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Financial Inclusion: The Islamic Finance Perspective

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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 populations. 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 and credit monitoring, and because of the lack of acceptable collateral.

Authors argue that the core principles of Islam place great emphasis on social justice, inclusion, and sharing of resources between the haves and the have-nots. 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 wealth among society. Both risk-sharing financing instruments and redistributive instruments complement each other to offer a comprehensive approach to enhancing financial inclusion, eradicating poverty, and building a healthy and vibrant economy. They help reduce the poor's income-consumption correlation.

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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.

The paper concludes that Islamic finance provides a comprehensive framework to enhance financial inclusion through promoting micro-finance, SME financing, and micro-insurance structured on the principles of risk-sharing, and through Islam's redistributive channels, which are grossly under-utilized in Muslim countries. The study argues that redistributive instruments should be developed as proper institutions to optimize the function of such instruments. Institutionalizing these instruments would require an enabling environment, a sound legal framework, and transparent collection and distribution. Applications of financial engineering can devise innovative ways to develop hybrids of risk-sharing and redistributive instruments to enhance access to finance to promote economic development.

WHAT IS FINANCIAL INCLUSION AND WHY IS IT 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 rates for formal financial services in developing countries are extremely low. Increasing access to financial services holds the promise of helping reduce poverty and improving 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 of "financial inclusion" 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:

a) Easy access to finance for all households and enterprises;
b) Sound institutions guided by prudential regulation and supervision;
c) Financial and institutional sustainability of financial institutions; and
d) Competition between service providers to bring alternatives to customers.[2] Typical indicators of the financial inclusion of an economy are the proportion of the population covered by commercial bank branches, the number of automated teller machines (ATMs), sizes of deposits and loans made by low-income households and small to medium enterprises (SMEs). However, availability of financial services cannot necessarily be equated with financial inclusion, because people may voluntarily exclude themselves from

financial services for religious or cultural reasons, even though they do have access and can afford the services.[3]

Understanding the linkage of financial inclusion with 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 harvesttime or borrow to survive 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 in order to generate income and ultimately come out of poverty.[4] In addition, financial sector development could enable the poor to channel their savings to the formal sector—i.e., bank accounts and other saving schemes and insurance—which would allow the poor to establish a buffer against future shocks, thus reducing vulnerability and exposure that otherwise could put undue strain on future income prospects.

There is growing evidence identifying linkage between economic development and financial inclusion. 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.[5] Empirical studies 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.[6] Almost 30% of the cross-country variation in changing poverty rates can be explained by variation in financial development.

ISSUES WITH CONVENTIONAL APPROACHES TO FINANCIAL INCLUSION

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

a) *High interest rates*. Conventional microfinance institutions are often criticized for charging very high interest rates on loans to the poor. These high rates are justified due to high transaction costs and high risk premium. However, this imposes undue stress on the recipient to engage in activities that produce returns higher than the cost of funding, which may not be possible in many cases.
b) *Not every poor person is a micro-entrepreneur*. Merely making the capital accessible to the poor is not the solution without realizing that not every poor person or recipient of microcredit has the skill set or the basic business sense to become an entrepreneur. There is the need to provide proper training, skill-building, and institutional support to promote entrepreneurship among the poor. Such capacity-building requires funds that 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, microcredit 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 microfinance 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.[7]
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-borrowers. 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 the need to move toward a market-based or private sector–based solution within the formal financial sector or capital markets. Without participation by the private sector, some 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 produce the kind of dramatic transformations expected by earlier literature, it does appear to have some important—though more modest—outcomes. There is some evidence of a shift away from non-productive activities in favor of productive ones, but not one drastic enough to result in significant uplift in poverty levels. This suggests that microloans help some households reprioritize their expenditures and smooth consumption—a valuable function for poor households that suffer from irregular and unpredictable income streams.[8]

THE 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 who cannot work (including the handicapped), society must afford the minimum requirements for a dignified life by providing shelter, food, health care, and education.

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 the conventional financial model. According to the Islamic perspective, risks are mitigated in various ways. First, the economic system is a rule-based system that has provided rules of behavior and a taxonomy of decisions—actions and their commensurate payoffs are 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. That rules of behavior and compliance with them reduce uncertainty is 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.[9] 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, God 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.[10] Islamic laws of inheritance provide further mechanisms of risk sharing.

Islam ordains risk sharing through three main venues:

a) Contracts of exchange and risk-sharing instruments in the financial sector;
b) Redistributive risk-sharing instruments that the economically more able segment of the society utilize in order to share the risks facing the less able segment of the population; and
c) The 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 two.[11] This verse, in part, ordains that all economic and financial transactions are conducted via contracts of exchange (*al-bay'*) 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-bay'*) 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-bay'*) as contracts involving exchange of property in which there are expectations of gains and probability of losses,[12] implying that there are risks in the transaction.

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 taxpayers.

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 the confused belief 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 2007–08 global financial 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."[13]

In a competitive market economy, in which markets are complete and Arrow securities whose payoffs 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.[14] 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.[15]

To summarize, the Islamic system advocates for risk sharing in financial transactions and a financial system based on risk sharing 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 (MSMEs), 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 the growing market for the private equity. With the increased availability of funds for these sectors, one could expect an increase in the financial inclusion in the system.

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 they are instruments of redemption of rights and repayment of obligations.

In practical terms, the Qur'an 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 people. 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*), and ostentatious and opulent spending (*itraf*). It then ordains that the net surplus, after moderate spending necessary to maintain modest living standards, must be returned to the members of 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 Qur'an 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 rights of the less able in the income and wealth of the more able are the network of mandatory and voluntary payments such as *zakat* (two and a half percent on wealth), *khums* (twenty percent of income), and payments referred to as *sadaqat*.

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 God has created resources for all of 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.

Qard hasan is a loan mentioned in the Qur'an as "beautiful" (*hassan*), probably because in all the verses in which this loan is mentioned, it is stipulated that it is made directly to God and not to the recipient (see, for example, verse 17, chapter 64). It is a voluntary loan without the creditor's expectation of any return on the principal. Additionally, while the debtor is obligated to return the principal, the creditor, of his own free will, does not press the debtor for an exact timing of its return. Again, in the case of *qard hasan*, God promises multiple returns to the "beautiful loan." Unfortunately, the full potential of this institution to mobilize substantial resources for the empowerment of the economically weak or dispossessed has not been realized. Much has been written about microfinance and its potential to reduce poverty. However, it is an irony that institutions of microfinance are growing rapidly in Muslim countries, but it is seldom realized that Islam's own institution of *qard hasan* 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 up to one third of his/

her wealth over which he/she is allowed by shari‘a 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 amounts of financial resources through implementation of this institution by a globally credible Islamic financial institution is substantial.

PUBLIC POLICY IMPLICATIONS

Analysts suggest that public policy and strengthened institutional framework in developing countries can go a long way toward enhancing financial inclusion. Better governance that can reduce damages to households due to mismanagement, achieving and sustaining economic and political stability, and 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.[16] Public policy could also help in mobilizing the savings of poor households and thus reduce vulnerability to income shocks.

Public policy to forge integration and support saving mobilization in developing countries could help risk mitigation and sharing, thus building resilience in the face of shocks. With regards to microfinance, as discussed earlier, there is empirical evidence suggesting that while these contracts help reduce poverty in low-income countries by providing small, uncollaterized 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 between borrowers. Joint liability and peer monitoring—which are features common to most microfinance 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.[17] In addition to saving mobilization and encouraging microfinance, better access to the 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 the private sector does not have. For one thing, in its capacity as the risk manager of 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 generations. 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.[18]

GOVERNMENT AS THE RISK MANAGER PROMOTING RISK SHARING[19]

In a society, risk can be shared among its members and/or between its members and its state. Both in 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 risk. 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. Then, each member of the community could be assigned a level of consumption dependent on the aggregate level of income and not on that of the member. This arrangement would assure perfect risk sharing to mitigate idiosyncratic risk so that a given household's income would not affect its level of consumption. Generally, empirical studies suggest that in low-income countries, saving, borrowing, the use of buffer stock, working longer hours or taking a second job, gift exchange, and private transfer of cash and clothing are mechanisms used in risk sharing.

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 net 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 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.[20] 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 the analytic reasoning that justifies government's intervention in the economy to protect the public interest.[21]

The reason that contemporary societies implement social safety nets, such as social security, health care, and 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 levels 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.

Heretofore 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 nets, 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 tradeoff between equity and efficiency; the issue at the heart of state vs. market debates.

NEED FOR DEVELOPING SUPPORTIVE INSTITUTIONAL FRAMEWORK

As discussed earlier, access to finance is hampered by informational asymmetries and market imperfections that need to be removed before one could think of enhancing finance. When it comes to developing countries where the financial sector is not very developed and the formal financial sector is underdeveloped, it is important that attention is paid to improving institutions critical for financial sector development. Improved access to finance in many developing countries is constrained by an underdeveloped institutional framework, inadequate regulations, and a lack of specialist supervisory capacity. Policymakers need to take steps to enhance key legal, informational, and regulatory institutions in the country.

a) *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 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 2010 CGAP and World Bank Financial Access survey 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.[22]

b) *Improving financial infrastructure, especially the improvement of the current credit informational system, should be given 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 the MENA region.[23] Sharing borrower information is essential to lowering costs and overcoming information constraints. Lack of access to credit information and low coverage ratio of the credit history of individuals are two main features that contribute to 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 importantly, introducing private credit bureaus capable of significantly expanding coverage and the depth of credit information.[24] Financial infrastructure improvements will reduce the information asymmetry that constrains access to credit and raises the costs and risk of financial intermediation.

c) *Develop infrastructure conducive to shari'a-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 that are competitive with conventional products in terms of pricing, transparency, processing time, and burden on the client. Shari'a-compliant microfinance and SME financing are limited in their scope and scale because of the lack of knowledge concerning shari'a products, the absence of accounting and regulatory standards for shari'a-compliant microfinance, and adequate monitoring and supervisory setups.

Integrating shari'a-compliant products and customers' information into the formal financial sector will not only enhance 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 shari'a-compliant financial institutions expand their funding source and enhance their risk-sharing mechanism, as an institution with its clients' credit information available to the public can establish its reputation much more easily than an institution with an informal credit history system.

d) *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 to a new market without taking on extensive marketing, distribution, or administrative 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 services in poorer OIC countries. In the MENA region, 34% of SMEs in GCC countries have access to insurance services, while the figure falls sharply to 19% if the SMEs in non-GCC countries in the same region are considered.[25] One major reason for 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'a-compliant.[26]

If the policymakers in Muslim countries wish to promote Islamic microfinance and SMEs, these measures need to be complemented by the promotion of micro-*takaful* by designing an adequate regulatory framework and by providing incentives for insurance carries to enter into this market. Study by the Islamic Development Bank (IDB) rightly suggests that *qard hasan* funds could be used to develop micro-*takaful* capacity in a country in addition to credit guarantee systems.[27] Similarly, *zakah* funds can be utilized to cover the default risk of the poor spectrum of micro-enterprises, to build capacity and skills, and to reduce operating costs of microfinance and micro-insurance. Implementation of such ideas and innovations requires the development of institutions supporting transparent governance to ensure the effectiveness of such mechanisms.

e) *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 the removal of regulatory barriers without sacrificing the promotion of stability or the security of the financial system.[28]

INSTITUTIONALIZATION OF ISLAMIC REDISTRIBUTIVE INSTRUMENTS

As discussed earlier, Islam provides a set of redistributive instruments that could play a critical role in enhancing access and reducing poverty. Given Islam's emphasis on social and economic justice and the eradication of poverty, we would expect Islamic instruments that targeted addressing inequity, such as *zakah*, *khairat*, *waqf*, and *qard hasan*, to play an important role if the required institutional structures are developed.[29] Therefore, there is the need to formalize or institutionalize Islamic redistributive mechanisms designed to empower the economically weak segments of society.[30]

By institutionalization, we mean building nationwide institutions and a surrounding legal infrastructure to maximize the effectiveness of these redistributive mechanisms. This institution-building exercise can take place in three steps. The 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 shari‘a. 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 customers, or new means can be introduced leveraging new technologies. Finally, there should be a mechanism to ensure enforceability of rules through transparent means.

The objective of the institutionalization of redistributive instruments is to formalize and standardize the operations to facilitate each instrument. For example, for *zakah*, *khairat*, and *qard hasan*, a formal network of institutions needs to be developed to collect, distribute, and recycle the funds in the most efficient and the most transparent fashion.[31] In some countries, points of sale such as automated teller machines (ATMs) or cash-dispensing machines are used to give customers the option of making donations or contributions on the spot, to make it easy for the customer to make such contributions. The financial institution can collect and aggregate funds and then disburse them to the needy through selected channels.

The use of *qard hasan* for the microfinance sector should be exploited further. Many of the characteristics of the *qard hasan*–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 efforts by sociologists and economists to investigate the behavioral causes—one can speculate that lack of knowledge, in the first instance, and concerns about the 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 hasan* resources to existing microfinance 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:

a) Through investing a fraction of the mobilized resources; and
b) Through profit-sharing via *qard hasan* resources through which the Islamic financial institution invests in the productive investment projects of young entrepreneurs that have no access to formal credit markets.

Policymakers need to pay attention to this set of tools to enhance access and they should encourage development of such institutions through the development of a legal framework to protect the institutions, donors, and stakeholders, and to ensure transparent governance. With well-developed redistributive institutions supplemented by formal and semi-formal sector financial institutions, one would expect a more effective approach to poverty reduction.

FINANCIAL ENGINEERING

Financial innovation and engineering have changed the face of the global financial landscape in the last three decades. Although some of the innovations have been criticized and have been the source of volatility in the markets, their positive contribution cannot be denied. There is no reason why financial engineering cannot be used in the area of financial inclusion and to enhance financial access. One way could be to introduce the application of securitization to securitize assets generated by microfinance and SMEs. *Sukuk* (Islamic bonds) are a successful application of securitization and, working along the same lines, a marketable instrument can be introduced to provide funding for much needed microfinance and SME financing. With the introduction of securitization of microfinancing and SMEs, financial institutions will 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 microfinancing and SME financing.

Several researchers have put forth ideas of formalizing and institutionalizing Islamic modes of redistribution 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 hasan* model or establishing microfinance institutions based on hybrid of *zakah*, *awqaf*, and *sadaqat*. The institution of *awqaf* (trust or endowment) was once a very well-established institution in Muslim societies but with its gradual decline, the institution lost its effectiveness. Policymakers 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 the credit enhancement tools that are a standard feature of conventional securitization, both the originators and structures shy away from the securitization of such portfolios. In addition to conventional credit enhancement techniques through trenching, one could raise enough funds based on *qard hasan* to provide an additional buffer of security to 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 hasan* 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 the 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.[32] These instruments could anchor the development of the high end of the risk spectrum.

The abovementioned innovative techniques should be explored further by Islamic financial institutions. Policymakers 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. The availability of an enabling environment and supporting institutions are prerequisites and should be developed before such innovations can take place.

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 socioeconomic and 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 dazzling pace of financial innovations in the 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.[33]

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 *sadaqat* and *qard hasan*, also 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 instrumentalized to be included in the full-spectrum Islamic finance menu of instruments for risk sharing. In that event, Islamic finance becomes a risk manager of the society.

Islamic finance's 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, and small and medium-sized 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 that led to the recent global financial crisis of the conventional system, in which the risks of financial innovations were shifted away from financiers. The consequence was that while the gains of this "democratization of finance" project were privatized, its pain was socialized.[34]

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 "God-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. The Prophet Muhammad said that poverty is near disbelief. 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.

Endnotes

1. Asli Demirguc-Kunt, Thorsten Beck, and Patrick Honohan. "Finance for All?: Policies and Pitfalls in Expanding Access," *World Bank Policy Research Report* (Washington, DC: The World Bank, 2007).

2. Ibid.
3. Ibid.
4. Department for International Development (DFID), "The Importance of Financial Sector Development for Growth and Poverty Reduction," Policy Division Working Paper (London, UK, 2004).
5. Oded Galor and Joseph Zeira, "Income Distribution and Macroeconomics," *Review of Economic Studies* 60:1(1993): 35–52; and Abhijit V. Banerjee and Andrew F. Newman, "Occupational Choice and the Process of Development," *Journal of Political Economy* 101:2 (April 1993): 274–98.
6. Aslı Demirgüç-Kunt and Ross Levine, "*Finance and Economic Opportunit*y." Working paper (World Bank, Development Research Group, Washington, DC, 2001).
7. Ibid.
8. Jonathan Bauchet, Cristobal Marshall, Laura Starita, Jeanette Thomas, and Anna Yalouris, "Latest Findings from Randomized Evaluations of Microfinance," Consultative Group to Assist the Poor (CGAP) (Washington, DC, 2009).
9. Abbas Mirakhor, "Islamic Economics and Finance: An Institutional Perspective," *IIUM Journal of Economics and Management* 17:1 (2009).
10. Mirakhor, ed. *Essays on Iqtisad: The Islamic Approach to Economic Problems* (Nur Corp., MD, 1989), 45–80; Zamir Iqbal and Abbas Mirakhor, "Financial Inclusion: Islamic Finance Perspective," *Journal of Islamic Business and Management* 2:1 (2012): 35–64.
11. Abbas Mirakhor, "Epistemological Foundation of Finance: Islamic and Conventional." Keynote address presented at the Foundations of Islamic Finance Conference Series (Kuala Lumpur, March 8–10, 2011).
12. Abbass Mirakhor, "Whither Islamic Finance," presented at the Securities Commission of Malaysia (March 2010).
13. Andrew Sheng, *From Asian to Global Financial Crisis* (London: Cambridge University Press, 2009).
14. (Mirakhor, 2010)
15. (Mirakhor, 2010)
16. (Mirakhor, 2009, 2010)
17. P. R. Chowdhury, "Group-Lending: Sequential Financing Lender Monitoring and Joint Liability," *Journal of Development Economics* 77:2 (2005): 415–439; Beatriz, Armendariz De Aghion and Jonathan Morduch, *The Economics of Microfinance* (Cambridge, Massachussets: MIT Press, 2005); Gregaory Fischer, *Contract Structure, Risk Sharing, and Investment Choice* (London: London School of Economics, 2010).
18. Robert Merton, "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, 1983).
19. (Mirakhor, 2011)
20. K. J. Arrow and G. Debreu, "The Existence of an Equilibrium for a Competitive Economy," *Econometrica* XXII (1954): 265–90.
21. Joseph Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information," *American Economic Review* 71: 3 (1981): 393–410.