, 2010),** pp. 460 **Price $ 15.00**

Mohammed Saleh Ayyash

This book attempts to analyse the essential aspects of social responsibility of Islamic Banks and the means to achieving them. Apart from encapsulating the Sharī'ah formulation of the social responsibility and its relation to the objectives of Sharī'ah, the book also addresses the linkage between social responsibility and the economic and social development of Muslim communities. Furthermore, it demonstrates the impact of the nature of social and developmental role which should be undertaken by Islamic banks, not only for achieving socio-economic development but also for making the earth inhabitable and prosperous.

☐ **ISLAMIC BANKING STRUCTURES: IMPLICATIONS FOR RISK AND FINANCIAL STABILITY, (1432, 2011),** pp 50 **Price $ 10.00**

Abd Elrahman Elzahi Saaid Ali

The results of this research are expected to be valuable to the management of Islamic banks and to those who are engaged in the fields of Islamic banking and finance.

☐ **HANDBOOK OF ISLAMIC ECONOMICS, Vol. 1, Exploring the Essence of Islamic Economics, (1432, 2011),** pp.348 **Price $ 35.0**

Habib Ahmed & Muhammad Sirajul Hoque

This "Handbook of Islamic Economics" is part of the project to make important writings on Islamic economics accessible by organizing them according to various themes and making them available in one place. The first volume of this Handbook subtitled "Exploring the Essence of Islamic Economics" collects together the eighteen important articles contributed by the pioneers of the subject and presents them under four broad themes: (i) Nature and Significance of Islamic Economics, (ii) History and Methodology, (iii) Sharī'ah and *Fiqh* Foundations, (iv) Islamic Economic System.

☐ **BUILD OPERATE AND TRANSFER (BOT) METHOD OF FINANCING FROM SHARĪ'AH PERSPECTIVE, (1433, 2012),** pp.115 **Price $ 15.00**

Ahmed Al-Islambouli

Literature on BOT techniques from Sharīah perspectives are few and far between. This book surveys and reviews the previous studies as well as experiences of BOT financing by individuals and institutions and concludes with a Sharī'ah opinion. It finds BOT to be a combination of *Istiṣnā'* and other contracts. The BOT would be a valid method after appropriate modifications

☐ **CHALLENGES OF AFFORDABLE HOUSING FINANCE IN IDB MEMBER COUNTRIES USING ISLAMIC MODES (1433, 2012),** pp.266 **Price $ 20.00**

Nasim Shah Shirazi, Muhammad Zulkhibri Salman Syed Ali & SHAPE Financial Corp.

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 **Price $ 10.00**
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.

☐ **THE ECONOMICS OF PARTICIPATION (1995),** pp.116 **Price $ 10.00**
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.

☐ **TABUNG HAJI AS AN ISLAMIC FINANCIAL INSTITUTION: THE MOBILIZATION OF INVESTMENT RESOURCES IN AN ISLAMIC WAY AND THE MANAGEMENT OF HAJJ (1995),** pp.44 **Price $ 10.00**
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*.

☐ **ISLAMIC BANKING: STATE OF THE ART (1994),** pp.55 **Price $ 10.00**
Ziauddin Ahmad
The paper reviews and assesses the present state of the art in Islamic banking both in its theoretical and practical aspects.

☐ **ROLE OF ISLAMIC BANKS IN DEVELOPMENT (1995),** pp.54 **Price $ 10.00**
Ahmad Mohamed Ali
The paper analyses the concept of development from an Islamic perspective, highlighting the role of Islamic banks in achieving the same.

☐ **JURISPRUDENCE OF *MAṢLAḤAH* AND ITS CONTEMPORARY APPLICATIONS (1994),** pp.88 **Price $ 10.00**
Hussein Hamid Hassan
The paper discusses the Islamic view as well as applications of *Fiqh al Maṣlaḥah* in the field of economic and finance.

☐ ***AL GHARAR* (IN CONTRACTS AND ITS EFFECT ON CONTEMPORARY TRANSACTIONS) (1997),** pp.79 **Price $ 10.00**
Siddiq Al Dareer
This study presents the Islamic Sharī'ah viewpoint regarding *gharar* and its implications on contracts, particularly in connection with sale contracts and other economic and financial transactions.

☐ ***ISTIHSAN* (JURISTIC PREFERENCE) AND ITS APPLICATION TO CONTEMPORARY ISSUES (1997),** pp.148 **Price $ 10.00**
Mohammad Hashim Kamali
The lecture deals with an important subject. It is a common knowledge that Qur'ān 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.

☐ **ECONOMIC COOPERATION FOR REGIONAL STABILITY (1996),** pp.34 **Price $ 10.00**
Bacharuddin Jusuf Habibie
The paper highlights significance and implications of economic cooperation for regional stability in the context of Asian countries. Given the importance of economic cooperation between the developing countries in general and Islamic countries in particular.

☐ **WHAT IS ISLAMIC ECONOMICS? (1996),** pp.73 **Price $ 10.00**
Mohammad Umer Chapra
This lecture deals with an important subject. It explained both the subject matter of Islamic economics as well as its methodology in his usual mastering fashion.

☐ **DEVELOPMENT OF ISLAMIC BANKING ACTIVITY: PROBLEMS AND PROSPECTS (1998),** pp.24 **Price $ 10.00**
Saleh Kamel
This lecture explores the origin of Islamic banks and explains their problems and prospects which have attracted the attention of scholars.

☐ ***AL-QIYAṢ* (ANALOGY) AND ITS MODERN APPLICATIONS (1999)**, pp.132 **Price $ 10.00**
Muhammad Al-Mukhtar Al-Salami
The paper presents the juridical theory of *Qiyās* and its applications to contemporary issues.

☐ ***MUḌĀRABAH* AND THE PAKISTAN PERSPECTIVE (2000),** pp.46 **Price $ 10.00**
Justice (Retd.) Tanzilur Rahman
The lecture deals with *Muḍārabah* characteristics and its applications in accordance with Sharīʿah and the Pakistan perspective.

☐ **SUSTAINABLE DEVELOPMENT IN THE MUSLIM COUNTRIES (2003),** pp.104 **Price $ 10.00**
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.

☐ **PETROCHEMICAL INDUSTRY IN OIC MEMBER COUNTRIES (1994),** pp.89 **Price $ 10.00**
Useful and up-to-date information on Petrochemical Industry in OIC member States are brought together in this study to promote trade among them in this area.

☐ **FERTILIZER INDUSTRY AND TRADE IN OIC MEMBER COUNTRIES (1995),** pp.603 **Price $ 20.00**
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

☐ **L'ORGANISATION ET LE FONCTIONNEMENT DU CONSEIL MALAIS DE DIRECTION DES PELERINS ET DU FONDS DU PELERINAGE (1987),** 109 pages **Prix $ 10.00**
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**
Yassine Essid and *Tahar Mimm, (éd.)*
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**
Mohamed Ariff and *M.A. Mannan* (éd.)
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.

☐ **INTRODUCTION AUX TECHNIQUES ISLAMIQUES DE FINANCEMENT (1997),** 210 pages **Prix $ 20.00**
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.

☐ **CONFERENCES EN ECONOMIE ISLAMIQUE (1996),** 555 pages **Prix $ 20.00**
Ausaf Ahmed and *Kazim Awan*
Actes de séminaire dont l'objectif principal est de servir comme outil de base pour les étudiants et aux enseignants en économie islamique.

☐ **LE DEVELOPPEMENT DURABLE, (1997),** 256 pages **Prix $ 20.00**
Taher Memmi (éd.)
Actes d'un séminaire sur le développement durable qui présente, entre autres, la stratégie en cette matière de quelques pays membres de la BID.

☐ **PROMOTION ET FINANCEMENT DES MICRO-ENTREPRISES (1997),** 187 pages **Prix $ 10.00**
Taher Memmi (éd.)
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.

☐ **PROFITS ET INTERETS BANCAIRES ENTRE L'ANALYSE ECONOMIQUE ET LA CHARI'A (1994),** 150 pages **Prix $ 10.00**
Abdelhamid El-Ghazali
Cet opuscule traite de l'intérêt bancaire face au profit en tant que mécanismes de gestion de l'activité économique. Une analyse de deux points de vue différents, celui de l'économie conventionnelle et celui de la Chari'a.

☐ **LA MOUDHARABA SELON LA CHARI'A ET SES APPLICATIONS CONTEMPORAINES (1994),** 83 pages — **Prix $ 10.00**
Hassan El-Amin
Cette étude traite de nombreux aspects pratiques: légal, économique et bancaire.

☐ ***JOUALA* ET *ISTISNA,*** — **Prix $ 10.00**
***Analyse juridique et économique* (1994) ,** 65 pages
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 *(RIBĀ)* (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
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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 **Prix $ 20.00**
Mohammad Umer Chapra
Ce livre développe avec habilité la logique islamique de la prohibition du *Ribā*, et démontre avec rigueur la viabilité et la supériorité du système de financement basé sur la participation au capital.

Documents occasionnels

☐ **DEFIS AU SYSTEME BANCAIRE ISLAMIQUE, (1998),** 90 pages **Prix $ 10.00**
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.

TRANSLITERATION TABLE

Arabic Consonants

- Initial, unexpressed medial and final:

ء	’	د	d	ض	ḍ	ك	k
ب	b	ذ	dh	ط	ṭ	ل	l
ت	t	ر	r	ظ	ẓ	م	m
ث	th	ز	z	ع	ʿ	ن	n
ج	j	س	s	غ	gh	هـ	h
ح	ḥ	ش	sh	ف	f	و	w
خ	kh	ص	ṣ	ق	q	ي	y

- Vowels, diphthongs, etc.

Short	ـَ	a	ـِ	i	ـُ	u
Long	أ	ā	ي	ī	و	ū
Diphthongs	ؤ	aw	ئ	ay		

Notes To Contributors

1. The papers submitted to *IES* should make some noticeable contribution to Islamic economics, either theoretical or applied, or discuss an economic issue from an Islamic perspective.
2. Submission of a paper will be held to imply that it contains original unpublished work and is not being submitted for publication elsewhere.
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5. All papers should have an introductory section in which the objectives and methodology of the article are explained and a final section, which summarizes the main points, discussed and the conclusions reached.
6. Manuscripts should be typed double-spaced, on one side of the paper only. References, tables and graphs should be on separate pages.
7. Detailed derivations of the main mathematical results reported in the text should be submitted separately. These will not be published.
8. References should be listed at the end of the text in the following style:
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.
10. The verses of the Qur'ān quoted should carry *surah* number and *ayah* number as (3:20).
11. Complete reference to the source of ahādith quoted should be given.
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Islamic Development Bank (IDB)

Establishment

The Islamic Development Bank is an international financial institution established in pursuance of the Declaration of Intent issued by the Conference of Finance Ministers of Muslim Countries held in Jeddah in Dhul Qa'dah 1393H (December, 1973). The inaugural Meeting of the Board of Governors took place in Rajab 1395H (July 1975) and the Bank was formally opened on 15 Shawwal 1395H (20 October, 1975).

Vision

By the year 1440H Hijrah, IDB shall have become a world-class development bank, inspired by Islamic principles that have helped significantly transform the landscape of comprehensive human development in the Muslim world and help restore its dignity.

Mission

The mission of IDB is to promote comprehensive human development, with a focus on the priority areas of alleviating poverty, improving health, promoting education, improving governance and prospering the people.

Membership

The present membership of the Bank consists of 56 countries. The basic condition for membership is that the prospective member country should be a member of the Organization of Islamic Cooperation (OIC), pay its contribution to the capital of the Bank and be willing to accept such terms and conditions as may be decided upon by the IDB Board of Governors.

Capital

As of the month of Rajab 1431H, the Authorized Capital of the Bank was ID 30 Billion, and the Issued Capital was ID 18 Billion, of which ID 17.474 Billion was subscribed with ID 4.031 Billion Paid-Up.

Group

At present the IDB Group is made up of Islamic Research and Training Institute (IRTI), International Islamic Trade Finance Corporation (ITFC), The Islamic Corporation for Insurance of Investments and Export Credit (ICIEC) and The Islamic Corporation for the Development of the Private Sector (ICD).

Headquarters and Regional Offices

The Bank's headquarters is in Jeddah in the Kingdom of Saudi Arabia. Four regional offices were opened in Rabat, Morocco (1994), Kuala Lumpur, Malaysia (1994), Almaty, Kazakhstan (1997) and Dakar, Senegal (2008).

Financial Year

The Bank's financial year is the lunar Hijra year.

Accounting Unit

The accounting unit of the IDB is the Islamic Dinar (ID), which is equivalent to one SDR – Special Drawing Right of the International Monetary Fund.

Languages

The official language of the Bank is Arabic, but English and French are also used as working languages.