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2012

Online at <https://mpa.ub.uni-muenchen.de/55977/>

MPRA Paper No. 55977, posted 20 May 2014 18:08 UTC

Financial Inclusion: Islamic Finance Perspective

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Abstract

Enhancing financial inclusion or access to finance can make critical contributions to the economic development. Conventional mechanisms such as micro-finance, small-medium-enterprises (SME), and micro-insurance to enhance financial inclusion have been partially successful in enhancing the access and are not without challenges. Islamic finance, based on the concept of risk-sharing offers set of financial instruments promoting risk-sharing rather than risk-transfer in the financial system. In addition, Islam advocates redistributive risk-sharing instruments such as *Zakah*, *Sadaqāt*, *Qard-al-hassan*, etc, through which the economically more able segment of the society shares the risks facing the less able segment of the population. These are not instruments of charity, altruism or beneficence but are instruments of redemption of rights and repayment of obligations. In addition, the inheritance rules specify how the wealth of a person is distributed among present and future generations of inheritors.

This paper argues that conventional modes of enhancing financial inclusion can be replicated through instruments of Islamic finance allowing risk sharing and risk diversification. However, even after availability of micro-finance and SME financing, financial exclusion may not be fully overcome. Therefore, one needs to utilize, Islam's instruments of redistribution where mandated levies and recommended avenue of spending may play their role. They help reduce the poor's income – consumption correlation. The paper concludes that Islamic finance provides a comprehensive framework to enhance financial inclusion through the principle of risk-sharing and through Islam's redistributive channels which are grossly under-utilized in Muslim countries. The redistributive instruments may be developed as proper institutions to optimize the function of such instruments. Application of financial engineering can device innovative ways to develop hybrids of risk-sharing and redistributive instruments to enhance access to finance to promote economic development.

Key Words: Financial inclusion, Redistributive risk-sharing, Risk transfer, *Zakah*, Inheritance rules, *Sadaqāt*, *Qard al Hassan*.

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Introduction

There is evidence suggesting that financial development and improved access to finance—also referred to as financial inclusion, in a country is likely not only to accelerate economic growth but also to reduce income inequality and poverty. Despite its essential role in the progress of efficiency and equality in a society, 2.7 billion people (70% of the adult population) in emerging markets still have no access to basic financial services,¹ and a great part of them come from countries with predominantly Muslim population. In conventional finance, financial access is especially an issue for the poorer members of society including potential, or would be, entrepreneurs. They are commonly referred to as “non-banked” or “non-bankable” and in the case of potential entrepreneurs they invariably lack adequate collateral to access conventional debt financing. While access to finance may be important for economic growth, the private sector may not be willing to provide financing to some areas because of the high cost associated with credit assessment, credit monitoring and because of the lack of acceptable collateral.

Although the linkage of financial development with economic development exists, a high degree of the financial development in a country is not necessarily an indication of alleviation of poverty in a country. There is growing realization that in addition to financial development, the emphasis should be to expand the accessibility to finance and the financial services which can play a more positive role in eradicating poverty. Development economists are convinced that improving access and making basic financial services available to all members of the society in order to build an inclusive financial system should be the goal. Enhancing the access to and the quality of basic financial services such as availability of credit, mobilization of savings, insurance and risk management can facilitate sustainable growth and productivity, especially for small and medium scale enterprises.

Conventional finance has developed mechanisms such as micro-finance, small-medium-enterprises (SME), and micro-insurance to enhance financial inclusion. Conventional techniques have been partially successful in enhancing the access and are not without challenges. Islamic finance, based on the concept of risk-sharing offers set of financial instruments promoting risk-sharing rather than risk-shifting in the financial system. In addition, Islam advocates redistributive instruments

¹Demirguc-Kunt, Beck and Honohan (2007).

such as *Zakah*, *Sadaqāt*, *Qard-al-hassan*, etc, through which the economically more able segment of the society shares the risks facing the less able segment of the population. Such instruments of wealth redistribution are used to redeem the rights of the less able in the income and wealth of the more able. These are not instruments of charity, altruism or beneficence but are instruments of redemption of rights and payment of obligations. In addition, the inheritance rules specify how the wealth of a person is distributed among present and future generations of inheritors.

Islamic finance addresses the issue of financial inclusion from two directions—one through promoting risk-sharing contracts which provide a viable alternative to conventional debt-based financing, and the other through specific instruments of redistribution of the wealth among the society. Both risk-sharing financing instruments and redistributive instruments complement each other to offer a comprehensive approach to enhance financial inclusion, eradicating poverty, and to build a healthy and vibrant economy. They help reduce the poor's income – consumption correlation. In other words, the poor are not forced to rely on their low level income to maintain a decent level of subsistence living for themselves and their families. The redistributive instruments have to be developed as proper institutions to optimize the function of such instruments. Institutionalizing of these instruments would require enabling environment, sound legal framework, and transparent collection and the distribution.

Instruments offered by Islam have strong historical roots and have been applied throughout history in various Muslim communities. Islam offers a rich set of instruments and approaches and if implemented in a true spirit can lead to reduced poverty and inequality in Muslim countries plagued by massive poverty. Therefore, the policy makers in Muslim countries who are serious about enhancing access to finance or “financial inclusion” should exploit the potential of Islamic instruments to achieve this goal.

Section I introduces the concept of the financial inclusion and its relevance to economic development. Section II discusses issues identified with conventional approach to financial inclusion. Section III describes Islam's concept of financial inclusion through risk-sharing products. Section IV discusses Islam's instruments of redistribution. Section V offers key policy recommendations. Finally, Section VI concludes the discussion.

1. What is Financial Inclusion and Why it is Important?

Many poor families in the developing world have limited access to formal financial services, including credit, savings, and insurance. They instead rely on a variety of informal credit relationships with moneylenders, relatives, friends, or merchants. Traditionally, banks and other formal financial service providers including insurance companies have not considered the poor a viable market, and penetration ratios for formal financial services in developing countries are extremely low. Increasing access to financial services holds the promise to help reduce poverty and improve development outcomes, by enabling the poor to smooth consumption, start or expand a business, cope with risk, and increase or diversify household income.

The concept, financial inclusion, was initially referred to the delivery of financial services to low-income segments of society at affordable cost. However, during the past decade, the concept has evolved into four dimensions: (i) easy access to finance for all households and enterprises, (ii) sound institutions guided by prudential regulation and supervision, (iii) financial and institutional sustainability of financial institutions, and (iv) competition between service providers to bring alternatives to customers.² Typical indicators of the financial inclusion of an economy are the proportion of population covered by commercial bank branches, number of Automated Teller Machines (ATMs), sizes of deposits and loans made by low-income households and Small-Medium Enterprises (SMEs). However, availability of financial services not necessarily can be equated with financial inclusion, because people may voluntarily exclude themselves from the financial services for religious or cultural reasons, even though they do have access and can afford the services.³

What distinguishes the use of financial services from the access to financial services? To what extent is the *lack of use* a problem? The users of financial services can be distinguished from non-users, who either cannot access the financial system or opt out from the financial system for some reason. Within the non-users, first, there is a group of households and enterprises that are considered unbankable by commercial financial institutions and markets because they do not have enough income or present too high a lending risk. Second, there might be discrimination against certain population groups based on social, religious, or ethnic grounds. Third, the contractual and informational infrastructure might

²Demirguc-Kunt, Beck and Honohan (2007).

³ *Ibid.*

prevent financial institutions from reaching out to certain population groups because the outreach is too costly to be commercially viable.⁴ Finally, the price of financial services may be too high or the product features might not be appropriate for certain population groups. In addition, there could be a set of users who voluntarily exclude themselves from the system due to conflicts with their religious or ethical or moral value system.

Understanding the linkage of financial inclusion with the economic development is important. There is voluminous literature in economics and finance on the contributions of finance to economic growth and development. The main reason why “finance” or “financial inclusion” or “access to finance” matters is that financial development and intermediation has been shown empirically to be a key driver of economic growth and development. Development economists suggest that the lack of access to finance for the poor deters key decisions regarding human and physical capital accumulation. For example, in an imperfect financial market, poor people may find themselves in the “poverty trap”, as they cannot save in harvest time or borrow to survive a starvation. Similarly, without a predictable future cash-flow, the poor in developing countries are also incapable of borrowing against future income to invest in education or health care for children.

Given the significance of financial inclusion, a developed financial sector in a country can play a critical role in promoting growth and in reducing poverty by enabling the poor to borrow to finance income-enhancing assets including human assets such as health and education and to become micro-entrepreneurs to generate income and ultimately come out of the poverty.⁵ In addition, financial sector development could enable the poor to channel the savings to formal sector, i.e. bank accounts and other saving schemes and insurance which allow the poor to establish a buffer against future shocks, thus reducing vulnerability and exposure which otherwise could have put undue strain on future income prospects.

Modern development theories analyzing the evolution of growth, relative income inequalities and economic development offer two tracks of thinking. One track attributes imbalances in redistribution of wealth and income in the economy as an impediment to growth while the other track

⁴For example, in Bangladesh, Pakistan, and the Philippines, it takes more than a month to get a small business loan processed. In Denmark, the wait is only a day. Demirguc-Kunt, Beck and Honohan (2007).

⁵ DFID (2004).

identifies financial market imperfections as the key obstacle.⁶ Proponents of the redistribution of wealth claim that redistribution can foster growth and a focus on redistributive public policies such as land or education reforms focusing on schooling, saving, or fertility changes can lead to reduction in income inequalities and poverty.

The other school of thought attributes market failure and imperfect information leading to financial markets frictions as the obstacle to growth (Stiglitz & Weiss, 1981). Financial market frictions can be the critical mechanism for generating persistent income inequality or poverty traps. Financial market imperfections, such as information asymmetries and transactions costs, are likely to be especially binding on the talented poor and the micro and small enterprises that lack collateral, credit histories, and connections, thus limiting their opportunities and leading to persistent inequality and slower growth.

The main problems in delivering credit are linked to risks arising out of information asymmetries and the high transaction costs of processing, monitoring, and enforcing small loans, leading to an increase in break-even interest rates for these loans. These asymmetries can result from adverse selection, that is, the inability of the lender to distinguish between high- and low-risk borrowers, or from moral hazard, that is, the tendency for some borrowers to divert resources to projects that reduce their likelihood of being able to repay the loan and the inability of the lender to detect and prevent such behavior. Depending on the specific information asymmetry and the ability of potential borrowers to pledge collateral, lenders may try to use the interest rate or a combination of the interest rate and collateral as a screening and sorting mechanism. If collateral is not available, lenders are forced to rely only on the interest rate, but in doing so, they risk excluding, or crowding out, safe borrowers.

There is growing evidence identifying linkage between the economic development and financial inclusion. Galor and Zeira (1993) and Banerjee and Newman (1993) imply that financial exclusion not only holds back investment, but results in persistent income inequality, as it adds to negative incentives to save and work and encourages repeated distribution in a society. Empirical studies by Demirguc-Kunt and Levine (2007) show that countries with deeper financial systems experience faster reductions in the share of the population that lives on less than one dollar a day. Almost 30% of the cross-country variation in changing poverty rates can be explained by variation in financial development.

⁶ Demirguc-Kunt, Beck and Honohan (2007).

2. Issues with conventional approach to financial inclusion

Although the tension between the two approaches of either redistribution policies or financial market frictions continues, there is realization that the evolution of financial development, growth, and intergenerational income dynamics are closely intertwined. Aghion and Bolton (1997) point out that an approach centered on redistribution policies may create disincentives to work and save but DemirgüçKunt and Levine (2007) argue that by focusing on financial sector reforms and reducing financial market imperfections to expand individual opportunities creates positive and not negative incentive effects. They further conclude that building a more inclusive financial system also appeals to a wider range of philosophical perspectives than can redistributive policies: redistribution aims to equalize outcomes, whereas better functioning financial systems serve to equalize opportunities.

The approach to remove financial markets frictions to enhance financial inclusion consists of two tracks. First, the emphasis is on developing the overall financial sector infrastructure targeting the banking, capital markets, and insurance sector through promoting enhanced regulations, supervision and transparency. This is in addition to necessary building of economic and legal institutions which are deemed necessary for efficient functioning of any economy. The second track focuses primarily on expanding credit to Micro-Small-Medium Enterprises (MSME). For example, in the past three decades, access to micro-credit has expanded dramatically and according to some estimates, nearly 200 million micro-borrowers have been successful in having approach to formal financial services.⁷

The experience with micro-credit or micro-finance has been mixed as there is growing consensus that the expectations were overestimated and there are serious challenges in achieving sustainable impact on poverty alleviation. The key challenges facing micro-finance industry are summarized below:

- a) **High Interest Rates:** Conventional micro-finance institutions are often criticized for charging very high interest rates on the loans to the poor. These high rates may be justified due to high transaction costs and high risk premium. However, this imposes undue stress on the recipient to engage in activities which produce returns higher than the cost of funding which may not be possible in many cases.

⁷ Bauchet, Marshall, Starita, Thomas, and Yalouris (2011).

- b) **Not every poor is micro-entrepreneur:** Merely making the capital accessible to poor is not the solution without realizing that not every poor or recipient of micro-credit has the skill set or the basic business sense to become an entrepreneur. There is need to provide proper training, skills building, and institutional support to promote entrepreneurship among poor. Such capacity building requires funds which are often not readily available.
- c) **Diversion of funds:** There are chances that the funds will be diverted to non-productive activities such as personal consumption. In some cases, micro-credit may lead the poor into a circular debt situation where borrowing from one micro-lender is used to pay off the borrowings from another lender. Poor households clearly have other financial needs such as school fees, risk mitigation against health and crop exposures, and even personal consumption.
- d) **Large scale fund mobilization:** While some of micro-finance institutions (MFIs) have had a significant impact on poverty, others have been less successful, making it difficult because MFIs generally cannot mobilize funds on a large scale and pool risks over very large areas in the way that more traditional, formal financial institutions can. In addition, most MFIs have only limited coverage and are reaching only a minority of the bankable population.⁸
- e) **Product Design:** The financial services needs of poor households may require different product features with different payment and delivery structures as opposed to typical debt based lending to micro-borrower. A more suitable product targeted to match the needs of the poor may prove to be more welfare-enhancing.
- f) **Absence of private sector participation:** As mentioned above, due to limited supply, coverage, products set, and funding by the informal, semi-formal and non-commercial sectors, effectiveness of MFIs is often compromised. There is need to move towards a market-based or private sector based solution within the formal financial sector or capital markets. Without participation by the private sector, some of the core issues may not be overcome.

It is worth looking at the evidence on the effectiveness of micro-lending. Recent experimental evidence from three randomized impact evaluations suggests that while increasing access to credit does not

⁸ DFID (2004).

produce the kind of dramatic transformations expected by earlier literature but it does appear to have some important—though more modest—outcome. There is some evidence of shift away from non-productive activities in favor of productive ones but not drastic enough to result significant uplift in the poverty levels. This suggests that micro loans help some households reprioritize their expenditures and smooth consumption—a valuable function for poor households that suffer from irregular and unpredictable income streams.⁹

3. Concept of Financial Inclusion in Islam

It is widely recognized that the central economic tenet of Islam is to develop a prosperous, just and egalitarian economic and social structure in which all members of society can maximize their intellectual capacity, preserve and promote their health, and actively contribute to the economic and social development of society. Economic development and growth, along with social justice, are the foundational elements of an Islamic economic system. All members of an Islamic society must be given the same opportunities to advance themselves; in other words, a level playing field, including access to the natural resources provided by God. For those for whom there is no work and for those that cannot work (including the handicapped), society must afford the minimum requirements for a dignified life by providing shelter, food, healthcare and education.

The concept of development in Islam has three dimensions: individual self-development, the physical development of the earth, and the development of the human collectivity, which includes both.¹⁰ In Islam all three dimensions of development assign heavy responsibility on individuals and society—with both held responsible for any lack of development. Balanced development is defined as balanced progress in all three dimensions. Progress is balanced if it is accompanied by justice, both in its general (*Ádl*) and in its interpersonal (*Qist*) dimensions.¹¹ The objective of such balanced development is to achieve progress on the path-to-perfection by all humans, through rule compliance. The first dimension specifies a dynamic process of the growth of the human person toward

⁹ Bauchet, Marshall, Starita, Thomas, and Yalouris (2011).

¹⁰ Mirakhor and Askari (2010).

¹¹ The Quran uses two words for justice: *qist* and *ádl*. The first is the chief characteristic of appropriate human relations and of human relations towards the rest of creation. It is entirely a human phenomenon; it is not a divine trait. *Ádl*, on the other hand, is a feature of Allah's Actions that manifests itself in the perfect balance of the cosmos; it characterizes the Action of Allah to place everything in its rightful place (Mirakhor and Askari (2010).

perfection. The second dimension addresses the utilization of natural resources to develop the earth to provide for the material needs of the individual and all of humanity. The third dimension of development refers to the progress of the human collectivity toward full integration and unity. Happiness and fulfilment in a person's life is not achieved by a mere increase in income, but with a full development of a person along all three dimensions. At the same time, economic progress and prosperity 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.

Islam emphasizes financial inclusion more explicitly but two distinct features of Islamic finance – the notions of risk-sharing and redistribution of wealth – differentiate its path of development significantly from conventional financial model.

Individuals in a society face two types of risks. The first is the result of the exposure of the economy to uncertainty and risk due to external and internal economic circumstances of the society and its vulnerabilities to shocks. How well the economy will absorb shocks depends on its resilience which will in turn depend on the institutional and policy infrastructure of the society. How flexibly these will respond to shocks will determine how much these risks impact individual lives when they materialize. The second type of risk individuals face relates to the circumstances of their personal lives. These include risks of injuries, illness, accidents, bankruptcies or even change of tastes and preferences. This kind of risk is referred to as idiosyncratic and when they materialize, they play havoc with people's livelihood. This is because often the level of their consumption that sustains them is directly dependent on their income. If their income becomes volatile, so will their livelihood and consumption. Engaging in risk sharing can mitigate idiosyncratic risk and allow consumption smoothing by weakening the correlation between income and consumption such that should these risks materialize, and the shock reduce income, consumption and livelihood of the individual do not suffer correspondingly.

In a society risks can be shared among its members and/or between its members and its state. Both in the industrial and developing economies, people find ways and means of sharing risks to their livelihood. In particular, they use coping mechanisms to increase the variability of their income relative to their consumption. In more developed financial systems, the coping mechanism is investing in financial assets or in acquiring insurance to mitigate against personal risks. In developing

countries, with weak financial markets, people rely on informal insurance, borrowing or saving to cope with idiosyncratic risks. In such societies, theory suggests that perfect informal insurance is possible if communities fully pool their incomes to share risks.

According to Islamic perspective, risks are mitigated in various ways. First, the economic system is a rule-based system which has provided rules of behavior and a taxonomy of decisions - actions and their commensurate pay offs based on injunctions in the *Qur'an*. Complying with these rules reduces uncertainty. Clearly, individuals exercise their freedom in choosing to comply or not with these rules. These rules of behavior and compliance with them reduce uncertainty - an important insight of the new institutional economics. Rules reduce the burden on human cognitive capacity, particularly in the process of decision making under uncertainty. Rules also promote cooperation and coordination (Mirakhor, 2009). Second, Islam has provided ways and means by which, those who are able to mitigate uncertainty by sharing the risks they face by engaging in economic activities with fellow human beings through exchange. Sharing allows risk to be spread and thus lowered for individual participants. However, if a person is unable to use any of the market means of risk sharing because of poverty, *Allah* swt has ordered a solution here as well: the rich are commanded to share the risks of the life of the poor by redeeming their rights derived from the Islamic principles of property rights (Mirakhor 1989, Iqbal and Mirakhor 2011).

Islam ordains risk sharing through three main venues:

- I. Contracts of exchange and risk-sharing instruments in the financial sector;
- II. Redistributive risk-sharing instruments through which the economically more able segment of the society utilize in order to share the risks facing the less able segment of the population; and
- III. Inheritance rules specified in the Qur'an through which the wealth of a person at the time of passing is distributed among present and future generations of inheritors.

Islamic finance, the foundation of the belief that such a system facilitates real sector activities through risk sharing, has its epistemological roots firmly in the Qur'an, specifically, verse 275 of chapter 2 (Mirakhor, 2011; Mirakhor and Smolo, 2011). This verse, in part, ordains that all economic and financial transactions are conducted via contracts of exchange (*al-Bai'*) and not through interest-based debt

contracts (*al-Riba*). Since in the *Ayah* the contract of exchange appears first and 'no-*Riba*' after, it is reasonable to argue that requiring that contracts be based on exchange constitutes a necessary condition of a permissible contract. Based on the same logic, the requirement of 'no-*Riba*' constitutes the sufficient condition of contracts. The necessary condition (*al-Bai'*) and sufficient condition (no *Riba*) must be met for a contract to be considered Islamic. Classical Arabic Lexicons of the *Qur'an* define contracts of exchange (*al-Bai'*) as contracts involving exchange of property in which there are expectations of gains and probability of losses (Mirakhor, 2010) implying that there are risks in the transactions.

One reason, *inter alia*, for non-permissibility of the contract of *Al-Riba* is surely due to the fact that this contract transfers all, or at least a major portion, of risk to the borrower. It is possible to imagine instruments that on their face are compatible with the no-*Riba* requirement, but are instruments of risk transfer and, ultimately, of shifting risk to tax payers.

By entering into contracts of exchange, parties improve their welfare by exchanging the risks of economic activities, thus allowing division of labor and specialization. Conceptually, there is a difference between risk taking and risk sharing. The former is antecedent to the latter. An entrepreneur has to first decide to undertake the risk associated with a real sector project before financing is sought. In non-barter exchange, it is at the point of financing where risk sharing materializes or fails to do so. The risk of the project does not change as it enters the financial sector seeking financing. Not clarifying this distinction has led to a confusion that the two concepts are one and the same. In the contemporary economy, at the point of financing, risk may be shared but it can also be transferred or shifted. The essence of financial intermediation is the ability of financial institutions to transfer risk. All institutional arrangements within the financial sector of contemporary economies are mostly geared to facilitate this function. One of the chief characteristics of the 2007/2008 global crisis was the fact that many financial institutions shifted the risk of losses but internalized the gains of their operation. Hence, the concept of "privatized gains and socialized losses" (see Sheng, 2009).

Arrow (1971) demonstrated that in a competitive market economy, in which markets are complete and Arrow securities whose pay offs are state-contingent are available, it would be Pareto optimal for the economy if its members were to share risk according to each participant's ability to bear risk (Mirakhor, 2010). In the absence of complete markets, which include all possible future contingencies, the efficiency of risk-sharing

mechanisms will depend on the institutional structure, the degree and intensity of informational problems and policies designed to render the economy resilient to shocks.¹²

To summarize, Islamic system offers various advantages over the conventional system based on risk-shifting. Use of risk-sharing instruments could encourage investors to invest in sectors such as micro-small-medium-enterprises (MSME) which are perceived as high risk sectors. Given an enabling environment, investors with matching risk appetite will be attractive to providing capital for these sectors. This argument can be supported by growing market for the private equity. With increased availability of funds for these sectors, one could expect an increase in the financial inclusion in the system.

4. Redistributive Instruments of Islam

As will be argued here, the second set of instruments meant for redistribution are used to redeem the rights of the less able in the income and wealth of the more able. Contrary to common belief, these are not instruments of charity, altruism or beneficence but these are instruments of redemption of rights and repayment of obligations.

In practical terms, the *Quran* makes clear that creating a balanced society that avoids extremes of wealth and poverty, a society in which all understand that wealth is a blessing provided by the Creator for the sole purpose of providing support for the lives of all of mankind is desirable. The Islamic view holds that it is not possible to have many rich and wealthy people who continue to focus all their efforts on accumulating wealth without simultaneously creating a mass of economically deprived and destitute. The rich consume opulently while the poor suffer from deprivation because their rights in the wealth of the rich and powerful are not redeemed. To avoid this, Islam prohibits wealth concentration, imposes limits on consumption through its rules prohibiting overspending (*Israf*), waste (*Itlaf*), ostentatious and opulent spending (*Itraf*). It then ordains that the net surplus, after moderate spending necessary to maintain

¹²Mirakhor (2010). The economy-finance nexus defined by Arrow-Debreu-Hahn general equilibrium models were risk-sharing conceptualizations in which securities represented contingent financial claims on the real sector. Equity share claims represent first best instruments of risk sharing and satisfy characteristics required of Arrow Securities. It would appear that had the financial markets in industrial countries developed their financial sector along the lines suggested by Arrow-Debreu-Hahn model, they could have had much more efficient risk sharing and, perhaps, avoided the crises that have plagued conventional financial system. See Arrow and Debreu (1954) and Arrow and Hahn (1971).

modest living standard, must be returned to the members of the society who, for a variety of reasons, are unable to work, hence the resources they could have used to produce income and wealth were utilized by the more able.

The *Quran* considers the more able as trustee-agents in using these resources on behalf of the less able. In this view, property is not a means of exclusion but inclusion in which the rights of those less able in the income and wealth of the more able are redeemed. The result would be a balanced economy without extremes of wealth and poverty. The operational mechanism for redeeming the right of the less able in the income and wealth of the more able are the network of mandatory and voluntary payments such as *Zakat* (2.5 percent on wealth), *Khums* (20 percent of income), and payments referred to as *Sadaqāt*.

The most important economic institution that operationalizes the objective of achieving social justice in Islam is that of the distribution-redistribution rule of the Islamic economic paradigm. Distribution takes place post-production and sale when all factors of production are given what is due to them commensurate with their contribution to production, exchange and sale of goods and services. Redistribution refers to the post-distribution phase when the charges due to the less able are levied. These expenditures are essentially repatriation and redemption of the rights of others in one's income and wealth. Redeeming these rights is a manifestation of belief in the Oneness of the Creator and its corollary, the unity of the creation in general and of mankind in particular. It is the recognition and affirmation that *Allah* (swt) has created the resources for all of the mankind who must have unhindered access to them. Even the abilities that make access to resources possible are due to the Creator. This would mean that those who are less able or unable to use these resources are partners of the more able.

The expenditures intended for redeeming these rights are referred to in the *Quran* as *Sadaqāt* which is the plural of the term *Sadaqah*, a derivative of the root meaning truthfulness and sincerity; their payments indicate the strength of the sincerity of a person's belief (*Quran*, 2:26; 2:272). The *Quran* insists that these are rights of the poor in the income and wealth of the rich; they are not charity (*Quran*, 917:26; 38:30; 70:25; 19:51; 2:177). Therefore, the *Quran* asks that extreme care be taken of the recipients' human dignity of which the recipients themselves are fully aware and conscious to the point that they are reluctant to reveal their poverty. The *Quran* consequently recommends that payment to the poor be done in secret (*Quran*, 2:271-273). Moreover, the *Quran* strictly forbids that these

payments be made either reproaching or accompanied by ill treatment of the recipient or with annoyance displayed by the person making the payment (*Quran*, 2:262-265).

Sadaqāt are a very important redistributive institution in Islam for two reasons: first, they operationalize the truthfulness of one's belief in *Allah* (swt) in voluntarily giving of one's income and wealth. Second, the importance of this institution derives from the fact that the receiver is not the person to whom *Sadaqah* is given, but *Allah* (swt). In two verses (103 and 104) of Chapter of Repentance, it is noted that:

(103): of their goods (wealth) take *Sadaqah*, so that you might purify and sanctify them; and pray on their behalf. Indeed, your prayers are a source of security for them: and *Allah* (swt) is One Who Hears and Knows.

(104): Do they not know that *Allah* (swt) accepts repentance from His servants and Receives their *Sadaqāt*, and that *Allah* (swt) is indeed He, the Oft-Returning, Most Merciful.

Zakah is considered a component of *Sadaqāt*, but it has been given a special status in the *Quran* because it is ordained with obligatory prayer in at least 20 verses (see, for example, verse 110, Chapter 2). Moreover, its collection was enforced by the governments in early Muslim history following the passing of the Messenger.

Qard hassan is a loan mentioned in the *Quran* as "beautiful" (*hassan*) probably because in all the verses in which this loan is mentioned, it is stipulated that it is made directly to *Allah* (swt) and not to the recipient (see, for example, verse 17, Chapter 64). It is a voluntary loan without creditor's expectation of any return on the principal. Additionally, while the debtor is obligated to return the principal, the creditor, on his own free will, does not press the debtor for an exact timing of its return. Again, in the case of *Qard hassan*, *Allah* (swt) promises multiple returns to the "beautiful loan." Unfortunately, the full potential of this institution to mobilize substantial resources for the empowerment of economically weak or dispossessed has not been realized. Much has been written about micro finance and its potential to reduce poverty. However, it is an irony that institutions of micro finance are growing rapidly in Muslim countries, but it is seldom realized that Islam's own institution of *Qard hassan* is a more effective means of providing credit to those who cannot access formal credit channels.

Very early in the history of Muslim societies, the institution of *Waqf* appeared through which a person could contribute the third of his/her

wealth over which he/she is allowed by *Sharī'ah* to exercise control at the time of his/her death. A *Waqf* is a trust established when the contributor endows the stream of income accrued to a property for a charitable purpose in perpetuity. This institution has already been partially instrumentalized—although not in the sense used in this talk—since the legality of cash *Waqf* (i.e., endowing the future income stream of a cash trust instead of a physical property) has been recognized in most Muslim countries. Here, too, the potential of mobilizing large amount of financial resources through instrumentalization of this institution by a globally credible Islamic financial institution is substantial.

The third dimension of distributive justice in the institutional scaffolding of an Islamic society is the institution of inheritance crucial in the intergenerational justice framework envisioned by the Law Giver. Rules governing production, consumption and distribution assure conservation of resources for the next generations. Rules of redistribution ensure that those unable to benefit by participating directly in production and consumption in the market, through combination of their labor and their right of access to resources provided by the Supreme Creator for all humans, are redeemed their rights through *Zakah*, *Khums*, *Sadaqāt*, *Waqf* and other redistributive mechanisms. Once these rights have been redeemed out of the income and wealth of the more economically able, the latter's property rights on the remaining income and wealth is held inviolable. These rights, however, seize at the point of passing of a person. At the time of passing the person loses the right to allocate his/her wealth as he/she pleases except on a third of income which believers can use to make *Waqf*, *Sadaqāt*, or other transfer contributions as the person wishes. The remainder is broken up and has to be distributed among a large number of persons and categories according to strict rules of allocation specified in the *Qur'an* (see the *Qur'an* Verses 11-13, Chapter 4).

5. Public Policy Implications

Analysts suggest that public policy and strengthened institutional framework in developing countries can go a long way in enhancing financial inclusion. Better governance that can reduce damages to households due to mismanagement, achieving and sustaining economic and political stability, financial sector development are examples of policy improvements. In terms of institutional framework, clear and secure property rights, contract enforcement, trust among people and between government and people, and other institutions can reduce risk, uncertainty and ambiguity, strengthen social solidarity, bring private and public interests into closer harmony and ensure coordination to achieve in risk

sharing (Mirakhor 2009, 2010). Public policy could also help in mobilizing savings of poor household and thus reduce vulnerability to income shocks.

Public policy to create integration and support saving mobilization in developing countries could help risk mitigation and sharing thus building resilience in face of shocks. With regards to micro finance, as discussed earlier, there is empirical evidence suggesting that while these contracts help reduce poverty in low income countries by providing small, uncollateralized loans to poor borrowers, there is no evidence to suggest that those contracts allow businesses to grow beyond subsistence. Aside from high interest rates that reduce available resources, it is thought that the structure of typical microfinance contracts have features, such as peer monitoring and joint liability designed to reduce moral hazard risk, that create tension between risk taking and risk pooling. The latter, allows greater opportunity for informal risk sharing due to repeated interaction among the borrowers. Joint liability and peer monitoring - which are features common to most micro finance programs under which small groups of borrowers become responsible for one another's loans and all members are held responsible for consequences of one member's failure to repay the loan but do not reward other members in case of success - discourage risk taking and development of entrepreneurial impulses among borrowers (Chawdhury, 2005; Amendariz De Aghion and Morduch, 2005; Fischer, 2010). In addition to saving mobilization and encouraging micro finance, better access to financial sector through developing microcredit and insurance markets in rural and poverty-stricken regions are promising ways and means by which public policy can assist development of risk sharing to allow households to cope with risk.

There are powers available to a government that private sector does not have. For one thing, in its capacity as the risk manager of the society and as its agent, it can promote risk sharing broadly by removing many of the barriers to its spread. It can reduce informational problems, such as moral hazard and adverse selection through its potentially vast investigative, monitoring and enforcement capabilities. Through its power of implementation of civil and criminal penalties for non-compliance, a government can demand truthful disclosure of information from participants in the economy. It can force financial concerns that would attempt to appropriate gains and externalize losses, by shifting risks to others, to internalize them by imposing stiff liabilities or taxes. Using its power to tax and to control money supply, a government has the

significant ability to make credible commitments on current and future financing issues. It can use its power to tax to create an incentive structure for intergenerational risk sharing whereby the proceeds from taxation of current income-earning generation is redistributed to reduce risks to human capital of the youth of current and future generation. Without government intervention, individuals are unable to diversify the risk to their most valuable asset: their human capital. The young have significant human capital but insufficient financial capital. For the old, on the other hand, the case is the opposite.¹³

5.1 Government as the risk manager promoting risk-sharing¹⁴

It could well be argued that in contemporary societies, risk management is the central role of government and therefore, government is the ultimate risk manager in a society. In most economies, governments play a major role in bearing risk on behalf of their citizens. For example, governments provided social safety nets measures and insurance for a variety of financial transactions. The history of economic explanation for government's role in the economy spans more than a century as economists attempted to explain the justification of the role as being necessitated by the divergence between public and private interests. Some six decades ago Arrow and Debreu (1954) focused on finding precise conditions under which public and private interests would converge as envisioned in a conception of Adam Smith's invisible-hand conjecture. The result was an elegant proof that competitive markets would indeed have a stable equilibrium provided some stringent conditions were met. It was clear, however, that even under the best of actual conditions, markets did not perform as envisioned either by Smith or Arrow-Debreu. Consideration of violations of the underlying conditions spawned a voluminous body of literature on the theory and empirics of market failure. This concept became the starting point of analytic reasoning that justifies government's intervention in the economy to protect the public interest (Stiglitz, 1993).

¹³ As Robert Merton (1983) suggested, a trade is possible between these generations but laws prohibit trade in human capital (except through wage employment), the young cannot make credible commitment of their human capital through private contracts. There is no possibility for private contracts to commit future generations to current risk-sharing arrangements. This, in effect represents another case of commitment failure. Using its powers of taxing and spending, unparalleled monitoring and enforcing capabilities and its control of money supply, government can resolve these issues. No private entity can credibly commit not to default on an obligation as can government.

¹⁴ Mirakhor (2011).

The reason that contemporary societies implement social safety nets, such as social security, health care, public unemployment insurance programs, is that individual households face substantial risk over their life span such as mortality risk, wage and other income-wide risks, and health risks. Because private insurance markets do not provide perfect insurance against all risks, there is said to be a market failure and government intervention is called for to correct it. What has become clear in the wake of the global financial crisis is that even in the most advanced industrial economies existing social safety nets have become incapable of coping with the adverse consequences of the crisis. Not only has the crisis shaken previous level of confidence in markets, nearly all analyses of its causes attribute it to market failure in one dimension or another. This has intensified calls for governments' interventions to counter the adverse effects of the crisis on income and employment, to strengthen social safety nets and to reform the financial sectors. The most important lesson of the crisis has been that people at large carry too large a risk of exposure to massive shocks originating in events that are beyond their influence and control. Hence, attention has been focused on ways and means of expanding collective risk sharing.

Here-to-fore, it has been assumed that government intervention, in the form of activities, such as providing social safety nets, public goods, and deposit insurance, were solely for the purpose of addressing various kinds of market failure. While this is a crucial justification for intervention, there is an important dimension of government's role that has not attracted much attention. Much of these activities in provision of social safety net, from a minimal amount in some countries to substantial amounts in welfare states, are also about collective risk sharing. This dimension has been particularly neglected in the analysis of government provision of social insurance and services in which the sole focus has been on the issue of trade off between equity and efficiency; the issue at the heart of state vs. market debates.

5.2 Need for Developing Supportive Institutional Framework

As discusses earlier, access to finance is hampered by informational asymmetries and market imperfections which needs to be removed before one could think of enhancing finance. When it comes to developing countries where financial sector is not very developed and formal financial sector is under-developed, it is important that attention is paid to improve institutions critical for financial sector development. Improved access to finance in many developing countries is constrained by under-developed institutional framework, inadequate regulations, and lack of specialist

supervisory capacity. Policy makers need to take steps to enhance key institutions such as legal, informational, and regulatory in the country.

5.2.1 Regulators should give financial inclusion a priority.

Despite the significance of financial inclusion, it is observed that it is still not a priority for financial regulators in most of OIC countries. OIC countries need to develop a regulatory and supervisory framework that supports wide financial inclusion based on sound risk management and with sufficient consumer protections. Financial inclusion should be considered as a goal alongside prudential regulation and financial system stability. The CGAP and World Bank Financial Access survey (2010) of financial regulators worldwide found that regions that include financial access in their strategies and mandate their financial regulators to carry such agendas are also the countries that reform the most. Regulators with a financial inclusion strategy are more likely to have more financial inclusion topics under their purview and more resources and staff dedicated to working on these matters.¹⁵

5.2.2 Improving financial infrastructure, especially the improvement of current credit informational system, should be given the priority.

Core components of the financial infrastructure such as credit information, investors' rights, insolvency regimes, etc. are essential irrespective of type of financing, i.e. conventional or Islamic. Deficiencies in financial infrastructure are one of the major obstacles for further SME lending in MENA region.¹⁶ Sharing borrower information is essential to lowering costs and overcoming information constraints. Lack of access to credit information and low coverage ratio of credit history of individuals are two main features that contribute to the financial exclusion in OIC countries especially for SME financing. Muslim countries interested in enhancing financial inclusion need to improve the financial infrastructure which will entail expanding the range of collateral, improving registries for movables, and improving enforcement and sales procedures for both fixed and movable assets. It also entails upgrading public credit registries, and more

¹⁵ Pearce (2010).

¹⁶ As the most comprehensive measurement of business environment faced by SMEs across countries, the Doing Business Report 2011 shows that OIC countries rank 118 on average, much lower than the average developing countries (100) in terms of ease of doing business. In addition, OIC countries lag far behind in all four aspects of ease of getting credit – depth of credit information, public credit registry coverage, strength of legal rights, and private credit bureau. (Mohieldin, Iqbal, Rostom, Fu (2011))

importantly, introducing private credit bureaus capable of significantly expanding coverage and the depth of credit information.¹⁷ Financial infrastructure improvements will reduce the information asymmetry that constrains access to credit and raises the costs and risk of financial intermediation.

5.2.3 Develop infrastructure conducive to *Sharī'ah*-compliant products

The growth of Islamic microfinance will depend to a large degree on whether financial institutions can develop sufficiently attractive financial products and services, which are competitive with conventional products in terms of pricing, transparency, processing time, and burden on the client. *Sharī'ah*-compliant microfinance and SME financing is limited in its scope and scale because of lack of knowledge concerning *Sharī'ah* products, absence of accounting and regulatory standards for *Sharī'ah*-compliant micro-finance, and adequate monitoring and supervisory setups.

Integrating *Sharī'ah*-compliant products and customers information into formal financial sector will not only enhance the access, it will also help integrate Islamic finance with conventional finance. For example, by bringing borrowers' information to credit bureaus, financial institutions of all types could extend access to new customers, while managing risks and costs more effectively. This will also help *Sharī'ah*-compliant financial institutions to expand their funding source and enhance their risk-sharing mechanism, as institution with its clients' credit information available to the public can establish its reputation much easier than those with an informal credit history system.

5.2.4 Develop and promote Micro-insurance:

There is evidence of a positive causal relationship between insurance penetration and economic growth. The policyholder benefits by increased access to a wider range of products with increased coverage and greater sustainability; and the partnering insurance company has access into a new market without taking extensive marketing, distribution, or administration costs. More importantly, the partner-agent model facilitates the pooling of risks between the formal and informal sectors.

Despite the success and rapid growth of Islamic insurance (*Takaful*) and micro-insurance's contribution in poverty reduction, Micro-*Takaful* institutions are still significantly underdeveloped in OIC countries. Similar to low-income individuals, SMEs are also less covered by insurance

¹⁷ Rocha, Farazi, Khouri, and Pearce (2011).

services in poorer OIC countries. In MENA region, 34% of SMEs in GCC countries have the access to insurance services, while the figure falls sharply to 19% if the SMEs in Non-GCC countries in the same region are considered.¹⁸ One major reason of the slow expansion of micro-*Takaful* may be linked to the fact that micro finance institutions in Muslim populous countries are less likely to offer insurance services which are *Shari'ah*-compliant.¹⁹

If the policy makers in Muslim countries wish to promote Islamic micro finance and SMEs, there is need that these measures are complemented by promotion of micro *Takaful* by designing adequate regulatory framework and by providing incentives to insurance carriers to enter into this market. Study by Islamic Development Bank (IDB) rightly suggests that *Qard Hassan* funds could be used to develop micro *Takaful* capacity in a country in addition to credit guarantee systems.²⁰ Similarly, *Zakah* funds can be utilized to cover default risk of poor spectrum of micro-enterprises, to build capacity and skill building, and to reduce operating costs of micro finance and micro insurance. Implementation of such ideas and innovations require development of institutions supporting transparent governance to ensure the effectiveness of such mechanisms.

5.2.5 Encourage formal sector engagement

Based on the experience of micro finance, the development community is shifting the emphasis away from micro credit institutions to an array of other financial institutions, such as postal savings banks, consumer credit institutions, and, most important, the banking system with the view that this broader approach can lead to overall financial system efficiency and outreach to the whole population. Widening of financial services to the poor and small enterprises by private sector institutions (particularly commercial banks) in the formal financial sector requires proper incentives and removal of regulatory barriers without sacrificing promotion of stability or security of the financial system.²¹

5.3 Institutionalization of Islamic redistributive instruments

As discussed earlier, Islam provides set of redistributive instruments which could play critical role in enhancing the access and to reduce the poverty. Given the Islam's emphasis on social and economic justice and the eradication of poverty, we would expect Islamic instruments targeted

¹⁸ Rocha, Farazi, Khouri, and Pearce (2011).

¹⁹ Kwon (2010).

²⁰ Obaidullah (2008).

²¹ DFID (2004).

to address inequity, such as *Zakah*, *Khairat*, *Waqf*, and *Qard hassan*, to play an important role if the required institutional structures are developed²². Therefore, there is need to formalize or institutionalize Islamic redistributive mechanisms designed to empower the economically weak segments of the society.²³

By institutionalization, we mean to build nation-wide institutions and surrounding legal infrastructure to maximize the effectiveness of these redistributive mechanisms. This institution-building exercise can take place in three steps. First step is the development of institutions. An institution is nothing more than the legalization of the rules of behavior and therefore, would require crafting rules pertaining to these instruments as envisioned by the *Sharī'ah*. The next step would be to establish these institutions and to integrate them with the rest of the economic and financial system. In this process, either existing channels of distribution, i.e. banks or post offices can be utilized to interact with the customers, or new means can be introduced leveraging of new technologies. Finally, there should be mechanism to ensure enforceability of rules through transparent means.

The objective of institutionalization of redistributive instruments is to formalize and standardize the operations to facilitate each instrument. For example, for *Zakah*, *Khairat*, and *Qard hassan*, a formal network of institutions needs to be developed to collect, distribute, and recycle the

²²For example, Mohieldin, Iqbal, Rostom and Fu (2011) estimate the resource shortfall to fill the poverty gap using *Zakah* collection and find supporting evidence that 20 out of 39 OIC countries can actually alleviate the poorest living with income under \$1.25 per day out of the poverty line simply with domestic and remittances *Zakah* collection. They argue that they do not consider it a totally new source of poverty reduction mechanism using *Zakah* as it is already collected and distributed to the poor in several Islamic countries but they argue that proper collection, streamlining, accountability, prioritization, and allocation to productive activities can have significant impact on enhancing access and opportunity for the poor segment of the society which will ultimately lead to reduction in poverty.

²³ See Mirakhor (2004) for further details. He argues that given the number of poor in Islamic countries, critics argue that, a priori, Islamic institutions, which were meant to redistribute income and wealth from the more well-to-do to the weaker segment of the society, have not shown the necessary potency in performing their function, and they could be right. It is a serious problem that very little effort has been expended by our researchers and scholars in empirically investigating the behavior of Muslims vis-à-vis these institutions, i.e., why the latter have failed to achieve the objectives for which they were designed, and how the situation could be remedied. Admitting that these institutions have, by and large, failed to alleviate poverty in Muslim countries does not obviate the need to consider their potential.

funds in most efficient and the most transparent fashion.²⁴ In some countries, point of sale such as Automated Teller Machines (ATM) or cash dispensing machines are used to give choice to the customers to make donations or contribution at the spot to make it easy for the customer to make such contributions. The financial institution can collect and aggregate funds and then disburse to needy through selected channels.

The use of *Qard hassan* for micro finance sector should be exploited further. Many of the characteristics of the *Qard hassan* based funds could be shared by micro finance institutions. Therefore, the infrastructure of the latter can be utilized to effectively achieve the objectives of the former. While it is difficult to explain why this very important Islamic redistributive institution is so underutilized in the Islamic world— and requires some research effort by sociologists and economists to investigate the behavioral causes—one can speculate that lack of knowledge, in the first instance, and concerns about safety and security of the contributed principal may be important factors. The latter could be provided by a credible Islamic financial institution through issuance of financial instruments that would provide safety and security to the contributors. The Islamic financial institution can also instrumentalize the asset side of its balance sheet. Furthermore, it can provide *Qard hassan* resources to existing micro finance institutions to reduce the burden of their interest rate charges on their borrowers. But, how would such an Islamic financial institution cover its administrative costs? There are two possible sources: (i) through investing a fraction of the mobilized resources, and (ii) through profit-sharing via *Qard hassan* resources through which the Islamic financial institution invests in productive investment projects of young entrepreneurs that have no access to formal credit markets.

Policy-makers need to pay attention to this set of tools to enhance access and they should encourage development of such institutions through development of legal framework to protect the institutions, donors and stakeholders, and to ensure transparent governance. With well-

²⁴An example of a Muslim country where the institution of *qard hassan* has been utilized effectively to provide microfinance is Iran where these institutions are widespread throughout the country. They provide small consumer and producer loans and, in some cases, engage in profit-making activities that supplement the principal amounts deposited with the fund. These *qard hassan* funds are usually associated in each locality with mosques or other religious organizations and, at times, with guilds or professional group associations. The capital is contributed by the more well-to-do who are at liberty to withdraw their funds at any time. These funds operate with very low administrative costs since most are managed through volunteer service contributed by the people within the group. See Sadr (2007).

developed redistributive institutions supplemented by formal and semi-formal sector financial institutions, one would expect more effective approach to poverty reduction.

5.4 Financial Engineering

Financial innovation and application of financial engineering have changed the face of global landscape in the last three decades. Although, some of the innovations have been criticized and have been the source of volatility in the markets, yet their positive contribution cannot be denied. There is no reason why the financial engineering cannot be used in the area of financial inclusion and to enhance the financial access. One way could be to introduce the application of securitization to securitize assets generated by micro finance and SMEs. *Ṣukūk* are a successful application of securitization and working on the same lines, a marketable instrument can be introduced to provide funding for much needed Micro finance and SME financing. With the introduction of securitization of Micro and SMEs, financial institutions would be able to pool their assets and issue marketable securities. In this way, they will share the risks with the market as well as free-up the capital for further mobilization of micro and SME financing.

Several researchers have put forth ideas of formalizing and institutionalizing Islamic modes of redistributions through an integrated approach by applying financial engineering and by combining different modes. These approaches include establishing a nonprofit financial intermediary based on the *Qard-al-hassan* model or establishing microfinance institutions based on hybrid of *Zakah*, *Awqaf*, and *Sadaqāt*. The institution of *Awqaf* (trust or endowment) was once a very well-established institution in Muslim societies but with gradual decline, it lost its effectiveness. Policy makers need to encourage revival of these institutions and should encourage financial engineering to create hybrid solutions where Islam's redistributive instruments are mixed with market-based instruments to address the issue of sustainable development.

Let's take an example of financial engineering where a market-based solution is combined with a redistributive instrument to strengthen its viability in the market. As argued earlier, securitization could be used to securitize MSME sector assets and to mobilize funding from the market. However, given the perception of high risk and lack of credit enhancement tools which are a standard feature in conventional securitization, both the originators and structurers shy away from securitization of such portfolios. In addition to conventional credit enhancement techniques through tranching, one could raise enough funds based on *Qard al-hassan* to

provide additional buffer of security to the investors against the credit risk. If the securitized portfolio consists of micro-lending, a default by the micro-borrower could be covered by the *Qard al-hassan* which could be forgiven if a business loss occurs despite the earnest efforts of the borrower.

Similarly, issuing an equity instrument on the portfolio of domestic development projects has an added advantage of improving domestic income distribution. Provided that these instruments are issued in low denominations sold in the retail market, these instruments can serve the households and firms in their attempts to hedge their idiosyncratic risks. In essence, they would be macro-market instruments similar to those proposed by Shiller (1993, 1999, 2004). These instruments could anchor the development of the high-end of the risk spectrum.

Above mentioned innovative techniques should be explored further by the Islamic financial institutions. Policy makers should aim to develop a financial system where financial innovation is encouraged but there are checks and balances as well as incentive mechanisms to avoid misuse of financial engineering. Availability of enabling environment and the supporting institutions are pre-requisites and should be developed before such innovations could take place.

6. Conclusion

Risk sharing serves one of the most important desiderata of Islam: the unity of mankind. Islam is a rules-based system in which a network of prescribed rules governs the socio-economic-political life of society. Compliance with these rules renders the society a union of mutual support by requiring humans to share the risks of life. Risk sharing intensifies human interaction. The dizzying pace of financial innovations of several decades prior to the crisis created opportunities and instruments of risk shifting - where risks were shifted to investors, borrowers, depositors and, ultimately, to taxpayers - rather than risk sharing. The financial sector became increasingly decoupled from the real sector with the growth of the former outpacing that of the latter by double-digit multiples (Epstein, 2006; Mirakhor, 2010; Menkoff and Tolksorf, 2001).

Instruments of Islamic finance allow risk sharing and risk diversification through which individuals can mitigate their idiosyncratic risks. On the other hand, mandated levies, such as *Zakah*, are means through which the idiosyncratic risks of the poor are shared by the rich as an act of redemption of the former's property rights in the income and wealth of the latter. Other recommended levies, beyond those mandated,

such as *Sadaqāt* and *Qardh Hassan*, too play the same role. They help reduce the poor's income - consumption correlation. In other words, the poor are not forced to rely on their low (or no) level income to maintain a decent level of subsistence living for themselves and their families. It is possible that at some point in time even these levies can be instrumentalised to be included in the full-spectrum Islamic finance menu of instruments for risk sharing. In the event, Islamic finance becomes a risk manager of the society.

Its instruments of risk sharing will help blunt the impact of economic shocks, disappointments and suffering on individuals by dispersing their effects among a large number of people. It will have instruments of finance available for all classes of people to allow them to reduce their idiosyncratic risks and smooth their consumption. It will ensure that innovators, entrepreneurs, small and medium size firms have access to financial resources without the need to take all risks on themselves or, alternatively, abandon productive projects altogether. It will have instruments of insurance that not only provide protection against health and accident risks but also insure against risks to livelihood and home values to protect people's long-term income and livelihood. Such a full-spectrum Islamic finance can then truly be said to have "democratized finance" without transferring risks of any venture to a particular class or to the whole society. This would be in sharp contrast to the results of the "democratization of finance" project which led to the recent global financial crisis of the conventional system in which the risks of financial innovations were shifted away from financiers. Consequence was that while the gains of this "democratization of finance" project were privatized, its pains were socialized (Sheng, 2009).

Given the rules governing property rights, work, production, exchange, markets, distribution, and redistribution, it is reasonable to conclude that in an Islamic society-- a rule-complying and Allah-conscious society--, absolute poverty could not exist. It can be argued that there is no topic more emphasized in Islam than poverty and the responsibility of individuals and society to eradicate it. There is a saying, sometime reported as that of the Holy Prophet (pbuh)²⁵, that poverty is near disbelief and that poverty is worse than murder. 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

²⁵ That narration is said to be weak / *Mauzo'o* as per the standard set by *Muhadditheen* (*Al Dhabi, Meezan al I'tidal, 4 / 416; Albani, Al Silsilah al Dhazifah, No. 1905.*

their income and wealth and that the state has failed to take corrective action.

References

1. Aghion, Philippe, and Patrick Bolton. 1997. "A *Theory of Trickle-Down Growth and Development*." *Review of Economic Studies* 64 (2): 151–72.
2. Armendariz De Aghion, B., and J. Morduch (2005): *The Economics of Microfinance*. Massachusetts: MIT Press.
3. Arrow, K.J. (1971), *Essays in the Theory of Risk-Bearing*, Chicago: Markham Publishing Company, pp. 143; 121-133, pp. 239-266.
4. Arrow, K.J. and Debreu, G., 1954, "The Existence of an Equilibrium for a Competitive Economy", *Econometrica*, vol. XXII, pp. 265-90.
5. Arrow, K.J. and F. Hahn, *General Competitive Analysis* (1971). San Francisco: Holder Day.
6. Banerjee, Abhijit V. and Andrew F. Newman. 1993. "Occupational Choice and the Process of Development." *Journal of Political Economy* 101 (2, April): 274–98.
7. Bauchet, Jonathan, Cristobal Marshall, Laura Starita, Jeanette Thomas, and Anna Yalouris (2009), "Latest Findings from Randomized Evaluations of Microfinance," Consultative Group to Assist the Poor (CGAP), Washington, DC: USA.
8. Beck, Thorsten, and Asli Demirguc-Kunt. "Access to Finance: An Unfinished Agenda." *The World Bank Economic Review*, 2008: 383-396.
9. CGAP (2010), *Financial Access 2010: The State of Financial Inclusion Through the Crisis*, CGAP, Washington, DC. USA.
10. Chapra, M.U., 2000, *The Future of Economics: An Islamic Perspective* (Leicester, UK: The Islamic Foundation).
11. Chowdhury, P.R. (2005). "Group-Lending: Sequential Financing Lender Monitoring and Joint Liability," *Journal of Development Economics*, 77(2), 415-439.
12. Demirgüç-Kunt, Asli, and Ross Levine. 2001. "Finance and Economic Opportunity." Working paper, World Bank, Development Research Group, Washington, DC.
13. Demirguc-Kunt, Asli, Thorsten Beck, and Patrick Honohan. *Finance for All? : Policies and Pitfalls in Expanding Access*. A World Bank Policy Research Report, Washington, D.C.: The World Bank, 2007.
14. Department For International Development (DFID) (2004). "The Importance of Financial Sector Development for Growth and Poverty Reduction," Policy Division Working Paper, London, UK.

15. Doing Business Report 2011 (2011), *IFC and The World Bank*, Washington, D.C. USA, <http://www.doingbusiness.org/>
16. Epstein, G. (2006). “*Financialization and the World Economy.*” New York: Edward Elgar.
17. Fischer, Greg (2010). “*Contract Structure, Risk Sharing, and Investment Choice.*” London School of Economics. The Suntory Centre.
18. Galor, Oded, and Joseph Zeira. 1993. “*Income Distribution and Macroeconomics.*” *Review of Economic Studies* 60 (1): 35–52.
19. Iqbal, Zamir and Abbas Mirakhor, 2011, *An Introduction to Islamic Finance: Theory and Practice* 2nded, (Singapore: John Wiley & Sons).
20. Kwon, W. Jean (2010). "An Analysis of Organisational, Market and Socio-cultural Factors Affecting the Supply of Insurance and Other Financial Services by Microfinance Institutions in Developing Economics." *Geneva Papers on Risk and Insurance*, 2010: 35(1): 130-160.
21. Menkoff, L. and Tolksorf (2001). *Financial Market Drift: Decoupling of the Financial Market from the Real Economy?* Heidelberg-Berlin: Springer-Verlag.
22. Merton, R. (1983). “*On the Role of Social Security as a Means for Efficient Risk Sharing in an Economy Where Human Capital is not Tradeable,*” in Z. Bodie and J. Shoven (eds.) *Financial Aspects of the United States Pension System*, Chicago: University of Chicago Press.
23. Mirakhor, A. (2010). Whither Islamic Finance. Presented at the Securities Commission of Malaysia, March 2010.
24. Mirakhor, A. (2011). “*Epistemological Foundation of Finance: Islamic and Conventional.*” Keynote address presented at the Foundations of Islamic Finance Conference Series, Kuala Lumpur, March 8-10, 2011.
25. Mirakhor, A. and Edib Smolo (2011). “*Do Conventional and Islamic Finance Share Common Epistemology?*” *Global Islamic Finance*, August.
26. Mirakhor, A. 2009, *Islamic Economics and Finance: An Institutional Perspective*, *IIUM Journal of Economics and Management*, vol. 17, no. 1.
27. Mirakhor, A. (2011), “*Islamic finance and risk sharing: Role of Public Policy,*” paper presented at 5th International Islamic Capital Market Forum Securities Commission of Malaysia, November 10, 2011, Kuala Lumpur, Malaysia
28. Mirakhor, A. and Hossein Askari, 2010, *Islam and the Path to Human and Economic Development* (New York: Palgrave Macmillan).
29. Mirakhor, A. (1989), ‘*General Characteristics of An Islamic Economic System,*’ in Baqir Al-Hasani and Abbass Mirakhor, (ed.) *Essays on*

- Iqtisad: The Islamic Approach to Economic Problems*, (Nur Corp., MD, USA), pp.45-80.
30. Mirakhor, A. 2004, *Islamic Finance and Instrumentalization of Islamic Redistributive Institutions*, Paper presented at Ibn Rushd Memorial lecture, London, April 2004.
 31. Mohieldin, Mahmoud, Zamir Iqbal, Ahmed Rostom, and Xiaochen Fu (2011), *The Role of Islamic Finance in Enhancing Financial Inclusion in Organization of Islamic Cooperation (OIC) Countries*, Policy Research Working Paper WPS5920, The World Bank, Washington, DC. USA
 32. Obaidullah, Mohammed (2008), *Role of Microfinance in Poverty Alleviation Lessons from Experiences in Selected IDB Member Countries*, Islamic Research and Training Institute (IRTI), Islamic Development Bank (IDB), Jeddah, Saudi Arabia.
 33. Pearce, Douglas (2010) *Financial inclusion in the Middle East and North Africa: Analysis and Roadmap Recommendations*. The World Bank, Washington, DC. USA.
 34. Rocha, Roberto, Subika Farazi, Rania Khouri, and Douglas Pearce (2011). *The Middle East and North Africa Region: The Results of a Joint Survey of the Union of Arab Banks and the World Bank*. The World Bank, Washington, D.C. 2011.
 35. Sadr, Kazem, (2007) "*Gharzul-Hasaneh Financing and Institutions*." First International Conference on Inclusive Islamic Financial Sector Development. Negara Brunei Darussalam.
 36. Sheng, Andrew (2009), *From Asian to Global Financial Crisis*, Cambridge University Press.
 37. Shiller, R. (1993). *Macro Markets: Creating Institutions for Managing Society's Largest Economic Risks*. New York: Oxford University Press.
 38. Shiller, R. (1999). "*Social Security and Institutions for Intergenerational, Intragenerational and International Risk Sharing*." Carnegie-Rochester Conference Series on Public Policy, 50, 165-204.
 39. Shiller, R. (2004). "*Radical Financial Innovation*." Cowles Foundation Discussion Paper No. 1461. New Haven, Connecticut, 06520-8281.
 40. Stiglitz, Joseph, and Andrew Weiss. 1981. "*Credit Rationing in Markets with Imperfect Information*." *American Economic Review* 71 (3): 393–410.