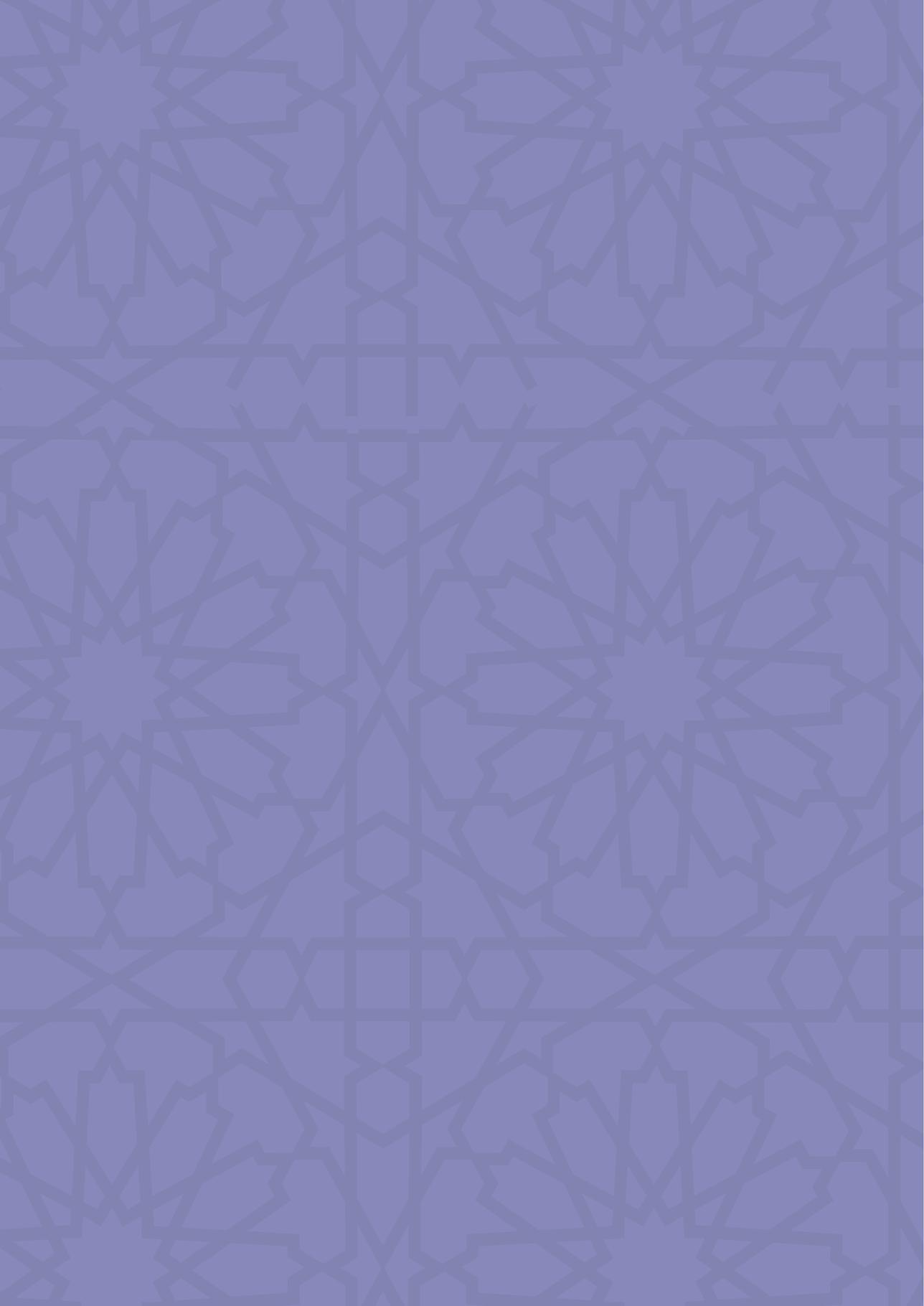


Islamic Finance: A Catalyst for Shared Prosperity?

Post-Symposium Proceedings





Post-Symposium Edited Book

**Islamic Finance:
A Catalyst for Shared Prosperity?**

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Foreword

The significant progress in economic growth has lifted many people out of poverty over the past few decades. Nevertheless, poverty alleviation remains a challenge. Inequality persists, with huge gaps in terms of access to health and education and other services and assets. The World Inequality Report 2017 reveals that since 1980 the world's richest 0.1 per cent have increased their wealth by the same amount as the 3.7 billion people who make up the poorest half of the world's population. Growth has apparently not benefitted everyone equally. This begs the question of how to equitably share benefits and opportunities emanating from economic growth. It is also important to seek equitable financial well-being and unbiased access to markets and resources to include the most vulnerable in a regime of shared prosperity.

Reducing poverty and improving distribution of welfare, while boosting overall prosperity, is a common goal across most low- and middle-income countries. The notions of risk-sharing and shared prosperity have attracted attention, especially after the financial crisis in 2007-2008. The shared prosperity advocates an economic and financial system that mobilizes and allocates resources to the most productive ventures, at no additional cost of poverty and income inequality.

Islamic finance has a role to play in addressing these issues. It advocates risk-sharing, equitable distribution of wealth, fairness and justice in all transactions, economic and social justice, linking finance with real economic activities, and promoting social and financial inclusion. It should, therefore, encourage entrepreneurship, promote real economic development, and support the principles of long-term sustainability.

Social inclusion is central to ending extreme poverty and fostering shared prosperity. It is both an outcome and a process of improving the terms on which people take part in society. It aims to empower the poor and marginalized people to take advantage of burgeoning global opportunities. However, we must acknowledge that Islamic finance is not currently being utilized to its full potential. It has a variety of financial instruments that can be used to increase funds and mobilize resources from a diverse range of sources, including the corporate sector, impact investors, and social entrepreneurs as well as other social finance tools such as zakat, waqf and general charity.

To address this broad array of challenges, "Islamic Finance: A Catalyst for Shared Prosperity?" was selected as a theme for the inaugural Symposium on Islamic Economics and Finance 2015. The Symposium was organized by Islamic Research and Training Institute (IRTI) of Islamic Development Bank (IsDB) Group, in partnership with the World Bank Group's Global Islamic Finance Development Center (GIFDC), Borsa Istanbul, and Guidance Financial Group at Boğaziçi University. The aim of the Symposium was to demonstrate relevance of Islamic financial principles and practices to global socio-economic outlook.

This book will contribute in sharing knowledge and providing new insights. I would like to congratulate the editors, and extend my deepest gratitude to those who have contributed and rendered their support for this publication.

Dr. Humayon Dar

Director General

Islamic Research & Training Institute

OVERVIEW

Background

Reducing poverty and improving the welfare, while boosting the overall prosperity of the population, is a common goal across most low-income countries. Risk-sharing and shared prosperity concepts have attracted attention especially after the financial crisis in 2007-2008. Shared prosperity advocates for an economic and financial system that mobilizes and allocates resources to the most productive ventures without the cost of increased poverty and income inequality. Furthermore, social inclusion is central to ending extreme poverty and fostering shared prosperity. Social inclusion is both an outcome and a process of improving the terms on which people take part in society. Social inclusion aims to empower the poor and marginalized people to take advantage of burgeoning global opportunities.

Research in Islamic economics and finance has progressed in many areas. Although the emphasis on risk sharing in financial and social contracts is a distinctive feature of Islamic finance, however, important aspects of risk sharing and its relevance to shared prosperity are yet to be explored and developed. The desire is that human well-being and shared prosperity remains at the very heart of all Islamic finance initiatives. Therefore, the Inaugural Symposium on Islamic Economics and Finance with theme of “Islamic Finance: A Catalyst for Shared Prosperity?” was held on 8-9 September 2015.

Toward a better understanding of the role Islamic finance can play in promoting inclusive growth, reducing inequality, and accelerating poverty reduction, the issues addressed in this book fall into four broad areas. These are i) Risk-Sharing and Shared Prosperity; ii) The Role of Islamic Finance in Development, Shared Prosperity, and Growth; iii) The Role of Islamic Finance in Financial Inclusion; and iv) Islamic Microfinance.

Risk-Sharing and Shared Prosperity

There is an abundance of literature on Islamic finance and financial stability. Nabil Maghrebi and Abbas Mirakhor, in their paper ‘Stability of Islamic Finance and Shared Prosperity’, argue that risk sharing is an effective method of expanding participation of agents in economic growth and development and sharing of the fruits of prosperity. While risk sharing enables Islamic finance to promote economic justice and social participation, the asset-backed equity-financing nature of Islamic finance is conducive to financial system stability. The risk-sharing principle underlying Islamic finance reduces the economic incentives for transferring credit risk and for speculative activities. By preventing risk from being entangled in complex debt-creating structures that characterize the incompleteness of contracts

under conventional finance, this principle also redefines the role of financial markets and institutions in smoothing consumption and capital expenditure. It is the asset-backed nature of Islamic finance that allows for a participative securitization process that provides different segments of the society with fair opportunities to share economic prosperity. The allocation of risk commensurate to the idiosyncratic abilities to bear losses is arguably more conducive to a socially inclusive financial system. While systematic risk cannot be eliminated, it is collective risk taking and individual risk aversion that promote more efficient mobilization of resources, and more equitable sharing of economic risk and prosperity.

Contemporary Islamic banking has been blamed for mimicking conventional banking since its inception. The chapter on ‘A Risk-sharing Model for Islamic Banks’, by Obiyathulla Ismath Bacha and Abbas Mirakhor, proposes a risk-sharing model for Islamic banks that can potentially pull Islamic banking away from this path of dependency. When an institution with a viable business model is unable to carry its debts and goes bankrupt, its restructuring often results in an equity-for-debt swap. The regime switches from risk shifting to risk sharing. The reason the equity-for-debt swap is a solution is because with everyone being equity holders sharing the risk, every party has “skin in the game.” This effectively overcomes the asymmetries that plagues debt/risk shifting regimes and the perverse incentives that arise with high leverage. Based on this argument, the authors propose that Islamic bank’s assets would be securitized by the issuance of sukūk-type instruments that have the same underlying contract and average “duration” as customer financing. While small assets are to be pooled into tranches of similar maturity, medium and larger assets would have papers issued directly against them. Thus, an Islamic bank would have thousands of sukūk holders, instead of depositors, who share the profits and losses arising from their respective tagged asset. This model has advantages, including to: 1) reduce systemic risk by dissipating risk and reducing the liquidity mismatch inherent to banking; 2) provide new liquidity instruments to enhance liquidity within the Islamic finance sector through the securitized papers; 3) enhance macroeconomic stability by reducing risk concentration within the banking system; 4) widen financial inclusion by way of small-denomination sukuk; and 5) minimize the contingent liabilities of governments by avoiding the use of deposit insurance.

Another paper, ‘Distributive Justice: An Islamic Perspective’, by Askari, points out that throughout Western history, “justice” has been deemed to be a noble virtue, independent of any religious belief and a virtue that all governments should uphold, and justice may be broadly divided into two parts: commutative justice and distributive justice. The focus of this paper is on the distributive justice, which is concerned with the “just” division of the economic pie (production and wealth) among members of society, including owners of capital, workers, those who cannot provide for themselves, and animals. While Western thinking on distributive justice has evolved from the time of Aristotle to the present, the Islamic framework and conception of a just society has not changed with time because Muslims believe that the Qur’ān represents Allah’s (swt) Divine words and is immutable over time. Islam says that justice thrives and proliferates when everything is placed in its rightful place and is achieved by simply following the Divine rules. The rules—especially those dealing with distribution and redistribution—will then achieve distributive justice. The existence

of absolute and relative poverty, along with significant income inequality, is evidence of rule-violation and governance failure, for which members of society are individually and collectively responsible.

The Role of Islamic Finance in Development, Shared Prosperity, and Growth

With the expiry of the Millennium Development Goals (MDGs), the United Nations launched the bold initiative of the Sustainable Development Goals (SDGs) in September 2015 to eradicate poverty by 2030. The SDGs are more ambitious than the MDGs, and it will be challenging for many countries to achieve them. In particular, the challenge will be more daunting for countries that did not fare well in achieving the MDGs. Many Muslim countries fall in this category; poverty is pervasive, and 700 million people in those countries live on less than \$2 a day (World Bank, 2014). The paper on ‘Islamic Finance, the Sustainable Development Goals, and Shared Prosperity’ by Habib Ahmed examines the ways in which the Islamic financial sector can contribute to achieving economic aspects of SDGs and enhancing shared prosperity. First, the relationship between an effective financial system and the enhanced shared prosperity is established. Three functions of a financial system is of crucial importance to the level of shared prosperity. These are the functions of mobilizing savings and asset management, allocation of capital and financing and risk management. By mobilizing savings and managing assets, a financial system can promote growth through mobilizing financial resources for investment, reduce inequality via providing asset management services for the poorest 40% of the population, and reduce vulnerabilities by providing saving products for emergencies. Allocating capital for production in an efficient and effective manner in a financial system would promote growth while reducing inequality by providing financing to low-income households and middle and small enterprises (MSEs). In addition, by properly allocating capital and financing for short-term needs and emergencies a financial system can reduce vulnerabilities. Finally, the management of risks is another function of a financial system through which growth can be promoted and inequalities and vulnerabilities can be reduced.

The conventional finance faces some challenges when providing its functions to contribute to shared prosperity. The paper analyzes these challenges in terms of both individual households and MSEs levels. On the individual side, the financial system provides three main kinds of products, namely the survival products such as deposits and mortgage funding, security products such as insurance and pension schemes, and growth products such and mutual funds and real estate. However, the provision of these products has the dilemma that as far as the low-income segments of the society are considered, the financial institutions have a disincentive to bear the asymmetric information related risks related to those segments. Thus, the supply of those products increases as with the income level, which consequently decreases financial inclusion and shared prosperity. This is also reflected in the data collected under the World Bank Global Financial Inclusion Index Database. The conventional financial institutions provide four main kinds of liability products, such as current accounts and payment services, working capital financing such as overdraft and factoring, trade financing such as letters of credit and guarantee, and asset financing such as securitized loans and lease

financing. However, as far as MSEs are considered there exists a gap of financing for medium and long term financial needs of those enterprises due to the associated risks and collateral issues, which also limits the capacity of conventional financial system to contribute to shared prosperity.

This study establishes the link between the main objectives of Islamic economic and financial system and the aim of shared prosperity by indicating how the ideas of social justice and benevolence underlying Islamic economic and financial system are in compliance with the twin goals of eradicating poverty and boosting shared prosperity. Different modes of Islamic finance that are based on the notions of risk sharing and being asset-based are analyzed to show how they can be used to serve to the needs of the poorest 40% of the societies as survival, security and growth products. The chapter also investigates the ways Islamic finance can provide innovative tools to fill the gap for medium and short-term financing needs of MSEs. The study concludes that in order to reflect the foundational principles and values and positively contribute to shared prosperity, Islamic financial sector has to reorient itself. The industry should strive to develop institutions that can fulfil the broader goals or maqasid of Shariah that can come up with more risk-sharing financial products and services.

Since the modern birth of Islamic banking in Egypt in the 1960s, expansion has been swift across the globe, particularly over the last two decades. From an insignificant beginning, the industry has grown to over \$1.6 trillion in assets in 2012, and is expected to reach \$6.1 trillion by 2020. Not only have local banks in Muslim countries adopted Islamic banking principles, but also large multinational banks have established Islamic windows. Islamic finance has spread beyond commercial banks, and now spans investment banks and insurance companies, as well as investment (such as asset management) and financial companies (including leasing). The development of new products, such as sukuk (Islamic bonds), has also broadened the range of products available.

At the same time, a mature body of the literature has shown that financial development is broadly conducive to economic growth. A developed financial sector helps mobilize savings, facilitates the allocation of capital to where the highest returns are expected, monitors the use of capital once invested, and allows for diversification of risk. Moreover, it does not matter much for economic growth whether the financial system is more bank-based or market-based; what matters is the level of overall financial development.

However, the empirical literature has only looked at conventional banking, not Islamic banking. Do findings that deepening the financial sector impacts growth also apply to systems where Islamic banking plays a significant role? The paper ‘Islamic Banking: Is It Good for Growth?’ by Patrick Imam and Kangni Kpodar aims to address this matter. It investigates the relationship between Islamic banking development and economic growth in a sample of low and middle-income countries, using data over the period 1990-2010.

The results show that, notwithstanding its relatively small size compared to the economy and the overall size of the financial system, Islamic banking is positively associated with

economic growth after controlling for various determinants, including the level of financial depth. The results are robust across different measures of Islamic banking development, econometric estimators (pooling, fixed effects and System GMM), and to the sample composition and time periods.

This finding is encouraging as, despite its rapid growth, Islamic banking still represents a relatively small share of the economy and of the overall size of the financial system, and it has yet to reap the benefits from economies of scale. This means that many countries that currently suffer from low growth—a feature often present in Muslim countries—should aim to further develop this segment of finance. As an initial step, it is essential to develop and update legislation and regulation to encourage Islamic finance, as well as the supporting infrastructure, including the necessary human skill sets.

Advances in information technology and financial innovations have vastly enlarged the capacity for banks to switch regimes from risk transfer to risk shifting. The 2007/2008 financial crisis showcased the consequences of the devastating power of this capacity. The fallout from this crisis has intensified calls for a re-examination of the current banking model and its underlying incentive structure. Axiomatically, risk shifting is absent in an ideal Islamic financial system; instead, risk sharing lies at its core. Alaa Alaabed, Mansur Masih and Abbas Mirakhor in the paper ‘Undermining Shared Prosperity? Risk Shifting and Islamic Banking’ empirically investigate the risk-shifting behaviour in Islamic banks in dual banking systems of OIC (Organisation of Islamic Cooperation) member-states. A two-step dynamic difference GMM (generalized method of moments) analysis due to the nature of the data about Islamic banking, which is characterized by a larger dynamic panel and a smaller time frame, indicates that Islamic banking has a limiting effect on risk shifting which undermines the contribution of Islamic finance to shared prosperity. This evidence is not surprising due to the current configuration of Islamic banking, which has grown out of conventional banking and uses many of its techniques and instruments. To strengthen the risk sharing capability of the Islamic banks, drastic reformation is required.

The Role of Islamic Finance in Financial Inclusion

Due to the needs of development and constrained by limited domestic resources, Muslim countries are forced to borrow with interest. This creates a moral dilemma, particularly for those states that claim to be Islamic. Such external borrowing drains domestic resources and exposes the country to risk of sudden stoppage to inflow of funds. Internally, for the country to get out of this dilemma, it needs to borrow from its own population. A paradigm shift from risk transfer to risk sharing would greatly facilitate such borrowing. Murat Çizakça, in his paper ‘Modernizing a Historical Instrument (Esham) for Growth and Financial Inclusion’, argues that Esham is a particularly promising instrument for the rising middle class in the Islamic world. Thus, to the extent that these people purchase Esham shares, financial inclusion will be enhanced. The huge advantage of Esham for the borrower is that the latter does not have to redeem his debt at a certain date. Consequently, the borrower is protected and the annuities to be paid to investors can be benchmarked at even a higher percentage

than the prevailing interest rate. This would obviously encourage large numbers of additional members of the middle class to enter into the financial system.

Looked from the macro-economic perspective, difficult circumstances exist so long as Muslim countries are forced to borrow on interest rate basis. Morally, this creates a huge dilemma particularly for those states claiming to be Islamic. Indeed, while on the one hand these countries make such claims, on the other, they are forced to borrow with interest, a process which casts serious doubts upon their legitimacy. Externally, such borrowing drains domestic resources and exposes the country to the risk of sudden stops of funds. Internally, for the country to get out of this dilemma it needs to borrow from its own population. A paradigm shift from risk transfer to risk sharing would greatly facilitate such borrowing. But for this, new instruments are needed. Such instruments need not only to re-distribute the national income but also to enhance financial inclusion. Esham would redistribute the national income in favour of the middle class and would also ensure their financial inclusion by providing a monetary and fiscal policy instrument that can directly influence private sector portfolio adjustment without resorting to the interest rate mechanism. Providing it is issued in sufficiently small denominations, it can even appeal to lower middle classes. Provision of regular fixed or flexible annuities for the middle classes would enhance aggregate savings in the economy with which the government and private sector can finance another round of investments. In short, while Esham, *ceteris paribus*, can trigger sustained economic growth, simultaneously it can reduce the need for Muslim countries to borrow from abroad with interest. Esham, indeed, is a non-debt creating flow and should not be considered as a contingent liability on the balance sheet of the issuer. This is because, the borrower, usually the government, has no obligation to pay back the loan capital and its sole commitment is the regular payment of fixed or flexible annuities. If the issuer is a company, positive implications of this for the Basel III gearing ratios should be obvious. Whether issued by a government or a company, thanks to its redemption characteristics, it can serve as a very important hedge against idiosyncratic risks.

Financial inclusion—the access to financial services, at affordable cost, to disadvantaged and low-income segments of society—is an integral part of Islamic microfinance to provide various Islamic financial services. Financial inclusion is a national development strategy in Indonesia to boost economic growth through equal income distribution, poverty reduction, and financial system stability. This community-centered strategy needs to target groups that face constraints to accessing financial services. Upon this background, Ascarya, Siti Rahmawati, and Hendri Tanjung, in their paper ‘Designing Holistic Financial Inclusion Based on Maqāṣid al-Sharī‘ah’, proposed a holistic model of financial inclusion based on maqāṣid al-sharī‘ah (the Objectives of Islamic Law). The model also includes empowerment and development for the poor to gradually move from extreme poverty to improved status as working poor, and finally to become independent micro-entrepreneurs. This study applies qualitative methods to design an Islamic model of holistic financial inclusion by using field surveys, in-depth discussions, and focus group discussions. The study also applies Analytic Network Process (ANP) to compare and evaluate several Islamic holistic models of financial inclusion to determine their relative strengths and weaknesses. The study identifies

seven aspects and evaluates their relative importance, suggesting a careful sequencing of development services to maximize the impact.

Islamic banking continues to grow more rapidly than conventional banking in most Arab and many Muslim majority countries. However, might it promote social as well as financial inclusion, reaching out to lower-income groups? What would be the political costs and possible benefits to the state actors that regulate these banks in each country? Having this questions in mind, Clement M. Henry, in his paper ‘Islamic Banking: More Financial Inclusion for Arab States?’, examines whether any greater inclusion is yet associated with the penetration of Islamic finance into the banking systems of Muslim majority states. While time series data are not yet available, a cross section of 38 states including most of the Muslim world except India was devised, using data from the World Bank’s Financial Inclusion (Findex) Program and the writer’s data on market shares of Islamic banks. There is little evidence of any significant causal relation between Islamic banking and financial inclusion. The penetration of Islamic finance might be expected in general to reduce religious opposition to banks, but the statistical relationship was very weak, even if it pointed in the expected direction.

Survey data from the Arab Barometer, however, point to widespread rejection of interest-based banking in the Arab world. A 2011 survey administered to ten Arab countries included two questions about banking, i.e. whether interest contravened the teachings of Islam and whether banks should be allowed to charge interest, given the demands of the modern economy. Almost half of the respondents rejected interest and therefore could be considered as potential clientele for Islamic finance. This paper takes advantage of the Arab Barometer’s rich array of social and political attitudes to analyse the potential appeal of Islamic finance in each of the ten countries, namely Algeria, Egypt, Iraq, Jordan, Lebanon, Palestine, Sudan, Saudi Arabia, and Yemen. A major finding across much of the Arab world was that the potential devotees of Islamic finance had little interest in politics and tended to share other conservative religious values, such as keeping the women at home. The countries scored high on indicators of “religiosity” such as daily prayer, but were not particularly anti-secularist or hard-line Islamist, terms that this paper carefully defines by the set of survey questions.

Specific country findings were also of interest. The Saudi clientele for Islamic finance was quite distinctive, expressing relatively liberal values about family life, at least in the Saudi context. The major correlates were religiosity, wealth and age, suggesting that the needs of wealthy Gulf investors indeed drive the expansion of Islamic finance in the region. Findings from Algeria had interesting political implications. Its potential Islamic clientele was exceptionally interested in politics and supportive of state institutions, so that the government might benefit from channelling its interest in politics into Islamic finance. Promoting Islamic finance could be one way of gaining support for restructuring and diversifying Algeria’s economy and offering greater political and social as well as financial inclusion. As for Tunisia, the very apolitical nature of its potential constituency for Islamic or “participatory” finance is a distinct advantage. Both Egypt and Tunisia witnessed revolutions being “hijacked,” in the view of many, by the Muslim Brotherhood and its Tunisian cousins.

While the political transitions took different directions, one common outcome was increased polarization, in Tunisia as well as Egypt, between political Islamists and their religiously more neutral compatriots. By remaining carefully aloof from politics, the banks have better chances of improving their market shares.

The Arab Barometer survey results point to a vast potential clientele, part of an arc stretching from Sub-Saharan Africa across to Southeast Asia. As part of a community of practicing Muslims, principally defined in the survey by “religiosity” and “family values,” it may overcome the religious objections of some and bring more people out of informal economies. Better time series data are needed to understand the conditions under which Islamic finance may actually mobilize wealth that would not otherwise circulate and put it to constructive uses.

Islamic Microfinance

The main promise of microfinance is its ability to reach poor segments of society and help micro-entrepreneurs access capital. Despite the high interest rates and conditionality, the poor and micro-entrepreneurs were satisfied with the loan they received from microfinance institutions (MFIs) due to immediate access, speed of approval, lack of collateral requirements, and most importantly, a less cumbersome process than commercial banks. However, the high interest charges and high yields attracted both banks and fund managers to develop customized products, either directly targeting the poor and microenterprises or indirectly making capital investments in the microfinance institutions (Galema et al., 2011). This commercialization of MFIs made it difficult to meet its double objectives of social welfare and financial sustainability. Many MFIs neglect their social objective of poverty alleviation and instead pursue profit above outreach (Hoque et al., 2011).

Against this backdrop, Islamic microfinance is quietly evolving from an experiment into a niche industry in some Muslim countries, especially in Bangladesh, Indonesia, Lebanon, Pakistan, Sudan, and Yemen.

The study of ‘Islamic Microfinance Institutions: Pro-Poor or For-Profit?’ by Luqyan Tamanni and Frank Hong Liu examines the performance of Islamic microfinance institutions vis-à-vis their conventional counterparts to find any evidence of differences in sustainability and poverty outreach, amidst increasing competition and commercialization. Using panel data from MIX Market database, this paper benefits from a reliable dataset from 1998-2013 that covers microfinance institutions from four regions that have Islamic microfinance institutions, namely East Asia and Pacific, South Asia, Middle East and North Africa and Eastern Europe and Central Asia. Islamic microfinance institutions represent about 2.88 percent (38 out of 1,320) of the total.

Using Pooled Ordinary Least Squares (OLS) regression to analyze financial performance, poverty outreach, and risk factors, the paper finds that there is no conclusive evidence of trade-off between sustainability and outreach in the Islamic MFIs, or the effect of commercialization. However, the study finds that profitability of Islamic MFIs is worse-off

than conventional, indicated by lower Return on assets and higher Cost per borrower, despite higher sustainability measure (Operational Self Sufficiency). On the other hand, Islamic MFIs have higher number of poor borrowers that suggests an encouraging poverty outreach. Similarly, the average loan size is lower, which suggests that there is a consistent attention to poorest segment or depth of outreach, despite the percentage of women borrowers being also lower. In addition, Islamic MFIs recorded a higher percentage of portfolio at risk, but interestingly lower loan loss rate, suggesting a delay in short-term payment is quite common among the borrowers although very few default completely. The paper concludes that Islamic MFIs is closer to pro-poor characteristic of higher depth of outreach and lower profitability, as they deal mostly with the poorest of the poor who borrow small amount of loans, may delay their payments temporarily, but always repay. This conclusion is consistent with the argument that Islamic microfinance, and to certain extent Islamic finance in general, is not just about profit but also driven by socially-oriented mission.

Women have been marginalized for millennia in many parts of the world. They are rarely independent in terms of finances and decision-making process and often they are among the most vulnerable (Zoynul and Fahmida 2013). While women’s contribution is immense in different aspects of development in developed countries, but in the developing world, especially in Muslim majority countries, they have very limited access to trades, industrial institutions, educational services, and health care.

Bangladesh has a population of 170 million, and about half of the people live below the poverty the poverty line with 80 per cent in the rural areas. Of the population, nearly half are women and most of them, living in the rural areas. The lack of productive employment opportunities for the huge number of unemployed and under employed work force is posing serious problems for the country. Prof. Dr. Eunus, the noble laureate, developed a micro-credit program in mid-seventies. This program has lots of contribution for rural poor’s livelihood, but it is based on interest, which is prohibited in Islam, and the interest rate is exorbitantly high. In order to address these concerns, Islami Bank Bangladesh Limited (IBBL) launched a Shari’ah-based and interest-free microfinance program named Rural Development Scheme (RDS) in 1995. At present, some 0.6 million micro-finance group members, of whom 90 per cent are female, are involved in this scheme. This program has become a very important tool, especially for the women, to combat poverty and enhance the social and economic wellbeing of its recipients. Therefore, Mizanur M. Rahman, in his study ‘Women’s Participation in Islamic Microfinance in Bangladesh and their Role in Shared Prosperity: An Empirical Analysis’, aims to confirm or refute a positive link between Islamic microfinance and the socio-economic wellbeing of women, and to explore the way of improving the performance of microfinance. To achieve these aims, 250 respondents were interviewed and data were economically and econometrically analyzed highlighting household income, expenditure and employment generation as well as shared prosperity.

The results revealed that women’s income and assets played a very important role in enhancing women’s economic independence and sense of self-confidence. It helped in breaking the cycle of poverty they live in and allowed them to have more control over their

lives and economic decisions. Results also revealed that the subsidy system by Islamic microfinance targeting the beneficiaries has helped in a limited way in transforming the women's lives; which was supplemented by the small amount of investment offered to the women of the groups. These women lacked the skills needed to engage in highly profit making activities or entrepreneurship.

Thus, Islamic microfinance has enabled the poor women to undertake diversified economic activities which generate flow of stable income round the year, thereby strengthening survival strategy of the poor women. With micro-investment, the poor households now own assets which can be used to meet contingencies without sacrificing their independence, security and peace of mind by getting into debt. The micro-investment program has also empowered the beneficiaries by raising their social consciousness and importance in family decision making. Women's participation also has a beneficial effect on their welfare since it increases their total employment. Their participation in Islamic micro-investment program has also increased their mobility. The most important result revealed in this study is related to the link between receiving a micro-investment and increase in the clients' children's education, health, hygiene, pure drinking water and sanitation consciousness.

The study recommends that Islamic microfinance program should shift from the simplistic ones to pluralistic ones that offer services besides Islamic microfinance (e.g., marketing, training etc.). Also, it is necessary to redirect this microfinance towards developmental activities that will contribute to the improvement, in the long run, of the wellbeing of the recipients. The development would be possible when microfinance allows real and substantial investments in the production/ investment capital and assets, not only personal assets. Although, Islamic microinvestment program has benefited the clients, still it faces some challenges which need to be overcome. The following are among measures that should be taken:

- i) proper monitoring and supervision so that borrowed money is invested in income generating activities;
- ii) alleviate ultra-poor's poverty through an integrated approach including zakat and awqaf;
- iii) initiate government efforts to employment generation, infrastructure development and electricity generation;
- iv) provide high quality needs-based entrepreneurship training and services;
- v) provide assistance to market products and services of the clients; and
- vi) undertake proper monitoring and take necessary measures to avoid Shariah violation.

In order to address the problem of alarming poverty in the majority of OIC member countries, Mustafa Omar Mohammed, Mohamed Aslam Mohamed Haneef, Ataul Haq Pramanik, Md. Fouad Bin Amin and Aliyu D. Muhd present an Integrated Waqf-based Islamic Microfinance Model (IWIMM) developed in 2013. The model comprises six

constructs: Waqf Resources, Islamic Microfinance [IsMF], Takaful Financing, Project Financing, Human Resource Development and Poverty Alleviation. The model has been successfully tested in six OIC countries, and their paper discusses the results of a field survey conducted in one of the countries, Sudan, on a sample of 163 Islamic microfinance clients. Most of the respondents have large extended family members, low level of education, no vocational training, have high but offset by high expenditure and receive financing from Islamic microfinance institutions. The study adopted partial least square (PLS) technique to analyze the data. Given the high poverty incidence in Sudan and the failure of the existing poverty alleviation programs, microfinance institutions are not able to access sufficient fund to finance the other four constructs discussed above. Therefore, the authors had expected an overwhelming acceptability for IWIMM. Accordingly, the findings have supported all the following seven hypotheses designed for testing IWIMM.

- H1: Waqf Resources contribute positively to Islamic Microfinance
- H2: Islamic Microfinance contributes positively to Takaful Financing
- H3: Islamic Microfinance contributes positively to Human Resource Development
- H4: Islamic Microfinance contributes positively to Project Financing
- H5: Human Resource Development contributes positively to Project Financing
- H6: Takaful Financing contributes positively to Poverty Reduction
- H7: Project Financing contributes positively to Poverty Reduction

The results of the study have some important implications. Waqf institutions have huge potential to finance IsMF and human resource development. Clients need to participate in various human resource development programs before joining project financing schemes, which are equity-based Islamic financing mode. The relationship between efficient, skilled and knowledgeable partners and the selection of appropriate projects can yield greater success. The coverage of micro-Takaful needs to be widened. Takaful financing can provide security to individuals, family members and their businesses, and thus safeguard them from poverty. The novelty of this study therefore lies in the robustness of IWIMM, which is also simple to understand and relates perfectly to the real need of the man in the street, in this case the microfinance clients who are really yearning for such a model.

To sum up, this volume provides original works and provoking ideas covering the theoretical and empirical issues related to Islamic finance, economic growth and shared prosperity. We hope that the findings and recommendations of these studies would be of great interest not only to future academic researchers in the field of macroeconomic stability and Islamic finance, but also to regulators and policymakers keen on drawing lessons to promote financial inclusion, and prevent financial crises in the future.

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The symposium invited prominent policymakers and regulators from the public sector to deliver opening remarks and prominent scholars to deliver keynote speeches. The two-day event included high-level panel discussions and sessions in which selected academic papers were presented.

The WBG and IsDB Group wish to express their gratitude to the Center for Applied Research in Finance (CARF), Bogazici University for hosting this event, and Islamic Finance News (IFN), the media partner of the event. The organizers are also thankful to all the speakers and discussants whose presentations have enriched the knowledge of the participants and organizers and assisted them in understanding the issues better.

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ABBREVIATIONS

AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
ADR	American Depositary Receipts
BMA	Bayesian model averaging
CAPM	capital asset pricing model
CFPs	crowdfunding platforms
CSR	corporate social responsibility
CWM	Crowdfunding- <i>Waqf</i> Model
DCC	dynamic conditional correlation
DRs	depositary receipts
ESG	environmental, social, and governance
ETF	exchange-traded fund
G-20	Group of Twenty
G-30	Group of Thirty
GCC	Gulf Cooperation Council
GDP	gross domestic product
GDRs	global depositary receipts
GFC	global financial crisis
ICD	Islamic Corporation for the Development of the Private Sector
IDB	Islamic Development Bank
IFIs	Islamic financial institutions
IMF	International Monetary Fund
IRR	internal rate of return
IRTI	Islamic Research and Training Institute (Islamic Development Bank)
KFH	Kuwait Finance House
KPIs	Key Performance Indicators

LMTI	Linaburg-Maduell Transparency Index
MDGs	Millennium Development Goals
OECD	Organisation for Economic Co-operation and Development
OIC	Organisation of Islamic Cooperation
OTC	over-the-counter
P2P	person-to-person
PPP	public-private partnership
SDGs	Sustainable Development Goals
SMEs	small and medium enterprises
SMS	short message services
SPV	special purpose vehicle
SRI	socially responsible investment
SWF	sovereign wealth fund
TNCs	transnational corporations
UN	United Nations

GLOSSARY

أَحَادِيث	<i>Aḥādīth</i>	the narrative record of the sayings, doings and implicit approval or disapproval of the Prophet
فِئَةُ الْمَعَامَلَات	<i>fiqh al-mu`āmalāt</i>	Islamic commercial jurisprudence
غَرَر	<i>gharar</i>	excessive risk and uncertainty, ambiguity
حَلَال	<i>ḥalāl</i>	permissible, lawful, allowed
حَرَام	<i>ḥarām</i>	not permissible, unlawful, not allowed
إِحْسَان	<i>iḥsān</i>	benevolence, compassion, kindness
إِجَارَة	<i>ijārah</i>	leasing, rent
إِسْتِصْنَاع	<i>istiṣnā`</i>	Manufacturing contract whereby a manufacturer agrees to produce (build) and deliver a well-described good (or premise) at a given price on a given date in the future
مَقَاصِدُ الشَّرِيعَة	<i>maqāṣid al-sharī`ah</i>	Objectives of Islamic Law
مَيْسِر	<i>maysir</i>	gambling
مُضَارَبَة	<i>muḍārabah</i>	A partnership whereby one party the Capital owner provides capital to an entrepreneur to undertake a business activity. Profit are shared between them as agreed but any financial loss is borne only by the capital owner as his loss is his unrewarded efforts put into the business activity.
مُرَابَحَة	<i>murābahah</i>	mark-up sale, sale at a margin
مُشَارَكَة	<i>mushārakah</i>	Partnership whereby all the partners contribute capital for a business venture. The partners share profits on a pre-agreed ratios while losses are shared according to each partner's capital contribution.
قُرْآن	<i>Qur`ān</i>	the sacred book of Islam
رِبَا	<i>ribā</i>	usury, interest
سَلَم	<i>salam</i>	a contract for the purchase of a commodity for deferred delivery in exchange for immediate payment
شَرِيعَة	<i>shari`ah</i>	Islamic law
صُكُوك	<i>sukūk</i>	equity-based certificates of investment
تَكَافُل	<i>takāful</i>	solidarity, mutual support
وَقْف (أَوْقَاف)	<i>waqf (awqāf)</i>	endowment(s), foundation(s), trust(s)
وَكَالَة (وَكَالَات)	<i>wakālah (wakālat)</i>	Agency. A contract whereby one party appoints obligatory contribution(s) or due payable to the poor by all Muslims having wealth above nisab (threshold or exemption limit)
زَكَاة	<i>zakāh (zakāt)</i>	

OPENING REMARKS

Prof. Dr. Azmi Omar

On behalf of IRTI and the IDB Group, let me congratulate the World Bank, Borsa Istanbul, and the Bogazici University, as well as each and every other individual who has been making sure that this event is a successful one.

The theme of this event is apt. Islamic finance has been growing at double-digit rates over the last 15 years. It all started in 1975, with the establishment of the Dubai Islamic Bank. In that same year, the Islamic Development Bank (IDB) was also established. Later in the 1980s, Islamic commercial banks were established. In 1990, the first sukūk was issued by Shell Malaysia. In early 2000s, a number of Islamic banks were launched and sovereign sukūk were issued.

Islamic banks have been growing very fast and have spread over to many countries, as well as many continents and regions, including Europe, Africa, the Far East, and Central Asia. However, the focus of Islamic banking has thus far been on the retail banking side, meaning that it has mainly been driven by consumer financing. Therefore, if you look at the balance sheet of Islamic banks you will see that the majority of these banks are focusing on mortgage and vehicle financing, whilst only a small proportion are in commercial or corporate banking.

However, if you shift your gaze to the sukūk side, you will see that there has been a significant development. Sukūk has always been used for project financing and project financing linking, thus linking the financial sector and the real sector. Since 2003, IDB has been actively financing this development of the sukūk sector, on a regular basis. During our recent annual meeting in Maputo, Mozambique, our Board of Governors agreed to increase our sukūk issuance up to US\$25 billion. This is a good example of the role of Islamic finance because through the continuous issuance of sukūk, we can link the real sector with the financial sector, to bring about real development.

Nevertheless, we do not see much in the context of Islamic banking to support the agenda of shared prosperity. After 30 years of Islamic finance, there is a lot of criticism, particularly with respect to Islamic banking. Hence scholars like Dr. Chapra and others are questioning the role of Islamic finance in supporting shared prosperity. At this point, the issue of maqāṣid al-sharī‘ah comes into the picture: specifically, the question of what Islamic finance, or Islamic banking, has done in order to support maqāṣid al-sharī‘ah. This is an issue that has been continuously debated within the Islamic finance academic world and among practitioners.

Realizing this, IRTI came up with a study called Islamic Social Finance. What do we mean by Islamic social finance? In Islamic social finance we look at zakāh, awqāf, and Islamic

microfinance. In 2014, the report covered countries in South Asia and Southeast Asia and documents the best practices in terms of managing zakāh, awqāf, and Islamic microfinance. In 2015, our study covered Sub-Saharan Africa, including Sudan and other countries such as Nigeria, South Africa, Mozambique, and Zambia. Generally, our findings indicate that, in the context of shared prosperity, the current definition of zakāh is very restrictive and will not be able to resolve poverty alleviation. However, if we expand the definition, zakāh can help to alleviate the poverty of Muslims and contribute significantly a country’s GDP—but only if we expand the definition. Therefore, one of our policy recommendations is to reexamine the definition of zakāh. Based on our study, we presented three expanded definitions.

Another policy recommendation is to look at the categories of zakāh recipients. Are we restricted to these eight categories of people entitled to receive zakāh as stated in the Holy Quran or can we look at the broader perspective? We recently had a roundtable on Islamic social finance in the United Nations with the Office of Humanitarian Affairs. The good thing is that the United Nations now accepts that Islamic social finance has a role to play in the issue of human assistance and humanitarian issues. More than 80 percent of refugees today are Muslims. But what solutions has Islamic social finance—zakāh, awqāf, or ṣadaqah — brought to these issues? We are trying to look at how we can use Islamic social finance to resolve some of these issues. But are we only looking at zakāh, awqāf, and Islamic microfinance for development purposes, without looking at those humanitarian issues?

The third policy recommendation concerns the treatment of zakāh. In some countries, zakāh is tax exempted or tax deductible. Countries that provide the tax exemption have enjoyed an increase in the payment of zakāh, whereas countries that do not give any exemption for zakāh have not seen a big increase.

The other policy recommendation, that we made, was the issue of ‘āmil. ‘Āmil is about one-eighth of the zakāh collection. We put a specific percentage on ‘āmil: one-eighth can only be reserved for ‘āmil. But in certain countries this is not possible, as they may allow a much higher percentage. In African countries, for example, most of the zakāh is in forms of agricultural products. For agricultural products you need warehouses, so as to be able to store these agricultural products. Furthermore, the distribution of those agricultural products requires additional time. In Southeast Asian countries, however, people pay by in cash.

We also looked at the type of awqāf. In a number of countries, the definition of waqf has also been very restricted. The cash and the corporate awqāf are new tools used for poverty alleviation, but the methods by which they are being used, as well as how they are being used, must be addressed.

We also conducted some case studies that have been very successful. In Pakistan, for example, an Islamic microfinance institution, Akhuwat, uses purely qarḍ ḥasan, and it is very successful. There are also some good examples in Sudan, where zakāh, awqāf, and other Islamic microfinance instruments are being used to support the development of income for the poor. For the purpose of training, zakāh is being used to build a capacity of the poor. For the purpose of financing, either murābahah or qarḍ ḥasan is being used. Overall, there

are several good examples that other countries or other Muslim organizations can emulate in order to advance the issue of shared prosperity.

The question is whether Islamic banking, or participation banking, has been able to support and advance the issue of shared prosperity. I think we need to do more in order to promote shared prosperity in Islamic banking. At the same time, I think that we have to look at zakāh, awqāf, ṣadaqah, and Islamic microfinance as tools through which to bring about shared prosperity among not only Muslims, but also among society as a whole.

IRTI and the World Bank are currently producing a global report on the theme of shared prosperity in Islamic finance. The report, which I believe is the first ever report that looks at the role of Islamic finance in shared prosperity, includes chapters on banking, takāful, capital markets, and Islamic social finance. The other good news is that the issues of zakāh, awqāf, and Islamic microfinance have recently been put on the main agenda for further discussion at most of the international forums. In addition to Dr. Murat Çizakça, our expert on awqāf, we need to have more people working in this area in order to see how we can further promote Islamic banking, sukūk, takāful, and Islamic social finance – in order to bring about shared prosperity.

In this regard, the IDB Group stands ready to support the development of Islamic finance. As you know, we have been providing project financing and we have been going into private sector development, through our sister company, Islamic Corporation for the Development of the Private Sector (ICD), IDB. IRTI, specifically, has been doing research and capacity building on Islamic finance.

One of the key things that we always address, especially in countries that are interested in implementing Islamic finance or in opening up their doors to Islamic banking, is to take into account shared prosperity. This means to learn from the mistakes of the countries that implemented Islamic finance earlier on, such as Malaysia, Indonesia, Bangladesh, Pakistan, and Turkey. We need to learn from these practices, and how to minimize the issue of purely focusing on retail banking, without focusing on the issue of the shari‘ah. We need to address this issue of shared prosperity so that when new Islamic banks are being established worldwide, these issues of purely focusing on the profit motive or risk transfer, without taking into account risk sharing, will be minimized. In other words, what we want to see are more risk-sharing principles, as well as other types of instruments being implemented by Islamic banks. Through this method, more shared prosperity can be brought about for both the bank customers and the society.

For example, countries like Suriname, in South America, are planning soon to open an Islamic bank. Suriname is a member country of IDB. A neighboring country, Guyana, is also interested in opening up an Islamic bank.

In conclusion, let me once more congratulate the team for working very hard to make this event a success. To see Islamic finance, or participation finance be implemented globally is a personal agenda, as I am sure that my old friends here in the Islamic finance industry would agree. At the end of the day, I think that the solution of Islamic finance is the solution

to humanity. We do not need more speculative finance. Therefore, this is important finance. It is risk-sharing finance. It is ethical finance. It is finance that will not only be able to address the problems of the Muslims, but also those of the world. In that sense, it will bring more stability to the financial system.

IMPORTANCE OF RESEARCH IN ISLAMIC ECONOMICS AND FINANCE

Dr. Mohamad Hammour

I'd like to give you a bit of an overview of the mission that has been developed, with all of the symposium partners, for this annual symposium: an event which we hope will become an institution, a platform, and a forum serving the discipline of Islamic economics and finance.

It is fair to say that Islamic finance and economics is no longer a discipline in its infancy. However, it is also fair to say that this discipline has not reached its full maturity and adulthood. It is a discipline that will still require a lot of exploration, innovation, contributions, and a lot of maturing. We all believe it is high time for a platform to be established that contributes and supports this coming phase of maturation and development: a platform that would not only constitute a forum for exchange and contribute thought leadership to the discipline, but one that would also facilitate the dissemination of ideas. This, in short, is the mission of this Annual Symposium on Islamic Economics and Finance.

I said a platform for the exchange of ideas. By this, I mean an exchange between many different parties and disciplines. In the general Islamic tradition of combining thought and action, which is very much reflected in the composition of the symposium partners, we can see that this is a platform that brings together not only academics, but also policy makers and industry practitioners. It is also meant to be a forum that brings together an exchange between different disciplines, which will not only include economics and finance specialists, but hopefully also bring *shari'ah* scholars, lawyers, sociologists, politicians, and others around the table, as the symposium progresses.

This event is also meant to bring together different perspectives. Islamic finance, as a discipline, is a very important contributor to the efforts to find alternative approaches to providing sounder foundations to the financial architecture. However, there are also other schools of thought and alternative finance schools that are introducing very interesting and important perspectives. It is therefore a vital initiative and effort to bring about and sustain a dialogue between these different schools.

Second, the symposium is meant to provide a forum for thought leadership. This is very important, as nothing happens without leadership. I believe that the prominence of the symposium sponsors, and the high quality of the content and contributions, can help provide a true form of leadership within the discipline. This is meant both in terms of raising standards and in terms of bringing about creative thinking. In its youth, Islamic finance and economics has, I believe, been more characterized by passion than necessarily by the excellence of the contributions within the field. In an age of more maturity, I believe that it is time to raise the

bar on high standards and high delivery of excellent thinking in research and policy.

In terms of creativity, I think it is important to understand that, as any logician would say, premises lead to conclusions. Approaches that don't question methodology, assumptions, and conceptual blocks, and that ultimately lead to a certain type of practice will not necessarily be as fertile as questioning the underpinning thought processes and assumptions, and/or providing truly creative insights. I therefore think that encouraging creativity should be a key aspect of these annual symposiums.

Last, but not least, I mentioned that this symposium should be a forum for education and the dissemination of ideas. We are not in an ivory tower. We are in a very much applied discipline. The hope is that the prominence and the visibility of the symposium, and of the symposium partners, will help create a channel that truly contributes toward the dissemination of ideas: either through original thinking and research or, hopefully, through some commissioned surveys and pieces of synthesis on the discipline. It is also hoped that through the annual publication of the proceedings of this symposium, alongside the establishment of a main website that people can go to, to look at the history of the debates and contributions of this symposium, a good platform for dissemination will be established.

With this in mind, I am enthusiastic and excited, as I believe everyone in this room is, to participate and listen to the very important contributions on the topic of shared prosperity and broad participation in Islamic economics and finance.

THOUGHTS ON THE PARADIGM SHIFT IN ISLAMIC FINANCE

Dr. Talat Ulussever

The reasons for the latest global crisis have been discussed in both academic circles and the markets since 2008. The general view is that regulatory and supervisory defects are the main reason for the crisis. However, when we look at the big picture, we can confidently say that the basic reason that lies behind almost all economic and financial crises is linked to significant amounts of borrowing and leveraged products. The rapid increase in the number of both global and local crises in the past 40 years, in addition to becoming contagious, cannot be considered independently from accelerated financialization. Carmen Reinhart and Kenneth Rogoff, known for their contributions to the literature, with their studies on financial crises, underline that the basic reason for all financial crises, regardless of their source—whether banking, foreign currency, or the public sector—is the increase in debt, particularly the short-term debt burden. Likewise, Atif Mian and Amir Sufi, viewed as prominent economists of the future, argue in their book, *House of Debt*, that increased household debt is responsible for financial crises.

Following this crisis—created by leveraged products and a financial system based on a high amount of borrowing—the world focused on conjectural solutions and policies, which led the global economy to fail to recover, despite the seven years that have passed since the crisis has broken out. All these solutions and policies failed not only to revive the real sector on a global scale, but have also increased the global debt burden by over US\$50 trillion since 2008. This is a reflection of interest rates being determined by the central banks independently of the income of the real sector—whereas economic theory argues that economic balance is achieved on the assumption that marginal capital income is equal to financial income. In this current economic environment—which is completely unlinked from the marginal return of capital, with zero or even negative interest—both investments and savings are influenced negatively and an investment/saving imbalance is occurring on a global basis. The mainstream economic and financial perspective, which argues that price discovery in an interest-free world is not possible and zero interest will negatively influence all economic decisions, put the global economy in this very situation, and has failed to offer any solutions.

At this point, I would like to emphasize the need for a financial system that is more strongly linked to the real economy. A financial system that assumes a greater role in the intermediation activities in the real economy and that, at the same time, benefits society and creates value, is needed in the future. A financial system of such a nature is an indispensable prerequisite for sustainable economic growth. I believe that in a financial system designed with this prerequisite, capital markets must intervene and strengthen the links between the

financial markets and real economy. Returns offered by the capital markets that are linked to the real economy help alleviate investment/saving imbalances. In an economy based on risk sharing, the reference ratio replaces interest rates.

I would like to emphasize that if instruments based on risk sharing and the capital markets where these instruments are traded became more active, that would play a very important role in generating savings. I believe that a financial system that is linked to developments in the real economy and that moves in synchronization with the marginal productivity ratios on a sectoral basis will have a significant effect, especially in attracting the savings of individual investors. As the effect of savings on sharing welfare is clear, I would like to once more emphasize the relationship between the capital markets and risk sharing.

The latest global financial crisis also proved that a financial system that is not based on a risk-sharing principle fails to absorb the fluctuations in the market. On the contrary, the effects of the crisis were felt more deeply and widely on a global scale due to the spreading effect. Conversely, Islamic finance, which is based on the principle of risk sharing, despite the shortfalls in practice, has clearly accelerated all over the world, particularly in Islamic states, thanks to its instruments as well as the underlying ideas. Asset-backed instruments and practices offered by Islamic finance have created a new excitement in the financial markets.

Muḍārabah is an example of such an instrument. *Muḍārabah* means labor/capital partnership, and was first implemented in the pre-Islamic Jahiliyyah period. Later, after the adoption of Islam, *muḍārabah* was implemented in caravan trade and marine trade, frequently with success. A similar practice was introduced in Europe in the 10th century under the name “commenda,” as a type of “common commandite company.”¹⁾ It adopted in the commercial law of the countries of the region and was standardized. During the Ottoman period, numerous instruments based on *muḍārabah* were developed and successfully implemented. In recent years, Murat Çizakça (Professor of Islamic Finance) has published successful studies in this field.

Another concept that was transferred from the Islamic culture to the Western civilization is “risk.” Despite some disagreement, the general view is that the Arabic word “*rizq*” was transformed to the West as “risk” through the Andalusian Moslems. That is to say, the concept of risk is based on the concept of “*rizq*” (sustenance) in Islam. Therefore, we can interpret the concept of “risk sharing” as “*rizq* sharing.” Islam encourages sharing of welfare and returns through practices such as *zakāt* (a form of obligatory alms-giving and religious tax in Islam), *ṣadaqāt* (alms), and *qarḍ* (interest-free loan), just as it encourages the sharing of possible welfare and returns in trade and investment. The fact that all these methods of sharing help to alleviate unequal distribution of income is self-explanatory.

It is clear that the unequal distribution of income would not be a structural problem in a financial system that is in conformity with Islamic principles. Verse 7 of *Sūrat al-Hashr* emphasizes that what Allah gave as bounty may not become a fortune used only by the rich.

1) A commandite company is a form of partnership in which there are one or more silent partners who contribute funds, but who are liable originally only for the capital invested and later only according to a registered scheme of liability.

Sūrat al-Hashr and similar *Sūrats*, as well as the practices of our Prophet, require that welfare and returns be shared.

So, what method is used for such sharing, or what should be the method? At this point, it is possible to consider the ex-ante and ex post measures of a financial system in line with Islamic principles. The most well-known ex post measure is *zakāt*, one of the five fundamental principles of Islam. With *zakāt*, welfare is redistributed through sharing, and social welfare is balanced. Risk sharing and instruments based on risk sharing can be defined as ex ante measures. That is to say, through risk sharing, return is shared, and therefore a precautionary measure is applied. Therefore, through both precautionary and corrective measures, resource transfer is realized. In the event that an economic activity is realized in accordance with the Islamic principles, including before and after the event, unequal distribution of income is prevented.

Another subject that I would like to mention is related to the content of Islamic finance. Although it started off with good intentions, it has continued in line with conventional finance, even including the reference point. Most academic studies show that although the practice of Islamic finance in its current form dissociates from conventional finance, these two types of finance are not very much different structurally. The studies carried out by Borsa İstanbul research team show similar results.

As suggested by the widely used term “Islamic finance,” we are talking about an Islamic financial system. However, I would like to state that the main target must be Islamization rather than Islamicization. That is to say, I believe that it would be more accurate to use the term “finance of Islam” or “finance in Islam” rather than Islamic finance. A model where the whole system, including the reference point, is based on Islamic rules should be designed and implemented. For example, what we call “Islamic banking” in many countries is implemented on the basis of special provisions in conventional legislation. However, without separate legislation, we cannot talk about completely Islamized banking. This is true for the capital markets as well.

Islamization of the current financial system requires, in certain instances, establishing an original model, while in others, it is possible only by changing the existing one. In both cases, the ontological elements of Islam must be considered. For this reason, overlooking micro elements and seeking a structure on the macro level will not “Islamize” the financial system, but only “Islamicize” it. Today, numerous practices in the so-called Islamic finance system have been subject to this incomplete transformation, despite the underlying good intention. In this regard, Haidar Naqvi’s studies are important. For example, in his work entitled “An Islamic Synthesis,” Naqvi establishes the axiomatic foundations of an economic system based on Islam. I would also like to emphasize the importance of Masud’ul Alam Choudhury’s (Professor of Economics) analytical micro-based studies. As the number of such studies increase, I get more hopeful for a financial model that is capable of comprehending Islamic principles more deeply.

On this occasion, I would like to once more bring to the agenda the subject of “naming.” It is clearly not very correct to call the system currently implemented “Islamic.” The term “interest-free finance,” which is accepted as an antidote to conventional financial system, also fails to fully respond to the required model. A model based on the concepts of “sharing,” “participation,” or “partnership” and naming the model as such will be more useful, as it fulfills the main objective. I would like to take this opportunity to mention Temel Hazıroğlu and Mehmet Emin Özcan (2000), who ensured the use of the term “participation banking” in Turkey.

The insufficiencies of both the demand and supply sides are important reasons for the underdevelopment of instruments based on risk sharing. However, as market makers, we must be aware of our responsibility and take the necessary practical steps. I would like to take this opportunity to say that in both the banking sector and the capital markets, we must improve the mechanisms that will revive both the supply and demand for products based on risk sharing. For example, instead of an exchange business where only equities in conformity with Islamic rules or *sukūk* are traded, we must develop a mechanism where exchange operations will be recreated more in line with Islamic rules. That is to say, an equity is in conformity with Islamic rules only if the trading, intermediation, and custody rules regarding such equity are, as a whole, in conformity with Islamic rules. Within this context, I would like to emphasize the importance of the Real Estate Exchange and Gold Exchange, planned to be established under the initiative of the Organization of Islamic Cooperation. Our esteemed President, His Excellency Recep Tayyip Erdoğan, is the leader of this idea.

Another issue I would like to touch upon is the development of the global capital markets, particularly in Muslim countries. Currently, nearly 80 percent of the Islamic financial assets in the world are in the banking sector. Of these instruments, the ratio of those that are not based on risk sharing is 90 percent. For stronger economic growth, it is necessary to introduce a system based on risk sharing, led by the capital markets instead of a structure based on banking and borrowing. In order to emphasize the importance of the capital markets in ensuring a stronger economic growth trend, I would like to share with you an updated and well-received study by the OECD. Analyzing 50 years of data for the OECD countries, the study shows that financing through loans has a negative effect on the economy, while those economies that have recourse to the capital markets for finance grow in a healthier and faster fashion. With regard to Turkey, I can say that our capital markets institutions, and particularly Borsa İstanbul, aim to assume a more active role in the forthcoming period and continue to work toward this target (Cournède and Denk 2015).

Finally, I hope that this event will lead to eye-opening sessions that will improve our vision for and perspective on and discussions on “risk sharing” and “welfare sharing.” I do hope that our studies will guide our capital markets.

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BUILDING TOMORROW'S ISLAMIC STOCK MARKETS

Andrew Sheng*

I want to congratulate Dr. Zamir Iqbal, the World Bank, Borsa Istanbul, the Islamic Development Bank, the Islamic Research and Training Institute, and the Guidance Financial Group for organizing this Inaugural Symposium. Not being able to claim any expertise on Islam, I would like to survey the context for the rise of Islamic finance at a crucial juncture in the development of mainstream finance. In his keynote address, Professor Abbas Mirakhor, has elaborated on his insight that Islamic finance is different from mainstream finance in its risk-sharing philosophy (Askari and Mirakhor, 2014). What does risk-sharing mean in practice in the context of the stock market?

Dr. Abbas, the late Professor Ajit Singh of Cambridge University, and I wrote an earlier paper on the role of stock markets within the financial system. Since Ajit departed this world earlier this year, this paper is dedicated to his memory and his contributions to the highest standards of academic research. Ajit was one of the students and colleagues of the late Joan Robinson, one of the select disciples of John Maynard Keynes at Cambridge. Nearly 80 years since the publication of Keynes' General Theory, we have not yet developed another General Theory for a proper diagnosis and prognosis for the current global financial crisis. In my view, the current discussions on Islamic finance would add to our understanding of how finance and real economic activities interact to shape the world that we live in.

What we have learnt from the global financial crisis? Where can Islamic finance help in building a stronger global financial system, especially when the crisis revealed considerable flaws in the current system? Specifically, I want to take off from a question posed by the audience earlier to Professor Abbas: “What are the practical ideas involved in taking Islamic finance to the next level?” We will draw upon the lessons to be learnt from the global financial crisis, the recent A-share correction in China, and the Silicon Valley experiences in fund raising in equity.

To put it simply, the global financial crisis revealed serious flaws in the finance industry serving itself, rather than the real economy revealing not only financial institutions that are too big to fail (TBTF), too complex to manage, and more powerful than governments. The result was unprecedented regulatory reform, and pushing activist monetary and fiscal policies to the limit, leading to a huge global debt overhang.

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From the global financial crisis, we now know that conventional finance or mainstream finance is mainly debt driven. Debt shifts risks to those who may not be able to bear them, creates concentration, fragility, and inequality, and is, therefore, not sustainable. Islamic finance is ethical-based, but it must be superior to conventional finance in practical terms, such as efficiency, social equity, inclusiveness, cost, and risk management.

As Abbas (Bacha, Ismath, Mirakhor and Hossein Askari, 2015) recently said, Islamic finance cannot be conventional finance with a *shari'ah* label. As an alternative to mainstream finance, Islamic finance has to offer genuine advantages to its users, meeting social needs and providing improved services for the real sector.

We should be clear that we are not comparing two static models; rather, they are two dynamic and rapidly changing financial modes of operation and philosophy. Hence, whilst it is a major mindset breakthrough for Abbas and his colleagues to identify that Islamic finance is all about risk sharing, at the practical level, Islamic finance practitioners must innovate and demonstrate in practice (rather than just theory) that the Islamic finance model has definable comparative advantages that will ensure its ability to compete and thrive.

On 24 September, 2015 I stood by the edge of the desert in the oasis of Dunhuang, the beginning of the Silk Road in China, and reflected how the caravans began the hazardous trade across two thousand miles of desert. It struck me that conventional finance at normal interest rates could never have financed these caravans, with untold losses from desert storms, robbers, and cheating on arrival at the final destination. Only one in two to four caravans could have succeeded, so that the returns to investments must have been sufficiently high to compensate for the huge unknown risks. Islamic finance began with such venture capital. Being equity based, there was a sense of risk sharing, trust in the caravan captain, and in the counterparties in trade. In other words, Islamic finance was built on adventure, high risks, and high returns. Conventional banking could not deal with such uncertainties due to the imponderables involved. Obviously, faith also sustained those who indulged in such ventures.

That insight brings me back to the twenty-first century because finance also faces huge unknown unknowns from disruptive technology, geopolitical tensions, climate change, unconventional monetary policy and complex regulations. Only equity-based finance can cushion the entrepreneur, the financier, and society at large against such radical uncertainties because normal banking based on thin interest rate margins cannot offset potential losses. This, then, is the starting point of this paper, to re-examine the stock market and how Islamic finance could go back to its roots to cope with the challenges of the twenty-first century.

This paper looks at the changing landscape of mainstream finance, what the global trends are, how the stock markets are evolving, and how technology might be able to help Islamic finance prove that innovation would be able to enable it to compete vigorously as an alternative model of growth and development.

Global Trends to 2030

The financial sector is a subecosystem within the larger ecosystem of human life and activity within our biosphere. It serves to support real sector activities. Hence, its evolution and operations are subject to many interacting and interdependent social, economic, political, and scientific forces at the national and global levels. We cannot examine finance independent of the context in which it operates.

If Islamic finance is a sub-ecosystem, it needs to take into consideration the system as a whole. We cannot separate the development of Islamic finance from geopolitical issues, demography, financialization and debt overhang, disruptive technology, climate change, and governance.

Hence a short survey of how the leading thinkers see global trends is useful.

The U.S. National Intelligence Council's scenario building for 2030, (NIC 2013) foresees a multipolar world without a single hegemon, so that going forward, we may see a crisis-prone global economy emerging, with greater volatility and imbalances amongst different players. Although the world economy will continue to grow, the advanced market economies are aging and slowing, whilst the emerging market economies will continue to enjoy faster growth, due to favourable demographics. Over 60 percent of the world's population will be in urban areas, but higher demands for food, water, and energy could cause stresses and conflicts. Climate change could exacerbate such stresses with more natural disasters, compounded by human errors such as bad policy, failed states, corruption, and weak governance. There are clear risks that the present national and multilateral governance structure and institutions are unable to adapt fast enough to deal with such changes, so that greater social inequality and regional imbalances are likely to foster more human conflict from terrorism and war. Technology is likely to radically change lifestyles, bringing opportunities as well as risks, through disruption of old business models and loss of jobs made obsolete by automation.

All these risks imply that financial systems will have to be much more resilient in order to support real sector changes and manage new and unknown risks. Specifically, the global financial crisis demonstrated that finance itself was a source of endogenous risk, compounding the problems of the real sector. Finance took care of itself, rather than helping to manage risks for the real sector. Furthermore, the global financial crisis revealed that a basic problem was short-termism, because finance became obsessed by immediate gains, rather than funding long-term projects like adapting to climate change, building social infrastructure, and also supporting the inclusiveness in society, such as small and medium enterprises (SMEs) and rural and underprivileged sectors.

This scenario requires a different mindset from the present system.

Since the global financial crisis, there have been substantial reforms at the regulatory level, but the system is still regulated in silos. The United States, for example, has not been able to consolidate its fragmented regulatory system. Despite consensus on pushing through Basel

III bank regulatory reforms, the Financial Stability Board is still unable to get consensus on how to regulate the shadow banking system. It is also not clear whether the regulatory changes will rein in the too-big-to-fail (TBTf) financial institutions, because since the global financial crisis, the financial system remains even more concentrated than ever.

Non-U.S. national financial systems remain highly bank-based, especially in Europe and Asia. After governments ran larger fiscal deficits due to the global financial crisis, the system has become even more debt-driven.

As the McKinsey Global Institute (Dobbs et al. 2015) pointed out, since 2007, global debt has grown by \$57 trillion to just under \$200 trillion, or 286 percent of GDP, rising by 17 percentage points (Dobbs, Lund, Woetzel and Mutafchieva, 2015). Eighty-three percent of the world's equity market capitalization is supported by zero or near-zero interest rate policies, and 50 percent of world government bonds yield 1 percent or less (Hartnett, Nahal and Ma, 2014). In order to deal with such leverage, central banks have increased their balance sheet to \$22.6 trillion, or nearly 8 percent of global financial assets, excluding derivatives.

Total global financial assets relative to GDP rose from 100 percent of GDP in 1980 to 380 percent of GDP at the end of 2013 (IMF GFSR 2015). Of this, bank assets accounted for 168 percent of GDP, debt markets (129 percent), and stock market capitalization (83 percent). In crude leverage terms, debt (including bank loans) was 3.6 times equity. Because of its deep stock market and smaller banking system, the leverage ratio for the United States was only 2.2 times, whereas in systems dominated by banks, the leverage ratio was 5.2 times for Japan, 7.2 times for China, and 7.8 times for Europe.

If banking systems become highly leveraged and their customers are also highly leveraged, it is not surprising that the whole system became fragile. High leverage can only be sustained by very low interest levels, which is why it was not surprising that central banks had to use quantitative easing or QE (flooding the market with liquidity) and keeping interest rates at historically low interest rates to prevent financial meltdown and hopefully revive economic growth.

In other words, the world has entered into a phase of asset bubbles in almost all financial assets, supported by unprecedented loose monetary policy, with very high levels of fiscal debt, and in some cases, corporate and household debt. Historically, excessive debt has been wiped out by war, financial crises, large write-offs, or inflation (Eichengreen 2014).

The rate of growth of debt has become faster than GDP growth, meaning that the degree of leverage is still increasing, and is not sustainable, even with lower and lower interest rates. The stark choice is therefore either fragility from financial collapse or higher and higher inflation, together with greater inequality.

Already, there is more evidence from a number of sources, including OECD (2015), that financial repression and modern financial markets increase the level of concentration and worsen social inequality. Post-crisis, there are more concerns about financial inclusion

precisely because SMEs and retail consumers and savers (the masses) did not have adequate access to financial services. Similarly, instead of reducing the size of too-big-to-fail banks, their size and concentration has increased further as a result of consolidation and mergers.

The problem with the current global financial crisis is that conventional monetary and fiscal policies have reached their limits of effectiveness, and further injections of QE or fiscal stimulus would only entrench current imbalances rather than solving the structural issues. In other words, mainstream finance itself must recognize its limitations, and that there may be no substitute for a painful “root and branch” restructuring of the real sector, including the financial system.

In short, we cannot solve excess leverage with more debt. We can only deleverage or make the system more resilient by having a bigger equity cushion. Equity is risk sharing, which diffuses risks across those most equipped to absorb risks and uncertainty.

The Future of Finance: The End of the Debt Cycle

The International Monetary Fund (IMF) has just completed a study of the future of Asian finance (Sahay, Schiff, and others 2015). Specifically, if Asia is to become a major player in the global economy, the IMF study (Sahay, Cihak, and others 2015, 4) argues that Asian finance needs to take a bigger role, including:

- Better managing accumulated saving
- Efficiently mobilizing saving
- Investing in human and physical capital
- Deepening capital markets to escape a “middle-income trap,” and
- Supporting economic and financial integration of ASEAN.

The United Nations Environment Programme (UNEP) has just published a study on sustainable finance, of which I am an Advisory Committee member (UNEP 2015). Oliver Wyman has argued that we need to look at financial services as a money and information business (Oliver Wyman 2013), because information technology has not only transformed consumer lifestyles (social media and internet), but also the arrival of FinTech (financial technology platforms) have invaded traditional businesses in payments, trading, and credit and asset management of banks, insurance companies, securities, and asset managers. Already, information companies like Google and Alibaba have surpassed the market value of traditional banks. Traditional bank interest and income margins are becoming thinner from competition and also from higher regulatory costs.

In broad terms, the future of finance will be changed dramatically because of the forces of demographics, urbanization, technology, climate change, and geopolitics/social conflict,

where the risks are not only unknown, but also unmeasurable.

The problem with a bank-dominated world, with central banks in charge, is that it continues to drive debt as the solution to real sector imbalances.

Debt, which is about risk shifting, has run its course because even governments, which are the residue absorber of risks, have become highly indebted. OECD government debt is already over 100 percent of GDP. Central banks cannot be lenders of last resort and expand their balance sheets without consequences for inflation. Debt liquidation forces adjustment on the borrowers, without a sense of burden-sharing on the part of lenders. As Irving Fisher (1933), Charles Kindleberger (1978), and Richard Koo (2011) have shown, debt deflation and its resulting market illiquidity and social inequality drives down output, growth, and employment, culminating in secular stagnation.

Debt enables instant gratification of desires (for consumption or power) and postponing all tough decisions to the future. As the CEO of one of the largest global asset managers, Larry Fink (2015), remarked, “We’ve created a gambling culture in which we tune out everything except the most immediate outcomes...Instead of encouraging our institutions and our leaders to grapple effectively with complex, long-term challenges, we’re rewarding them to do the opposite.”

Furthermore, the debt network spreads contagion and worsens fragility. Debt hubs (banks) will cause systemic failure when they do not have the capital and liquidity cushion to absorb risks.

The only major risk-absorber is equity, which is all about ownership, risk sharing, and commitment to long-term issues. The higher the level of equity finance, the better the world is able to absorb unknown shocks.

In other words, equity markets offer a better solution for finance to serve the real sector than debt. Since Islamic finance is interest free and equity-driven, Islamic finance has much to offer in theory, but this must be proven in practice.

The reasons for the debt-equity imbalance are well known but difficult to fix because of entrenched interests. First of all, there is a tax bias for debt because interest paid and loan losses are tax deductible, whereas capital losses on stocks are not tax deductible and dividends are subject in practice to higher taxation on the part of investors, especially the lower income investors, who may not reclaim the tax deducted at the source. Second, there is an intellectual misconception from the famous Modigliani-Miller theorem that in a free market, there is no difference between debt and equity for the purposes of valuing a firm. This theorem is only true if there is no such thing as bankruptcy because the higher the leverage of a firm, the greater the chance of failure. Third, debt and leverage favour the controlling shareholders, since leverage improves return on existing capital, but worsens both the credit risk of the borrower and also the systemic risks as a whole. Fourthly, current stock markets and their regulation add considerable costs to raising equity capital relative to debt.

For example, other than accounting, legal, and other fees in preparation for an IPO (initial public offering), the investment banking fees for listing in the New York Stock Exchange is 7 percent of the offer amount, and 3 percent in the Hong Kong Exchange. This is still high compared with debt offerings, which do not require elaborate prospectuses and listing fees.

We therefore need to look deeper into the practice of equity markets rather than the accepted theory to examine how Islamic finance can draw from recent innovations in stock markets to advance its cause. Specifically, I draw upon recent experience from China’s stock market development and the rise of Silicon Valley crowd-funding to offer valuable insights into how future Islamic and other stock markets should be designed.

The Role of Stock Markets

If Islamic finance is risk sharing and equity based, then we must build the equity market of tomorrow, not the equity market of yesterday.

Traditionally, stock markets are supposed to have four major functions: resource allocation, price discovery, risk management, and corporate governance. But the global financial crisis proved that there were failures in all four areas, resulting in *bad resource allocation*; *poor price discovery*, as stock markets are very speculative; *weak and misleading risk management*; and finally, *flawed corporate governance*, as the finance sector could not regulate itself. Of course, stock markets played a smaller role in the global financial crisis than debt and banking markets, but it was precisely their speculative nature and inability to raise capital cushions that helped foster the systemic fragility.

Beginning in the early 1980s, the International Finance Corporation (IFC) began encouraging the development of stock markets in emerging markets. The naïve version of this model was that if you replicate the New York Stock Exchange (NYSE) or London Stock Exchange (LSE) in your market, you would succeed in deepening your capital markets. Nearly four decades later, most emerging markets have stock markets, but they remain mostly retail-driven, shallow, and speculative. As the IMF study (Sahay, Schiff and others 2015, p.9) showed, “despite recent rapid growth, (Asian) equity and bond markets remain underdeveloped and illiquid in part due to a paucity of real money and long-term institutional investors.” It is actually far worse. As the recent Chinese A share market showed, emerging market stock markets are highly volatile and speculative, and did not raise much capital for SMEs. Since 2008, IPO fund raising has accounted for less than 3 percent of the total social funding in the Chinese economy, which was why the Chinese corporate sector became overleveraged and relied heavily on the banking and shadow banking system (Sheng and Ng 2015).

Policy makers who still look at capital market development from that “IFC” perspective completely forgot history. Stock markets like NYSE and LSE started not from top-down design, but from the bottom-up. Stock markets began life as cafés where entrepreneurs raised risk capital for colonial and overseas ventures, no different from Islamic bursas (Arabic stock exchanges) raising funds for high-risk caravans that sought markets and trade in distant lands.

Eventually, these grew up to become mid-sized enterprises and then global multinationals.

Accordingly to the World Federation of Exchanges, there are only 45,000 listed companies in global exchanges; together they account for US\$68.6 trillion of market capitalization at the end of June 2015. In China, there are only 2,800 listed companies, compared with an estimated 13 million SMEs that cannot access stock markets through IPOs and therefore can only borrow from the banks or shadow banks.

In the late 1990s, China began experimenting with developing home-grown exchanges along a different path.

Having realized that there is a huge need for SMEs and eligible companies to access capital, local governments in Chinese cities started to create “property exchanges,” which allowed unlisted companies to seek private investors, and private equity/venture capitalists to invest in such companies on an unlisted basis. In almost every major city in China, these property exchanges have become important centres for exchange of information and trading of unlisted shares. As a result of more active trading, there are now an estimated 2,500 private equity/venture capital (PE/VC) funds in China with asset under management of RMB2 trillion (US\$400 billion). Some of the more active city property exchanges have been consolidated into a National Equities Exchange and Quotations platform, an over-the-counter exchange commonly called the “Third New Market (TNM),” the Chinese equivalent of Pink Sheet listings in the United States, which enables start-ups to pre-trade before they graduate to formal exchanges.

By August 2015, there were 3,000 companies listed on the Third New Market (more than the Shanghai and Shenzhen markets), with turnover of around 500 million RMB daily. The Third New Market became active in July and August, when the official listed markets closed their IPOs because of market turmoil. The rules of the TNM may not be as clear as the formal exchanges, but at least SMEs now have a chance of accessing capital, rather than borrowing from shadow banks, which could charge as much as 24 percent per annum or higher.

By widening access to capital to more SMEs, the TNM returned to deliver on the one issue that conventional stock markets do not take care of adequately. This is the people training and learning business. SMEs, investors, and intermediaries all learn from their successes and failures about price discovery, resource allocation, risk management, and corporate governance. Stock markets are all about people, and people are about values. If you trust them and you give them a stake in what they want to do and if the broad base of society succeeds, the whole society succeeds.

In short, if the formal stock markets are universities, the TNM is a nursery or primary school for budding entrepreneurs. The TNM is still work in progress, but it has become an important catalyst for start-ups and nascent investment banks or merchant bankers to promote shared prosperity for thousands of SMEs.

In other words, the stock market should not be “the 1 percent for the 1 percent,” but a

mechanism for the broad masses to prosper from the success of the many, and learn from their failures.

Didier, Levine, and Schmukler (2015) assembled a major dataset on firm-level domestic and international issuances of equities and bonds from 1991 to 2011 and matched this information with balance sheet information on 45,527 publicly listed firms from 51 countries from 2003 to 2011. The fundamental results showed that there is considerable concentration in equity and bond issuance, with only a small number of large firms issuing securities in the typical country. These companies raised an increasing amount of funds during the 1990s and 2000s. Roughly 20 listed companies are major issuers of securities in either their domestic capital market or in an international financial center.

Secondly, with access to capital markets, the median issuer by size experiences asset growth of 12 percent per annum, faster than the growth of 4.5 percent of the median non-issuer. In sum, formal stock markets help only relatively few companies.

But stock markets have one major advantage over debt markets; individual failure is acceptable. Banks do not like nonperforming loans, and therefore they shun lending to higher-risk SMEs. Banks that are not universal banks are not allowed to inject equity for their borrowers through debt-equity swaps.

This brings me to a lesson from Silicon Valley, which I visited recently, and it really opened my eyes to what is happening in the area of risk capital. Silicon Valley is using technology to go back to basics. It is very inclusive because everybody can raise funds through crowd funding, even though initially it was through professional fund managers. This has now broadened to crowd funding through the internet, where a start-up can raise US\$10 (for charities), US\$50, or US\$100 from individuals for a start-up, which only needs US\$10,000 to US\$20,000. Once it succeeds in moving to the next stage, the start-up may need US\$1 million. At each level of “success” in testing the product or concept, the start-up goes through more sophisticated levels of management and expertise in order to raise US\$5 million or US\$20 million, broadening the base of its investors. Each slice of fund-raising raises the stakes, as well as the need to convince the investors why more funding is justified. At the US\$100 million level, the project may reach the exit level of the formal stock market, such as NASDAQ or NYSE.

By going back to basics, Silicon Valley has turned traditional finance on its head. It has learnt from the law of large numbers. It does not matter if individuals fail. Experience shows that out of 100 start-up enterprises, 60 or more will fail within the first year, 30 may just break even, but if two or three succeed with 3,000 to 4,000 percent returns, the whole investment portfolio succeeds.

Why is Silicon Valley venture capital successful? The investors that select the projects (note that these do not involve governments) have got sufficient technological experience to evaluate success or failure. Recognizing that failure is the mother of success, they experiment until they achieve the 2 or 3 percent of “unicorns” that succeed. The profits make up for all

the losses of the 40 percent to 60 percent that lose money.

The idea of going for high return from low-cost options is the concept of anti-fragility advanced by Nassim Taleb (2013). An anti-fragile system is one that makes small options that yield very large returns to compensate against unknown losses. Because no one can predict when the Bad Black Swans (the unknown unknowns that create large, unpredictable losses) will strike, then the only way to offset these large losses is to build up sufficient capital with cheap options that generate big profits.

Anti-fragility is the antithesis of conventional debt finance. Under conventional debt finance, the mindset is risk adverse. The conventional banker is afraid of loan losses, trying to make sure that everyone must pay back their money. But experience tells us that when the Bad Black Swan hits, what appears to be low risks turn out to be large losses. As Hyman Minsky (1992) argued, “stability creates instability.” By shunning a large number of SMEs that individually appear to have high credit risks and focusing on large borrowers, which appear to have low risk, the banking system’s nonperforming loans shoot up when crisis hits.

In other words, it is the mistakes that individual SMEs make that create the opportunity (and learning experience) for the next one to succeed. We do not know which of the multitude of start-ups will succeed—only that when they do, the returns are spectacular. Therefore, if we make the ecosystem diverse, catering to the many and being broad-based, then the system as a whole is much more resilient or anti-fragile than a highly homogenous, concentrated system that we have currently.

Once you begin to understand that in the law of large numbers, a power law applies where a small number—say, 2 or 3 percent of the people—who succeed make so much money, that they can cover the losses of the majority, then the investment in equity must be spread to the system as a whole.

In other words, if society as a group succeeds, there should be enough profit for everyone, provided that the division of profit is fair. On the other hand, conventional finance works on the basis of lending to the rich and ignoring the poor, creating a systemic risk of social inequality. So when the systemic crisis occurs, conventional banking that operates on “picking pennies (profits made from thin margins but large volume of trading) in front of a steamroller” (Taleb, 2007, p.19) guarantees that the system will fail. Moreover, leveraging the capital of the lender thinly, without sufficient equity to cushion against systemic losses, means the whole system is not sustainable.

The true spirit of risk sharing is that those who succeed must help those that didn’t succeed.

There are two ways of dealing with income and wealth distribution. The first method is using taxation to redistribute income and wealth. However, current democratic politics have difficulties with taxation because the rich have ways to avoid tax, and value-added consumption taxes actually make the poor pay more. The other way is to distribute equity more fairly, because if everyone is an owner in a company or country’s prosperity, then there

is greater social cohesion and stability. If the guy who was a nobody becomes the next Steve Jobs or Bill Gates, he is quite willing to share his prosperity with people who believed in him from the beginning: namely, his co-investors. Equity distribution for the economy as a whole can be done through better pension, insurance, and asset management for the masses, with dividend incomes that reflect the average well-being of the nation as a whole. For example, sovereign *sukūks* that provide a return roughly equal to GDP growth is an Islamic finance product that is equitable because everyone should have a return equal to what the nation as a whole is growing in real terms to ensure a fair share of returns. The only qualification is that GDP is not a perfect measure of national well-being.

Technology and innovation is the right way forward for mass distribution. The Internet of Things means that in countries like Pakistan, 30 percent of the people have bank accounts, while 70 percent have mobile phones. Which channel is going to be more inclusive in terms of reach in finance? Clearly, technology. Therefore, we should think about a new bottom-up Islamic finance model using technology to deliver services and products that are *shari’ah*-compliant, promoting risk sharing and benefit sharing in an equitable and ethical manner.

Silicon Valley-style risk capital, using technology to enable mass participation in equity, is one way in which the Islamic finance investor could use the profits of the upside to cover the losses of the downside. A sustainable system is one that balances profits against risks—not an imbalanced system where profits are privatized and losses socialized.

My suggestions here is not that the “IFC” model is wrong. It is incomplete because it takes a model of “best practice” that may work in advanced countries and assumes that it works in every other country. Today, we have learnt that development is about “best fit.” What fits your situation best? Each one of us in our own country will know what is best for the local conditions, local habits, and local culture, and what can succeed with new technology and new access to new markets. There are many roads to Rome or Mecca. We simply must use the best tools we have to achieve the goals of a just, equitable society and economy.

A further issue is whether we need the rule of law as a precondition in every market before we can build the foundations of Islamic finance. My view is that the rule of law is a living, dynamic, and evolving set of codes and rules, not always defined by written law. In every society, functional or dysfunctional, there exists a code of rules and law that a community abides by.

There may be dysfunctional courts—perhaps the system itself does not work—but in each community, key rules of social conduct apply. Whether these rules are enforced or not is another matter. For example, there was a question whether Islamic finance should operate on the definition of charity or *waqf*, more broadly defined. Even a charity-based model has its limits. It has its limits because the world cannot be sustainable only on charity. Charity is good to help the poor, and we should all help the poor and needy, but if we have no income, we cannot be charitable. In every venture, the returns must fit the risks.

If we depend only on charity, it solves part of the problem, but not the problem as a whole.

Sustainable finance is all about risk sharing because we are all in the same system. Your problem is my problem, and my problem is your problem: which means that your success is also my success.

A further issue is whether Islamic finance risk management can be better than current conventional risk management. The answer is that it has to be superior (given the flaws in the current system). But how that is achieved needs to be thought through. Conventional risk management models are broken because they use historical data to project forward. Experience tells us that there are more black swans out there than assumed under conventional risk models. Uncertainty is not part of that risk management model. Consequently, current risk models being used cannot predict the unknowns or radical uncertainty because they were assumed out of the model. The mainstream risk model gives the user the delusion that risk is manageable, and when the global financial crisis hit, it was completely off the mark. If you have too much leverage and inadequate capital, no risk model will help you in a crisis. The only thing that you have to cushion yourself against unknown unknowns is the level of your equity and your know-how.

Islamic finance, which is equity-based finance, is the right way to rethink risk management. Do not try to think about Islamic finance risk management in the conventional sense. Nassim Taleb's antifragility is unconventional, but the right way to think about uncertainties. If you cannot predict the unknown, you must profit so much from the low-cost, high-return option that you make so much money that you can cover your losses.

This comes back to the mindset, or theoretical issue. Nassim Taleb's theory was not evolved from theory or basic principles, but from his observation from practice and experience that conventional risk theory was wrong. We cannot compare apples (mainstream finance) with oranges (Islamic finance). If Islamic finance is an apple, it is only conventional finance with a *shari'ah* label. This cannot be right, because Islamic finance is different, and therefore, you have to think about risk management in a very different way.

As Islamic finance is about risk sharing, it means that you have to think about it in a way in which both the investor and the investee have a genuine partnership of social responsibility. If you succeed, everybody succeeds. If you fail, everyone who participate shares.

Conclusion

Islamic finance needs to rethink the competition game with mainstream finance from very different angles and even basic principles.

We cannot compete solely through theory. Theory alone cannot succeed because conceptually every theory is unproven, until it is disproved by facts and a new theory emerges. Of course, some will see the future through divine insights, but not all of us are so gifted. Scientifically, the only way that we can know when we move into the unknown is by experimentation. As we do not know, therefore we experiment.

The big mental block in the advance of Islamic finance, or in any intellectual or operational innovation, is in the theory that prevails among policy makers. Professor Abbas made a very good point about the mental block amongst policy makers that if we replicate the New York stock market in our market, we are deemed to have succeeded. Consequently, if New York has a crash, are we also doomed to have a crash? Our conventional bankers think that if the New York banker lends like Citibank, then the Islamic bank or emerging market bank can be Citibank with a new label. This mindset will not succeed because even Citibank has to change its mindset and business model when faced with new challenges.

My fundamental view is that debt-driven mainstream finance has already run its course. It is fragile, unequal, and predatory, and it suffers from regulatory capture. Islamic finance is ethics-driven, risk sharing, and equity based. It should be a real alternative to mainstream finance. However, we cannot go the old mainstream finance way, add a bit of *shari'ah* label to it, and say: We are going to compete. You cannot compete because this is not the right way to go about it. You need to restore the balance in financial markets, the balance in society, by being much more inclusive, and you can use technology to do this.

Building Islamic finance will be a huge challenge. This paper only attempts to open up the debate by looking at the challenge from a different angle because mainstream finance is failing and not sustainable in its present form. It has become much more fragile than we have realized. It will not be solved by QE and unconventional monetary policy and current conventional thinking in regulatory policy.

Mankind has always moved forward through boldness in thinking and diverse forms of experimentation. Islamic finance is exactly at that exciting stage of experimentation.

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UNDERSTANDING THE POTENTIAL OF RISK SHARING TO ATTAIN SHARED PROSPERITY

Prof. Abbas Mirakhor

Shared prosperity has been proposed as a solution to the twin problems of inequality and poverty. While the concern with these issues dates back to the earliest recorded history as a dimension of justice, one of the most significant phenomena following the financial crisis of 2008–09 has been the depth and intensity of mainstream economics' concern with inequality. Part of this concern can be explained by the depth and breadth of inequality that has now become global. It is significant that, after decades of neglect (roughly from 1950s until about mid-1990s), the focus on mainstream economics on inequality has intensified only recently. One impetus has been the popularity of the research by Thomas Piketty and his associates since the middle of last decade, culminating in the publication of his recent book.⁽²⁾ Question arises as to the reasons for the neglect of the question of distribution for such a long time by mainstream economics. A compelling case can be made that the factor most responsible is the analytic framework of mainstream economics.

Fundamental to this framework is a “model of man” as an acquisitive, self-interest-motivated, noncooperative, nonsympathetic individual with perfect foresight and full information, as well as perfect cognitive ability to choose the alternatives that best serve her/his own self-interest (the so-called “economic man”). Such individuals participate in markets that are complete (every product and service has a market) by entering into contracts that are also complete (they cover all possible contingencies). This was thought to be the stylized conception of a market economy as envisioned by classical economics. Such a market economy, with no state intervention, had a social optimum and it was the job of economics to find that equilibrium. Between mid-1950s and mid-1970s, elegant mathematical models of such an economy were constructed and conditions for social optimum were concretely defined. The model came to be known by the name of its major authors, Arrow-Debreu-Hahn-McKenzi, the “competitive general equilibrium model.” Importantly, this was thought to be the proof of the validity of classical economics and the possibility of such an equilibrium. It was, of course realized, that the two assumptions of complete markets and complete contracts were grossly unrealistic. But both were thought to have first-best approximations if there were contingent securities in the market with state-dependent payoffs, and if risks were allocated to all market participants based on their ability to bear risk.

2) It is worth noting, however, that economists outside of the mainstream such as socialists, did indeed address the issue of inequality in the 1970s. The question of income distribution has been a main topic of socialists' writings, especially in Europe, well into the twentieth century. American economists were also concerned with this question from the beginning of the twentieth century until WWII. Closer to mainstream, one example that comes readily to mind is Amartya Sen's book on inequality published in 1973 and follow-up work (Sen 1973, 1992). The work of the World Bank on poverty reduction, related closely to inequality, in the 1990s, is also noteworthy.

During the same period, and with the same analytic framework, two important postulates were advanced that, for all practical purposes, made consideration of the distributional question almost irrelevant to the mainstream economics (with the exception of work on welfare economics). The first was the work of Simon Kuznets (1955) on the relationship between economic development and inequality (equality u-curve or inequality inverse u-curve). Based on empirical data and theorizing, Kuznets postulated that at the early stages of economic development, equality declines but as the development process proceeds, there will be a turning point as equality begins to improve. Two years after Kuznets published his work, Nickolas Kaldor (1957) stylized its results into an economic growth model, one of whose major assertions was that factor (labor and capital) shares remain constant throughout the process of development. This meant that the share of national income received by labor and capital are constant over the long term. Thomas Piketty has shown this to be dramatically counterfactual.⁽³⁾ Nevertheless, the “robustness” of Kuznets' results received a major boost a decade after publication as the research of a young bright economist at the World Bank, Montek Ahluwalia (1976), using different methodology and cross-sectional data, found empirical support for the Kuznets u-curve. In the succeeding decades, culminating in the works of Piketty, the u-curve was severely challenged,⁽⁴⁾ after which consensus emerged that no empirical support can be found for the inverse relationship between development and equality (see Kanbur 2012). In fact, Piketty (2014) has shown a long-term positive relationship between growth and inequality.⁽⁵⁾

The second postulate that is posited as being responsible for neglect of the distributional question by mainstream economics is the thesis of the “equity-efficiency tradeoff.” The term comes from a 1975 paper by Arthur Okun that postulated a negative relationship between policies addressed to reducing inequality and productivity. Astonishingly, for almost a decade and half, this idea went unchallenged as no attempt was made at finding empirical support for it. When in the 1990s such attempts were made, “the trade-off turned out to be more like a unicorn than hard science” (Bowles 2012, 20). On the contrary, empirical studies showed inequality of income and wealth had a negative impact on economic performance.⁽⁶⁾

It is encouraging that after the long period of neglect, once empirical evidence on the negative effects of inequality of income and wealth began mounting toward the end of last century, economists started searching for solutions. Important proposals have been offered by economists relying not only on the results of empirical research but also on theoretical studies that questioned elements of the analytic framework of mainstream economics. Almost all components of the framework have been questioned.

The first assault on the analytic framework of economics began as early as 1947, as Herbert A. Simon questioned the assumption of “rationality”. Simon (1947, 1957) challenged the assumptions of complete information, perfect foresight, and unlimited economic man to

3) See Piketty and Saez 2003, 2006; Atkinson and Piketty 2007; Alvarado Atkinson, Piketty, and Saez 2013

4) For a survey of this literature, see Fields (2001).

5) Recently, the debate has been revived by a paper entitled “Effects of Income Inequality on Aggregate Demand” (Brueckner and Lederman 2015). The authors conclude that, “Overall, our empirical results provide support for the hypothesis that income inequality is beneficial to economic growth in poor countries, but it is detrimental to economic growth in advanced countries” (15).

6) See Bowles, Gordon, and Weisskopf 1990; Alesina and Rodrik 1994; Persson and Tabellini 1994.

choose the best among alternatives. He argued that: the cognitive capacity of humans was limited, information was costly, and the future was unknown therefore uncertain. Under the assumption of the framework, rational decision making meant that the “economic man” had to know all the alternatives, as well as each of their consequences and their efficiencies. These, Simon said, were impossible conditions for ordinary humans to meet; their rationality is limited by the available information, the cognitive limitations of their mind, and the available time. These constraints impose a bound on rationality. Instead of perfect rationality, humans operate with “bounded rationality,” and in the process of choosing among alternatives, humans have a threshold in their objectives in this process. Simon suggested that humans choose a heuristic strategy to find the alternative that meets this threshold. Once they are satisfied with this choice, they stop searching. So, instead of maximizing, humans search for alternatives that “satisfice.” This was the beginning of two new fields in economics: behavioral economics and cognitive economics.

The next elements of the analytic framework to come under scrutiny were the assumptions of economic man as noncooperative, unsympathetic, and self-interested. Experimental economics showed that not only are humans cooperative, but they are sympathetic, other-regarding, and engage in reciprocity (see Bowles and Gintis 2011). Moreover, behavioral experiments provided evidence that people not only share, even when amounts involved are high, but they are willing to punish unfair behavior, even if it costs them, and they express a social preference for “inequality aversion.”⁷⁾

Another set of assumptions of the analytic framework to be examined was the idea of complete markets, complete contracts, and the zero cost of enforcing all contracts. That this set of assumptions is unrealistic had already been noted by economics in the 1970s. However, it was not until the late 1980s that the economic theory of contracts was recognized as a field of inquiry (see Stiglitz 1987). The theory suggested that contracts are incomplete because they cannot include all the information that the participants to an exchange need to ensure that the interests of both parties are served by the contract. Hence, contracts are incomplete. For example, a labor contract cannot include many factors—such as the level of effort, honesty, and trust—that influence the actions of participants in an employment contract, which, in turn, impact the interests of the other party, but cannot be covered by the contract. This is also the case in debt contracts. These contracts cannot include provisions of truth telling, gambling, speculative risk taking, malfeasance and other actions that affect the borrower’s promise to repay. For this reason, a debt contract is not enforceable except by the coercive force of governments, which in performing this function, provide the creditors with free insurance. Contract theory terms the conflict between the two sides of a contract resulting from its incompleteness a principal-agent problem (stemming from the mismatch between the principal on one side and the agent on the other). This mismatch leads to so-called coordination failures between the interests and actions of the parties to the contract. Coordination failures are results of independent actions of contracting parties, and lead to suboptimal results.

7) See Abbink, Bolton, and Tang 1996; Cameron 1999; Fehr and Gaechter 2000; Fong 2001, 2007.

A major contention of contract theory is that the principal-agent problem arises because the incentive structure of contracts is not efficient to elicit the kind of behavior from participants that can serve the interests of both parties. This idea gave birth to the field of incentive economics (see Laffont 2000). Incentive economics searches for contracts where both parties have sufficient incentives to achieve efficient outcomes to improve the gains from exchange for both, as opposed to contracts without such incentives. These are referred to as incentive-compatible contracts.

Examples of such contracts are those in the labor and credit market where the agents become residual claimants: in effect, they become owners of property rights (they have “skin-in-the-game”) and thus they become principals themselves. An example of the first type is an incentive contract that allows labor to share in the profit of the firm (see Weitzman 1984). An example of incentive-compatible contract in the credit market is a risk-sharing contract where the risk and reward of the project subject to the contract are shared between the two sides of the contract (see Askari and others 2012). The major advantage of these types of incentive-compatible contracts is that because agents are residual claimants, and share in the risks as well as the gains, the contracts enhance productivity. There is an incentive structure in place to elicit truth-telling, trust, cooperation, hard work, and efficiency in resource management: factors that could not be written into contracts and enforced. Hence these contracts attenuate the coordination problem and improve the efficiency of outcomes. Without this incentive structure, there are considerable transaction, monitoring, and enforcement costs involved in designing and implementing contracts.

Another important development in the 1980s and 1990s was the birth of new institutional economics (see North 1990). This field of inquiry contends that economic performance of societies depends greatly on their governance structures, composed of the rules governing economic behavior, which in turn determine the institutional “scaffolding” usually contained in the society’s social contract. It is worth noting that recently Stiglitz (2015) has asserted that the reason for the massive inequality in the United States is due to the fact that the social contract has become impaired and suggests that the problem of inequality in that country cannot be solved without a new social contract that rewrites major rules (about 40 rules) governing economic behavior. Generally, poor governance structures are self-reinforcing because certain groups in the society that are privileged by poor governance have no incentive to allow reforms to be implemented that would provide for better sharing of the fruits of economic growth performance. On the contrary, these groups have incentive to spend resources to maintain an inefficient governance structure. With this inertia against change, there is a feedback loop between increasingly poor governance and higher concentration of income and wealth.

In parallel to developments in economics, there were shifts of emphasis in various policy fronts in terms of what countries had to do in order to achieve high economic growth. From the 1950s through the 1970s, the progress of humanity was reduced to its economic development and growth. And, it was thought that the problem of “underdevelopment” was insufficiency of capital. Hence, the emphasis was placed on “getting-capital accumulation-

right” as the answer to “economic backwardness.” In the 1980s and 1990s, the emphasis shifted to “getting-the-relative-prices-right.” The idea was that by reducing public sector intervention in the economy, increasing openness, and improving macroeconomic stability, resources would be more efficiently allocated by allowing their prices to converge to their true scarcity price (the opportunity cost). This view came directly from the model of general competitive equilibrium that asserted that at the social optimum, all relative prices would be equal in the market, assured by the operations of the invisible hand.

However, weaknesses in this model were revealed as evidence of market failures mounted. It appeared that the invisible hand did not exist. An important example of market failure was attributed to a phenomenon called “financial repression.” Research in the early 1970s by McKinnon (1973) and Shaw (1973) asserted that developing countries were misallocating their financial resources through directed lending and ceilings on interest rates. Presumably, there was an equilibrium “market” rate of interest that cleared the market for financial resources. Deviation from this rate meant distortion and inefficiency. When this happened, financial markets were “repressed.” So developing countries were urged to “liberalize” their financial system (see Villanueva and Mirakhor 1990). Soon the recommendation converged with the “get-the-prices-right” prescription, culminating in a set of free market policy recommendation that came to be known as the “Washington consensus” supported by major international financial institutions, the United States, and Europe (see Williamson 2004).

Conceptually, financial repression is the deviation of the actual interest rate from its “market equilibrium” rate. Presumably, the latter is the “opportunity” cost, or the true scarcity price, of financial resources measured by the productivity of these resources in their next best alternative use. All throughout the push for financial liberalization, the benchmark for the “market interest rate” was determined for the most part by policy, influenced by the market power of banks in industrial countries. It cannot be claimed that such rates are determined by either the true opportunity cost of financial resources or by any reasonable measure of the marginal productivity of these resources—a requirement of free-market general equilibrium theory that lay at the foundation of liberalization policy recommendations of the “Washington Consensus.”

All theories of interest determination are essentially equilibrium theories of price determination, as the result of the interaction of forces of supply and demand reflecting the true opportunity cost (or the scarcity price) of resources. These theories cannot explain the existence of a fixed, predetermined rate of interest in an economy in which market forces are freely operating to equate prices of factors and products to their opportunity costs. At no time in contemporary economic history has the absurdity of equating the notion of opportunity cost of financial resources with a predetermined policy rate of interest been as obvious as at the present, when the policy-determined “market rate” of interest is zero or even negative. Concurrently, the opportunity cost of financial resources, as approximated by the rate of return to the real sector of the economy, is a large multiple of the policy-determined rate (see Chapter 2). This deviation of the “market” rate of interest from its true opportunity cost represents a significant “financial repression”: a significant market failure.

With the advancement of research and development in new institutional economics in the 1990s and early 2000, policy prescriptions shifted from “getting-the-prices-right” to “getting-the-institutions-right.” Policy recommendations focused on prescriptions of how to reform the “rules of the game,” including property rights, contract enforcement, and overall governance structure (see Rodrik 2000; Acemoglu and Johnson 2005). The shock of the financial crisis of 2008–09 led to a search for its underlying causes. Aside from technical reasons, attention was also focused on general moral failure on the part of major financial institutions. The focus now became “getting-the-values-right.” The argument was that these institutions, in their pursuit of greed, had betrayed their fiduciary responsibilities and had committed “economic crimes against humanity.”⁽⁸⁾

The policy implication here implies a greater emphasis on metaeconomic values by focusing on the development of the social and moral capital of societies. The publication of the painstaking empirical research of Piketty and his colleagues showing that inequality of income and wealth was increasing and that the top income earners were receiving the lion’s portion of income has heightened concern with inequality and has shifted policy attention to “getting-the-distribution-right.”

In this context, the World Bank Group has taken the lead in advocating policies to combat poverty and inequality with a program of “shared prosperity” aiming at reducing the inequality gap between rich and poor. The goal is to boost the income levels of the bottom 40 percent of the population in member-countries through more equal sharing of the fruits of economic growth. It is worth noting that the “shared prosperity” program of the World Bank Group excludes redistribution of income and wealth. In the words of the World Bank’s Vice President for Poverty Reduction and Economic Management, Jaime Saavedra-Chanduvi: “We are not suggesting that countries redistribute an economic pie of a certain size, or to take from the rich to give to the poor. Rather we are saying that if a country can grow the size of its pie, while at the same time share it in ways that boost the income of the bottom 40% of its population, then it is moving toward shared prosperity. So the goal combines the notion of rising prosperity and equity.”⁽⁹⁾

This implies that current income and wealth inequality is taken as given, with the idea that additions to growth and prosperity be shared more equally, especially with the bottom 40 percent of the population. One wonders how this would differ from the “trickle-down” policies of the past. The World Bank Group’s answer is that emphasis should be on ensuring that the growth is so broad-based that it would generate investments focused on job creation and broadened economic opportunities, and that societies would need to commit to a new social contract that improves and equalizes opportunities for all citizens. Given the earlier discussion that inequality of income and wealth stems from governance structures that favor the wealthy and that the latter create inertia against change, it is difficult to see what incentive this group will have to agree to a new social contract that gives more of the fruits of growth to

8) See S. Zuboff, “Wall Street’s Economic Crimes against Humanity,” *Newsweek*, March 20, 2009.

9) Jaime Saavedra-Chanduvi, May 8, 2013, World Bank, Washington, DC. <http://www.worldbank.org/en/news/feature/2013/05/08/shared-prosperity-goal-for-changing-world>

the poor. Moreover, wealth and income inequality are closely related (see Saez and Zucman 2014; Wolff 2014). And as Piketty (2014) argues, income inequality leads to more wealth inequality, which in turn leads to more income inequality. Thus, it would seem without some redistribution, there is low probability that increases in growth would be shared with the poor any more than at the present.

Much has been said about damages of high income/wealth inequality to society. It erodes trust, creates barriers to social mobility for current and future generations (see Kanbur and Siglitz 2015), increases social resentment, undermines effective governance, creates a “winner-take-all” society (see Teuling 2014), and breaks down social solidarity. In the words of Rosanvallon (2013), “Inequality is a stealthy blade that is silently severing the social bond and simultaneously undermining social solidarity.” While income and wealth inequality undermine economic performance; shared prosperity and economic performance support each other, there is no tradeoff (see Stiglitz 2015).¹⁰⁾ Dauderstat (2014) has argued that inequality is “a cause of global imbalances, debt bubbles, and financial crises and undermines sustainable prosperity.”

Research has revealed that inequality undermines long-term growth prospects (Kumhof and Ranciere 2010; Rajan 2010; Cynamon and Fazzari 2013). Furthermore, Piketty (2014) argues that inequality not only reduces rates of growth in the long term but also that it reinforces further unequal distribution of income and wealth.

This research has documented a paradox within the analytic framework of economic theory. The data in these studies show that the ratio of capital (wealth) to output has increased, but so has the rate of return to capital. Standard theory would expect the reverse: as the stock of capital (wealth) increases, the rate of return to capital should decline. Instead the rate of return to wealth has increased with the size of wealth. An explanation is that the increase in wealth (capital) is not the same as the increase in productive capital—a classic definition of rent, where an increase in wealth is not due to its productive uses. As the accumulated high wealth levels are inherited by the next generation, the problem of income and wealth inequality is exacerbated for the next generation, as the pattern of income distribution is shaped by the distribution of inherited wealth. As stated in a recent OECD publication, “higher inequality of incomes of parents tends to imply higher inequality of life chances for of their children. To achieve greater equality of opportunities without tacking increasing inequality in income will be very difficult” (see OECD 2015; Kanbur and Stiglitz 2015).

Moreover, it is an inevitable consequence of high income and wealth inequality that it promotes a governance structure of “clientism” and leads to capture of the state and its legislative and enforcement capabilities by the wealthy—which, in turn, induces policies to perpetuate inequality. This process damages and ossifies political processes and the political system.¹¹⁾ The totality of the corrosive effects of inequality on the fabric of current and future societies is the reason Piketty (2014) argues for high tax rates (above 80 percent), as well as wealth

10) See also Dauderstat 2014 for some empirical evidence of lack of tradeoff between growth and equity, see Ostry, Berg, and Tsangarides. 2014.

11) See Barro 1996; Benabou 1996; Benabou and Tirole 2006; Ramcharan 2010.

and inheritance taxes, in order to impose limits on rents collected by the wealthy on their unproductive capital.

In its 2011 report on inequality, the OECD asserts that: “Inequality raises political challenges because it breeds social resentment and generates political instability. It can also fuel populist, protectionist, and anti-globalization sentiments. People will no longer support open trade and free markets if they feel they are losing out while a small group of winners is getting richer and richer” (see OECD 2011, 40). The erosion of social solidarity and trust undermines the legitimacy of governments, leading Rosanvallon (in his 2013 book, *The Society of Equals*) to suggest that “continued inequality in the extreme brings the society to the brink of breakdown and revolution” (4). He reminds us that it was the rampant inequality that gave rise to the demand for equality and became the “mother idea” and the “rallying cry” of the French Revolution. He sees similarities in the pathologies of the current inequality crisis and of the first inequality crisis that was initiated by the Industrial Revolution and reached its peak (1880–1900) in the wake of the first wave of globalization. The response to the first inequality crisis manifested itself in form of nationalism, protectionism, and xenophobia. However, Rosanvallon sees a paradox in the current crisis of inequality in that while surveys have shown discontent in many societies with the injustice of inequalities, there is no concrete action to demand or to make political decisions to change the situation. He argues that “a general sense that inequalities have grown ‘too large’ or even become ‘scandalous’ co-exists with tacit acceptance of many specific forms of inequality and with silent resistance to any practical steps to correct them. Widespread social discontent is thus associated with practical passivity in the face of generalized inequality” (5).

To be sure, a number of proposals have been advanced to address the current inequality crisis. However views differ on what constitutes “prosperity” and how to best achieve “sharing”. The root of the word “prosperity” is the Latin word “prosperus,” meaning in line with hopes and expectations. Currently, prosperity is taken to mean well-being, manifested either as a state of being or having. Over the past one hundred years, and especially during the last fifty, “having” has eroded “being.” Environmental, nutritional, social, economic, and political crises have brought home the idea that equating prosperity with high levels of consumption, the accumulation of material possessions, and rising purchasing power need to be attenuated with the urgency of considering prosperity as a state of being.

In this context, some argue that reducing income inequality alone is not sufficient to attain prosperity in its latter meaning. For example, Amartya Sen (1992) argues that we must “focus on our ability to achieve valuable functionings that make up our lives, and, more generally, our freedom to promote objectives we have reason to value” (xi). Sen defines “functionings” as ranging “from the most elementary ones, such as being well-nourished, avoiding escapable morbidity, and premature mortality, etc. to quite complex and sophisticated arrangements, such as having self-respect, being able to take part in the life of a community” (5). To achieve functionings, a person must have “capabilities” to function. A good society, Sen argues, is one that provides equality of capabilities as well as the equality of freedom to choose among alternative “capability sets.” This approach suggests that rather than focusing on equality of

income and wealth, the attention should focus on what people are effectively able to do and to be. That, in essence, is what Sen considers prosperity.

Another example focusing on objectives other than inequality of income and wealth is the vision of Rosanvallon (2013), who argues that the solution to the current inequality crisis is not redistribution; “The stakes” he says “are much larger. It is a whole era that is coming to an end: an era based on a certain conception of social justice...there is a collapse of a whole set of old ideas of justice and injustice” (7, 9). His solution is for societies to do a fundamental rethinking of equality, “not merely as a measure of the distribution of wealth” but as a relational concept “articulated in connection with three other notions: similarity, independence, and citizenship” (10). The first term means that humans share some essential properties. Therefore they are “alike,” with the remaining differences irrelevant to the relationship among them. Independence means considering member of the society equally as autonomous: that is, there should be no subordination in exchange transactions; equality should prevail. The third term suggests understanding equality as participation in “community membership and in civic activities.”

Most other solutions offered to the inequality crises take the notion of prosperity as relating to a state of having. Here, too, there are different approaches. The first is Stiglitz’s approach, referred to earlier, in which he suggests the only workable solution is “rewriting” new social contracts that reformulate “the rules of the game.” The question that arises with respect to Stiglitz’s proposal is its political viability. If one argues that the political processes are co-opted by politically powerful “haves” in order to perpetuate income and wealth inequality, what incentive is there for them to agree to a new social contract, especially if existing political processes are to be utilized in constructing new social contracts?

Other less radical solutions fall in two categories: income-based redistribution, and asset-based redistribution. Proposals that fall in the first category can involve “hard” income-based redistribution, such as the one proposed by Piketty (2014), mentioned earlier, where both income and wealth (including inherited wealth) are taxed at high rates and the proceeds redistributed to reduce inequality. Here too, the question is one of political viability, as in the case of Stiglitz proposal.

There are also “soft” income-based redistribution proposals, such as the “shared prosperity” proposal of the World Bank Group. They are considered soft because they reduce political opposition to the proposal. Such proposals take the current distribution of income and wealth as given and focus on attenuating the consequences of market operations by distributing the additional income more equally through public investment in health, education, infrastructure, financial inclusion, pro-poor transfers, and wage policies to reduce the impact of wealth concentration.

However, since wealth has command over use of resources, leaving current asset concentration intact means that market-determined rewards going to the concentrated wealth will be highly unequal, thus reinforcing rather than weakening inequality. And, aside from the

question of their political viability, income-based redistributions have well known perverse incentive effects.

There is also the problem of the underlying theoretical underpinnings of this approach, which argue that increasing the income of the poor through income redistribution will stimulate aggregate demand that then increases income and employment—a claim that has little empirical support (see for example, Bowles and Boyer 1995). Moreover, by ignoring asset inequality, income-based redistribution proposals leave the underlying governance structure intact, with all of its inefficiencies stemming from incomplete contracts, such as coordination failures.

The solutions available are either wholesale change of economic rules of the game, as proposed by Stiglitz, or a market-based solution that changes the underlying property right claims, such as the asset-based approach suggested by Bowles (2012) or its variant, risk-sharing approach proposed by Askari and his colleagues (2012). Asset-based redistribution does not involve radical, hard redistribution; rather, it changes the contractual framework of economic exchange without interfering with the implementation of proposals addressed to achieving an improved state of “being,” such as those advanced by Sen and Rosanvallon, as discussed earlier.

Bowles argues that the highly unequal distribution of assets inhibits implementation of growth-enhancing governance structure for three reasons. First, the asset-poor cannot enter into contracts available to the asset-rich. For example, they will have to accept fixed-price contracts in many transactions (wages in the labor market and risk-free rates of interest for investments) rather than returns that are more in line with the scarcity value (opportunity cost) of their resources. Fixed-price contracts inhibit many dimensions of behavior that are highly productivity-enhancing, such as hard work, providing full information, keeping promises, trustworthiness, risk taking, solidarity, and cooperation. These dimensions of behavior cannot be included in contracts, and even if they were, monitoring them would be difficult and costly. These contracts do not have strong enough incentive effects to elicit maximum levels of response from these productivity-enhancing dimensions of behavior.

Second, these types of contracts lead to coordination failures (principle-agent problems) because of weaknesses in the incentive structure. Third, as mentioned earlier, maintaining a high level of inequality in the society is costly for the wealthy because it requires a weak state and expensive supportive institutional structure. It also requires unemployment levels high enough to be used as a labor-disciplining device, with the ever-present threat of job loss. Furthermore, with contracts that, by nature, have weak incentive structures, there is the additional cost of monitoring, supervising, and policing by individual producers as an expenditure necessary to support unequal income and wealth distribution. These costs divert resources away from productive activities, and thus entail allocative inefficiencies. These are a few sources of inefficiency when wealth is highly concentrated.

There are other important inefficiencies of high asset concentration in terms of lost

opportunities to would-be entrepreneurs, investors, and innovators, who could well enhance the productivity of the economy except that they are asset-poor. There is considerable evidence that asset-poor entrepreneurs are either shut out of credit markets or have to pay higher rates than those with a higher level of wealth. Asset-poor investors are forced to accept much lower rates of return on their meager assets than their wealthier counterparts. Bowles (2012, 37) argues that “where contracts in financial markets are incomplete or unenforceable, individuals lacking in wealth are either precluded from engaging in a class of contracts that are available to the wealthy, or enter into these contracts on unfavorable terms.” The reason “why an individual’s amount of wealth influences the kinds of contract she can engage in is that only those with sufficient wealth can undertake projects on their own account, that is without borrowing. And, among those who borrow, those with more wealth borrow on better terms. This is because greater wealth on the part of the agent allows contracts which more closely align the objectives of principal and agent. This is the case, for example, when the borrower has sufficient wealth to post collateral or put her own equity in a project, and therefore has greater incentive to supply effort, to adopt more prudent risk levels preferred by the lender (the principal), to reveal information to the principal, and to act in other ways that advance the principal’s interests but that cannot be secured in a contract.” There is also evidence that the asset-poor have much higher rate of time preference, as well as higher risk aversion.⁽¹²⁾

It is the contention of proponents of asset-based redistribution that there is a class of contractual relationships (governance structures) in economic exchange that is incentive-compatible, enhances productivity, and generates higher economic growth. The chief characteristic of this class of contracts is that they reduce or eliminate the distinction between principal and agent when and where it is due to governance (ownership) structure. Asset-based redistribution in effect rewrites the rules of property rights claims by allowing agents to share in the three crucial dimensions of property rights: (a) the right to control access to the asset; (b) the right to control the disposition over its use; and (c) the right of claim on the residual income produced by the asset (see Bowles 2012, 15). An example of these forms of contracts is a joint partnership, where the ownership of an economic venture is shared between two or more partners. They share the property rights claim jointly and also have joint claim on the residual income of the venture. Each has a residual claim, but also the control that is involved in the property rights claim. These types of contracts are referred to as “profit-sharing,” or “risk-reward sharing,” or simply “risk-sharing” contracts. The “share economy” proposal of Martin Weitzman (1984) referred to earlier is an example of this type of incentive-compatible contract, in which labor receives a base wage and a share of the profit. From the point of view of asset-based redistribution, the shortcoming of this type of proposal is that while labor is a residual claimant, it has no ownership control, contrary to Bowles’ proposal that eliminates the principal-agent distinction.

Bowles (2012) argues that there are distinct advantages to asset-based redistribution compared to income-based redistribution. The most important is their potential for combining

12) See Binswanger 1980; Jappeli 1990; Rosenweig and Binswanger 1993; Saha, Shumway, and Talpaz 1994; Holtz-Eakin, Joulfaian, and Rosen 1994; Laffont and Matoussi 1995; Guiso, Jappelli, and Terlizzese 1996; Green and others 1996; Gross and Souleles 2002; Banerjee and Duflo 2010.

equity and efficiency. In “contrast to the income-based egalitarian strategy, which is rarely better than productivity-neutral (and often a lot worse), asset-based egalitarianism can in principle be productivity enhancing. This is true because it can implement more efficient distribution of residual claimancy and control rights and because redistributing assets addresses a major cause of unequal incomes and thus gives greater scope for markets to do what they are good at: identifying losers—firms that fail to produce good products at competitive prices—and getting them out of the game” (Bowles 2012, 18).

Asset-based redistribution has the potential to enhance efficiency, as each party to contracts has “skin in the game,” thus eliminating or minimizing principle-agent differences. In doing so, it can minimize monitoring, supervisory, and disciplinary costs, leading to efficiency gains. As a result, participants in a contract of an economic undertaking can choose higher-risk, higher-return projects, and thus collectively increase the efficiency and productivity of the system. For example, through sharing contracts, SMEs that are normally credit-constrained can expand their operations or engage in innovative activities that otherwise would not be undertaken. Through such contracts, asset-poor participants become less risk averse, allowing them to seek higher-risk, higher-reward ventures. Finally, asset-based redistribution can create a reciprocal and trusting environment that strengthens social cohesion, promotes social mobility, and reduces income inequality—without the perverse incentive effects and resentments that would lead to resistance to changes in the status quo that characterizes income-based redistribution efforts, and without creating a conflict with proposals, such as those of Sen and Rosanvallon, addressed to improving the state of “being” in a society.

While Bowles’ proposal (2012) represents a compelling case for asset-based redistribution as a preferred approach to income-based redistribution, it does not provide a blue print of policies and procedures for its implementation. In fairness, Bowles does suggest how to begin the process by “first identifying those aspects of concentrated ownership of assets that can give rise to perverse incentive and costly enforcement strategies and then to devise asset redistributions that can attenuate the resulting co-ordination failures without introducing their own costly incentive problems” (Bowles 2012, 18).

In contrast, Islamic finance provides a comprehensive approach to asset-based redistribution through risk sharing, which is at the core of Islamic finance.⁽¹³⁾ In the studies and discussion that follows, an attempt is made to explain the potential of risk sharing in achieving shared prosperity, while reducing inequality and poverty.

13) See The Kuala Lumpur Declaration, 2012. International Research Academy, Kuala Lumpur. <https://www.zawya.com/shariah-legal/research/profile/20130703114056ZX/>.

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ISLAMIC FINANCE: A CATALYST FOR SHARED PROSPERITY

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The primary vision of Islam in this world, as clearly stressed by the *Qur'ān*, is to be a “blessing for mankind” (*al-Qur'ān*, 21:107). However, after centuries of decline in a number of crucial aspects of life, including the educational, scientific, economic, social, and political, Muslims are at present far from being a reflection of this *Qur'ānic* vision. This deficiency calls for a considerable reform in all the relevant aspects of their lives. One of the most important of these is to ensure the prevalence of justice in their lives because justice serves as the springboard for development and has been specified by the *Qur'ān* to be the primary mission of all the messengers of God.⁽¹⁴⁾

A clear and indisputable implication of this emphasis on justice in the *Qur'ān* is equitable sharing of prosperity so that, according to the *Qur'ān* itself, “wealth does not circulate only among your rich” (*al-Qur'ān*, 59:7).

To hammer this point further, the *Qur'ān* places justice next to piety (*al-Qur'ān*, 5:8) in terms of its importance in the Islamic faith because piety serves as a springboard for honesty and integrity, both of which are indispensable for not only promoting justice but also to development that helps attain shared prosperity. This emphasis on justice in the *Qur'ān* (*al-Qur'ān*, 57:25; 6:82) has also been reflected in the *sunnah*, *fiqh*, and the writings of nearly all classical and modern Muslim scholars. The Prophet, peace and blessings of God be on him, equated injustice with absolute darkness and warned against it by saying: “Beware of injustice for injustice will lead to absolute darkness on the Day of Judgement.”⁽¹⁵⁾

It is perhaps this emphasis on justice in the *Qur'ān* and *sunnah* that led to the rapid spread of Islam in the earlier centuries and that may have led Māwardī (d. 1058), a prominent Muslim scholar in the eleventh century, to assert that “there is nothing that destroys the world and the conscience of the people faster than injustice.”⁽¹⁶⁾

It also prompted Ibn Taymiyyah (d. 1328), a highly respected reformer in the fourteenth century, to emphasize that “the world can survive with justice and

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14) The *Qur'ānic* verse referred to here reads: “We have sent our messengers and sent with them the Book and the balance so that people may establish justice” (57:25). Some other verses conveying the same message are: 4:58, 4:135, 5:8, 5:42, 6:115, 6:152, 7:29, 16:90, 42:15, and 49:9. Recurrence of this message in so many different places in the *Qur'ān* indicates the importance attached in the Islamic value system to the establishment of justice.

15) *Sahih Muslim* (1955), vol. 4, p. 1996:56, *Kitāb al-Birr wa al-Ṣilah wa al-Ādāb. Bāb Tahrim al-Zulm*, from Jābir ibn ‘Abdullāh. The Prophet, peace and blessings of God be on him, has used the word *zulūmāt* in this ḥadīth. *Zulūmāt* is the plural of *zulmah* or darkness, and signifies several layers of darkness, leading ultimately to “pitch” or “absolute” darkness, as is also evident in the *Qur'ānic* verse 24:40.

16) Al-Māwardī, Abū-al-Ḥasan, (d. 1058), *Adab al-Dunyā wa al-Dīn*, Muṣṭafā al-Saqqā (ed.) (Cairo, Muṣṭafā al-Babi al-Ḥalabī, 1955), p. 125.

unbelief but not with injustice and Islam,” and that “God upholds a just state even if it is unbelieving, but does not uphold an unjust state even if it is believing.”⁽¹⁷⁾

Prof. Claude Cahen (1970) has, therefore, rightly acknowledged that “the underlying tendency of the *Qur'ān* legislation was to favour the underprivileged.” The clear implication of this emphasis on justice is that Islam and injustice cannot coexist and that injustice can prevail in a Muslim society only if Islamic teachings are either violated or not implemented effectively.

Such a firm and absolute stand on justice is natural in a world view where it is believed that all human beings are created by the One and only God as members of a single human family (*ummah wāḥidah*: *al-Qur'ān*, 2:213; 10:19) and are socially equal. All the resources provided by the Creator are nothing but a trust in their hands and must be utilized in an efficient and equitable manner to ensure the well-being of all. There is, therefore, no justification for any discrimination due to race, religion, status, sex, age, or wealth. It would not, therefore, be morally justifiable for Muslims to become participants in what may be termed a “lonely crowd” where, in spite of living in a society, everyone is essentially alone and concerned with serving only his or her own self-interest, paying little attention to the well-being of others. This vision of Islam to ensure individual as well as social well-being, with particular attention to those who have become deprived, is natural in a society where all people are required by their Creator to be treated as brothers and sisters in a well-knit human family dedicated to the well-being of all. They are all expected to treat one another fairly and caringly without any discrimination, and to use all available resources efficiently and equitably for ensuring the well-being of all.

Thus, one of the clear implications of this emphasis on justice is to ensure shared prosperity, or prosperity that caters to the well-being of all people. This clearly demands that there should be a perceptible improvement in the fulfillment of the basic needs of all individuals in society, irrespective of their race, sex, age, religion, or nationality, and particularly, “those who have been oppressed,” as emphasized by the *Qur'ān* (*al-Qur'ān*, 28:5-6).⁽¹⁸⁾

The well-being of all, therefore, must be the inalienable goal or categorical imperative of a Muslim society. All sectors of life, including the moral, educational, political, social, and economic, need to be organized in such a way that they are in harmony with this vision and contribute in an effective and meaningful manner to its realization. The financial system cannot be an exception. It must also play a crucial role in the realization of this vision.

This leads to the conclusion that the term “efficiency,” which is widely used in economics and is one of the most important objectives of economics, needs to be defined in such a way that it is in harmony with the imperative of establishing justice. This is because it may be difficult to attain efficiency without ensuring justice, and, if it is attained, it may be difficult to sustain it. Accordingly, the kind of material prosperity where output and profit are maximized

17) Imam Ahmad Ibn Taymiyyah, *Al-Hisbah fi al-Islām*, p. 94. For translation, see Holland (1982, 95).

18) This particular āyah of the *Qur'ān* reads: “And We [God] wish to favour those who have been oppressed in the world so as to make them leaders and successors and establish them firmly in the world” (*al-Qur'ān*, 28:5-6). Another āyah projecting the same vision states that “those who believe and do not impair their belief with injustice, for them there is peace and they are the guided ones” (6:82). This āyah clearly implies that durable peace cannot be achieved in this world without eradicating injustice so that even those who have been oppressed can become leaders and successors.

in a way that some people become super rich while others remain abjectly poor, unable to satisfy even some of their basic needs, is in dire conflict with not only the Islamic vision but also the goal of realizing optimum efficiency.

Justice and efficiency are thus inalienable and cannot be separated. Together they reflect the emphasis embodied in the saying of the Prophet that “He is not a Muslim who eats his fill when his next-door neighbor is hungry.”⁽¹⁹⁾

Shared prosperity is thus an innate and inalienable characteristic of the Islamic vision. No Muslim society can hence claim to genuinely reflect the ethos of Islam if the prosperity that it has attained remains confined to just a small group and does not permeate to all individuals and groups in the society. Therefore, within the framework of the Islamic worldview, moral sanctity cannot be given to that prosperity which is not shared by everyone in society. It is, therefore, the moral obligation of all sectors of the economy, society, and polity to do whatever is necessary to achieve such shared prosperity.

Since the financial sector plays a crucial role in the development of an economy and ensuring fairness in the distribution of its output and wealth, it cannot be an exception. It must also serve as a catalyst for promoting shared prosperity. It seems, however, to have played an important role in promoting inequalities by mobilizing resources from a vast spectrum of the population and making them available generally to a relatively small spectrum, thereby aggravating the prevailing inequalities. There would be no harm if this small spectrum did not use it for conspicuous consumption and used it rather for expanding employment opportunities, education, and vocational training, and fulfilling the needs of and generally uplifting the vast majority. One of the primary purposes of Islamic finance, therefore, must be to play a key role in promoting shared prosperity by accelerating development, expanding employment and self-employment opportunities, and reducing inequalities of income and wealth as much as possible.

This discussion tries to examine whether Islamic finance, as it is currently being practiced, is suitably structured and equitably implemented to help realize the kind of shared prosperity that Islam envisages. It needs to be borne in mind, however, that since all sectors of human life are closely interlinked, reform primarily of the financial sector may not be sufficient to realize the Islamic vision of shared prosperity unless all other sectors, including the political, educational, moral, social, and economic, also play a complementary role. Shared prosperity, therefore, must be an inalienable part of the long-run objectives (*maqāṣid*) of all sectors of a Muslim society. This makes it necessary to see whether the Islamic financial system as practiced so far has really become a reflection of this vision. If not, then the need arises for overall reform of not only the financial system but also all sectors of the polity, economy, and society to enable the financial system to become true to its innate vision.

The goal of shared prosperity will, of course, require the creation of prosperity in the first place by the promotion of a reasonably high rate of sustainable economic growth if

19) ليس المؤمن الذي يشبع و جاره جائع الى جنبه (19) *Ṣaḥīḥ* Muslim, Sunan al-Kubrā, from Ibn Zubayr, Kitab al-Dahāya, bāb mā lā yaḥillu akluhū, No. 19049.

an exorbitant rate of taxation is to be avoided. Islam was able to achieve the desired goal, in the words of Toynbee, “by the extraordinary deployment of latent spiritual forces.”⁽²⁰⁾

It needs, therefore, to be borne in mind that the vision of shared prosperity to fulfill everyone’s basic needs, reduce the prevailing inequalities of income and wealth as much as possible, and create a fraternal and humane environment as envisaged by the Islamic vision of being a blessing for everyone, may be difficult to attain without invigorating all the positive factors that led to the rise of Muslims in the early centuries after the Prophet, peace and blessings of God be upon him (d. 632). If this is not the case and resort is made to nationalization and exorbitant rates of taxation, as some dictators had tried to do in the recent past, then as Anthony Crosland (1974), a leading British socialist, rightly indicated, the super-rich, who have a great influence on the government, will try to frustrate such attempts.

The rich should definitely be required to make some sacrifice because all the resources that they have at their disposal do not really belong to them. They are essentially a trust from God in their hands and need to be utilized in accordance with the terms of the trust, the most important of which is to ensure the well-being of all. Realizing optimum efficiency as well as equity in the use of all resources is, therefore, not just an economic necessity but also an absolute moral imperative. All the different individuals, groups, firms, and sectors of the economy need therefore to do their best to fulfill this imperative.

Financial institutions cannot be an exception. They must also play a crucial role in actualizing this vision of Islam. Their responsibility is even greater because they mobilize a vast pool of society’s financial resources from a large spectrum of the population. This pool of resources should not be used to promote conspicuous consumption or aggravate inequalities. It should rather be used to promote shared prosperity by helping expand employment and self-employment opportunities and reducing poverty. It is, therefore, important for financial institutions to ensure that there is an efficient and equitable use of these resources for realizing an optimum and equitable rate of growth, with the ultimate objective of attaining the moral imperative of shared prosperity.

In the absence of requisite data, it is not possible to state with confidence whether the Islamic financial institutions have risen fully so far to the realization of this vision of Islam. This constrains one to rely on the general impression of the public, which seems to be that the resources that the banks mobilize from a vast spectrum of society are generally made available to high-equity individuals and firms without due attention to the realization of the *maqāṣid*. In the process, while they do abide by the letter of the law, they do not try effectively to live up to the spirit of the law and thus have not been able to contribute effectively to the realization of the *maqāṣid*. A more efficient as well as equitable use of the banks’ resources could help contribute significantly to the realization of the *maqāṣid* by accelerating justice-

20) Toynbee, abridgement by Somervell (1957, Vol. 2, 30). Baeck emphasizes that, “it was with Islam that they (the Arabs) became a world power and the guiding light of a large part of the Mediterranean. In the transition from late Antiquity to the emergence of the Latin West in the twelfth century, Islam was at its apogee and played an eminent role as a maker of Mediterranean culture and history” (Baeck 1994, 95).

oriented development and helping reduce unemployment and poverty.

This is, of course, a difficult task. It is, however, not impossible. It will require goal-oriented governance in the banks, along with a respectable rate of growth. It should be possible to devise ways of protecting the banks against willful default and procrastination by the borrowers in the repayment of their debts to banks by the establishment of institutions needed for this purpose, including those for credit rating and loan insurance. Human beings have been capable of solving difficult problems, and there is no reason to assume that the problems related to the efficient and equitable distribution of bank credit cannot be solved. The *Qur'ān* has clearly given assurance that “Those who struggle for Us, We will certainly show them Our Ways. And Allah is with those who act rightly” (*al-Qur'ān*, 29:69).

Shared prosperity, therefore, must be an inviolable goal of an Islamic society that wishes to ensure social peace along with faster, inclusive, and equitable growth. Realization of this goal, however, requires the adoption of a number of political, social, and economic reforms. One of these is that the resources that banks mobilize get utilized by them equitably for the healthy and justice-oriented development of their society without compromising the safety of the depositors' resources and stability of the financial system. This is undoubtedly a difficult task, but is nevertheless unavoidable. The resources that banks mobilize need to be utilized effectively and equitably for the fulfilment of the essential development needs of their society, including the expansion of productive investment, promotion of employment and self-employment opportunities, and increase in the supply of education and vocational training, as well as goods and services that help promote productive investment, increase employment opportunities and decline in poverty.

The Islamic financial system can therefore become true to its divine mandate of helping realize the *maqāṣid al-Shari'ah* by commitment to four crucial reforms. The first and the most important of these is the injection of a moral dimension into the existing conventional system, which has in general been secular in its entire approach. Consequently, there are no express ethical criteria to guide the banks as well as the lenders and borrowers for a more effective and equitable use of the resources that come to the financial system from a vast spectrum of society. The principle guiding force for both the banks as well as their clients is the profit motive—which, though necessary and allowed by Islam, requires a moral foundation to enable it to serve the larger public interest and to promote the well-being of all.

The second is that credit be made available only for productive investment to expand employment opportunities and the production of real goods and services, and not for speculation and ostentatious living.

The third is that even among real goods and services, priority be given to goods and services that are necessary for the satisfaction of basic needs, and promotion of education as well as vocational training.

Fourth, a dimension of risk sharing needs to be introduced in all credit transactions so that the creditor becomes motivated to be more careful in extending credit. This can help reduce

the phenomenon of excessive credit expansion, which is generally considered to be one of the major causes of financial crises.

If the volume of credit extended for speculative transactions and for goods and services that are not needed for the satisfaction of basic needs or productive investment gets reduced, the banks may be motivated to find alternative ways of utilizing their resources. Some of these alternatives may be greater credit for:

1. Promotion of small and medium enterprises as much as possible
2. Creation of employment and self-employment opportunities
3. Expansion in the production of goods and services that fulfill basic needs and promote productive investment
4. Reduction as much as possible in the prevailing income and wealth gaps between the rich and the poor; and
5. Minimizing inflationary pressures by ensuring that credit is granted and utilized for productive purposes and not speculative ones, and does not lead to an excessive expansion in money supply.

The pursuit of these alternatives raises questions about the risk exposure of banks. Experience has shown that small and micro- enterprises have proved to be viable institutions with respectable rates of return and low default rates.⁽²¹⁾

Nevertheless, it is desirable to create institutions that could help banks manage their risk more effectively by collecting and making information available about the credit rating of small and medium scale borrowers and making a proper arrangement for the settlement of disputes.

In the absence of adequate data, it is difficult to determine exactly what Islamic banks have been able to accomplish so far in meeting these principles. It was generally expected that Islamic banks would utilize their resources for expanding productive investment by small and medium enterprises and, thereby help promote development and reduce unemployment. Even though Islamic banks have made some progress in this direction, they have not yet been able to exploit their full potential. The general impression seems to be that the operations of Islamic banks are not significantly different from those of conventional banks. To what extent this impression reflects reality is difficult to judge without data.

There is no doubt that the banks face a number of problems; as a result, they are constrained in their movement toward the realization of the *maqāṣid*. One of the most important problems is related to the late payment of debts or default. Strengthening of the legal system, as well as the establishment of *shari'ah* courts or banking tribunals, may help banks recover their loans on due dates and prevent willful default

21) The Economist, February 16, 1985, p.15.

and procrastination by the borrowers in the repayment of their debts to banks.⁽²²⁾ It may also be worth considering the introduction of loan insurance, even though there are problems associated with this. However, these problems are not insoluble and can be solved if a serious effort is made.

While the establishment of Islamic finance is by itself a great achievement, it has a long way to go before it can help realize the *maqāṣid* and fulfill the general expectations of Muslims. If its full potential is adequately realized, it can make a valuable contribution toward the realization of shared prosperity. This vision cannot be realized by merely changing “interest” into “mark-up” and leaving everything else unchanged. It requires the making of a worthwhile contribution toward resolving society’s serious problems and helping attain those *maqāṣid* that can be realized through the financial system.

22) See Chapra (2014, 180).

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THE ROLE OF ISLAMIC FINANCE IN HUMANITARIAN ACTION

Jemilah Mahmood

Serious humanitarian challenges will most likely worsen in the future. One of the ways that we are attempting to address these challenges is to hold the first-ever World Humanitarian Summit. This initiative of the Secretary General of the United Nations is a unique process that involves a multitude of stakeholders. Over the past year and a half, we have gone around the world to consult not just with governments, but also with UN agencies, various NGOs, the private sector, the diaspora, and academicians. What we have heard very clearly is that to meet the demands of the financial gap that is facing humanitarian actors we need to look at the potential of scaling up and diversifying finance, as well as improving the efficiency of how it is being managed. Among these issues, the potential of Islamic social finance was highlighted as one of the areas we should really look into more deeply.

Today, I would like to illustrate to you the potential value of Islamic social finance within the humanitarian field. First, let me start by sharing with you the reason why the World Humanitarian Summit is being held, and why we are being faced with these serious humanitarian challenges. A total of 60 million people have been displaced, mainly by conflict. This is the highest number since World War II. Specifically, 80 percent of the assistance we provide in the humanitarian field is for people in either acute or in protracted crises. The average age of someone who has been displaced post-conflict is about 17 years—or some might argue, 20. Furthermore, according to data produced in the recent *Global Humanitarian Assistance Report 2015*, out of 33 conflicts that are currently active, more than 95 percent are occurring in Muslim-dominated countries. What is very worrying is that the crises are getting more and more protracted, which therefore requires a completely different way in how we approach the management of humanitarian crises.

Over the past decade, there has been a steady increase in the amount of funding from donors; despite this, the unmet requirements are increasing. This gap is occurring because of the escalating costs and the escalating number of crises we have to deal with. The needs for the humanitarian sector amount to about US\$19.5 billion. Meanwhile, the amount spent on ice cream [around the world] is three times higher than what is required for us to meet the requirements of people in crises. The amount of Christmas spending in Europe was actually higher than the funding gap for Syria. What I am trying to illustrate is that, never before has the world had more wealth. What we lack, however, is the political will to ensure that these funds can be channeled to meet some of the needs of people affected by crises.

Why Islamic social finance?

Islamic social finance has been in existence since the early beginnings of Islam. Islamic social finance also seems relevant to address the crises we face today, because more than 95 percent of crises are in Muslim-dominated countries and because it has the potential to become an integral component of the global humanitarian system. Informally, we know that both *zakāt* and *ṣadaqāt* are regularly given to meet some of the demands in crisis. We have also seen many charity drives in which NGOs and different agencies call for people to provide *zakāt*. In addition, Muslim populations are generally extremely generous during Ramadan, and have thus helped to meet some of these needs.

What are the potentials of Islamic social finance in the humanitarian sector?

We also need to look at other innovative ways that we can use Islamic social finance. How do we better utilize *awqāf* to meet some of these demands, particularly in protracted situations? How do we get the people out of humanitarian crises and into a much more transition and development mode? For this, there could be innovative structures in place, such as *sukūk*, and bond equivalents, or social impact bonds.

The *Islamic Social Finance Report*, produced by IDB together with Thomson Reuters, has been vital in helping us understand the potential of Islamic social finance within the humanitarian sector. We have identified a huge potential of US\$600 billion, as an estimate of distributable *zakāt* for potential humanitarian action.

How do we unlock this potential?

I am really delighted to be able to speak to all of you today because we require many brains to think through this and help us, in the humanitarian sector, to figure this out.

First, we need a public consensus for the utilization of Islamic social finance funds for humanitarian action, through the establishment of a *zakāt*, most probably an international *zakāt* and *awqāf* standards governing board.

Second, we need legal and policy reform to address key infrastructure issues, so as to build linkages between Islamic social finance and the humanitarian system.

Third, we need to have much more coordination among Islamic social finance bodies and multilateral institutions toward the creation of regional and global *zakāt* and *awqāf* institutions.

Lastly, it is very important to utilize the opportunity of the World Humanitarian Summit, which will be held from the 23rd to 24th of May 2016, in Istanbul.

How can we start to develop some safe approaches to pilot several key Islamic social finance initiatives?

The summit should not be the end point. Instead, it should be part of our journey in launching new thinking and new initiatives, so that some forms of sustainable funding can be found to address the profound challenges that we face in the humanitarian sector, particularly within the Muslim world.

In January this year, at the Oxford University Centre for Islamic Studies, we had our first meeting to underline and understand the potential of Islamic social finance within the sector. In April, the Secretary General appointed the High-Level Panel for Humanitarian Finance at the United Nations, which will run between April and November 2015. The co-chairs are Kristalina Georgieva from the EU, as well as, his Royal Highness Sultan Nazrin Shah from Malaysia. The High-Level Panel has identified Islamic social finance to be a real game changer, if we can get it right. It will, therefore, be included in the final report of the High-Level Panel for Humanitarian Finance.

A couple of weeks ago in New York, we had another roundtable where we tried to identify some areas that we might consider piloting, particularly for refugee situations, education crises, food shortages and so forth. This event brought together not just the Islamic Development Bank and the World Bank, but also some academic institutions, private equity firms, legal firms, UN agencies, and philanthropists. I am currently in Berlin to work with 120 experts from around the world, on different areas to see how we can shape what we call a “Consensus Report,” which was a result of our broad consultations. We also have the opportunity of the World Islamic Economic Forum on the 3rd and 5th of November 2015, where I will be running a master class on Islamic social finance and humanitarian action. Finally, there will be a Secretary General’s report, in either December 2015 or January 2016, prior to the World Humanitarian Summit.

Thus we hope that by the time we get to the World Humanitarian Summit, we should be able to get a group of Individuals and institutions to really champion how we can look at Islamic social financing, a traditional tool in the Islamic world, and enable it to become the innovative and groundbreaking, new financial tool that can be effectively and efficiently applied in the 21st century.

As someone who has been working in this field for 20 years now, I can honestly say that the current situation is really very, very worrying. Unless and until we find a way to tap into new and different types of funding, I predict that the situation will get much worse. I also think that we need a complete rebranding of the way Islam is perceived and how we can use the existing tools. With that in mind, I truly hope that the summit provides that platform.

Without further ado, I call on every one of you to please join us and help us reshape the future of humanitarian assistance: specifically, to use the talent and the intellectual power in this room to bring Islamic social finance to a different level, and to try to meet some of the huge humanitarian challenges that we face today.

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PART 1
RISK-SHARING AND SHARED PROSPERITY

CHAPTER 1

STABILITY OF ISLAMIC FINANCE AND SHARED PROSPERITY⁽²³⁾

Nabil Maghrebi and Abbas Mirakhor

Abstract

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

The challenges of stability and equitable growth are arguably difficult to meet through debt financing, which transfers the burden of losses from financiers to entrepreneurs even at the level of microfinance, distorts economic incentives, increases systemic risk, and renders financial regulation more complex. The procyclicality of the conventional financial system leads to credit contraction during economic downturns, precisely when the need increases for real investment to stimulate economic output and reduce unemployment. Financial intermediaries tend to respond to changes in the riskiness of assets by adjusting balance sheets through credit contraction and various mechanisms to transfer credit risk.

This study is an attempt to argue that the risk-sharing modes of financing real investments in the public and private sector reduce the procyclicality of the financial system. The equity financing of real investment is conducive to more efficient channeling of savings toward development finance. The risk-sharing principle underlying Islamic finance reduces the economic incentives for transferring credit risk and for speculative activities. By preventing risk from being entangled in complex debt-creating structures that characterize the

23) This chapter is a revised version of the paper by Maghrebi and Mirakhor (2015).

incompleteness of contracts under conventional finance, this principle also redefines the role of financial markets and institutions in smoothing consumption and capital expenditure. It is the asset-backed nature of Islamic finance that allows for a participative securitization process that provides different segments of the society with fair opportunities to share economic prosperity. The allocation of risk commensurate to the idiosyncratic abilities to bear losses is arguably more conducive to a socially inclusive financial system. While systematic risk cannot be eliminated, it is collective risk taking and individual risk aversion that promote more efficient mobilization of resources, and more equitable sharing of economic risk and prosperity.

“Society may subsist, though not in the most comfortable state, without beneficence, but the prevalence of injustice must utterly destroy it.”

—Adam Smith, *The Theory of Moral Sentiments* (1759)

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

—Raghuram Rajan, “Democracy, Inclusion, and Prosperity,” 2015

Introduction

The concept of development relies on efficient institutions that promote political and economic stability, and the enforcement of property rights. Human and economic development can be promoted by improvements in the quality of education, health, basic infrastructure, and financial inclusion. With respect to financial inclusion, Iqbal and Mirakhor (2013) argue that there are four dimensions to consider: easy access to financial services for all households, competition between service providers, sound and sustainable financial institutions, and effective prudential regulation. Given the precarious conditions of poorer households underserved in terms of opportunities for upward mobility, there is clearly a demand for public services, and physical and financial resources. However, the important question remains as to whether the focus should be not just on access to financial services but also on the financing modes to which access is facilitated.⁽²⁴⁾ It may be argued indeed that much of the informal borrowing of the poor is made for purposes that should be served by public services such as health and education.⁽²⁵⁾ Together with the expansion of government programs in these important areas, there should be recognition that the extension of formal credit to the poor can be merely conducive to excessive indebtedness. Thus, there is a need for alternative solutions to promote prudential access to finance and risk-sharing opportunities. Access to finance is important in its own right, but constructive thinking and innovative strategies are needed to channel financial resources in an efficient and responsible manner toward greater participation into economic activities, and sharing of prosperity.

24) Pritchett and Woolcock (2004) examine the critical elements of service delivery, including resources, information, decision making, delivery mechanisms, and accountability. They argue that the improvement of service delivery depends on how these responsibilities are structured.

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

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

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

Thus, this study examines the concept of risk-sharing in finance as the driving force for sharing economic prosperity. The Kuala Lumpur Declaration of 2012, issued by a group of leading *Shari'ah* scholars and Muslim economists, considers risk sharing as the essence of Islamic finance. A litmus test is its ability to promote financial inclusion and the asset-building capacity of the poor and thus better sharing of prosperity. The role of risk sharing in the optimal allocation of resources in a competitive and dynamic economy is better understood in relation with risk transfer and financial instability. Those relationships are explored next.

Financial Stability and Economic Prosperity

Development and finance

Financial stability is regarded as a precondition for sustained economic growth and prosperity. This view is consistent with the stated mission of the Bank for International Settlements, which aims to promote monetary and financial stability. Given financial stability, there remains a major intellectual challenge to development economics, which is to reconcile

growth with equity. The conventional wisdom, which no longer enjoys a clear consensus, is that once growth is ensured, equity will be achieved rather systematically. This view assumes fair access to finance for all, despite conditions of severely limiting poverty for large segments of society. However, the recurrence of financial crises is conducive to patterns of fluctuating growth rates with prolonged periods of negative growth. These conditions have asymmetric effects on consumers with different income levels. Thus, the dynamics of economic growth and properties of financial systems are arguably more complex to ensure financial stability and reconcile equity with growth.

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

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

Kenneth Boulding (1970, 126) notes that “[m]any, if not most, economists regard the Paretian optimum as almost self-evident. Nevertheless, it rests on an extremely shaky foundation of ethical propositions. The more one examines it, for instance, the more clear

it becomes that economists must be extraordinarily nice people even to have thought of such a thing, for it implies that there is no malevolence anywhere in the system. It implies, likewise, that there is no benevolence, the niceness of economists not quite extending as far as goodwill. It assumes selfishness, that is, the independence of individual preference function, such that it makes no difference to me whether I perceive you as better off or worse off. Anything less descriptive of the human conditions could hardly be imagined.”

Abstraction from morality is usually justified on the grounds that the competitive economy is governed by value-neutral exchange relations. As argued by Smith (1759), however, allocative efficiency can be achieved on the basis of a system of morality and justice. Thus, exchange relations are indeed essential to risk sharing, and are not necessarily in conflict with the pursuit of equity and economic justice.⁽²⁶⁾

If the objective of public policy is to promote prosperity, then this objective is also shared with the *maqāsid al-sharī'ah* (Objectives of Islamic Law). The objective of *shari'ah* in finance is not to bind individuals into sharing prosperity by giving away wealth through charity and *qard hasan* (interest-free loans) and themselves becoming poor⁽²⁷⁾.

It may be argued that it is rather about the sharing, on equitable basis, of economic and financial risks, to which all parts of society are systematically exposed. The asymmetric exposure to systematic risk resulting from the predetermination of claims on future income streams undermines public policies aimed at promoting economic growth and shared prosperity. Asymmetric exposure shifts the burden of losses from one party to another during economic downturns and weakens the long-term relation between finance and development. Thus, it can be argued that it is through risk sharing rather than risk-transfer mechanisms that allocative efficiency and equity can be pursued simultaneously. This risk-sharing argument is central to the relation between development and finance, and it is also crucial to understanding the optimal approach to financial inclusion and poverty alleviation.

Procyclicality of financial systems

In order to understand the relation between risk sharing and shared prosperity, it is important to consider the salient features of financial systems based on debt and non-debt financial arrangements. The conventional financial system includes financial intermediaries, financial markets, and the financial infrastructure to facilitate payments. Financial inclusion is usually referred to as the process of widening the access to financial services provided by regulated financial intermediaries such as commercial banks and insurance companies.⁽²⁸⁾

Certainly, access to financial services reduces the reliance of poor households on informal systems of savings and insurance against risks. There is also mounting evidence that access to financial services, to the payments systems in particular, can improve the welfare of the poor in terms of facilitating financial transactions and consumption-smoothing.

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

27) This argument is also advanced by Ibrahim (2013), among others.

28) Financial intermediation is also provided by financial institutions other than commercial banks, such as mutual funds, money market funds, pension funds, investment banks, and hedge funds. These financial intermediaries are usually referred to as the shadow banking system, which is typically less regulated than commercial banks. Naturally, a relatively lower level of financial regulation also offers opportunities for regulatory arbitrage.

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

Thus, the usefulness of the financial system for the purposes of sharing prosperity depends on the efficiency of financial institutions, financial markets, and payment systems. Financial stability can be understood, in a narrow sense, in terms of the absence of disruptions to the settlements system; however, it is the mechanics of financial intermediation that pose systemic problems, with the potential of undermining public confidence and the ultimate objective of financial inclusion. As argued by the Financial Services Act in the United Kingdom, the resilience of the financial system is understood not just in terms of its ability to prevent interruptions to financial services, but also credit bubbles. Given the credit cycle, which also reflects fluctuations in economic output and employment, there is an intrinsic relation between financial stability and the optimal allocation of resources. The central issue is whether the stability of the financial system can be achieved with debt or equity financing relations. The question is important because the inefficient allocation of resources is conducive to financial instability, which undermines economic growth and prosperity. The type of financial intermediation that is conducive to credit bubbles and financial crises can also result in the failure of the very financial institutions through which financial inclusion is pursued in the first place.

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

of financial intermediaries to absorb shocks that may affect consumption patterns, and in turn individual time preferences.⁽²⁹⁾

Thus, banking institutions are exposed to liquidity shocks, which have the potential of affecting their own ability to extend credit, with asymmetric effects on corporate and households borrowing. This exposure to liquidity shocks is a natural result of the tradeoff between the maturity and return of bank assets represented by loan portfolios. The higher premium demanded for holding assets with longer maturities—and thus, less liquidity—implies stronger incentives for banks to extend credit on a longer-term basis. However, the preference for assets with higher returns, although with lower liquidity, implies that the bank's balance sheet tends to be characterized by long-term assets but short-term liabilities in terms of bank deposits. This maturity mismatch affects the behavior of banking institutions depending on their perceptions of liquidity shocks. The ability and willingness to extend credit differs during economic booms and downturns.

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

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

29) From an international perspective, Kindleberger (1978, 2013) argues that the U.S. economic depression in the 1930s and economic recession following the credit crisis in 2008 were caused, to a large extent, by the instability of the international financial system.

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

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

Financial instability

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

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

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

The financial instability hypothesis suggests that financing conditions affect the investment function of firms, and thus the linkage between the financial sector and the real economy. Under these conditions, it may not be surprising that real investment represents the most volatile part of the GDP since the behavior of lending institutions during economic booms and depressions has destabilizing effects on the behavior of firms. Thus, the dependence of economic growth on capital accumulation and prices of financial assets can in turn affect the balance sheets of households and undermine the benefits from financial inclusion.³⁰⁾ Reference can be also made to Tobin's Q , which provides a measure of the linkage between the financial sector and the real economy based on the ratio of firm value and replacement cost of assets. It can be regarded as a proxy for growth opportunities, with rising levels of Tobin's Q providing an incentive for firms to increase capital expenditure financed through the issuance of new equity. In contrast to debt, which provides the basis for the financial instability hypothesis, the reliance on equity for the financing of real investment provides stronger foundations for sharing risks associated with growth opportunities, and sharing

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

economic prosperity.

Thus based on Minsky's proposition about financial instability, financing affects the behavior of firms, and it can in turn constrain lending institutions, leading to the formation of financial crises as a natural result of credit bubbles during economic booms. Financial crises, as argued by Kindleberger (1994), are characterized by capital flight away from real assets and long-term assets into money and liquid assets, as opposite to capital flight into real assets and long-term financial assets during bubbles. Following a pattern of increases in asset prices, a reversal of expectations triggers a precipitous fall in prices. A reversal may take place over an interceding period of financial distress where anticipations of dipping prices gradually reach a critical threshold that engenders a turning point. Klemkosky (2013) notes that financial crises reflect a partial breakdown of the financial system due to several factors, including excessive debt, formation of asset bubbles, the complexity of the banking system, and the failure of economic and financial models. It is further argued that financial crises are conducive to long periods of slow economic growth. Thus financial crises may differ in their origin, but they result in economic strains, regardless.³¹⁾

Financial crises and income inequality

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

Financial crises are reflective of the significant deterioration of the balance sheets of economic agents through accumulation of debt. Richard Koo (2008) argues that post-crisis conditions are characterized by "balance-sheet recession," where the long process of deleveraging can be pursued through capital injections, debt-equity swaps, or debt forgiveness. Also, as noted by Stiglitz (2010, 1), "the crisis emanated from the center and reached the periphery. Developing countries, and especially the poor in these countries, are among the hardest hit victims of a

31) There is an extensive literature on financial crises, which grows with the onset of new ones. With respect to the recent U.S. credit crisis, Lo (2012) provides a review of the literature views about its main causes and economic implications.

crisis they had no role in making.” Thus, financial instability has serious implications for the real economy, and the balance sheets of poorer households in particular. Since financial stability depends on financing modes, there are limits to financial inclusion based on credit extension from lending institutions. The fragility of the financial system implies the financial vulnerability of the poor, which worsens during periods of financial instability. Given the asymmetric effects of financial crises on living standards, it is arguably poorer households that are left with the deepest economic scars.

It may be argued that rising poverty rates and unemployment that reflect these economic scars in the aftermath of financial crises may contribute toward higher suicide rates. There is evidence from the literature in medical and social sciences of a significant linkage between economic stress and suicide rates. For instance, Philips and Nugent (2014) examine the social impact of the U.S. economic recession 2007-09, and find a strong positive association between rising unemployment rates and temporal variations in suicide rates. Also, Antonakakis and Collins (2015) note the increase in suicide rates following the European sovereign debt problems, and suggest that the impact of fiscal austerity on suicides in Greece can be mitigated by the demographic targeting of suicide prevention measures. But there is clear evidence that poorer households may be more exposed to the adverse effects of unemployment and job insecurity during periods of economic stability and more so in the wake of financial crises.⁽³²⁾

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

Risk Sharing in Islamic Finance

The essence of risk sharing

There are some innovative funding mechanisms for development programs, including commodity-linked bonds that allow commodity-exporting countries to make payments linked to the price of reference commodities. Countercyclical finance includes also measures such as the automatic adjustment of outstanding debt during economic downturns and the

32) There is further evidence from Chang et al. (2009) of an association between the Asian currency crisis in 1997-98 and the observed surge in suicide rates in some countries in East and South-East Asia due to higher levels of unemployment. Nordt et al. (2015) provide evidence that suicides associated with unemployment are significantly higher than the number of deaths and estimated excess suicides specifically attributable to the U.S. economic crisis. Webb and Kapur (2015) note, in this respect, that the societal effects of recessions, fiscal austerity and spending cuts are not limited to unemployment. They argue that “many affected individuals who remain in work during these hard times encounter serious psychological stressors due to pernicious economic strains other than unemployment, including falling income, ‘zero-hour’ contracting, job insecurity, bankruptcy, debt, and home repossession.” (2015, 196). Thus, it is not surprising that many studies have proposed an association between economic crises, unemployment and psychological stressors.

extension of credit guarantees with countercyclical elements. However, there are limits to the effectiveness of countercyclical finance based on debt. The main question arises as to the optimal level of debt, and whether there exists a threshold at or beyond which debt financing ceases to contribute to economic growth and becomes the principal cause of financial instability and economic downturn. This important issue is examined by Reinhart and Rogoff (2010) with respect to sovereign debt, and Arcand, Berkes, and Panizza (2012) in relation to private debt, among others. The empirical evidence about the existence of thresholds is not conclusive, but the potential for counterproductive effects on economic growth remains.

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

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

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

rather difficult to regard interest-bearing, fixed income securities as pure contingent claims, in the sense of Arrow-Debreu securities (which deliver one-unit payoff conditional on the realization of a state of nature, and zero payoffs for all remaining states).

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

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

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

Stability of an Islamic financial system

The fundamental question that arises from the reemphasis on risk sharing is the stability of an Islamic financial system. This issue is important because, as noted earlier, financial stability

is a precondition for economic growth. Given the recurrence of financial crises due to serial debt defaults, financial stability seems to be rather elusive. The credit system is based indeed on the ability of banks to issue credit against insufficient deposits. Through credit expansion, banks are empowered not only to create money, but also to fuel credit booms and facilitate leveraged balance sheets. It is possible, however, to conceive— theoretically, at least—of a financial system based on equity participation where bank depositors are shareholders, as demonstrated by Mirakhor (1988). Debt and debt-based contracts can indeed be substituted by equity-financing instruments.

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

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

Risk Sharing and Shared Economic Prosperity

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

Income inequality and wealth redistribution

There is an extensive literature on the relation between finance and development, and the issue of wealth distribution. One seminal work is Thomas Piketty's 2014 book, *Capital in the Twenty-First Century*, which documents the persistent patterns of wealth and income inequality in capitalist economies over more than two and a half centuries. The book argues that the central contradiction of capitalism and its principal destabilizing force is that the private rate of return on capital, r , can remain higher than the rate of growth in income and output, g , for prolonged periods of time. The argument raises important issues about the natural relation between the rates of return on capital and rate of economic growth. Piketty (2014, 571) notes that "[t]he inequality implies that wealth accumulated in the past grows more rapidly than output and wages. This inequality expresses a fundamental logical contradiction. The entrepreneur inevitably tends to become a rentier, more and more dominant over those who own nothing but their labor. Once constituted, capital reproduces itself faster than output increases. The past devours the future."³³⁾

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

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

In light of these important arguments, it is possible to examine this inequality with

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

reference to the valuation of capital goods and financial assets using the present value relation under certainty. The value of capital goods is expressed as the sum of discounted cash flows generated by the asset in the future. Given a discount factor based on interest rate r , the present value of the financial asset generating a stream of constant dividends D can be expressed, in the limit, as D/r . In the case where dividends grow indefinitely at the rate g , this perpetuity can be valued as $D/(r-g)$. This present value equation is valid under the crucial condition that $r > g$ to ensure positive asset prices and avoid the case of indeterminacy.³⁴⁾ This condition is reminiscent of, and consistent with, the formulation of the central contradiction of capitalism by Piketty (2014), where r and g represent, instead, the private rate of return on capital and growth rate of income and output, respectively. Thus, the destabilizing force is represented by the tendency for the rates of return to exceed growth rates over prolonged periods of time.

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

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

The concept of interest is crucially related to the central contradiction of capitalism, and to the persistent gap between the rate of return on capital and rate of growth in output. As argued by Askari, Iqbal, and Mirakhor (2010), interest is regarded by John Maynard Keynes in *The General Theory* as accruing without genuine sacrifice. The compounding

34) Campbell and Shiller (1988) provide an approximation of the present value identity, which expresses the current dividend-price ratio as a function of expected returns and expected growth rates of dividends.

of interest is conducive to wealth accumulation at an accelerated rate that tilts wealth and income distribution toward rentiers. The wedge that interest rates create between investment and savings makes a sustainable full-employment equilibrium rather difficult to achieve. This may explain the twin problems: the inability of achieving full employment, and the inequitable distribution of wealth and income. Full employment may be approximated under a comprehensive, and gradual, socialization of capital investment that increases the amount of capital until it solves the problem of scarcity, measures that are consistent with the Keynesian policy of the euthanasia of the rentier.

With respect to the problem of redistribution through inflation, Piketty (2014, 134) argues that “once inflation becomes permanent, lenders will demand a higher nominal interest rate, and the higher price will not have the desired effects.” It may be also argued that in the same way that there are limits to inflation channels of redistribution, a progressive annual tax on capital may not be effective either in suppressing the private return on capital below the growth rate over sustainable periods of time. Again, insofar as the return on capital is determined ex ante, lenders would demand a higher nominal interest rate to offset the effects of new tax on capital. With $r^* > g$ determined ex ante and in the absence of upper boundaries on interest rates, the behavior of lenders would result in the private rate of capital raised to r^* and the central contradiction of capitalism would remain unresolved, with $r^* > g$.⁽³⁵⁾

Using a simple neoclassical growth model, Mankiw (2015) also argues that taxing capital with proceeds accruing to workers lowers the steady state consumption for both capitalists and workers, but impoverishes the former at a faster speed. Thus, if the contradiction is due to the predetermination of the rate of capital, then inflation and tax mechanisms may not provide the desirable long-term remedies to such structural inconsistencies.

The problem derives from the conflicting forces that govern the long-term relation between the rate of growth of income and output and the return on capital. It is important to note that whereas the latter is determined by financial arrangements in the financial sector, the former is driven by the outcome of investment in the real economy. It should be further noted that as the rate of return on capital is determined in financial markets, the distinction should be made between money markets and capital markets, and within capital markets, between bond markets and equity markets. Askari, Krichene, and Mirakhor (2014, 134) argue that in an Islamic financial system, “the rate of return to capital is neither a purely monetary phenomenon determined in the money market by the demand and supply of money, as in a Keynesian model, nor is it purely determined by the real demand for and supply of real savings, as in the Classical model. Instead, the rate of return to capital is determined by the rate of return to ownership position (equity) related to marginal product of capital as well as to the portfolio balance equilibrium.” Thus, the important distinction should be made between the return on capital as determined in the money and bond markets on one hand and in equity markets in the other.

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

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

Risk-sharing mechanisms for financial inclusion and shared prosperity

The discussion until this point has dealt almost entirely with financial instability, and the essence of risk sharing, and its importance for prosperity sharing. The notion that risk sharing promotes financial stability and economic growth raises the question about the mechanisms through which risk sharing can be achieved. Financial inclusion and financial stability have little significance for poor households, however, in the absence of risk-sharing mechanisms with tangible and observable effects that provide the basis for shared prosperity. The risk-transfer relations that underlie the conventional financial system imply asymmetric exposures to economic risk, and thus do not promote economic justice. Indeed as argued by Askari, Iqbal, Krichene and Mirakhor (2010), “the social and human costs of financial instability and financial crises, though impossible to quantify, might even dwarf the economic costs.” The reliance of households on debt, rather than equity, has implications for their leveraged balance sheets. For poorer households in particular, the limited value of assets implies the absence of collateral and in turn the denial of access to bank credit. It may be argued that microfinance schemes based on joint liability and state non-contingent repayments do not constitute a viable form of financial inclusion. Di Bella (2011) argues that the performance of microfinance institutions is linked not only with domestic economic conditions but to international capital markets as well. There is evidence that the U.S. financial crisis affected both the liabilities and asset sides of the balance sheets of microfinance institutions, and exposed the relatively high interest rates charged to low-income borrowers. Also, Wagner and Winkler (2013) argue that microfinance is vulnerable to financial crises, as microcredit booms tend to be followed by contractions in accordance with the cyclical properties of traditional banking sector. This suggests that the risks associated with economic downturns are not shared with financiers, and the social and human costs can be considerable.

Thus, the foundations of financial inclusion and prosperity sharing lie in risk sharing. The most likely to be financially excluded are the poor and residents of rural areas with limited

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

- a. The most important initiative is investment in public education, financial literacy and awareness programs about the merits of equity participation schemes.
- b. The alignment of positive incentives for micro-savings schemes, and for reduced dependence on consumption loans and charity that tend to perpetuate hand-to-mouth consumption patterns.
- c. The issuance of GDP-indexed “bonds” in which income is not fixed *ex ante* but determined on the basis of future economic growth. This is an important issue that is intrinsically related to the central contradiction of capitalism. The issuance of growth-linked securities ensures that the rate of return on capital does not persist above the growth rate of income and output.
- d. The implementation of measures address imperfect market conditions, such as transactions costs and asset indivisibility. The preferential tax treatment of debt should be reconsidered and a level-playing field for equity financing ensured. It is also crucial that the economics of asset divisibility are taken into consideration. Theoretically, the ability to construct optimal investment portfolios under imperfect divisibility depends on the investor’s level of wealth. Financial inclusion should provide poorer households associated with higher degrees of risk aversion with investment opportunities in mutual funds, which allow assets to be pooled and portfolio risk to be diversified. While the assets of poorer households are limited, they can be optimally mobilized toward participatory investment opportunities based on risk sharing, rather than exploited under microfinance models based on joint liability and risk transfer arrangements.
- e. The design of information-sharing systems for wider access to macroeconomic and financial information on a low-cost basis, ensuring affordability or free access to poorer households. Financial inclusion is not confined to access to financial services; it should include also access to timely and accurate information, which is essential to promote participation in equity markets on an informed basis.
- f. The integration of inalienable endowment *waqf*-based microfinance into development schemes. In light of the mounting evidence about the adverse effects of microcredit, it is imperative that new modes of equity financing substitute for interest-based debt in development programs. Çizakça (2004), and Ahmed (2003, 2007), among others, suggest that cash *waqf*, funds from other types of *awqāf*, as well as charity (*ṣadaqāt*) can be used to finance productive micro-level enterprises in addition and in lieu of government

finance.

- g. The promotion of Islamic insurance schemes for various income categories based on the concept of *takāful*. These forms of risk-hedging based on mutuality are essential to the optimal allocation of risk in the society based on the individual degrees of risk tolerance.
- h. The institution of development schemes based on equity partnership where potential profits from economic activities are shared with public-private participants. The government has the ability channel finance and other necessary resources into projects, such as land development, and poorer households in particular can be given the opportunity to own, develop, and cultivate land and share in future net income streams. This form of financial inclusion based on equity is conducive to poverty alleviation and shared prosperity. A balanced approach to the allocation of capital-labor resources promotes allocative efficiency without compromising on the imperative of equity.

Thus, it is crucial that the institutional, regulatory, and administrative structures promote the type of financial intermediation that allows for allocative efficiency and equity. These risk-sharing conditions are conducive to financial stability and economic growth, and therefore to shared prosperity. The optimal allocation of risk in the society provides safety in numbers for risk-averse individuals. It may be difficult to assume diminishing absolute (relative) risk aversion, where individuals with higher income are willing to put higher amounts (proportions) of wealth at risk. But, risk in the society can be optimally distributed through risk-sharing mechanisms, where participation is based on the individual levels of risk tolerance. There are different mechanisms for risk sharing, including the *mudhārabah* and *mushārakah* financial instruments for equity partnership initiatives. There are also, other redistributive institutions for risk sharing under Islamic finance, such as obligatory levies of *zakāh*; noncompulsory benevolent loans *qardh hasan* and charity *ṣadaqah*; and institutional endowment, *waqf*. Finally, the inheritance levies constitute also a form of intergenerational redistribution of wealth and risks among inheritors.

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

risk sharing. It is clear that a financial system that allows for greater financial inclusion based on risk sharing and mutuality is conducive to financial stability and shared economic prosperity.

Conclusion

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

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

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

Further research may shed light on the risks of financial exclusion. The lessons from the microcredit models need to be learned and persistence in errors, as well as path dependencies, should be avoided. As rightly argued by Askari, Iqbal, Krichene, and Mirkahor (2010), it is time to revamp the financial system to rely on risk sharing. The economic rationale behind equity financing is that in order to share prosperity, economic risks should be shared, as well. The allocation of risk commensurate to the idiosyncratic abilities to bear losses is

arguably more conducive to a socially inclusive financial system. Systematic risk cannot be eliminated, but it is collective risk taking and individual risk aversion that promote a more efficient mobilization of resources, and more equitable sharing of economic risks. Economic prosperity should be pursued through risk sharing rather than at the expense of others.

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CHAPTER 2

A RISK-SHARING MODEL FOR ISLAMIC BANKS

Obiyathulla Ismath Bacha

and

Abbas Mirakhor

Abstract

Islamic banking has thus far mimicked conventional banking, with the result that the same problems and outcomes have surfaced, even though it is operating within an interest-free framework. This apparent “convergence” has led to disaffection both among consumers of Islamic banking services and policy makers. This study proposes a risk-sharing model for Islamic banks that can potentially pull Islamic banking away from this path dependency. Under the proposal, an Islamic bank’s assets would be securitized by the issuance of *sukūk*-type instruments that have the same underlying contract and average “duration” as customer financing. Small assets may have to be pooled into tranches of similar maturity before being securitized. Medium and larger assets would have papers issued directly against them. Thus, instead of depositors, an Islamic bank would have thousands of *sukūk* holders, all of whom share the profits and losses arising from their respective tagged asset. Other than *Wadī‘ah*-based safe custody accounts and current accounts against which the bank would hold cash, all other depositors would be “sold” *sukūk* for the amount, duration, and risk level that they prefer. The model has several advantages, including minimizing systemic risk by dissipating risk and reducing the liquidity mismatch inherent to banking. The securitized papers would provide new liquidity instruments and could enhance liquidity within the Islamic finance sector. The proposed model would also enhance macroeconomic stability by reducing risk concentration within the banking system, substantially widening financial inclusion by way of small-denomination *sukūk*, and minimizing the contingent liabilities of governments by avoiding the use of deposit insurance.

Introduction

Banking, despite being highly regulated, is an industry prone to crashes and problems. What makes banking different from other businesses is that it is a confluence of various risks. Two of the most important are liquidity risk (arising from the inherent liquidity mismatch between a bank’s assets and liabilities) and credit risk (arising from the risk-transfer mode of

banking). Banks being financial intermediaries, invariably engage in maturity transformation. That is, they take deposits that are of shorter term maturity and use them to finance assets of much longer maturity. This is a duration mismatch inherent to the business of banking. In addition, credit risk arises from the fact that risks on a bank’s asset side are detached and have no link to the returns provided to depositors, on the liability side.

Liquidity risk—the fact that depositors can withdraw their money at any time, whereas the loans given by the bank based on those deposits cannot be liquidated immediately—is an inherent problem. To address this problem, there are a range of tools. Banks can use the interbank deposits, tap into the money market, issue short-term papers, borrow directly from the central bank, and so on. In addition, there is deposit insurance and the lender-of-last resort facility offered by central banks.

The second problem of credit risk arises from the risk-transfer that occurs with the intermediation by banks between surplus and deficit units. Unlike other financial intermediaries like mutual funds, or exchanges that simply make both sides take on the risk that comes with the exposure, banks do not. Depositors at a bank earn returns that are independent of what the bank earns from using their money. The returns and risk are detached. Depositors earn a “risk-free” return³⁶ that has no link with the credit risk taken by the bank using their money.

A second anomaly is that banks price their loans based on credit risk, which may only remotely, if at all, be linked with the underlying business or project risk. The repayment capacity of the borrower, rather than risk of the project that the borrower will invest in, is the focus. Thus, interest-based financing is independent of underlying business risk. The bank effectively transfers all business risk to be borne solely by the borrower. While this may seem advantageous to banks, empirical evidence based on the frequent crashes, does not bear this out. The illustration below shows how the risk-transfer model may not be advantageous to banks.

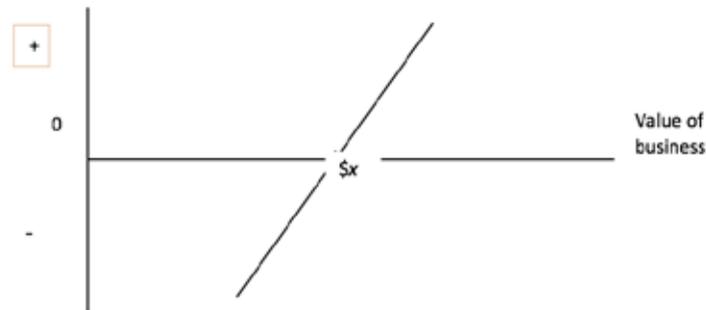
Illustrations of why the risk-transfer model may not be advantageous to banks

Suppose a business or project is entirely equity financed. The risk profile with current value of \$X to equity holders is as shown in figure 2.1:

³⁶ Especially with deposit insurance in place.

Figure 2.1 Payoff profile to an entirely equity-financed business or project

[In y-axis, change + to Positive payoff and – to Negative payoff]

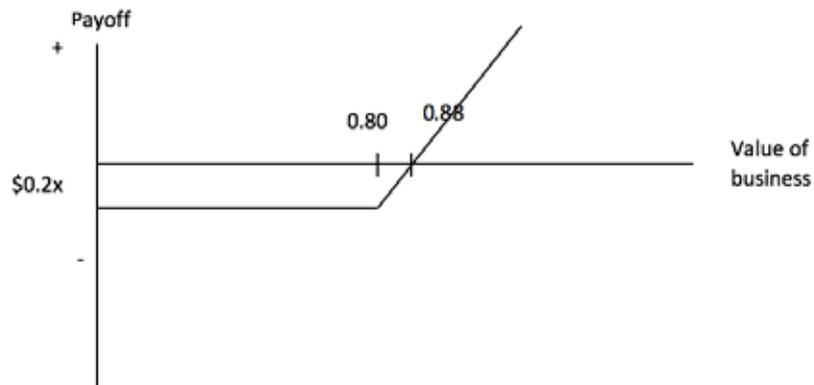


Equity holders of the firm are long on the underlying asset or the business. Any increase in the value of the business beyond x will mean a positive payoff (increase in shareholder wealth), while a decrease below x will mean a loss in value. Equity holders have “unlimited” upside potential and downside risk. Suppose the equity holders now undertake bank borrowing at a fixed interest of 10 percent, equivalent to $0.8x$, and use the debt to repurchase equity. Then the payoff profile to equity holders and the bank is as shown in figure 2.2:

Figure 2.2 Payoff profiles to levered equity and the bank

[In y-axis, change + to Positive payoff and – to Negative payoff]

a. Payoff to equity holders with leverage



b. Payoff to bank from fixed interest loan

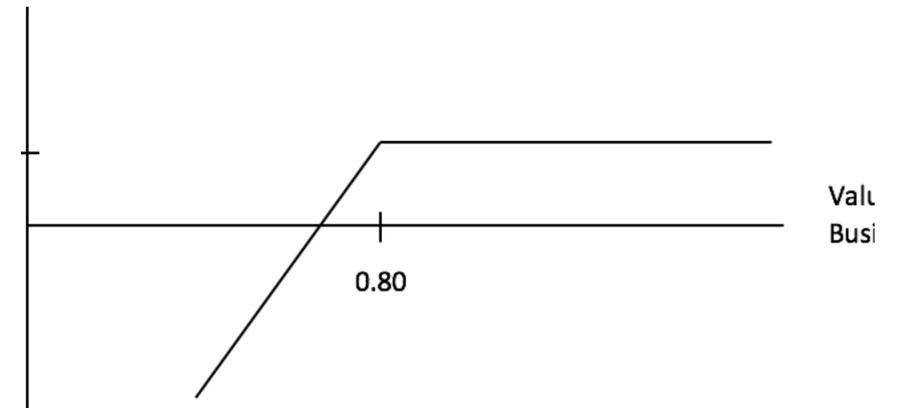


Figure 2.2 shows payoff profiles to levered equity and the bank. Effectively, equity holders now have a call option on the business or project. Their downside is now limited to the amount of their equity (now $0.2x$). However, they keep all the upside. The bank, by providing fixed-rate financing, is effectively shorting a put option. It has no upside potential, but does have downside exposure. The maximum that a bank can earn is limited to the interest amount: yet if value of the business or project falls below $0.6x$, ($0.8x$ minus $0.2x$), the bank begins to lose its principal and interest. The original payoff in figure 2.1 has been divided between levered equity holders and the bank—not necessarily in a way advantageous to the bank. Given the payoff to levered equity, it is easy to see why there are massive defaults when bubbles burst, as happened during the recent U.S. subprime crisis. Once the asset is “out-of-the-money,” there is an incentive for borrowers to default.

Given their position as writers of the put option (short put option), banks should try to minimize the probability of default by requiring collateral or guarantees, buying certificates of deposit, and so on. But even this, as is shown by crises after crises, is not safe enough for banks nor the societies they operate in.

The fact that the banking business model, despite its brittleness, has survived this long is testimony to the external support systems put in place. Deposit insurance, lender of last resort arrangements, fractional reserve banking, interest tax subsidies, and the various banking regulations aimed at protecting depositors and their banks are examples. If banking is brittle, the banking system as a whole is highly fragile. As risk gets concentrated in even a single bank’s balance sheet, systemic risk builds up. A single imprudent bank can put at risk the entire banking system; thus the need for bank bailouts and the resulting moral hazard. Rather than review the banking model, policy makers and regulators have put in place requirements that reduce, rather than avoiding the negative externalities that the system produces. The capital adequacy requirements of the Bank for International Settlements (BIS) and domestic banking regulations are examples. Banking-induced crises have not only become more frequent, but massively more expensive. There is obviously a huge social cost when banks

fail, yet when there is no failure, the profits accrue to private individuals. This is a classic case of socialized losses and privatized profits. If there is one key missing ingredient that has resulted in the knife-edge equilibrium that banking stands on, it is the lack of a direct link between the risks on the asset and liability sides of the balance sheet.

Islamic banking, which has thus far mimicked conventional banking, has had the same problems and outcomes. When contemporary Islamic banking began about 30 years ago, they had little choice but to adopt the conventional banking template. At that time they could not introduce the risk sharing contracts that are central to Islamic Finance. Thus, in order to take root, they simply mimicked the products and services offered by conventional banks in *shari'ah* compliant ways. However, the risk shifting mode appears to have subsequently been “hard coded” into Islamic banking. Islamic bankers appear to want the path of least resistance and continue with replication. This apparent “convergence” has led to disaffection among both consumers of Islamic banking services and policy makers. This study proposes a risk sharing model that can pull Islamic banking away from its current path dependency.

A Risk-sharing Banking Model

The fragility of banking is due to risks being concentrated and not dissipated as needed. Mutual funds, another financial intermediary, operate in an even more hazardous environment, but do not appear to have the fragility that banks have. What is different between the two is that mutual funds operate in a risk-sharing model, not a risk-transfer one. In a mutual fund, an investor's funds are tagged directly to a specific portfolio. The investor's returns depend entirely on the portfolio performance. The investor pays for the convenience and ability of the fund manager. If things go wrong, the fund manager loses his job, but the fund manager company remains intact. The company is never in danger, even though the stock market is a much more volatile than the real sector that banks operate in. What makes the mutual fund much less fragile is that unlike a bank, there is a direct link between the asset and liabilities of the mutual funds' balance sheet. Investment risks on the asset side are shared fully with investor funds/deposits on the liability side. It is this risk sharing that makes the mutual fund model antifragile—to use the term coined by Taleb (2012)—and the lack of which keeps banking on its perpetual knife-edge equilibrium.

Our proposed banking model is essentially based on the risk-sharing framework of mutual funds. Aside from the *shari'ah* requirements that financing should be of a risk-sharing nature with returns determined ex post, the *shari'ah* provides for a number of contracts that are well suited for the matching of asset and liability side risk profiles. In essence, under our proposal, the majority of the assets of an Islamic bank would be securitized by the issuance of *sukūk* that have the same underlying contract and average “duration” of customer financing. It is obvious that the securitization must take different forms. Where an asset is large enough to justify an issuance against it, papers can be issued to securitize it. Where the assets are small, they would have to be pooled into tranches of similar maturity and then securitized. The securitized papers or *sukūk* obviously cannot be subjected to the lengthy current process for *sukūk* issuance. Rather, banks should be provided a master template on which the securitized

papers are to be issued. Figure 2.3 shows a hypothetical balance sheet of an Islamic bank under the proposed model.

Figure 2.3 Balance Sheet of Islamic Banks under the Proposed Model

Assets	Liabilities
Cash	<i>Al-Wadī'ah</i> accounts
Cash	Current accounts
Trade financing	<i>Murābahah</i> papers (trade financing papers)
Leasing	<i>Ijārah sukūk</i> (lease-based papers)
Term financing -Consumer finance -Hire purchase	<i>Ijārah sukūk</i> (leasing/Hire Purchase (HP)-based papers)
Housing -Diminishing <i>mushārahah</i>	Diminishing <i>mushārahah sukūk</i> (housing finance facility)
Project financing - <i>Muḍārahah/Mushārahah</i>	<i>Muḍārahah/Mushārahah sukūk</i> (project financing facility)
Venture capital - <i>Muḍārahah/Mushārahah</i>	<i>Muḍārahah /Mushārahah</i> convertible <i>sukūk</i> (venture capital financing facility)

The balance sheet shows the corresponding items of the asset and liability sides. Current and Saving Accounts (CASA) will not require securitization because, as safe custody (*al-Wadī'ah*) accounts, they provide no returns. Cash will simply be held against these deposits. In providing safe custody and convenience, the bank earns by charging fees.

Short-term financing, trade financing, overdrafts, and the like could be provided by Islamic banks on the basis of *murābahah*. In the Malaysian context, such financing can be securitized by issuing *murābahah* papers of equal short-term maturity, which are traded on the Islamic Interbank Money Market (IIMM). The IIMM already trades such papers issued by corporates for short-term funding. In other jurisdictions where *murābahah*-based securities are not traded, banks may have to hold the short-term assets to maturity and fund them with non-*murābahah* papers.

Leasing, hire purchase and asset-based consumer financing could be funded by Islamic banks based on the *ijārah* contract. As there is an underlying asset that is tangible, has fixed tenor, and has a steady stream of fixed rental/lease payments, such financing should be easy to securitize. There are several means by which *ijārah*-financed assets can be securitized. The resulting papers should also be *ijārah*-based. By pooling the *ijārah*-financed assets into tranches of similar maturity, a bank could issue *ijārah sukūk* of different denominations. Thus a bank would at any given point have various *ijārah sukūk* of different denominations and maturities available for placement.

A portion of these could be sold directly to walk-in customers and depositors whose

intended maturity matches that of available paper. The remainder could be placed with other institutions seeking medium-term investible assets or in the Islamic Interbank Money Market.

The financing of homes accounts for a substantial portion of Islamic bank asset portfolios. The typical funding structure is diminishing *musharakah*. Given the long duration of home financing, securitization is already taking place. Currently the securitization is undertaken through a third party, Cagamas Berhad, the Malaysian national mortgage corporation. As is the case with securitizing other asset, there is no reason why Islamic banks could not customize the securitization to fit their needs. Islamic banks could use diminishing *musharakah sukūk* to fund their portfolio of home financing assets. As customers repaid their home financing, the bank could simply use these funds to repurchase portions of the outstanding diminishing *musharakah sukūk* that it had issued. Thus, as the value of the asset item decreases, so would the corresponding liability item.

Project financing tends to be larger and longer term. The greater exposure is often a source of problems for banks. Often projects fail not because of technical infeasibility but because of the debt burden the project has to carry as it comes on stream. It is here that risk-sharing finance can bring much value added. Risk-sharing contracts like *muḍārabah* and *musharakah* could be used. These contracts, however, would have to be modified to fit contemporary needs.³⁷⁾ Many of the controls used in modern venture capital financing could be used. At a basic level, allowable costs, identification and measurement of revenue, and the method of determining profits that will be shared must be agreed with the customer. As the bank begins providing funding under, say, a *muḍārabah* arrangement to a customer, it would issue *muḍārabah sukūk* of similar size and tenor, but at a different profit-sharing ratio (PSR). The difference between the PSR agreed with the customer and that of the resulting *muḍārabah sukūk* would constitute the profits to the bank. Effectively, a two-tier *muḍārabah* arrangement or a pass-through structure would be used.

The Securitization Process and Requisites

The risk-sharing model requires that a bank share risks on both the asset and liability side and that there is a direct link between the two. The process can be thought of as follows: as a bank completes assessment and documentation for the provision of funding on the asset side, it initiates the securitization process. For smaller assets, the packaging and securitization may be at predetermined intervals, such as monthly, or quarterly. Thus a bank may choose to issue papers at a fixed date every month. In determining the total face value of issuance, provisions for potential bad debt, prepayments, and the like would have to be factored in. Some amount of rounding off would be required. In determining tenors, a group of assets could be placed in different maturity buckets to determine how much of a certain tenor of *sukūk* should be issued. Similarly, in the case of large asset portfolios with different risk profiles, tranches of different risk classes may be warranted.

Thus a bank, in issuing securitized papers, would be offering papers of different maturities

³⁷⁾ See, for example, Bacha 1997.

and different risk classes. For example, a given issuance could include four tranches of 18-month maturity papers, each of a different risk rating. For investors who might want varied or diversified exposure, some combination of different asset categories but with the same maturity could be the underlying asset for one series of the issuance.

Several permutations of risk and tenors would be possible. The key is to ensure a one-to-one correspondence. That is, every paper outstanding would be tracked to one or a combination of assets. The total of papers outstanding could not exceed the total value of assets. Multiple claims on an asset or a given portion of an asset would not be permitted. Needless to say, all earnings accruing between customer financing and the issuance of papers on it would accrue to the bank. The model is flexible enough to allow for loan-syndication. In syndications, each bank would issue papers equivalent to its contribution in the syndication.

The proposed model does not require deposit insurance, nor is there a need for a lender of last resort. What is required, as described below, is for the central bank to play the role of a facilitator to smooth market frictions with regard to continuous trading of the securitized papers. The need for deposit insurance and lender of last resort is substantially reduced because the leverage arising from fractional reserve banking is avoided.

For the purpose of financial inclusion, banks should be required to keep a portion of the face value of papers issued to be small. Broadly, papers issued could have face values of RM1,000, RM10,000, and RM100,000. A small portion could be in multiples of RM100.

The sceptical reader will be reminded of how securitization brought the U.S. banking system to its knees during the 2007–08 subprime crises. Many researchers, including Nicholas Taleb (2012), have blamed this on a lack of “skin-in-the-game.” The argument is that because banks could package and sell-off the loans they had provided through securitization, there was no incentive for them to be careful. Extending the logic, there was even the incentive to take on higher risk, leading to moral hazard.

To avoid this, our model requires that banks be required to keep a minimum—say, 10 percent of each asset category by value—in its own account. These would be funded directly from shareholder funds. To further protect investors of a bank’s papers/*sukūk*, we propose two additional requirements. First, that the 10 percent held by the bank carry a first loss provision. That is, the initial losses from an asset would be borne from the portion held by the bank. Only when losses went beyond 10 percent should investors be hit. Second, where necessary, the asset financed would have to be ring-fenced.

This ring-fencing should occur at the customer level. That is, suppose a bank had financed the purchase of production machinery for a firm worth RM10 million. The underlying contract could be *ijārah* or even a profit-sharing one. The RM10 million of machinery ultimately would belong to the investors of the *sukūk* to be issued. To ensure the integrity of the equipment and to keep it away from other “creditors” or claimants on the firm, the machinery could be placed in a self-liquidating and bankruptcy remote special purpose vehicle (SPV). Finally, the 10 percent that would be held by the bank would be the risky portion that should

be subjected to Basel type capital adequacy requirements, if any.

It is obvious that one cannot expect every ringgit of liability (deposit) to be matched with an asset. Mismatches are likely. New investment deposits that come in may have to be kept within a temporary cash pool until they are placed out to fund new asset. On such temporarily held funds, the bank ought to be required to be paid a return equivalent to the average yield on 3-month papers that they have outstanding.

The need for market trading of securitized paper

The most challenging part of this proposal is probably the need to create well-functioning markets for the securitized papers put out by the banks. Banks already do securitization. They are also active in money markets, putting out instruments such as bankers' acceptances, trade notes, and negotiable instruments of deposit. This proposal substantially increases the reliance banks would have on money and capital markets. Market trading is critical for two reasons. The first is to dissipate risks broadly in order to minimize systemic risk. The second is for price discovery: that is, the determination of cost of funds or required rates of return for the bank. With active markets, daily pricing and marking to market is possible. Redemption values can be determined in a transparent manner at any point. Aside from ensuring fairness to all parties, market-derived prices and yields will move the system away from a reliance on interest rates.

The pricing of these instruments would be straightforward. Since the underlying asset has expected cash flows and a known tenor, the securitized paper, as a proportionate claim on these cash flows, would imply a market price as follows:

$$\text{Price} = \sum_{t=1}^N \frac{CF_t}{(1+k)^t} + \frac{x \times 100}{(1+k)^N} \quad (2.1)$$

where

- CF_t = are expected/project cash flows until period t
- t = tenor of the securitized instruments
- k = required yield (discount factor)
- x = face value of paper as a percentage of the underlying asset value
- N = final year of tenor

The one unknown in equation 2.1 is the required yield, k . It is this yield that is arrived at through trading. The discount factor will depend on the riskiness of the underlying asset and a premium dependent on the perceived riskiness of the bank issuing the paper. Well-managed

banks with good fundamentals are rewarded with lower risk premiums. Their cost of funds would be lower. "Ratings" of these papers and of the banks would inevitably emerge over time. Banking prudence is checked in multiple ways in this proposal. For instruments that have a balloon payment, pricing would be a slight variation on equation 2.1, as follows:

$$\text{Price} = \sum_{N=1} CF_t (1+k)^t + FV_n \times 100 \quad (2.2)$$

where

- FV_n = is the expected balloon payment at year n
- N = final year of tenor

Issuance or floatation costs of the securitized papers should be kept to a minimum. One obvious way would be by standardizing the documentation and issuance process. If all Islamic banks are required to follow a single master template with little customization, issuance costs can be minimized. Standardization of features enables exchange trading and trading on multiple platforms, all of which increases liquidity.

Maintaining an active market with high liquidity would require much more than standardized features. A whole new group of players would have to be brought in. Some of the potential players would be banking customers who, in lieu of deposits, would be sold these securitized papers. Currently, banks sell instruments in lieu of deposits only to high net worth individuals.⁽³⁸⁾ Individuals should have no objection because these papers would be tradable and could be redeemed at any time. The redemption value would simply be the closing price on the prior trading day price or the implied price given its yield. With liquidity, transaction cost and ease of redemption, rational individuals should want to invest in near-money papers such as these, instead of cash holdings. Here the success of Permodalan Nasional's reach, distribution, and redemption methods should be emulated. Investors in Permodalan Nasional's mutual funds can add to or withdraw their investments through various commercial banks and even post offices.

A second group of players for the securitized papers of a bank would be the other Islamic financial institutions. The trading of these securitized papers would simply be an extension of the range of instruments available for IFIs to manage liquidity. As the short-term papers would be made available on the Islamic Interbank Money Market (IIMM), it will see a broadened range of instruments.

A third group of players would be Islamic (and conventional) nonbank financial institutions (NBFIs), the *takāful* companies, Islamic mutual funds, *shari'ah*-compliant asset managers, and the likes of Tabung Haji, the Malaysian Pilgrims Fund. For these players, liquidity

³⁸⁾ Usually as structured products that are risky, and have long tenor, lock-out periods, and large face values.

management would become much easier. As the range of tenors available would be broad, *takāful* and pension funds would have a new range of instruments for their endowment/long-term cash-flow matching needs. As current *sukūk* tenors are mostly short and medium term, long-term fund management firms like pension funds and *takāful* have a difficult time finding papers that can help them meet their needs.

A fourth potential category of players would be conventional financial institutions that would want to use these papers for liquidity management. Since the return on these papers would be anchored in real assets, they would likely provide higher returns than conventional money market papers, and thus should be attractive complements, if not substitutes. The same logic should apply to corporations that have been using money markets, both for short-term investments and fund raising.

New institutions, such as money market mutual funds, are likely to surface over time to take advantage of these securitized papers as a new asset category. If money market mutual funds can thrive even with very low money market returns, the securitized papers should be attractive as a new asset class, given the diversity of the underlying assets, industries, risk profiles, and tenors. With time, institutions that specialize in these new asset class should arise.

Given the different potential players, the trading platforms and distribution channels should be varied. Banks could sell the smaller denominated papers over the counter, directly to walk-in depositors and other investors. The larger denominations should be brought to market directly through investment banking divisions. As these placements would be frequent, the process of bringing them to market must be simplified and low cost. Private placement with NBFIs and other institutions would also be possible. The largest portions of the papers issued should be within traded environments. The short tenor papers could be traded on the IIMM, while the longer tenor ones could be listed and traded in stock markets, among others.³⁹⁾ The larger denomination papers could also be traded on the IILM and other electronic platforms. The IILM is particularly well suited to provide the platform for the trading of these instruments. There is no reason why foreign players could not be allowed to invest/hold these instruments. The larger the potential group of participants, the more active and liquid the market is likely to be.

Because the same paper could be traded in different platforms and in different face value denominations, it is important that the pricing mechanism be easy and transparent. The securitized papers should be traded using the existing money market convention of being price-quoted based on a face value of RM100. This has two advantages; a paper of any face value denomination could be easily priced. Second, the implied yield or the market- required return for the paper would be obvious at any given point. As the quality of the underlying asset deteriorates or the bank issuing the papers has problems, the required yields would change. Well-developed financial markets anticipate and signal problems well in advance.

39) Bursa Malaysia and most stock exchanges already provided platforms for the trading of bonds markets and the like.

A final requisite would be the need for market makers. Even with electronic markets, designated market makers are needed to provide trading continuity. The availability of such institutions that will always make markets: that is, a readiness to buy or sell ensures continuous liquidity and assures all players that they can redeem their investments any time they want to. As markets deepen, there will be less need for market making, but until that happens, not having market makers could mean serious frictions, disjointed trading, and higher risk premiums required for the illiquidity. As such market makers would be critical, at least in the initial years.

Efficacy and Impact of the Proposed Model

This section examines the efficacy of the proposed model relative to conventional banking and assesses the potential impact on key stakeholders of a bank. It is obvious that the proposed model would change the topography of Islamic banking. Therefore, an evolutionary rather than a big-bang approach would be prudent. The model is amenable to a gradual rollout. For example, regulators can have a 10-year target to reach complete risk sharing. The model would be complete when Islamic banks could securitize and share the risks arising from their assets in full, except for the 10 percent that they need to keep on their books. A timeline approach with key targets to be achieved would be logical. An example would be a 30 percent risk-sharing target to be reached in 3 years, and 50 percent in 5 years, and so on. This would also allow for initial execution problems to be resolved. Just as banks would need time to adjust their internal systems, so too would their customers and depositors.

If the proposed model would change the topography of Islamic banking, one might be tempted to ask, why would the stakeholders want to adopt this model? Why should customers, depositors, and other players agree to this proposal? The answer lies in the spread or the arbitrageable difference between what one currently earns from placing deposits with banks and what could be earned from investing in the underlying asset.

Returns from investing in assets obviously vary by industry and country, and are dynamic. A quick and simple way to estimate the difference would be to look at the difference between bank deposit rates and average real sector returns. Table 2A.1 in annex A shows the 3- and 5-year global average stock returns for about 119 different “*shari‘ah*”-compliant industries. They are immediate 3- and 5-year returns provided by MorningStar⁴⁰⁾ based on the 100 largest capitalized stocks of each industry globally.

Note that an equity investment in these real-sector activities would have provided average annual returns of approximately 15.5 percent and 14.0 percent for 3 and 5 years, respectively. Yet bank deposits globally would have returned 2 to 3 percent per year. Even if one is to argue that the stock returns may include leverage at the firm level, a risk adjusted average difference of 6 percent to 8 percent between the two is clearly evident. This 6 to 8 percent is substantial, especially in these days of near zero rates. At a minimum, this 6 to 8 percent would go directly into the pockets of the different stakeholders. One might ask, why has this

40) While these are returns to U.S. stocks, industry/asset returns in emerging markets ought to be higher.

spread not been arbitrated thus far? This has mainly to do with the fact that banks play a risk transfer game, which is different from the risk-sharing mode of equity markets. As figures 2.1 and 2.2 showed, the exposures are different and so are not directly arbitrageable.

The proposed model effectively does away with this impediment by blurring the difference between the two and levelling the playing field. Under the proposed model, bank deposit returns must converge with real sector returns.

Impact on stakeholders

We now evaluate the impact on stakeholders by examining the impact on their risk and return. Depositors and customers seeking financing are probably a bank's largest constituency of stakeholders. For depositors, there will be a difference in both their risk and return under the proposed model. As risk-sharing partners, they take on the risks of the underlying asset. Thus, relative to a standard deposit, risks are higher; however, returns would also be higher. Depositors stand to be the big beneficiaries of the spread differential described previously. However, if a depositor is involved in *ijārah*- or *murābahah*-type arrangements, risk is lower, but so too would the returns.⁽⁴¹⁾

If depositors would get higher returns in exchange for taking on higher risks, the opposite would be true for customers seeking financing. Customers going into contracts like *muḍārabah* and *musyarakah* would reduce their exposure to the underlying asset, as it is now being shared with the bank. As the funding arrangement reduces the risk, the funding cost, though not fixed, would be higher. The higher cost would show up as a dilution in the earnings arising from the financed asset. Why would customers agree to the higher cost? Precisely because they now take on less risk with respect to the financed asset. Moreover, the customer would find that by having avoided leverage, the wealth of both the customer's shareholders and existing bondholders (if any) would increase because both the company's shares and bonds would rise in value. Since –this type of arrangement shares profits from a specific asset, shareholders would benefit because they would get a portion of the new asset's profit without diluting the earnings of their other assets (as new equity would). They also will not incur higher leverage (as new debt would). Keep in mind that given the features of *muḍārabah*, its cost should be lower than that of equity but higher than debt. Customers seeking *ijārah*- or *murābahah*-type funding are unlikely to experience much difference relative to debt.

Shareholders of banks would likely experience higher funding costs, but the bank would be a much less riskier entity. The proposed risk-sharing model would do away with much of the leverage inherent to banking. It would also reduce the liquidity mismatch between the banks' asset and liabilities. In addition, bank managers would have to be much more prudent because they would be sharing risks. The reduced riskiness for banks would come with reduced profitability. The large interest spread that banks earn in the risk-shifting mode would be reduced because earnings would have to be shared.

41) The returns for *ijārah*- and *murābahah*-type contracts would still be higher than deposit rates.

Overall, banks would become both much less risky and less profitable. Would bank shareholders be worse off? Not necessarily. A bank's shareholder would be worse off only if the reduction in earnings was more than the reduction in risks. Clearly this would not be the case. The reduction in risks is likely to be much more than any reduction in earnings. Thus, on a risk-adjusted basis, would the shareholder likely be better off. This is an empirical question that can only be settled with actual numbers and a simulation of outcomes. Banks would also benefit from the reduced capital adequacy ratios, minimal reserve requirements, and reduced complexity of banking regulation. All these should mean improved cost efficiencies.

The government and society would be beneficiaries. The government would not have to offer deposit guarantees or implicit guarantees. This would substantially reduce the government's contingent liabilities. The government would also benefit from the movement away from the provision of the tax shelter on interest. That would constitute one less subsidy for the government. The reduced need for intervention and bank bailouts would also help reduce potential costs. The government-bank relationship would be akin to that of the government with mutual funds: distant and nonobligatory.

Society has often had to bear the brunt of bank-induced financial crises. With risk-sharing dissipating risks over a wide constituency of investors, the chances of risks being concentrated within the banking system would be minimized. Systemic risk would be reduced and the overall macroeconomy would be less vulnerable. The disruption caused by banking and financial crisis imposes a huge cost of society. It is now obvious that bad behavior by banks has huge social costs. Such costs would be minimized. Risk-sharing finance raises the threshold of scrutiny by banks and then by investors, who will have to buy the securitized papers the bank puts out. Unlike now, where depositors have no influence on how or where banks lend their money, investors could choose not to take up issuances by banks that they are not comfortable with. This multitiered monitoring is a key advantage of the risk-sharing model.

Enhanced financial inclusion would be another way society would benefit. The divisibility that is offered through securitization—and in particular, the small denominations— help mobilize savings and resources away from dead assets or frivolous spending. When the retail investor gets to participate directly in the financing of the largest projects, financial sector development is truly in place.

By enabling the small retail saver to participate by investing in the securitized papers placed out by banks, shared prosperity can be enhanced. Where previously the small saver had little choice but to earn the meagre rates that bank deposits provided, the proposed risk sharing model offers small investors the opportunity to earn much more. A case could be made that the disconnection between returns in the real and financial sectors as argued earlier has repressed the earnings of small savers and helped accentuate income inequality. Anchoring financial returns on real sector output has the potential to enhance shared prosperity.

Minimization of liquidity risks and the avoidance of bank runs

As discussed, the two key risks that banks have are liquidity risks arising from their role transferring maturities (borrowing short term, and lending long term) and credit risk arising from the risk-transfer mode of banking. It should be clear that the proposed risk-sharing model would minimize if not eliminate both these key risks. Maturity mismatch and duration risk would be minimized because the tenors of the securities issued against the funding would have the same maturity. Even where small assets are collected and pooled before being securitized, the averaging would mean some residual mismatch, but nothing significant. The liquidity of the instrument issued would be a risk taken on by investors in a bank's securitized papers, and not by the bank itself. While investors would want compensation for liquidity risks if any, the issue becomes one of pricing, requiring higher yields and higher cost of funds to the bank, and not a risk arising from liquidity mismatch. It would therefore be in the bank's interest to ensure smooth trading of its papers by designing instruments better and encouraging market making.

In the contemporary banking system, credit risk, at the extreme, translates into bank runs. In this proposed model, bank runs would be a thing of the past. If one or a group of a given bank's financing goes bad, it is the papers securitized against these nonperforming assets that would go down in value. Papers whose underlying assets are performing as expected should suffer not diminution in value. Thus a bank that had been imprudent or careless in its assessment of funding requests could see several or even a majority portion of its securitized papers lose value. While the bank would be initially unaffected because the papers had already been placed out, it would be affected when it sought to place out securities subsequently. Investors would want compensation for higher perceived risks, even if the new assets were good. It would therefore be in the bank's interest to be careful because it would be hurt by imprudence in two ways from: first, on the portion of the asset held in its book (10 percent); and second, by way of increased costs when it placed out new paper.

The key point to note is that bank runs would be avoided in the proposed risk sharing model because risk would get dissipated by being spread out over a large number of investors, each with a small exposure. The system would have inbuilt stabilizers that would pass through the risks from one side of the bank's balance sheet to the other, without concentrating the risk within the bank. This is a key value added of the model.

Relative to contemporary banking, the proposed risk-sharing model has many benefits. The key benefit is that systemic risk is reduced, financing gets anchored into real assets, and governments and regulators have to intervene less. While it will substantially change the way banks do business, it works within and through the existing systems. It broadens the range of new liquidity instruments, bringing in new players and institutions that now have little relationship with banking.

Asian governments, given the lessons of the financial crisis of 1997–98, have started to pay more attention to the building of capital markets in order to minimize the vulnerabilities arising from bank-centric financial sectors. Capital markets are indeed more resilient at withstanding shocks. The risk-sharing bank model, by blurring the line between banking and

capital markets, makes banking that much more resilient.

Conclusion

When an institution with a viable business model is unable to carry its debts and goes bankrupt, the restructuring often results in an equity-for-debt swap. The regime switches from risk shifting to risk sharing. The reason the equity for-debt swap is a solution is because with everyone being equity holders sharing the risk, every party has “skin-in-the-game.” This effectively overcomes the asymmetries that plague debt/risk shifting regimes and the perverse incentives that arise with high leverage.

With the devastation caused by the global financial crisis of 2007–08, there has been much soul searching, especially in the West. In addition to the Volcker Rule, several other proposals have been made. Admati and Pfleiderer (2009) have proposed “increased liability equity.” The proposal essentially requires bank shareholders to be subjected to liability beyond their equity investment alone. The Financial Stability Board (FSB), a group of international regulators, has proposed that banks’ “total loss absorbing capacity” (TLAC) be substantially increased by requiring banks to hold capital buffers equivalent to 16–20 percent of their assets. The New York Federal Reserve has floated the idea of rewarding bank managers not with equity but with long dated bonds that have a face value that can be reduced by way of a clawback provision if their lending decisions subsequently go wrong. Several other proposals of a similar vein have been floated. However, all these proposals treat the symptoms, not the disease. Being peripheral, they may reduce the size and severity of the next crisis, but not avoid it.

Islamic banking in Malaysia is now 30 years old. Thus far it has been on replication mode. While there has been innovation at the product level, the business model is the same. Like all economic phenomena that unless guided would move in the path of least resistance, there is a disproportionate emphasis on commodity *murābahah*, *ijārah*, and other fixed-rate financing. Profit-loss sharing arrangements are minimal, if any. Without serious intervention, there is a clear danger of path convergence. The recently launched Islamic Financial services Act (IFSA) aspires to move Islamic banking away from replication and into risk sharing. The proposed model of this study lays out one possible path.

Annex 2A Global Average Industry Returns

Table 2A.1. Three- and Five-Year Returns

[Delete italics for numerals in return columns]

Average Industry Returns								
Industry Name	3-Year	5-Year	Industry Name	3-Year	5-Year	Industry Name	3-Year	5-Year
1 Advertising Agencies	22.49	18.63	44 Food Distribution	17.94	15.78	88 REIT - Industrial	20.4	22.71
2 Aerospace & Defense	26.54	18.87	45 Footwear & Accessories	20.74	24.87	89 REIT - Office	14.26	14.37
3 Agricultural Inputs	7.68	9.96	46 Grocery Stores	20.31	12.96	90 REIT - Residential	12.61	20.86
4 Airlines	36.53	23.38	47 Health Care Plans	26.08	22.92	91 REIT - Retail	21.21	24.4
5 Airports & Air Services	23.54	22.67	48 Health Information Service	16.76	15.69	92 Rental & Leasing Services	22.31	24.95
6 Aluminum	6.45	-2.49	49 Home Furnishings & Fixture	25.91	25.55	93 Residential Construction	18.01	9.59
7 Apparel Manufacturing	24.38	24.78	50 Home Improvement Stores	36.25	31.15	94 Restaurants	13.1	20.61
8 Apparel Stores	19.2	20.87	51 Household & Personal Prod	13.78	11.72	95 Rubber & Plastics	16.72	12.75
9 Asset Management	21.14	12.35	52 Industrial Distribution	5.37	18.18	96 Scientific & Technical Instru	10.33	14.73
10 Auto & Truck Dealerships	23.76	25.27	53 Industrial Metals & Mineral	-15.9	-7.5	97 Security & Protection Serv	9.28	11.71
11 Auto Manufacturers	16.72	9.24	54 Information Technology Ser	6.92	10.05	98 Semiconductor Equipment	20.6	14.68
12 Auto Parts	20.83	19.49	55 Integrated Shipping & Logis	14.37	14.3	99 Semiconductor Memory	54.17	17.85
13 Beverages - Soft Drinks	13.37	14.06	56 Internet Content & Informa	21.69	16.11	100 Semiconductors	15.46	15.14
14 Biotechnology	39.92	30.4	57 Lodging	21.26	19.66	101 Shipping & Ports	-11.14	-9.38
15 Broadcasting - Radio	17.43	28.13	58 Long-Term Care Facilities	24.59	15.35	102 Software - Application	13.25	14.74
16 Broadcasting - TV	19.83	10.05	59 Lumber & Wood Productio	14.84	16.1	103 Software - Infrastructure	13.85	11.4
17 Building Materials	17.06	9.61	60 Luxury Goods	12.4	20.95	104 Specialty Chemicals	22.67	24.27
18 Business Equipment	-2.24	1.74	62 Media - Diversified	28.2	24	105 Specialty Finance	4.06	6.67
19 Business Services	22.98	19.38	63 Medical Care	27.98	17.84	106 Specialty Retail	18.17	18.61
20 Chemicals	8.07	12.51	64 Medical Devices	21.31	13.65	107 Staffing & Outsourcing Serv	19.38	12.92
21 Coal	-23.1	-16.1	65 Medical Distribution	33.35	26.5	108 Steel	-15.12	-14.8
22 Communication Equipmen	11.75	4.16	66 Medical Instruments & Sup	24.05	15.86	109 Telecom Services	7.67	7.5
23 Computer Systems	9.3	-4.24	67 Metal Fabrication	0.06	4.32	110 Textile Manufacturing	17.43	15.1
24 Confectioners	17.1	19.21	68 Oil & Gas Drilling	-16.9	-10.8	111 Tools & Accessories	13.57	18.67
25 Conglomerates	31.77	15.22	69 Oil & Gas E&P	-3.64	2.31	112 Truck Manufacturing	13.17	11.46
26 Consumer Electronics	20.26	23.98	70 Oil & Gas Equipment & Serv	-0.4	4.99	113 Trucking	25.02	17.71
27 Contract Manufacturers	6.12	4.65	71 Oil & Gas Integrated	-2.78	2.25	114 Utilities - Diversified	13.06	11.8
28 Copper	-14.8	-2.84	72 Oil & Gas Midstream	14.81	18.91	115 Utilities - Independent Pow	9.17	4.58
29 Data Storage	11.08	12.3	73 Oil & Gas Refining & Marke	23.83	23.1	116 Utilities - Regulated Electric	17.89	12.7
30 Department Stores	9.08	10.15	74 Packaged Foods	18.07	15.72	117 Utilities - Regulated Gas	18.28	17.77
31 Diagnostics & Research	20.59	14.39	75 Packaging & Containers	20.22	17.55	118 Utilities - Regulated Water	9.05	15.49
32 Discount Stores	18.01	15.44	76 Paper & Paper Products	14.27	3.93	119 Waste Management	14.76	8.53
33 Diversified Industrials	13.89	14.76	77 Pay TV	24.15	24.76	Average Returns	15.4257	13.9475
34 Drug Manufacturers - Majc	20.3	14.78	78 Personal Services	14.45	12.72			
35 Drug Manufacturers - Spec	31.41	22.16	79 Pharmaceutical Retailers	33.34	22.76			
36 Education & Training Servi	-2.97	-6.47	80 Pollution & Treatment Cont	5.41	10.51			
37 Electronic Components	24.45	14.31	81 Publishing	20	12.44			
38 Electronic Gaming & Multi	12.51	8.71	82 Railroads	24.65	26.05			
39 Electronics Distribution	12.57	14.97	83 Real Estate - General	22.35	18.85			
40 Engineering & Constructio	0.1	3.42	84 Real Estate Services	20.68	18.6			
41 Farm & Construction Equip	-5.08	7.49	85 Recreational Vehicles	21.13	25.68			
42 Farm Products	17.43	13.62	87 REIT - Healthcare Facilities	17.48	18.53			

Source: Morningstar.

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CHAPTER 3

DISTRIBUTIVE JUSTICE: AN ISLAMIC PERSPECTIVE

Hossein Askari

Propositions for a Just Society

Throughout Western history, “justice” has been deemed a noble virtue, independent of any religious belief and a virtue that all governments should uphold. Today what we commonly refer to as justice may be broadly divided into two parts: *commutative justice*, the effective prevention of harm to members of society and to their property by others; and *distributive justice*, the “just” division of the economic pie (production and wealth) among members of society, including owners of capital, workers, those who cannot provide for themselves, and animals. The conception of commutative justice has remained more or less intact through time, and it is generally agreed that governments have a critical role to support and enforce commutative justice. On the other hand, the conception of distributive justice has evolved, is evolving, and is far from settled.

Distributive justice has been a preoccupation of all humans and their societies from the dawn of time. Why does it matter? Shared prosperity—whereby we all simultaneously prosper together—is appealing because it is seen as just. Distributive justice determines our material well-being. It affects the political system—and the political system and process, in turn, affect distributive justice. It shapes our attitude toward members of society and to society at large. It shapes our judgment of what we conceive as fair—including hard work resulting in commensurate rewards and a fair chance of getting ahead. It shapes our willingness to invest in oneself through formal and informal education to increase our productivity. It is an important factor in social harmony and can lead to division or cohesion among the members of the community. In turn, how we perceive these issues influences our state of mind, our trust in society, our work habits, our perception of the political system and in turn our participation, and ultimately our overall personal fulfillment on this plain of existence. More broadly, it could be claimed that justice brings harmony and peace to societies and countries, whereas injustice brings conflict and turmoil. Even more broadly, a society or a nation at peace may be also more likely to be at peace with its neighbors.

While Western thinking on distributive justice has evolved from the time of Aristotle to the present, the Islamic framework and conception of a just society has not changed with time because Muslims believe that the *Qur’ān* represents Allah’s (swt) Divine words and is immutable over time. The foundation of the Islamic political, social, and economic

system was laid down centuries ago in the *Qur’ān* and interpreted and briefly practiced by the Prophet Mohammad (sawa) in Medina, with the Constitution of Medina standing as its written foundation and proof of its practice. The basis for justice in the *Qur’ān* is that societies do not need a separate theory of justice, such as those espoused by Marx, Rawls, and others, but that compliance with rules of behavior handed down in the *Qur’ān* and interpreted by the Prophet assures the emergence of justice as a *natural outcome* of the practice of a rule-compliant society. Justice and a just social and political system are thus essential outcomes of the Islamic system if Muslims comply with Divine rules. Simply stated, a society will be just if the rulers and the people are rule-compliant. Justice, or *‘adl*, literally means placing things in their rightful place and also affording equal treatment to others. In other words, Islam has two simple propositions for a just society: place things in their rightful position, and give everyone their rightful due. The first can be merged into the second. The rightful place and right dues are guaranteed by compliance with the rules.

The Evolving Western Conception of Distributive Justice

Scholars have struggled to develop theories of distributive justice (a phrase that has its origins with Aristotle and is to be contrasted with commutative or corrective justice) for over two millennia. The list of renowned philosophers and economists who have contemplated distributive justice is long. It includes Socrates, Plato, Aristotle, Thomas Aquinas, Marcus Tullius Cicero, Hugo Grotius, Gershom Carmichael, Samuel Pufendorf, Thomas Hobbes, John Locke, Jean Jacques Rousseau, Immanuel Kant, Frances Hutcheson, David Hume, Adam Smith, Auguste Comte, Henri Saint-Simon, Georg Wilhelm Friedrich Hegel, Gracchus Babeuf, Karl Marx, Jeremy Bentham, John Stuart Mill, Alfred Marshall, John Bates Clark, Herbert Spencer, Friedrich Hayek, Milton Friedman, John Rawls, Ronald Dworkin, Robert Nozick, Amartya Sen, Martha Nussbaum, Gerald Cohen, and many more that would take too much space to list. Still, the debate rages on and is far from settled. Meanwhile, as Samuel Fleischacker has illuminated in his 2004 book, *A Short History of Distributive Justice*, the conception of what we mean by distributive justice in the West has been turned upside down and transformed over the centuries.⁽⁴²⁾

From Aristotle to philosophers in the mid-eighteenth century, distributive justice “... referred to the principles ensuring that deserving people are rewarded in accordance with their merits, especially regarding political status.... [It] was widely believed for a long time that certain kinds of people *ought* to live in need, that they would not work otherwise, or that their poverty was part of divine order”.⁽⁴³⁾ “Above all, the ancient principle has to do with distribution according to merit while the modern principle demands a distribution *independent* of merit”. “Moreover, to most premodern moral and political thinkers the poor appeared to be a particularly vicious class of people, a class of people who *deserved* nothing... it was to be bestowed as a matter of grace... of the giver.”⁽⁴⁴⁾ Thus all the philosophers referred to here before the mid-eighteenth century and people in general did not believe in the equality of humans, nor did they believe that human equality meant equality of access to political, social,

42) The development in Western thinking on distributive justice from Socrates to Smith presented here is based on this book.

43) Fleischacker 2004, 2.

44) Fleischacker 2004, 7–8.

and economic goods. The distribution of the economic pie was not an issue for justice and thus for distributive justice as it is thought of today.

For Aristotle, justice was an appropriate balance that may at times require rebalancing. More broadly, mainstream Western thinking about justice is, and has been, that it is a secular virtue. Aristotle was the first to differentiate between natural law and divine law. The law that all human share, or natural law, "...suggests that people can transcend differences in religion, culture and philosophy for the purpose of public order... Faith is necessary to accept the divine law, say Aquinas and his followers, but all human beings, whether Christian or not, can and should grasp the natural law."⁽⁴⁵⁾ Cicero in his *De Officiis* embraced justice as a virtue grounded within the inner psyche of humans and closely linked to the natural law. Aristotle's delineation of natural and divine law passed on through the ages and was adopted by Thomas Aquinas in the thirteenth century and was later recast by Hugo Grotius in the beginning of the seventeenth century.⁽⁴⁶⁾ Grotius renamed the two kinds of justice as "expletive" and "attributive": the former being legally enforceable, but not the latter, which he also views as "law of love." He associates the law of love with the law of the Gospels; naturally, love *cannot* be enforced.⁽⁴⁷⁾ Frances Hutcheson, who had a profound influence on Adam Smith, distinguished between "perfect" rights (commutative) and imperfect rights (distributive), a delineation that Adam Smith adopted. But importantly, justice did not mean equality and was not seen as enforceable by the state.

The change in Western thinking about distributive justice came around the time when Adam Smith was passing away, according to Fleischacker. More precisely, Fleischacker argues that Smith was the last great philosopher to refer to distributive justice in a way that it had been essentially thought of since Aristotle. Namely, when Smith inherited the concept of natural law, distributive justice had been a *private virtue* (and part of a broader set of social virtues), which relied on *private beneficence* and had little or nothing to do with the state, the distribution of goods or property, and state enforcement to achieve justice. "And according to the tradition that had drawn this distinction," Fleischacker notes, "distributive justice had little or nothing with property arrangements. Not a single jurisprudential thinker before Smith [including Smith]... put the justification of property rights under the heading of distributive justice."⁽⁴⁸⁾

Adam Smith, while vividly acknowledging the injustice and pain of inequalities on the poor, continued to strongly support absolute private property rights. He argued, along the lines of David Hume, that the poor worker in a market-based economy with strong private property rights—but with inequality—was still better off than the worker in a more egalitarian society that did not respect private property rights. This justification was a precursor to the theory proposed by John Rawls some 200 years later, where *inequality would be tolerated as long as it was to the advantage of the poorest members.*⁽⁴⁹⁾ Moreover, all references to redistribution of property were justified on the basis of reducing corruption, conflict, and crime; promoting

45) Fleischacker 2004, 11.
46) Fleischacker 2004, 22.
47) Fleischacker 2004, 23.
48) Fleischacker 2004, 27.
49) Fleischacker 2004, 39.

harmony; and preventing wealth getting in the way of the true meaning of life on earth. *But the redistribution of property and goods was not premised on justice.*⁽⁵⁰⁾

As mentioned, the significant shift in Western thinking on distributive justice did not come about until the end of Adam Smith's life. But it must be emphasized that Smith, while not recommending the redistribution of private property, championed the view that all humans had similar talents but dissimilar opportunities to develop them. Smith was strongly in favor of affording everyone an equal opportunity to develop his or her talents as this would improve and distribute economic prosperity. Fleischacker sums up the prevailing condition at the time of Smith's passing: "The Dominant—and almost entirely unquestioned—view was that poor people deserved to remain poor. To find the idea that people have a right to rise out of poverty, we need to turn to the eighteenth century."⁽⁵¹⁾

It was the a change in social attitudes and technology that sparked the notion that poverty could be eradicated, in turn giving birth to the modern notion of distributive justice , according to Fleischacker. This spark was crucially supported by the philosophical writings of Adam Smith, Jean-Jacques Rousseau, and Immanuel Kant. It was the writings of these philosophers, especially Rousseau, which underpinned the change in attitudes that humans were equal, that wealth corrupted morality and the political process, which emphasized the importance of schooling. They stressed that the poor had the same native abilities and would develop the same skills as the wealthy if educated (Smith), and the equal worth of all humans. In this view, the state has an important role in addressing inequalities because state intervention has moral advantages over private charities (Kant). All this leads to Gracchus Babeuf's expression that all humans had a right to all wealth—a radical expression for its time. "Babeuf, the leader of an abortive coup attempt [in France] in 1796 ... first explicitly proclaimed that justice requires the state to redistribute goods to the poor."⁽⁵²⁾

While Babeuf's proclamation provided a compass, it still took over 150 years to get to John Rawls' theory, arguably the most heralded modern Western theory of distributive justice. Many decades after Rawls' theory first appeared, we have the moral basis for distributive justice but no general consensus on the theory of distributive justice—much less how to implement it in a world of growing inequalities. But before we get to Rawls and the Islamic vision, a few words about Utilitarianism.

In economics, it is assumed that a free market that operates on the basis of the self-interest of its participants promotes the general interest of all. Based on a utilitarian concept, welfare economics developed the analytic position that in such a system, in which prices were determined by the free interplay of supply and demand, all factors of production would receive rewards commensurate with their marginal contribution to the production of goods and services. Vilfredo Pareto, a member of the Marginalist School, demonstrated analytically that in such a system "social welfare" would be optimal. Beyond this point, any attempt to increase rewards for any factor of production would lead to suboptimality. Therefore, at such equilibrium, actions or policies to move away from such a market solution could be justified

50) For the sake of brevity, we have omitted a discussion of justice in religions other than Islam.
51) Fleischacker 2004, 52.
52) Fleischacker 2004, 55.

if, and only if, at least one person were made better off without anyone else being made worse off. This simplified version of the Pareto rule is, in effect, the criterion of just distribution based on utilitarianism. It is important to note that the initial resource endowments, as well as the preferences of individuals, are taken as a given.

Unhappy with utilitarianism, John Rawls searched for an alternative principle of distribution, relying on the concept of the social contract—a procedural approach that assumes some key features of what is fair and impartial in order to arrive at what would be considered a just outcome. After considering the main characteristics of justice as fairness and the theoretical superiority of this approach to utilitarianism, Rawls settles on two principles of justice, where members of society, with different concepts of good and just, can all agree to cooperate with one another and form a social compact because of mutual advantage—and not because of love or pursuit of justice.

Rawls identifies two principles. The first (the Liberty Principle) guarantees the right of each person to have the most extensive basic liberty compatible with the liberty of others. The second (the Difference Principle) states that social and economic positions are to be organized such that they are reasonably expected to be to everyone's advantage, and attached to positions and offices open to all. Sequential ordering is necessary for Rawls to rule out the possibility that a departure from the first principle of equal liberty could or would be compensated by greater economic advantages; these principles apply to the "basic structure of the society," defined as the bifurcation of social institutions; one set of institutions "define and secure the liberties of citizenship" and the other "specify and establish social and economic equalities."⁵³ He considers people in the Original Position, where each person wants to pursue his or her own advantage in a procedure that is made fair to all because of moral impartiality and a sense of fairness through the so-called Veil of Ignorance, with no information on their race, gender, class, birth, age, or where they will end up in the choice that they make about the rule of distribution.

Rawls argues that the Difference Principle would lead the unknowing chooser that is, unknowing as to whether she or he would happen to end up in the least desirable position) to choose that allocation that maximizes the opportunities for the group of citizens with minimum advantage. Assuming a Veil of Ignorance, the logic of this choice is clear. Since no one knows whether or not they will end up being a member of the least privileged group and since all are rationally self-interested, they would agree that all opportunities should be distributed equally unless unequal distribution would benefit the least advantaged. This principle then allows comparisons between societies with respect to their distributive justice. A society is just if the least advantaged in the society are at least as well off as the least advantaged would be in any other alternative (again, recall Adam Smith's premise in support of the market system mentioned above). Rawls' theory of justice touched off debates that continue today, after more than four decades.

There are those who agree with his basic idea that justice means equality in the allocation of "primary goods" to all people, but who differ about how to compensate those who are

53) Rawls 1971

disadvantaged; among these are Ronald Dworkin, John Roemer, Paul Gomberg, and Amartya Sen. Dworkin proposes that economic resources should be equal to the point where any remaining inequalities are due to individual choices: that is, society should compensate those who are disadvantaged because of factors not under their control. Gomberg criticizes the positions of Dworkin and Roemer as well as others who base their concept of justice centrally on what they consider to be the "morally significant difference between the effects of chance and those of choice." He argues that in this view "a society would minimize the rewards and penalties of chance, but allow us to suffer (at least some of) the consequences of our own choices." He believes that this approach is intended basically "to sanctify the social order by assuring us that there was nothing wrong with the society and that anyone in a worse-off position was there as a result of his own choice and, hence, had only himself to blame." Thus such proposals are intended to cover up the deficiencies of the social order. Gomberg argues that social outcomes in a society—for example, employment in high- or low-paying jobs—are explained by two factors: a person's autonomous choices and the way social institutions are organized. If people have advantaged positions in a society of "equal opportunity," it is, then, because of their own "autonomous" choices. This would also be the case of those who are in disadvantaged positions.

Robert Nozick, another critic of Rawls, argues that the justice of a distribution framework must focus on the processes rather than outcomes. Since the outcome is the result of the process, the justice of a particular outcome depends on the processes that led to it. If the process is just, the outcome is just. People are entitled to their wealth if it is obtained through fair processes and procedures, regardless of whether or not they deserve it. This principle of entitlement would have absolute priority, even above the needs of the most deprived members of society. This absolute right of entitlement to wealth that is obtained through fair procedures gives the wealth-holder the right to reject any attempt at redistribution—say, through taxation.

To Sen, capabilities represent the real opportunities individuals have to lead or achieve a certain type of life. Functionings, on the other hand, represent the actual life they lead. Defining development as a process that promotes human well-being then would mean expansion of the capabilities of people to be and to flourish. In this framework, freedom is "the real opportunity we have to accomplish what we value." Consequently, in the concept of development as freedom, progress is assessed primarily in terms of whether the freedoms that people have are enhanced. Sen's capabilities and functioning approach shares much in common with Rawls. But a major difference is that Sen argues that all goods, including those that Rawls considers "primary goods," are inputs to a person's functionings. These are the set of actions and states a person performs and enjoys. Equality for Sen means equalizing the "capability set": the set of functionings from which a person chooses.

Ananta Kumar Giri argues that Sen neglects the development of the "self." Geri maintains that self-development is a crucial aspect of societal development, without which Sen's approach would not succeed. John Cameron criticizes Sen for focusing only on the poor and lower levels of income, while ignoring or neglecting the upper levels of income and the impact of income inequality on the development of capabilities; he argues that in so doing,

Sen deemphasizes the need for radical income distribution that would correct the patterns of functionings in society. Cameron asserts that the functioning of the affluent in society is harmful to the well-being of the rich as well as the poor. The functioning of the affluent, particularly in its acquisitive dimension and its attendant concepts of “consumerism” and “over consumption,” result in damage to the well-being of the society. Thomas Pogge presents a strong case that affluent functionings damage human well-being and that the behavior of the affluent is a direct cause of the underdevelopment of poor countries.

Before discussing the content of distributional justice in Islam, it may be helpful to emphasize a condition explored by David Hume in *An Enquiry Concerning the Principles of Morals* and discussed by Martha Nussbaum: namely, *when distributive justice is not an issue or a binding constraint*.⁽⁵⁴⁾ Hume identifies four cases where either there is no need for justice or where justice is ineffective:

Case 1. No scarcity, no work, no competition, no need for justice

Case 2. Scarcity, unlimited human benevolence and generosity, no need for justice

Case 3. The opposites of Case 1, where the human condition is so bad that cooperation cannot achieve anything, justice cannot take hold

Case 4. The opposite of Case 2, where humans are utterly wicked and cannot conform, justice is ineffective.

In other words, as Nussbaum notes, “...justice has a point only when there is a moderate but not desperate scarcity of possessions and when human beings are selfish and competitive, with bounded generosity, but also capable of limiting their conduct. That Hume believes to be our actual situation.” She quotes Hume: “The rules of equity or justice depend entirely on the particular state and condition in which men are placed, and owe their origin and existence to that utility, which results to the public from their strict and regular observance.” Nussbaum goes on to note that “Justice, then, is a convention whose utility is directly related to the circumstances, physical and psychological, in which we are placed. And Hume further stresses that among those circumstances is a rough equality of power among human beings.”⁽⁵⁵⁾ Hume’s observations are important, but are also relevant when we examine Islamic teachings and the Islamic vision of justice and distributive justice, in part because Muslims are to believe that The Creator gave humankind sufficient resources to thrive on this earth as long as they shared the Creator’s gifts.

The Islamic Paradigm

Hume’s observations about the conditions where justice is an issue—conditions of scarcity and the nature of the human condition—provides the perfect background for assessing the Islamic framework and vision for humanity. This section first looks at foundational Islamic teachings, human development in Islam, and the rules and institutions that underlie the

54) Nussbaum 2006, 46–48.
55) Nussbaum 2006, 47.

conception of distributive justice. The next section discusses the rules that directly affect the elements and contours of distributive justice in Islam.⁽⁵⁶⁾

The Unity of Creation and Freedom of Choice

Islam is a rules-based system, with rules prescribed by Allah (swt) and explained and implemented by His Messenger, the Prophet Mohammad (sawa). There are four fundamental concepts supporting the Islamic system.

The first is *Walayah*, the unconditional, dynamic, active, ever-present Love of the Supreme Creator for His Creation, manifested through the act of creation and the provision of sufficient resources to sustain life. Humans reciprocate this Love by extending their love to other humans and to the rest of creation. *Walayah* is love manifested through knowledge and the upholding of justice.

The second concept is *karamah*, human dignity. The *Qur’ān* considers humans to be the crowning achievement of the creation, for whose individual and collective development everything else has been created. Humans are endowed with intelligence to know their Creator, to recognize and appreciate the universe and everything in it, and to understand the reasons for their own existence.

The third concept is *meethaq*, the primordial covenant in which all humans are called before their Supreme Creator and asked to testify that they recognize in Him the One and Only Creator and Sustainer of the entire creation and all other implications flowing from this testimony.

The fourth concept is *khilāfah*: agency-trusteeship. Jointly, *Walayah* and *karamah* provide the basis for *khilāfah*. *Khilāfah* is the empowerment of humans by their Creator as agent-trustees to extend *Walayah* to one another, materially through the resources provided to them by the Creator, and nonmaterially through unconditional love for their own kind, as well as for the rest of creation.

The unity of mankind is an important scaffolding in Islam and affirmed in a number of verses of the *Qur’ān* [1: 4; 13: 49; 28: 31].⁽⁵⁷⁾ These verses, plus those dealing with the availability of resources as well as human endowments, are the foundation of the legislative framework of rules (institutions) for the socioeconomic-political behavior of humans.

The overarching importance of unity is in turn reflected in distributive justice. Resources are created for all humans. The diversity of humans does not and should not mean their disunity. They also have full cognition of their responsibility to maintain the unity, solidarity, and integrity of creation through their service to humanity and to the rest of creation. *The most important dimension of the adoration of Allah is removing barriers on the path of other humans*. For example, poverty and destitution are barriers for the poor on their path to reach perfection. Removing these barriers from the path of the poor is a demonstration of

56) This section is adapted from Mirakhor and Askari (2010), which provides further detail.
57) Qur’ānic verses are referred to in the text as [verse: chapter].

Walayah—as in politics, by standing up for justice to ensure that no human is deprived of the freedom of choice.

Human and Economic Development in Islam

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. The first specifies a dynamic process in the growth of the individual toward perfection. The second specifies the utilization of natural resources to develop the earth to provide for the material needs of the individual and all of humanity. The third concept refers to the progress of the human collectivity toward full integration and unity. Fundamental to all three is the belief that the Supreme Creator has provided the ways and means to facilitate the achievement of all three dimensions of development.

For physical development of the earth, the Islamic view would suggest that the Almighty would not give humans insufficient resources to perform the duties expected of them. Indeed, the *Qur'an* makes it clear that Allah has created sufficient resources to meet the needs of all humans at any time and He has done so dynamically, meaning that this sufficiency holds regardless of time frame and population [49: 54; 8: 13; 3: 65; 21: 15]. Consequently, the assumption that at a general (macro) level humanity faces scarcity would be untenable. This, however, may not be the case at the local or micro level (Zaman 2005a, 2005b; Barrera 2005; Marglin 1998).

As one of the important tests of human experience on this plane of existence, individuals and groups of humanity experience conditions of plenty, as well as conditions of scarcity [15–18: 89; 37–42: 30; 34–36: 34]. Allah's rules specify the appropriate response to these conditions. Allah tests some through opulence and others through poverty. In wealth, do humans thank the Almighty by living modestly and sharing with the less fortunate? In poverty, do humans exhibit endurance and patience and still continue to be grateful to their Creator for what they have?

The Islamic view of scarcity is thus subtly in contrast to that in conventional economics, where there is never enough to go around. *According to Islam, there are sufficient resources—if individuals share.* Sharing is an important precept in Islam. With regard to exhaustible resources, Islam teaches that these are the heritage of all generations, and current generations must preserve the right of future generations—for every individual in each generation to reap the same benefit. Robert Solow reached a similar conclusion in conventional economics when he said: “The finite pool of resources (I have excluded full recycling) should be used up optimally according to the general rules that govern the optimal use of reproducible assets. In particular, earlier generations are entitled to draw down the pool (optimally, of course!) so long as they add (optimally, of course!) to the stock of reproducible capital” (Solow 1974). Property rights and ownership are addressed in more detail below.

When it comes to the development of the human collectivity, the *Qur'an* recognizes legitimate authorities in an Islamic society. The important point is that it is only the rule-

compliance of those in authority that legitimizes them to oversee the implementation of the prescribed rules. Believers are the first to recognize the strength of the belief in such people and then exercise their free choice to follow and obey them. The Islamic concept places great emphasis on the need to focus human energy on the achievement of social solidarity and unity. The fundamental objective of creation is to create a society in which individuals become cognizant of all their capabilities, including the spiritual. The final objective of such a society is to ensure the actualization of the capabilities of humans to progress along the path to perfection toward their Creator.

Institutional Economic Structure (Rules of Behavior)

Corresponding to the objectives of the messengers and prophets, humans are to listen to the revelation with the aim of internalizing the rules of behavior (institutions) prescribed in the message, cleanse themselves of character traits unworthy of the human state, develop the earth (*Qur'an*, 11:61), establish social justice (57:25), and finally, move from darkness into light (2:257; 5:16) and help others of their kind do the same. Humans can achieve all these outcomes by being fully rule-compliant. These objectives are closely linked to the conception and implementation of distributive justice in Islam.

The Prophet promulgated rules of behavior during his ten years in Medina, which included rules for governance, accountability, and transparency; property ownership and protection; formation and the structure of the market; the role of the state in the market; behavior by market participants; distribution and redistribution of goods; education, technological progress, and society's infrastructure; and rules for sources of government income and its expenditures. The central axis of design and operation of these rules is justice, with responsibility for the individual and the collectivity, and emphasizing the equality of individuals before the law.

The Prophet clarified rules of property rights over natural resources, and as we shall see, these rules shape the boundaries of distributive justice in Islam. Property relations are governed by key rules regarding rights and obligations.

The first rule governing property relations is that everything in creation, including humans, is the property of the Creator. He has created natural resources for the benefit of all of mankind.

The second rule asserts the rights of the human collectivity to these resources: *He it is who created for you all that is in the earth* [29: 2]; and: *Do not give your resources that Allah has made you (responsible as) its preserver on to the foolish* [5: 4]. These two verses, and a number of others, establish the right of access to these resources by all humans.

The third rule establishes that once the property is accessed and combined with work by individuals, a full right of possession of the resulting product is established for the individual without either the Creator losing His original property right or the collectivity losing its initial right of possession to these resources.

The fourth rule recognizes only two ways in which individuals gain legitimate property

rights: through their own creative labor; and/or through transfers—via exchange, contracts, grants, or inheritance—from others who have gained the property rights title to an asset through their own labor. Therefore, work is the basis of the acquisition of right to property. Work, however, is not performed only for the purpose of satisfying one’s desires; it is considered a duty and an obligation. The importance of work has been emphasized in over 300 *Qur’ānic* verses and reflected in the *Sunnah*.

An important corollary of the importance of work is a fifth rule that forbids gaining instantaneous property rights without having worked to earn them, with the exception of lawful transfer. This rule prohibits property rights gained through gambling, theft, earning interest on money, bribery, or, generally, from sources considered unlawful [188: 2; 29: 4]. Although Islam prohibits debt-based contracts, it embraces a contract of exchange that allows risk sharing and consumption smoothing [275: 2; 29: 4].

Just as work is a right and obligation of all humans, so is access to and use of natural-physical resources. If an individual, for whatever reason, lacks the ability to work, it does not deprive that individual of his or her original right to resources granted to every human.

Therefore, the rule of the “immutability of property rights” constitutes the sixth rule of property relations. Before any work is performed on natural-physical resources, all humans have an equal right and opportunity to access these resources. When individuals apply their creative labor to resources, they gain a right to priority in the possession, use, and exchange of the resulting product, without nullifying the original property rights of the Creator or the rights the Creator granted to all humans in the final product or the proceeds from its sale. This is the justification for the rule of sharing [33: 4; 180: 3; 36-37: 4; 5-11: 92].

The duty of sharing the product or the income and wealth proceeding from its sale constitutes the seventh rule of property relations: that is, *property* ownership rights as a trust. This rule is operationalized through the ordained duties imposed on income and wealth, which must be paid to “cleanse” income and wealth from the rights of others. This is perhaps the reason why the *Qur’ān* refers to these duties as *zakāt*, from the root word meaning cleansing and purification, akin to tree pruning that simultaneously rids the tree of its undesirable parts and allows its further growth.

The eighth rule imposes limitations on the right of disposing property—a right that is presumably absolute in the Western concept of property rights. In Islam, individuals have a severely mandated obligation not to waste, squander, or destroy, or to use property for opulence or unlawful purposes, such as bribery. Once the specified property obligations are appropriately discharged, including that of sharing in the prescribed amount and manner, property rights on the remaining part of income, wealth, and assets are held sacred and inviolate and no one can force their appropriation or expropriation.

While these eight rules strongly affirm mankind’s natural tendency to possess—particularly products resulting from individual labor—property obligations promote interdependence and cohesion among the members of society. Private initiative, choice, and reward are recognized and acknowledged as legitimate and protected, but are not allowed to subvert the obligation

of sharing.

There is a difference between legal ownership (legal title) and possession. The Almighty has given all exhaustible natural resources (such as oil, gas, and gold) to humanity of all generations. Thus the state, as trustee, should manage the development of all such resources. The state, however, could subcontract the development of these resources, but all proceeds must be administered in a way to afford equal benefit to humans of all generations.⁽⁵⁸⁾ Moreover, in our opinion, the “natural” component of rent on any physical gift from The Almighty (land, rivers, lakes, and the like) is to be shared, while the rent attributable to improvement and enhancement of such physical assets can accrue to the person or persons with title.⁽⁵⁹⁾ The moment of this opinion is highlighted below, where Joseph Stiglitz examines the causes of growing income and wealth disparities.

The *Qur’ān* fully acknowledges the important contribution of markets and places great emphasis on contracts of exchange and trade. The Prophet implemented a number of policies to enhance the market mechanism and to encourage the expansion of trade. While Medina had its own existing market, the Prophet, with the advice of the leading merchants, selected a location for a new market for Muslims. Unlike the existing market in Medina, the Prophet prohibited the imposition of taxes on transactions and individual merchants. He also implemented policies to encourage trade among Muslims and non-Muslims by creating incentives for non-Muslim merchants in and outside of Medina.⁽⁶⁰⁾

The moral-ethical foundation of market behavior prescribed by the *Qur’ān* and implemented by the Prophet was designed to minimize the risk for participants and increase the efficiency of exchange. Moreover, rules specified in the *Qur’ān* regarding adherence to the terms of contracts and the knowledge of their enforcement increased certainty and reduced transaction costs. The Prophet advised participants to go beyond mere rule-compliance and to treat their fellow humans with beneficence. While justice in the market would be served by rule-compliance, which limits and controls selfish behavior, beneficence rises higher by actually sacrificing one’s self-interest for the interests of others.

The Prophet emphasized that the exploiters of humans are always the rich, the powerful, and the opulent.⁽⁶¹⁾ The Prophet is constantly reminded in the *Qur’ān* that the crucial aspect of his own mission, and that of the prophets before him, is to establish justice. In practical terms, the *Qur’ān* is clear that this means creating a balanced society that avoids extremes of wealth and poverty: a society in which all understand that wealth is a blessing afforded by the Creator for the sole purpose of providing support for the life of all members of society. While the rich consume opulently, the poor suffer from deprivation because their rights in the wealth of the rich are not redeemed.⁽⁶²⁾ Islam ordains that what is left after one has reached a modest living standard must be returned to the less able members of society as an act of redeeming their rights [7: 57]. Therefore, while Islam ordains hard work, the development

58) This has been explained in detail elsewhere; see Askari and others (2006).

59) This reasoning to support this opinion can be found in Mustafa and Askari (1988). The edited volume in which this chapter appears (Munawar 1988) contains a number of dissenting opinions.

60) For the detailed rules, see Mirakhor and Askari (2010).

61) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 3, 285–318.

62) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 3, 211–14; vol. 4, 203–73.

of the earth and natural resources provided by the Creator, and the use of proceeds for the satisfaction of the needs of all humans, it prohibits the concentration of output in the hands of a few.⁽⁶³⁾ Operationally, such an economy can be defined as: the collection of institutions (described above)—that is, the rules of conduct and their enforcement characteristics—to deal with the allocation of resources, the production and the exchange of goods and services, and the distribution and redistribution of the resulting income and wealth to establish balance and justice in society.⁽⁶⁴⁾

Societies that reject Divine law have institutions and power relations that allow significant inequalities, which, in turn, lead to inequality of income and wealth. It is the institutional structure of society that allows a pattern of wealth accumulation, creating abundance for some and scarcity for many. This is what creates social divisions, not natural scarcity. It is the institutional structure of society that determines the resource endowments of its members, which, in turn, determine the structure of their preferences and ultimately their economic behavior. Such an institutional structure combined with a poorly functioning process of self-development, provides no opportunity for the self to transcend the focus of the self on “me and mine.” *Self-development is necessary to transcend selfishness.* The *Qur’ān* clearly states the need for “a revolution in feeling or motivation” [11: 13]. The revolution, as defined comprehensively throughout the *Qur’ān*, is a change toward compliance with the rules of just conduct for the individual.

Allah has ordained equal free access to resources by all humans and that the resulting income and wealth—which, by implication from the earlier principle, are also the Creator’s Blessings—must not be hoarded, but must be shared with those who are less able to access the initial resources.⁽⁶⁵⁾ This expenditure is over and above the mandatory portion of net income and wealth collected by the legitimate authority (*zakāt*, *khums*, and *kharāj*), and is referred to as *ṣadaqāt*, from the root word meaning truthfulness and sincerity.⁽⁶⁶⁾ Their faithful discharge indicates the strength of the sincerity of a person’s belief. These expenditures are essentially the repatriation and redemption of the rights of others in one’s income and wealth. It is for the good of the person paying them that they are ordained.⁽⁶⁷⁾ Since these expenditures are the repayment of what is the right of those who were unable, or less able, to access the natural-physical resources that the Creator has made available to all humans, it is as repayment of a debt, without which one’s wealth would be soiled. Redeeming these rights is a manifestation of one’s belief in the essential axioms of the Oneness of the Creator and His Creation. When one is granted the mental-physical capacity by the Creator to access more of these resources, it means others less able or unable to use these resources are in fact one’s partners, whose rights in the final post-production, post-market proceeds must be redeemed. The *Qur’ān* affirms that because these are rights to be redeemed rather than charity, extreme care must be taken of the recipient’s human dignity.

The next set of rules to be understood and internalized by individuals are those governing

63) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 4, 168–79.
64) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 6, 324–415.
65) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 6, 93–111.
66) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 5, 441–80; vol. 6, 33–92.
67) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 6, 66–75.

contracts, transactions, and trust among participants. The rules prescribed by the Law Giver and explicated and implemented by the Prophet were intended to enhance trust within the community and reduce transaction costs. In a very important tradition, the Prophet says: “Three (behavioral traits) if found in a person, then he is a hypocrite even if he fasts, prays, performs bigger and small pilgrimages, and says ‘I am a Muslim’: when he speaks, he lies; when he promises, he breeches; and when trusted, he betrays.”⁽⁶⁸⁾ There is a strong interdependence between contract and trust; without trust, contracts become difficult to negotiate and conclude, and costly to monitor and enforce. When and where trust is weak, complex and expensive administrative devices are needed to enforce contracts. When and where property rights are poorly defined and protected, the cost of gathering and analyzing information is high. Where trust is weak, it is difficult to clearly specify the terms of contracts and enforce them. In these cases, transaction costs—that is, search and information costs, bargaining and decision costs, contract negotiation and enforcement costs—are high. When transaction costs are high, there is less trade, fewer market participants, less long-term investment, lower productivity, and slower economic growth.

The Time-Independent Conception of Distributive Justice in Islam

As we said at the outset, one of the most important questions confronting humanity concerns the distribution of economic resources. The answer depends on the underlying concept of justice and fairness, which, in turn, depends on the belief system. In Islam, the concept of justice for humans is simple and unambiguous: justice is obtained when all things are placed where intended by the Creator! How are humans to know where the right (just) place is for everything? The answer is: follow the rules prescribed by the Creator.⁽⁶⁹⁾ By the instrumentality of His *Walayah*, the Loving Creator has provided all that is necessary for humans to achieve perfection of the human state. The Creator has also clearly designated the path to perfection and has marked it with rules of behavior in all facets of human life. Rule-compliance assures justice, which assures balance for individuals and for society. Compliance with rules, however, does more than create balance; it guarantees that humans draw near to their ultimate objective—namely, their Creator.

While Western thinking on justice has evolved from the time of Aristotle to the present, the Islamic framework of a just society has not changed with time because Muslims believe that the *Qur’ān* contains Allah’s Divine Words. The foundations of the Islamic political, social, and economic system were laid down centuries ago in the *Qur’ān* and briefly practiced by the Prophet in Medina, with the Constitution of Medina standing as its written foundation and proof of its practice. The Qur’ānic perspective is that societies do not need a separate theory of justice, such as those espoused by Marx and Rawls, but that compliance with rules of behavior handed down in the *Qur’ān* and interpreted by the Prophet assures the emergence of justice as a *natural outcome* of the practice of a rule-compliant society. Justice and a just political, social, and economic system is thus an essential outcome if Muslims comply with Divine rules. Simply stated, a society will be just in Islam if the rulers and the people are rule-compliant. In summary, as we have said before, Islam has two simple propositions for

68) Al-Hakimi, Al-Hakami, and Al-Hakami 1989 vol. 6; Iqbal and Mirakhor 2007, 35–38, 244–246, 298–302.
69) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 2, 2–25; vol. 6, 324–451; Qutb 1953.

a just society: place things in their rightful position, and give everyone their rightful due. The first can be merged into the second. The rightful place and right dues are guaranteed by compliance with the rules.

Again, the Prophet is constantly reminded in the *Qur'ān* that the crucial aspect of his own mission, and that of the prophets before him, is to establish justice. In practical terms, the *Qur'ān* is clear that this means creating a balanced society that avoids extremes of wealth and poverty: a society in which all understand that wealth is a blessing afforded by the Creator for the sole purpose of providing support for the life of all members of society. And in the widely acknowledged words of the Prophet: “*Authority may survive disbelief but not injustice.*” In the *Qur'ān*, Allah emphasizes how Allah Loves truth and justice: “*The word of thy Lord doth find its fulfillment in truth and in justice: None can change His words: for He is the one who heareth and knoweth all.*”⁽⁷⁰⁾ Again, the Prophet emphasized that it is always the rich, the powerful, and the opulent who are exploiters of other humans: who, in order to amass wealth, are the source of the persecution and suffering of the prophets and their followers.⁽⁷¹⁾ *Islam did not invent theories of justice, but is itself justice.*

The central goals of Islam for society are the welfare of all its members and socioeconomic justice. All members of an Islamic society must be given the same opportunities to advance: in other words, a level playing field, including equal access for *each* member of society in *every* generation to the natural resources provided by Allah. Those for whom there is no work and for those that cannot work, society must afford the minimum required for a dignified life: shelter, food, health care, and education. For those who cannot access the natural resources provided by Allah, society must preserve their rights, while preserving the rights of future generations. After attending to these rights, Islam emphatically admonishes extreme inequalities of wealth and income. Islam advocates an environment where behavior is molded to support the goals of an Islamic society: societal welfare and socioeconomic justice, with the goal of making humankind one, confirming the Unity of Allah’s Creation.

Allah could have easily created a world of total perfection inhabited by “perfect” humans who had no free will. But first and foremost, Allah gave humans freedom and freedom of choice: accountable, equal, and as one. Thus Islam is founded on freedom, equality, and justice; and thus the conception of justice in Islam is founded on freedom and equality of humankind (the Unity of creation).

Allah then gave humans bountiful resources that, if managed well and shared, could satisfy all human needs. While The Creator is the ultimate owner of all things in this world, the Creator has placed humans above all else and made them trustees. Humans, as trustees, must obey The Creator’s Rules. As we have said before, a result of these principles is that private ownership in Islam is different than that widely practiced in the West.

The *Qur'ān* identifies four natural elements (water, herbage, fire, and salt) for public ownership (Iqbal 1988, 12). Muslim scholars agree that the application of this principle is

70) Qur’ān 6:115

71) Al-Hakimi, Al-Hakami, and Al-Hakami 1989.

naturally more widespread and certain categories of resources are excluded from private ownership. But they differ on the extent of public ownership. In 1983, at the Second International Conference on Islamic Economics in Islamabad, my co-author, Ahmad Mustafa, and I argued that *all* natural resources have been given to all humans by The Creator for the enjoyment of *all* generations of humanity. This conclusion is based on the treatment of land ownership by the different schools of thought in Islam. Namely, land in its original state was a gift in trust to all generations of humanity and “thus economic rent (excluding imputed rent to improvement) belongs to society as a whole and should be distributed either equally or equitably among all members...Land which is unutilized for a specified period...can be used by another Muslim as long as he compensates the “owner” for his improvement, but the owner does not lose his priority of use” (Mustafa and Askari 1988, 124).

In our opinion, the same principle can be used for other natural resources. An individual can legally own the land, but the rent (excluding that imputed to improvements) belongs to all members of society. Again, the importance of this for the growing disparity of income and wealth will become clear in the next section. As for exhaustible resources, in our view, the Islamic prescription as mentioned earlier is similar to that formulated by Robert Solow—the benefits of resource depletion must be evenly distributed to all humans of all generations.

Given the rules governing property rights, work, production, exchange, markets, distribution, and redistribution, it is reasonable to conclude that in a rule-complying and Allah-conscious society, absolute poverty could not exist. The Prophet said that poverty is near disbelief and that poverty is worse than murder.⁽⁷²⁾ 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.

The central proposition of Islamic finance is the prohibition of transactions in which a rent is collected as a percentage of a principal amount loaned for a specific time period without the transfer of the property rights, thus transferring the entire risk of the transaction to the borrower. The alternative is risk sharing, which does not redistribute income and wealth to the rich,⁽⁷³⁾ allows borrowers and lenders to reduce the risk of income volatility, and enables consumption smoothing—a major outcome of risk sharing. While the beneficial and ethical attributes of Islamic finance are evident, most observers have unfortunately ignored the economic benefits. Indeed, in the years between the two great wars, eminent Western economists such as Keynes raised serious questions about the stability of conventional finance. More recently, a number of economists have again been questioning the assumptions of stability of conventional finance, its debt-based characteristics and leveraging, and its contribution and the impact of financial crises on income and wealth inequality.

The most important economic institution that operationalizes the objective of achieving social justice is the distribution-redistribution rule of the Islamic economic paradigm. In practical terms, the *Qur'ān* makes clear that this means creating a balanced society that

72) Al-Hakimi, Al-Hakami, and Al-Hakami 1989, vol. 4, 278–468; Qutb 1953.

73) See the discussion that follows and Korinek and Kreamer 2014.

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 humankind. 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 accumulation, imposing limits on consumption through its rules prohibiting overspending, waste, ostentatious, and opulent spending. It then ordains that the net surplus, after moderate spending necessary to maintain 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 *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 the 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 is the network of mandatory and voluntary payments. *Distribution* takes place post-production and sale, when all factors of production are given their due *commensurate with their contribution* to production, exchange, and sale of goods and services. *Redistribution* refers to the post-distribution phase when the *charge due to the less able are levied*. The expenditures (*sadaqāt*) intended for redeeming these rights indicate the strength of the sincerity of a person's belief (*Qur'an* 2:26, 2:272). So how is distributive justice defined in Islam? Justice is achieved when everything is put in its right place. And what is the right place? Following the rules laid down by the Creator.

Based on the Islamic vision elaborated in this chapter, we expect the ideal Islamic solution (if the rules were adhered to) to differ in the following important ways from the conventional capitalist market-based system: a greater degree of justice in all aspects of economic management; higher moral standards, honesty, and trust exhibited in the marketplace and thus lower transaction costs; the eradication of poverty; a more even distribution of wealth and income; no hoarding of wealth (particularly financial wealth); less opulence in consumption; leaders and rulers with lifestyles that reflect the lives of the disadvantaged; no exploitive speculation; risk sharing in all aspects of life, including in financial contracts (as opposed to debt and risk shifting); better social infrastructure and provision of social services; better treatment of workers; higher education expenditures relative to GDP; higher savings and investment rates; higher trade/GDP; higher foreign aid relative to GDP; a higher degree of environmental preservation; and vigilantly supervised markets.

Income and wealth redistribution has traditionally been seen as undermining growth, but increasingly empirical studies are finding a positive relationship between equality and growth. Much more research is needed to establish the relationship and its mechanisms,

including human qualities and values such as trust, cooperation, risk sharing, solidarity, and unity that are stressed in Islam.⁽⁷⁴⁾

Contemporary Concern with Income and Wealth Distribution and Distributive Justice

A 2015 Oxfam report contained the startling prediction that in 2016, 1 percent of the world's population would own 99 percent of its wealth! In another 2015 report, the Boston Consulting Group (BCG) reported that the 17 million millionaires (roughly 0.2 percent of the world population) controlled 41 percent of global wealth! The report further documented the fact that the global wealth gap was widening and the wealth of the super rich (those with more than \$100 million in liquid assets) was growing the fastest. In a recent paper, examining the concentration of wealth in the United States since 1913, Saez and Zucman (2014, p.2, Abstract) conclude:

“Wealth concentration has followed a U-shaped evolution over the last 100 years: It was high in the beginning of the twentieth century, fell from 1929 to 1978, and has continuously increased since then. The rise of wealth inequality is almost entirely due to the rise of the top 0.1 percent wealth share, from 7 percent in 1979 to 22 percent in 2012—a level as high as in 1929. The bottom 90 percent wealth share first increased up to the mid-1980s and then steadily declined. The increase in wealth concentration is due to the surge of top incomes combined with an increase in saving rate inequality. Top wealth-holders are younger today than in the 1960s and earn a higher fraction of total labor income in the economy.”

The deteriorating income and wealth distribution in the West, especially in the United States, has become an important political issue, in no small part because the political system is becoming increasingly compromised by the concentration of wealth. The increasing concentration of wealth and capital in the hands of a few, as implied in the forgoing studies, has been significantly illuminated by Thomas Piketty in his widely and rightly acclaimed book (with its details and conclusions in hot debate), *Capital in the Twenty-First Century*.

Piketty (2014) essentially argues that owners of capital (the wealthy) have fared much better than the vast majority of society over the past three to four decades, and will continue to do so, because the rate of after-tax return on capital has been, and will continue to be, higher than the rate of growth of the economy (GDP) that affects the average person. This favors those who derive their income from wealth (dividends and interest) as compared to those whose income comes from work. That is, the wealth and income of rentiers (the wealthy) has grown, and will grow, faster than for those whose income is primarily derived from standard work. We say primarily because there are also a new class of super financial and general managers whose pay packages are simply eye-popping. Moreover, wealth is much more highly concentrated among the rich than is income from labor; thus, the higher the share of income from wealth, the more unequal the distribution of income.

In a four-part series of insightful papers published in 2015, Joseph Stiglitz—while disagreeing with Piketty's conclusion for the cause of long-term growing and wealth disparity

74) See Al-Jarhi and Zarqa (2007) for details.

(as have some others)—concludes:

Neoclassical economic models (positing rates of return to factors of production) in combination with inherited wealth cannot explain the long-term trend in income and wealth distribution. Much of the changing pattern can be explained by exploitive rents (market or monopoly power, discrimination, taking advantage of imperfections in corporate governance laws and asymmetries in bargaining power between workers and firms, and a variety of forms of exploitation by the financial sector, including market manipulation, insider trading, predatory lending, and abusive credit card practices) and land rents.⁷⁵⁾

The intergeneration of transmission of advantage (by wealth, human capital, and connections) leads to an unlevel playing field. This has serious political and social consequences and introduces further distortions into the market.⁷⁶⁾

Much of the changes in income and wealth is due to changed policies and “... a politics shaped by inequality of political power which follows from and can amplify inequalities in economic power. The growing inequality in our society is thus a reflection as much of democracy in the twenty-first century as it is of capitalism in the twenty-first century.”⁷⁷⁾

“There is increasing recognition that the increase in the wealth income ratio and inequality is related to the increase in rents, and in particular the value of land, and to our financial system.... These two phenomena are in fact linked with each other; [the] increase in the value of land and the distribution of ownership claims may be related to the provision of credit by our financial system—and [changes] in the rules governing that sector and the conduct of monetary policy may have played an important role in the increase in inequality.... A central issue of wealth inequality is not just the proportion of overall wealth owned by the capitalists, but differences in portfolio composition. If the two groups differ in their risk aversion, then their asset holdings may differ markedly, and policies affecting the returns on these different assets have large distributional effects... There can be large distributive effects of monetary and financial regulatory policy, and these can be quite different from those reflected in traditional discussions: a lowering of interest rates benefits holders of equity—again the capitalists—but hurts holders of government bonds, disproportionately life-cycle savers. Traditional analyses would see a lowering of interest rates as adverse to the interests of the rich.”⁷⁸⁾

A number of Stiglitz’s conclusions concerning the long-term trend in growing income and wealth inequality are pertinent to the Islamic vision of economics-finance-distributive justice and deserve a brief discussion for their linkage. These reasons include the rising price of rents (land, political power, and other rent-seeking activities); the intergenerational transmission of advantage (by wealth, human capital, and connections); the financial system; the abstinence from consumption (hoarding of wealth in financial assets); and the broad impact of policies (regulations, taxation, and the like) that adversely affect equality. As Stiglitz notes, higher

75) Stiglitz 2015a, 30–31.

76) Stiglitz 2015b, 33.

77) Stiglitz 2015b, 35–36.

78) Stiglitz 2015d, 25–27.

land prices do not mean more societal wealth, and especially no additional real capital. The rich buy more scarce land and lock their capital in it and also in financial assets. As the prices of exclusive real estate (downtown Manhattan and the Hamptons—not some small house in rural areas of the United States) goes up rapidly, their wealth increases. The same can be said for financial assets that are supported by central bank policies. Thus the rich invest disproportionately in exclusive real estate and in financial assets, as opposed to investing in productive activities that would enhance growth (something that is admonished in Islam).

In our opinion, the Islamic ownership of land and other natural resources (Allah’s Gift to all) would *not* allow the wealthy to benefit from the growing scarcity of land (especially choice land) that belongs to all members of society—whereas imputed rent to improvements would accrue to the “landlord.” Moreover, severe Islamic prohibition of corruption and inequality of opportunity would rule out a second reason for rising rents (because of political power and other rent-seeking activities) affecting income and wealth distribution. Moreover, the recommended lifestyle for rulers in Islam (to reflect the lifestyle of those deprived among society) would encourage more even income and wealth distribution. Along the same lines, Islamic finance, by prohibiting interest and leveraging, would limit the gains from financial assets. Besides risk-sharing finance, the Islamic system would reduce the likelihood of financial crises, an element not mentioned by Stiglitz (but the focus of Mian and Sufi’s 2014 book, *The House of Debt*) in its adverse effect on the poorer segments of society.⁷⁹⁾

Islam’s rules of inheritance distribute wealth more equally across generations. Its insistence on the oneness of humanity would rein in the global disparity in wealth highlighted in the Oxfam report. The provision of equal access to a good education would eliminate another bias identified by Stiglitz. The prohibition of hoarding would benefit growth and moderate inequalities in income and wealth.

Most importantly, while Stiglitz highlights the adverse impact of policy on income and wealth, in Islam, the Divine rules for distribution, redistribution, prohibition against hoarding of wealth, treatment of land and other natural resources, and the risk-sharing basis of the financial system would eliminate much of the policy-driven reasons for growing income and wealth inequalities. Islamic teachings would also address what appears to be one of the latest reasons given by many for rising income and wealth inequality, at least in the United States since around 1980—men with high income prospects (from a combination of factors, principally education, but also other factors) marrying women with similar potential.⁸⁰⁾ Rules of distribution-redistribution, as well as others, would address this phenomenon as well.

Similarly, Islamic finance, a financial system based on risk sharing, would enable all members of society to benefit from financial deregulation—which has encouraged more risk taking, but with the rich benefitting from higher profits at the expense of the rest of society under the conventional financial system. In a recent paper, Korinek and Kreamer (2014, 25) demonstrate this point and go on to conclude:

79) Askari and Mirakhor 2015; Askari and others 2011; Mian and Sufi 2014.
80) For example, see Atkinson 2015.

“Deregulation benefits Wall Street by allowing for greater risk-taking and higher expected profits... Our results bring up the question of what type of financial innovation and financial regulation are most likely to increase the welfare of both Wall Street and Main Street, so as to achieve a Pareto improvement. Our findings suggest two promising directions that correspond to alleviating the two market imperfections in our framework: (i) innovations or regulatory interventions that increase risk sharing between the two sectors on both the upside and the downside. This reduces the distributive conflict over risk-taking because it allows for a more equitable sharing of the gains from financial risk-taking; [and] (ii) innovations or regulatory interventions that reduce the likelihood of hitting binding constraints, for example better capitalized banks, reduce the likelihood that financial risk-taking will lead to credit crunches that have real implications. This reduces the distributive conflict because it alleviates the negative externalities from Wall Street to Main Street during such episodes.”

Concluding Remarks

The contour of an Islamic economy is one where everyone who is able works hard, using knowledge to combine with their own labor and the resources provided by the Creator, to produce goods and services for society. Economic, social, and political affairs are conducted with the goal of removing barriers to the progress of all humans and in full compliance with rules, including those governing property rights, market behavior, exchange and trade, and contracts and trust. Knowing that they are responsible and accountable, individually and collectively, everyone invests allegiance in a legitimate authority to carry out their affairs, with the legitimacy of the authority established by rule-compliance. The rule “commanding the good and forbidding evil,” applicable to individuals and society, assures the full and active participation of all in the affairs of society. The existence of absolute and relative poverty, along with significant income inequality, is evidence of rule-violation and governance failure, for which members of society are individually and collectively responsible.

While conventional economics assumes scarcity of resources, Islam acknowledges scarcity only at the local level and views it as misdistribution of income and wealth resulting from noncompliance with the rules of conduct (not sharing). While conventional theory adopts an impersonal market as a given and assumes that consumers maximize their own utility and producers maximize profits, the Islamic vision, although embracing the market-based system and proposing rules that enhance its functioning, includes a spiritual and moral foundation that attaches overriding importance to the welfare of society and of each and every individual in this and in future generations. Risk sharing in finance and throughout the system is important in and of itself because it promotes trust and brings humankind closer together.

In order to generate genuine debate inside Muslim countries and thus be effective in bringing about needed change, the criticisms of their policies and practices must be framed around the contradictions and inconsistencies of the behavior of these regimes against the *framework they are espousing*. In this way, first establishing the Islamic framework for a just society and then proceeding to compare policies and practices to this framework, any errors or failures can be readily identified and attributed. It is the institutional structure of society and its policies that allow a pattern of wealth accumulation, creating abundance for a few and

scarcity for the many.

What would Adam Smith, the great philosopher, say if he were here today? Freedom is a must and people around the world must be free to pursue their dreams and opportunities. The market system is sound, but market capitalism is in crisis. All would-be capitalists should read the *Theory of Moral Sentiments* to establish their anchor and develop sympathy for others in all business dealings. The poorer segments of society have the same native abilities and could develop the same skills as the rich if given the chance. They should be given an equitable opportunity to succeed. This means equal access to a good education and a level playing field, with the role of connections and wealth minimized, where talent and hard work reign supreme as the determinants of success in life.

What would a twenty-first century moralists say? The world is adrift. A few have too much while many have too little, and little hope to develop and use their talents. Humanity is selfish, fragmented, and in conflict with itself. There is an urgent need for human development with morality as its compass. Islam has much to offer in this quest, but the failures of Muslim societies have not demonstrated anything that should be copied and emulated. Many Muslims rulers profess Islam but live a life and rule in ways that contradicts even the *Qur'an*. Fortunately for Muslims, they have the perfect roadmap—the holy *Qur'an* and the *sunnah* of the Prophet (sawa)—and all they need to do is to follow it individually and collectively.

What does Islam say? What it has said for centuries. Justice thrives and proliferates when everything is placed in its rightful place and is achieved by simply following the Divine rules. First, all humans should be given an equal opportunity to develop the self (in all dimensions as mandated by The Creator) in a free political system with equality and justice as its hallmark. In the absence of human development, it will be impossible to attain true justice on earth. Second, all members of society should individually and collectively follow the Divine rules that mandate everything to be put in its rightful place and give everyone their rightful due. The rules—especially those dealing with distribution and redistribution—will then achieve distributive justice. In this quest, the community must hold its leaders and rulers accountable to be more rule-compliant and to live the lifestyle of the disadvantaged in order to feel their pain.

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PART 2

**THE ROLE OF ISLAMIC FINANCE IN
DEVELOPMENT, SHARED PROSPERITY, AND
GROWTH**

CHAPTER 4

ISLAMIC FINANCE, THE SUSTAINABLE
DEVELOPMENT GOALS, AND SHARED PROSPERITY

Habib Ahmed

With the expiry of the Millennium Development Goals (MDGs), the United Nations launched the bold initiative of the Sustainable Development Goals (SDGs) in September 2015 to eradicate poverty by 2030. The SDGs correspond to the World Bank's vision of ending extreme poverty by encouraging growth that promotes shared prosperity. The World Bank defines shared prosperity as "fostering the well-being of the bottom 40 percent of the population" and measures it by "the extent to which the bottom 40 percent of the population takes part in and benefits from the process of economic development" (World Bank 2015a, 9). Along with enhancing growth and reducing income inequality, the World Bank envisions shared prosperity to be achieved by enhancing environmental, social, and fiscal sustainability (World Bank 2013a, 7), which coincides with some of the goals identified in the SDGs.

The SDGs are more ambitious than the MDGs, and it will be challenging for many countries to achieve them. In particular, the challenge will be more daunting for countries that did not fare well in achieving the MDGs. Many Muslim countries fall in this category; poverty is pervasive, and 700 million people in those countries live on less than \$2 a day (World Bank 2014, 38). While member countries of the Islamic Development Bank (IDB) will be on track to meeting 16 specific indicators of MDGs, they will be off track to meeting 29 key MDG indicators, such as poverty, income distribution, job creation, hunger, and nutrition, Bello and Suleman (2011, ix) report. They identify slow growth, the dearth of institutional reforms, lack of inclusive growth, uneven income distribution, and resource constraints as some of the factors inhibiting the achievement of MDGs by IDB member countries.

One of the key constraints in achieving the SDGs will be funding the huge investments that will be necessary to achieve the goals. At current levels of investment, the developing countries will face an annual gap of \$2.5 trillion to achieve the SDGs, the United Nations Conference on Trade and Development (UNCTAD 2014) estimates. Given the scale of funding requirements, promotion of sustainable development will need "significant mobilization of resources from a variety of sources and the effective use of financing," the United Nations concludes (UN undated, 3). It will also require the engagement of different stakeholders, including government, businesses, civil society, and the financial sector.

While the financial sector can play an important role in mobilizing resources, its contribution to achieving the SDGs and shared prosperity will depend not only on the quantity of financing

but on its quality. On the supply side, the financial sector needs to be inclusive and provide various financial services to the poorest 40 percent of the population so that they can improve their economic conditions and contribute to growth. On the demand side, an issue in Muslim countries relates to voluntary exclusion; a large segment of the population does not deal with the interest-based financial sector because of their religious convictions. Including this group in the financial system and development process will require providing them with financial services that comply with *shari'ah* (Islamic Law). This study examines the ways in which the Islamic financial sector can contribute to achieving economic aspects of SDGs and enhancing shared prosperity.⁽⁸¹⁾

THE FINANCIAL SECTOR AND SHARED PROSPERITY:

CONCEPTS AND FRAMEWORK

To understand the ways and extent to which the financial sector can promote shared prosperity, it is necessary to understand its nature and functions. A financial system performs certain core functions that are common to different financial structures and stable across time and place (Merton 1992).⁽⁸²⁾ The key functions of financial institutions that are relevant to achieving shared prosperity can be summarized as mobilizing savings/managing assets, allocating capital/financing, and managing risks. These are discussed below.

Mobilizing savings/Managing assets. Mobilizing savings from the resource surplus of households and firms, and allocating these savings to productive activities not only promotes growth but also provides important services that meet various financial needs of households and firms.

The short-term and long-term financial needs of households include emergency planning, money management, investment for goals, and inheritance and estate planning (Chieffe and Rakes 1999). The former two needs are dealt with mainly through savings, while the latter two rely mainly on asset management. Similarly, banks provide various financial services to businesses, including different types of accounts that meet their needs. Achieving these needs requires an appropriate and affordable range of products and services.

Allocating capital/financing. In performing its role of financial intermediation, the financial sector allocates capital and funds to both the household and business sectors. The financial sector fills the gap between consumption and income by catering to the short-term and long-term financing needs of the household sector.⁽⁸³⁾ In the business sector, one of the key functions of a financial system that enhances growth is promoting capital accumulation and technological innovation (Levine 1997). Firms need lump sums and long-term investments

81) Throughout this chapter, the term "shared prosperity" is used to mean both shared prosperity and the economic aspects of the SDGs.

82) Merton and Bodie (1995) identify six functions of financial system as managing risks; transferring economic resources; dealing with incentive problems; pooling resources; clearing and settling payments (to facilitate trade); and providing price information. Similarly, Levine (1997, 689) identifies the functions of a financial system as "the trading of risk, allocating capital, monitoring managers, mobilizing savings, and easing the trading of goods." The functions that a financial system performs can enhance growth by increasing saving and promoting capital accumulation and technological innovation (Levine 1997). The Bank for International Settlements recognizes that financial innovations perform the functions of "transferring risks, enhancing liquidity and generation of debt and equity" to meet the evolving financial requirements (BIS 1986, 8).

83) Pressman and Scott (2009, 2010) group the main types of consumer loans into five categories: loans to buy motor vehicles, education loans, instalment loans, credit cards, and other debt that can be both instalment and non-instalment loans.

to start and sustain their businesses. They also need short-term working capital to fill the mismatch between cash inflows and outflows, as well as financing to buy inputs, and liquid funds to cover operational costs such as paying rent, utilities, salaries, travel expenses, and marketing.

Managing risks. One of the main functions of the financial system is “facilitating the trading, hedging, diversifying and pooling of risk” (Levine 1997). Risks can be classified in different ways. The World Bank (2001) distinguishes between risks arising from shocks at the micro, meso and macro levels. While micro risks are idiosyncratic, arising at the individual household or firm level, (e.g. death, health problems, unemployment, default, bankrupt, etc.) the meso and macro risks are covariant risks that affect communities and national economies. Micro risks involve good and bad states that randomly occur for individual households/firms over a period of time. With covariant risks, group of individual households / firms face the same type of risks. Another way to view risks is those that arise exogenously or endogenously. Households and firms face certain external (exogenous) risks such as floods or drought. They protect themselves through insurance, among other defensive schemes such as building up savings and emergency funds. Households also proactively engage in various degrees of risky savings/investment activities, depending on their income levels and risk appetite (endogenous risks). Similarly, firms engage in business ventures that entail various types of risks such as market risk, operational risk, and liquidity risks.

The insurance industry protects individuals against external (exogenous) risks. The financial sector acts as the agent to manage their savings and provide appropriate risk/return profiles for investments. It also mitigates risks directly by providing risk management instruments and insurance services to the business sector, and reduces risks indirectly when allocating capital to firms by carrying out due diligence and monitoring.

The Financial Sector’s Contribution to Shared Prosperity

The financial sector can promote shared prosperity in three ways: by facilitating economic growth, decreasing income inequality, and reducing vulnerability.

Facilitating economic growth. While the positive impact of finance on growth at the aggregate level has been demonstrated empirically, the evidence at the disaggregated and sector levels is mixed.⁽⁸⁴⁾ The link between finance and growth is the strongest in middle-income countries, while the impact tends to decline for higher-income countries (Beck 2012). Recent work shows that for high-income countries, finance has a negative impact on growth beyond a threshold level (Arcand, Berkes, and Panizza 2015).⁽⁸⁵⁾ Whereas in most members of the Organization for Economic Cooperation and Development (OECD), higher equity financing boosts growth, higher levels of credit to the private sector slows growth (OECD 2015). Higher credit in the economy impedes growth more when it is channeled to the household sector than to the business sector (Beck 2012; OECD 2015). Thus financing

⁸⁴ For a review of the link between the financial sector and growth, see Beck (2012) and Levine (2005).

⁸⁵ The threshold level for private credit to GDP is around 100 percent, beyond which the relationship becomes negative (Arcand, Berkes, and Panizza 2015).

appears to have a greater impact on growth when it is channeled to enterprises rather than the households.

Decreasing income inequality. Though some aggregate-level studies show that the growth in the financial sector lessens inequality, recent work indicates that expansion of the financial sector increases income inequality (Denk and Cournede 2015). This is partly explained by the distribution of credit, whereby households with higher incomes benefit more than their poorer counterparts from credit-financed investments that increase their income (OECD 2015). Similarly, in the business sector, smaller and medium firms face more financial constraints than larger, better-off firms (Beck and Demirgüç-Kunt 2006). Thus while finance to the business sector promotes growth, the distribution of the financing among different sized firms determines the impact on inequality.

Reducing vulnerability. Reducing insecurity about the future is a key determinant of enhancing welfare (Cafiero and Vakis 2006). Risk and uncertainty increase insecurity; thus one way to increase sustainability is to reduce the vulnerability of households and firms. Vulnerability of a household or firm depends on the characteristics of the risk event and their ability to manage these. Households and firms subsisting at the margin are vulnerable; negative shocks can drive households back to poverty and make firms insolvent. The effects of risk events and shocks can be persistent and move households into poverty traps (Wheeler and Haddad 2005; Carter and Barrett 2006).⁽⁸⁶⁾

The way risks are shared in an economy has a great impact on growth and inequality. Greif, Iyigun, and Sassan (2011, 2012) examine the role of risk-sharing institutions in determining how societies evolve and grow. They assert that risk-sharing social institutions,⁽⁸⁷⁾ along with legal, political, and economic institutions, determine levels of technological development and growth. They examine how social risk-sharing institutions can—or cannot—promote and encourage risk taking in newer, more productive technologies, depending on the nature of those institutions. In particular, social institutions that provide support to the poor in the society reduce social disorder and threats of appropriation, thereby creating incentives to invest in new technologies that produce growth. Risk-sharing institutions can thus promote new knowledge and risk taking that enhances productivity.

The way in which risks are managed in any society plays an important role not only in determining growth and stability, but also in providing security to the poor. One of the keys functions of financial intermediaries is to manage risks when allocating capital. The insurance industry also plays an important role by directly mitigating different kinds of risks that the household and business sectors face. These institutions can help alleviate poverty if services can be provided to the poor to reduce their risks and vulnerability.

For the financial sector to contribute to growth, help distribute wealth more equitably,

⁸⁶ Using an empirical model, Dercon (2008) simulates the impact of weather-related covariate shocks in Ethiopia, and finds that it causes poverty to increase from 33 percent to 47 percent of the rural population. If all the shocks were insured, poverty would decrease to 29 percent.

⁸⁷ For a discussion on the role of social systems such as households and communities in reducing risks, see chapters 3 and 4 in World Bank (2013b).

and reduce vulnerability, however, the industry itself must be resilient and must be able to reduce its own risks. The global financial crisis highlighted the vulnerability of the financial sector and its detrimental impact on output and welfare; the monetary cost of the crisis has been estimated to be as high as \$15 trillion (Yoon 2012).⁽⁸⁸⁾ The financial sector can be more stable and resilient to shocks if it uses instruments that are less opaque, engages more with the real economy rather than in excessive financialization, and reduces its excessive levels of leverage and debt. The relationships of the functions that the financial sector performs and factors that can contribute to shared prosperity are shown in table 4.1.

Table 4.1 Functions of Financial Sector and Factors Affecting Shared Prosperity

	Mobilizing savings/ Managing assets	Allocating capital/Financing	Managing risks
Facilitating economic growth	Mobilizing financial resources for investments	Allocating capital for production	Avoid economic crisis and promotion of innovation
Decreasing income inequality	Asset management for poorest 40 percent of the population	Provide financing to the poor and micro and small enterprises	Protect the poor against downturns and negative shocks
Reducing vulnerability	Savings for emergencies	Reduce risk by monitoring and provide financing for short-term needs and emergencies	Provide insurance and protection against risks and uncertain events

THE FINANCIAL SECTOR AND SHARED PROSPERITY: FRAMEWORK AND EVIDENCE

To examine the role of the financial sector on shared prosperity, the household and business sectors are divided into two groups. The household sector is further divided into poor (the bottom 40 percent of the population) and non-poor (the better-off 60 percent of the population). The business sector is divided into micro and small enterprises (MSEs) and medium and large firms. MSEs predominate in lower-income economies, they are an important source of employment, and the people who work in them tend to have lower incomes. Thus the financial sector needs to better serve these enterprises to promote shared prosperity. The financial needs of poor households and MSEs, and how the financial sector serves these needs, are discussed next.

The Household Sector: Finance and Shared Prosperity

Using the notion of Maslow's hierarchy of needs, Xiao and Anderson (1997) identify three levels of financial products and services from a consumers' perspective. The first are *survival*

⁸⁸ The losses from the global financial crisis in the United States were in the range of \$6 trillion to \$14 trillion, researchers from the Federal Reserve Bank of Dallas estimate (Atkinson, Luttrell, and Rosenblum 2013).

products that satisfy basic needs. These include different kinds of deposits (checking and savings), mortgages, and financing required for emergencies, essential activities/items, and the like. Second, *security products* satisfy additional needs beyond the necessity level. These products meet cash reserve and risk management needs, and include insurance, pension plans, endowments, and time deposits. Finally, *growth products* offset inflation and protect against risk and taxes. These products include investment in equities, mutual funds, tax-protected bonds, and real estate.

The household sector's demand for these different types of products depends on income levels and risk preferences. To better understand the demand for these different types of financial services, the household sector can be classified into low-income, middle-income, and high-income groups. As the income level increases, the household sector's risk appetite tends to increase. Many low- and middle-income households are risk averse and prefer predictable income and expenditures. While all income groups need survival financial products, low-income groups will have less demand for security financial products compared to other two groups. The demand for growth financial products will mainly come from the high-income groups. Low-income and middle-income will have lower demand for high-return/high-risk savings and investment products.

Available data on financial services for different regions of the world show that the poorest 40 percent of population is underserved compared to their better-off counterparts. Furthermore, there is wide disparity in different regions of the world in financial services that people can access. Table 4.2 shows the percentage of the population that has an account with a financial institution—which is defined broadly to include not only banks but other nonbank financial institutions such as credit unions and cooperatives. The Middle East has the lowest percentages of people who have accounts, followed by Sub-Saharan Africa. The disparity of the financial engagement of the poorest 40 percent and the richest 60 percent of the population in the Middle East is apparent, as in the former group only 6.92 percent of the people have an account with a financial institution, compared to 18.63 percent for the latter group.

Table 4.2 Account at a Financial Institution, 2014

Percent of population, age 15+

Region	All	Poorest 40%	Richest 60%
World	60.70	53.30	65.70
High-income	90.63	86.88	93.19
Middle-income	57.10	48.67	62.79
Low-income	22.30	14.81	27.42
Developing countries only			
East Asia and Pacific	68.76	60.73	74.22

Europe and Central Asia	51.38	44.16	56.32
Latin America and the Caribbean	51.14	40.92	58.05
Middle East	13.97	6.92	18.63
Sub-Saharan Africa	28.90	19.80	35.13
South Asia	45.49	37.35	50.89

Source: Global Findex (Global Financial Inclusion Database).

Table 4.3 shows the percentage of people who borrowed money during the past year and Tables 4.4 and 4.5 show the sources of borrowing. Table 4.3 demonstrates that on average, a high percentage of people have borrowed money globally (42.37 percent); the figure is higher for low-income countries (52.45 percent). A higher percentage of the poorest 40 percent of the population tend to borrow than the richer 60 percent of the population. The percentage of poorest 40 percent of the people who borrow funds is highest for Sub-Saharan Africa (53.49 percent), followed by the Middle East (47.79 percent) and South Asia (46.99 percent). Comparing these figures with those who have accounts in table 4.2 indicates that although people may not have account with a financial institution, they still borrow money—but they do so from other sources.

Table 4.3 Borrowed Any Money in the Past Year, 2014

Percent of population, age 15+

Region	All	Poorest 40%	Richest 60%
World	42.37	42.64	42.19
High-income	38.34	39.64	37.44
Middle-income	42.23	42.04	42.35
Low-income	52.45	53.88	51.48
Developing countries only			
East Asia and Pacific	41.21	41.92	40.73
Europe and Central Asia	39.50	41.90	37.86
Latin America and the Caribbean	32.74	28.43	35.65
Middle East	45.73	47.79	44.36
Sub-Saharan Africa	54.49	53.49	55.17
South Asia	46.66	46.99	46.45

Source: Global Findex (Global Financial Inclusion Database).

Table 4.4 indicates that the percentage of borrowing from a financial institution is relatively small in low-income countries, particularly those in the Middle East, Sub-Saharan Africa, and South Asia. Worldwide, access to loans for the bottom 40 percent of the income groups from financial institutions is smaller compared to their better-off counterparts. Table 4.5 shows that the bulk of the borrowing in low- and middle-income countries comes from friends and

families. In most regions, including the Middle East, the percentage of the people in the poorest 40 percent population borrowing from friends and families is higher than the better-off 60 percent of the population. These data indicate that lower-income people are meeting their borrowing needs from friends and families and other non-formal sources because of limitations to access to finance from the formal financial sector

Table 4.4 Borrowed from a Financial Institution, 2014

Percent of population, age 15+

Region	All	Poorest 40%	Richest 60%
World	10.69	8.69	12.04
High-income	17.27	16.25	17.97
Middle-income	9.08	6.63	10.74
Low-income	8.57	7.86	9.06
Developing countries only			
East Asia and Pacific	10.98	7.95	13.05
Europe and Central Asia	12.44	10.43	13.82
Latin America and the Caribbean	11.31	6.87	14.30
Middle East	5.62	4.76	6.19
Sub-Saharan Africa	6.29	4.83	7.29
South Asia	6.39	5.50	6.98

Source: Global Findex (Global Financial Inclusion Database).

Table 4.5 Borrowed from Family or Friends, 2014

Percent of population, age 15+

Region	All	Poorest 40%	Richest 60%
World	26.18	28.25	24.78
High-income	15.00	19.73	11.79
Middle-income	28.25	29.79	27.21
Low-income	34.91	35.20	34.71
Developing countries only			
East Asia and Pacific	28.27	30.89	26.48
Europe and Central Asia	23.58	27.24	21.08
Latin America and the Caribbean	13.49	13.03	13.79
Middle East	30.74	33.30	29.04
Sub-Saharan Africa (developing only)	41.92	41.31	42.34

South Asia	31.39	32.01	30.98
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Source: Global Findex (Global Financial Inclusion Database).

Table 4.6 shows the percentage of the people who are not able to come up with emergency funds. The response to the question is a good indicator of vulnerability, as it shows whether a household has access to funds in case of emergencies. Not surprisingly, the numbers in table 4.6 demonstrate that a higher percentage of the poorest 40 percent are unable to come up with the funds compared to the better-off 60 percent of the population. The figures for the Middle East are the highest, with close to 60 percent of the poorest 40 percent in the region indicating that they do not have access to emergency funds.

Table 4.6 Not Able to Come Up with Emergency Funds, 2014

Percent of population, age 15+

Region	All	Poorest 40%	Richest 60%
World	21.72	31.46	15.12
High-income	15.71	24.78	9.54
Middle-income	23.09	33.26	16.23
Low-income	24.36	32.36	18.88
Developing countries only			
East Asia and Pacific	15.76	25.06	9.44
Europe and Central Asia	24.97	33.49	19.13
Latin America and the Caribbean	31.98	44.87	23.27
Middle East	43.12	59.24	32.46
Sub-Saharan Africa	25.27	33.54	19.61
South Asia	28.14	38.47	21.28

Source: Global Findex (Global Financial Inclusion Database).

The Business Sector: Finance and Shared Prosperity

Definitions of what constitutes micro, small, and medium firms differ from country to country. For example, in the Middle East and North Africa (MENA) region, the cut-off point between small and medium varies from 5 to 50 workers, and between medium and large firms from 15 to 100 employees (IFC 2010, 9). Micro and small enterprises (MSEs) constitute a large percentage of enterprises and contribute to both growth and employment in most countries. In a study covering 99 countries, Ayyagari, Demirgüç-Kunt, and Maksimovic (2011) find that the mean employment share of small and medium enterprises (employing less than 99 employees) is 47.94 percent, and that small firms (with less than 20 employees) generate 45.34 percent of the new jobs.

Firms have specific financing needs that evolve with the growth of their businesses. The

International Finance Corporation (IFC 2014, 37) identifies these as liability products (current accounts and payments, cash management, and payroll services); working capital (overdraft and factoring); trade finance (letters of credit, letters of guarantee and documentation); and asset finance (securitized loans and lease financing). The sources of funds can be broadly categorized as internal and external. While the initial capital of firms is in the form of equity that comes from household itself or funds from friends and relatives, additional investments can take the form of debt or equity. As capital invested is positively related to returns of a project, a firm that does not have adequate capital may become unprofitable (Kerr and Nanda 2009, 7). One way to categorize financial needs is according to period of use, in terms of short-, medium-, and long-term financing. Long-term finance allows firms to address their life-cycle challenges and can contribute to faster growth, stability, and shared prosperity by reducing rollover risks and improving performance (World Bank 2015b, 1).

In a recent survey of micro and small enterprises from 13 countries, the World Bank (2014, 107) finds that the key obstacle to operations identified most frequently (in 36 percent of the firms) is limited access to finance. Table 4.7, adapted from IFC (2010), shows the types of financing available to meet financial needs of firms with different sizes. The key gaps that that micro and small enterprises face are medium- and long-term finance. This is confirmed by the 2014 *World Financial Development Report* (World Bank 2015b, 3), which reports that in developing countries only 66 percent of small firms report having any liabilities longer than one year, compared to 80 percent in high-income countries. Within developing countries, the ratio of long-term debt to total debt for small and medium firms stands at 12.7 percent, compared to 20.4 percent for large firms (World Bank 2015b, 28).

Table 4.7 Financing Needs and Financing Types for Different Firm Sizes

Horizon of Financing Need	Micro	Small	Medium	Large
Short-term	MF	BF, TF	BF, TF	BF, TF
Medium-term		BF, LF	BF, LF	BF, CM, LF
Long-term			BF, PE	BF, CM, PE

Source: Adopted from IFC (2010).

Note: BF = bank financing; CM = capital markets; LF = lease financing; MF = microfinance; PE = private equity; TF = trade financing.

ISLAMIC FINANCE: SCOPE AND PRINCIPLES

The preceding overview of access to financial services shows that the financial needs of a large percentage of the poorest 40 percent of the people are not being met by the financial sector. In particular, while a large percentage of the population borrows funds, they do so not from the financial sector but from friends and families. Furthermore, a large percentage of population cannot come up with emergency funds in case of emergencies, indicating their vulnerabilities to negative shocks. The disengagement with the financial sector is the highest for the Middle East region. While there are supply side-related issues for the low numbers for the region, one possible reason on the demand side is voluntary exclusion; a significant segment of the population does not engage with the conventional financial sector due to religious convictions.

The preference for Islamic finance and its implications for financial exclusion in Muslim countries are confirmed by various surveys. Karim, Tarazi, and Reille (2008) find that 72 percent of the people living in the Muslim countries do not use formal financial services, and a large percentage of the population (ranging from 20 percent to more than 40 percent) would not avail themselves of conventional microfinance to avoid interest. In a survey of 66,484 adults from 64 countries carried out in 2011, Demirgüç-Kunt, Klapper, and Randall (2013, 4) report that Muslims are less likely than non-Muslims to have an account and save at a formal financial institution, and more likely to identify religion as a reason for not having an account. In a smaller survey of 5,071 respondents in five Arab countries (Algeria, the Arab Republic of Egypt, Morocco, Tunisia, and the Republic of Yemen), they find that 45 percent of the respondents would prefer a loan from an Islamic bank than a conventional bank, even if they had to pay 5 percent annually more on the former. By contrast, 27 percent of respondents would prefer a loan from a conventional bank under the same cost structure. In another survey of nine countries in the Middle East and North Africa (MENA) region, IFC (2014, 39) finds that on average, 32.19 percent of the small and medium enterprises (SMEs) in these countries prefer to have a *shari'ah*-compliant product.

Even though the demand for Islamic financial products appears to be huge, the penetration of Islamic finance in most Muslim countries is small. For example, the five-country survey by Demirgüç-Kunt, Klapper, and Randall (2013, 40) reveals that only 2 percent of the 5,071 respondents use Islamic banking. IFC (2014) reports that even though 90 percent of the SMEs in Saudi Arabia prefer *shari'ah*-compliant products, only 2 percent of Islamic banks funding goes to them. Similarly, El-Zoghbi and Tarazi (2013) report that Islamic microfinance is provided by a small number of providers covering less than 1 percent of the total microfinance outreach in some selected Muslim countries. Given that Islamic finance can potentially play an important role in providing services to the poor and MSEs, the goals and principles of the sector are presented next.

Goals of Shari'ah and Islamic Finance in Terms of Shared Prosperity

The essential goals of *shari'ah* (*maqāṣid al-sharī'ah*) are safeguarding the faith, self (life),

intellect, posterity, and wealth (Chapra 2008). The objectives of Islamic commercial law and an ideal Islamic economy are to strive to protect and enhance one or several of the *maqāṣid*. Specifically, commercial transactions are sanctified and encouraged, as they preserve and support property and posterity (Hallaq 2004). Laldin and Furqani (2012) identify the specific *maqāṣid* related to Islamic finance as preservation of wealth, which can be done through its acquisition, development, and circulation, by protecting its value, by protecting ownership, and by preserving it from damage.

Maqāṣid can be classified into the micro (specific) level (*maqāṣid khassah*) and macro (general) level (*maqāṣid ammah*) (Abozaid 2010; Dusuki 2009; Dusuki and Bouheraoua 2011). Micro (specific) *maqāṣid* deal with issues related to individual transactions. Macro (general) *maqāṣid* relate to the benefits and well-being of the overall society. The *micromaqāṣid* relate to specific issues arising in the operations and transactions of the Islamic businesses and the financial sector. Using various legal maxims, Dusuki and Abdullah (2007) and Dusuki and Bouheraoua (2011) conclude that preventing and minimizing harm should be a key objective of an Islamic firm. This includes not engaging in harmful activities such as selling products that harm consumers, dumping toxic waste harmful to the environment or residential areas, or engaging in speculative ventures. *Maqāṣid* at the micro or product level also require *shari'ah* compliance and fulfilling the objectives of contracts. These include upholding property rights, respecting consistency of entitlements with the rights of ownership, linking transaction to real life activity, transferring property rights in sales, and prohibiting the sale of debt (Kahf 2006). Scholars view the macro implications of *maqāṣid* in a variety of ways. At the broadest level, Abozaid (2010, 67) views it as a vision that would protect and preserve public interests in all aspects and segments of life. Fulfilling the *maqāṣid* at the macro level implies that an economy should ensure growth and stability with equitable distribution of income, where all households earn respectable income to satisfy basic needs (Chapra 1992). For example, achieving the objectives of optimal growth and social justice in an Islamic economy would specifically require universal education and employment generation (Naqvi 1981, 85). The macro implication of the *maqāṣid* for the financial sector is that it should contribute to growth and equitable distribution of income, which coincides with the goals of shared prosperity.

Islamic Finance: Principles and Modes of Financing

The basic norm for commercial transactions in an Islamic economy is *permissibility*, which signifies that all acts/contracts are permissible unless they contain elements that are prohibited by Islamic law (Kamali 2000, 66). The two broad categories of prohibitions related to economic transactions recognized in *shari'ah* are *ribā* (excess in loan contracts) and *gharar* (excessive uncertainty). As interest is considered prohibited Islamic financial institutions use different modes of financing.⁽⁸⁹⁾ The key forms used by the Islamic financial sector are described next.

Debt. Debt is created in sale contracts through deferred-trading transaction whereby one

⁸⁹⁾ Detailed expositions of the different principles of Islamic financing can be found in Kahf and Khan (1992) and Ahmad (1993).

component of the transaction (paying price or the delivery of good) is postponed to a future date. In a price deferred sale (*bay' mu'ajjal*), the object of sale is delivered at the time of the contract, but the price is paid later. One type of financial transaction under this format is mark-up sale (*murābahah*), in which a good or asset is sold to the client at a mark up. The client pays for the good or asset at a future date or in installments. In a *salam* contract, the delivery of the good is postponed. In an *istiṣnā'* contract, both payment and delivery can be postponed.

Leasing. Ijārah is a leasing contract in which the client uses an asset by paying rent. One form of this asset-based financing is the hire-purchase scheme or lease-purchase scheme (*ijārah wa-iqtina'*), in which the installment includes rent and part of the capital. When the installments are fully paid, the ownership of the asset is transferred to the client.

Equity. Profit-sharing modes can take two forms: *mushārahah* and *muḍārabah*. In *mushārahah*, more than one party finances and manages a project and distributes the profit at an agreed ratio. A *muḍārabah* is a silent partnership, whereby one party supplies the funds and the other party manages the project and shares the profit at an agreed-upon ratio. In both cases, the loss is borne by the capital provider on a pro rata basis.

Agency (Wakālah). In an agency contract, a person represents other person(s) to perform certain duties. The agent can do the work for the principal for free or be compensated; the compensation can be structured in different ways.

Loan. In a loan (*qarḍ*) contract, the ownership of the asset is transferred without consideration. If money is loaned, repayment should be in exact quantities, as excesses charged would constitute *ribā*, which is prohibited. Actual administrative costs incurred, however, can be charged to the loanee in *qarḍ* transactions.

Two key Islamic principles governing economic and financial transactions link return to risks. The first is the legal maxim of “the detriment is as a return for the benefit” (*al-ghurm bi al-ghumm*), which associates “entitlement of gain” to the “responsibility of loss” (Kahf and Khan 1988, 30). This maxim is usually used to propose the preference for using profit-loss sharing instruments. The second principle arises from the Prophetic saying that developed into a legal maxim: “The benefit of a thing is a return for the liability for loss from that thing” (*al-kharaj bi al-daman*). The maxim implies that the party enjoying the full benefit of an asset or object should also bear the associated risks of the ownership (Vogel and Hayes 1998). The implications of the maxims are that profit and returns must be associated with risks arising either in business ventures or possession of assets. In this regard, Siddiqi (2009), among others, maintains that while the tendency in conventional finance is to transfer risks, the approach in Islamic finance should be risk sharing.

Debt in Islamic finance is not a result of monetary transactions, but is linked to the real economy, as debts are created through sale contracts. Whereas Islamic financing can be debt-based or equity-based, proponents of Islamic banking prefer equity modes of financing. They point to the advantages of profit-sharing modes of financing over the debt-based financing

such as increase in investment, allocative efficiency, stability, equity, and reduction of poverty.⁹⁰ Specifically, they argue that as the reward for a financier would be a share of profit, financial resources will be allocated to projects with the highest productivities and there will be more monitoring of investments, thereby reducing moral hazard. Furthermore, equity-based financing tends to be for longer terms, which contributes positively to growth.

ISLAMIC FINANCE AND SHARED PROSPERITY

The foundation principles and values of *shari'ah* imply that socioeconomic justice and equitable distribution of income are among the primary goals of Islam and are expected to be unyielding features of an Islamic economic system (Chapra 1985). The Islamic financial system, as part of the Islamic economic system, should also reflect and promote these objectives of Islam. The philosophical basis of the Islamic financial system lies in *'adl* (social justice) and *ihsan* (benevolence) (Siddiqi 2004). The implication of these concepts is “taking care of those who cannot be taken care of by the market, who cannot play with economic forces or do not have access to economic means to enable them to exploit the economic opportunities around them” (Khan 1997, 12–13). As such, it is imperative for the Islamic financial sector to include social dimensions in its operations, along with regular commercial financing practices.

Given its orientation and foundational basis, Islamic finance is expected to contribute to inclusive and equitable economic development, which coincides with the goal of shared prosperity. Specifically, Islamic finance can play an important role in contributing to shared prosperity by providing the financial services to the poorest 40 percent of the population in the household sector and micro and small enterprises in the business sector. The discussion that follows first identifies Islamic financial sector products needed for these segments and then explores how the financial institutions and capital markets can provide these services.

Financial Products for the Household and Business Sectors to Promote Shared Prosperity

As discussed, financial products can be classified as survival, security, and growth products, and the demand for these will vary by income level. While all products may be provided for the poorest 40 percent of the population, the most relevant products will be survival and security products. The specific products that fall in these categories are listed in table 4.8. Survival products include demand and savings deposits, financing at different terms, education financing, and access to emergency funds. In addition to demand accounts to facilitate payments and savings accounts for safekeeping, households also need short-term and long-term financing to fill the gap between income and expenditure and to purchase fixed assets such as housing. They also require emergency funds in certain cases of unexpected negative shocks.

⁹⁰ The advantages of Islamic banking are discussed in Chapra (1985); Khan (1995); and Siddiqi (1981, 1983).

Table 4.8 Financial Product Needs of the Poorest 40 Percent of the Household Sector

Financial functions	Financial institutions	Capital markets
Mobilizing savings/ Asset Management	<ul style="list-style-type: none"> Demand and savings deposits (SUR) Investment accounts (SEC) 	<ul style="list-style-type: none"> Retail <i>sukūk</i> (GRO) Mutual funds (GRO)
Allocating capital/financing	<ul style="list-style-type: none"> Short-term financing (SUR) Medium- to long-term financing (house, fixed assets, etc.) (SUR) Education financing (SUR) 	
Managing risks	<ul style="list-style-type: none"> Emergency funds (including <i>qard hasan</i>) (SUR) Micro<i>Ttakāful</i> products (SEC) 	Retirement plans (SEC)

Note: GRO = growth financial product; SEC = security financial product; SUR = survival financial product.

Security products include investment accounts, *takāful* products, retirement plans, and opportunities for investment in capital market instruments such as *sukūk* and mutual funds. The risks that households face in the short term can be mitigated by different types of *takāful* products. There are two main types of *takāful*: general and family. While the former provides short-term protection against accidents and losses of property, the latter provides saving opportunities and long-term protection arising from death or disability. The types of products under family *takāful* have become diverse, providing a variety of products that can be used for wealth and lifestyle protection. The management of longevity/livelihood risks and old-age care are also important products for an aging population. The growth products for the poor household include opportunities to invest in mutual funds and *sukūk* products.

Whereas some of these products may be relatively easier to provide, others will be more challenging. For example, while offering different types of deposits to the poorest 40 percent of the population may be straightforward, providing financing for poor and low-income households can be challenging for financial institutions for the economic reasons discussed. In some cases, inclusive finance may involve changing a small feature in the product. For example, if the minimum investment requirements of mutual funds are reduced from \$5,000 to \$100, many people with lower incomes can invest in them. However, coming up with some products such as *shari'ah*-compliant education financing for the poor can be challenging. While all types of financial products are important, the survival and security products should have priority over the growth products.

The different types of products that the financial sector can provide to the MSEs are shown in table 4.9. The survival products include demand and savings accounts and financing of different maturity terms. In addition to long-term financing to purchase fixed assets, they also need short-term financing to cover working capital and operational costs. Appropriate *shari'ah*-compliant products are needed to fulfill the different needs of MSEs. For example, whereas working capital can be financed by trade-financing instruments such as *murābahah*, long-term assets can be financed by asset-based financing such as *ijārah*.

The security products include *takāful* products and access to funding from capital markets. Firms can mitigate risks by using *takāful* to protect specific assets. Another way in which risks in MSEs can be shared with others is by using risk-sharing modes of financing, both from financial institutions and from capital markets. While financial institutions are likely to provide the bulk of the financing to MSEs, firms can also tap into capital markets to raise funds. This is a growth financial product; it will not be feasible for microenterprises. Enabling smaller firms to raise funds from capital market would require making listing of securities easier and less costly.

Table 4.9 Financial Product Needs of Micro and Small Businesses

Financial functions	Financial institutions	Capital markets
Mobilizing savings/ Asset management	<ul style="list-style-type: none"> Demand and savings accounts (SUR) 	
Allocating capital/financing	<ul style="list-style-type: none"> Short-, medium-, long-term financing (SUR) Working capital (SUR) Trade credit (SUR) Leasing (SUR) 	<ul style="list-style-type: none"> Listing opportunities of smaller firms (GRO) Social and short-term <i>sukūk</i> (SEC)
Managing risks	<ul style="list-style-type: none"> <i>Takāful</i> (SEC) Risk-sharing instruments (SEC) 	<ul style="list-style-type: none"> Risk-sharing <i>sukūk</i> (SEC)

Note: GRO = growth financial product; SEC = security financial product; SUR = survival financial product.

The financial sector is reluctant to finance the poor households and MSEs due to a variety of economic factors, in addition to their relatively low income and the uncertainty of that income (World Bank 2008). Private information about the poor households is scarce, which can lead to moral hazard and adverse selection problems, among others. In the face of extreme information problems, markets tend to either break down or function poorly as verification of the credit status becomes very costly (Holzmann and Jorgensen 2000). Other key constraints to providing financial services to the poor include higher costs arising from the small size of financial service and scale of production. Some of the risks of financing can be mitigated if the entrepreneur has good collateral; however, if the potential borrowers have limited collateral (which is often the case for low-income households and MSEs), then good projects may go unfunded.

While equity-based modes of financing can contribute to growth and also increase stability in firms, the Islamic financial sector has not used them extensively. Various factors determine the modes of financing used by the business sector. First, the costs of the different modes of financing affect the choice of modes. Equity is considered to be more costly than debt; thus there is a preference to use more debt. Second, there are considerations about maximizing profit. Specifically, if the goal of a firm is maximizing the return on equity (as opposed to the return on assets), firms will prefer higher levels of leveraging. Finally, most tax regimes favor debt-based financing, as interest payments can be deducted from costs, whereas dividends are taxed. Thus the overall incentive structures lead the business sector to use more debt than

equity.

Tax regimes need to be reformed to level the playing field for equity with respect to debt. There is also need to strengthen investors' rights in general and equity-holders' rights in particular to mitigate the risks arising in agency relationships such as *muḍārabah* contracts (Ahmed 2012). Stronger rights and better provision of information of prospective business ventures would reduce the possibilities of misappropriation and create incentives to use more equity-based modes.

Addressing these challenges will require coming up with new innovative ways to provide financing to the MSEs. For example, the problem of collateral can be mitigated by providing group-based financing, whereby physical collateral is substituted with social capital collateral. An example is Grameen Bank in Bangladesh, which has successfully used group-based lending for providing microfinance to the poorer sections of the population.⁽⁹¹⁾ Another option is to use asset-based financing such as leasing and use the leased asset as collateral. The social orientation, preference for risk-sharing features, and link between financing and the real sector provide a sound foundation for Islamic finance to provide financial services to MSEs. However, there is a huge and urgent need to develop a variety of products and services based on these principles at different tenures (short-term, medium-term- and long-term) and yielding different returns, to cover different kinds or risks, financing needs, and risk profiles. This will require investments in research and development. It will also require a reorientation of Islamic financial institutions from their current type of product development, which tends to replicate conventional products, to the development of new products and services based on *shari'ah* foundations and values.

A functional approach to product development will facilitate the development of *shari'ah*-based alternatives, Ahmed (2006) and Al-Suwailem (2006) argue. The functional approach would examine the needs that banks satisfy and then come up with Islamic alternatives that can meet these needs. For example, in hedging, the function that financial institutions perform is minimizing risks. In conventional finance, derivatives are widely used as hedging instruments. As conventional derivatives do not comply with *shari'ah* principles, financial engineering and stratagems or ruses are being used to circumvent the prohibitions. Under the functional approach, however, the need to minimize risks can be done through other means. For example, a cooperative technique of hedging currency risks that does not employ any derivatives can be used (Al-Suwailem 2006).

Diversifying Organization Formats and Approaches to Align Financial Institutions with Islamic Law

The dominant financial institution in Islamic finance is the commercial bank, which is modelled after conventional counterparts. As a debt-based corporate financial organization, the format of conventional banks may not appropriately reflect the transaction needs of Islamic finance, with their social orientation and emphasis on risk-sharing modes of financing.

91) For information on Grameen Bank, see <http://www.grameen-info.org/>.

There is a need to diversity the organizational formats and approaches to align the financial institutions with the principles and spirit of Islamic Law.

Achieving the goals of shared prosperity requires having a variety of nonbank financial institutions that can serve the poor and MSEs. Financial intermediaries that are local are better equipped to monitor and overcome the costs of screening and monitoring smaller enterprises (Kerr and Nanda 2009, 3). Furthermore, as many nonbank financial institutions (NBFI) have less stringent regulations, they can be used to circumvent the legal and regulatory constraints limiting the use *shari'ah*-compliant products and serving social needs.

The social goals of Islamic finance can be achieved by establishing not-for-profit financial institutions such as cooperatives, credit unions, and mutual insurance companies as alternatives to Islamic banks (El Gamal 2006). Some Islamic cooperatives exist in countries such as Canada and Thailand. An example of a successful cooperative that serves the needs of all segments to the population is Bank Kerjasama Rakyat Malaysia (Bank Rakyat) in Malaysia. In addition to providing savings and investments opportunities along with financial planning services, the cooperative bank offers a variety of services, including consumer financing, commercial financing, and financing for small, medium, and cooperative entrepreneurs. The bank also offers microfinance in the form of Islamic pawning services under the *ArRahnu* program through all of its branches and specialized *ArRahnu* centers, mainly to meet emergency funding needs (Ahmed 2013).

Similarly, nonbank financial institutions can provide *microtakāful* services directly to the poor. Examples of *microtakāful* provided by NBFIs include *Takāful* T&T Friendly Society (TTTFS), a multipurpose cooperative in Trinidad and Tobago that provides funeral *takāful* and investment opportunities to its members. A nonprofit organization in Indonesia, Peramu Foundation, *Takāful* provides *microtakāful* to clients of its microfinance program and also to others (Ahmed 2013).

Increasing equity-based financing will also require organizational forms that are different from debt-based banks, including Islamic versions of venture capital and private equity firms. Other organizational models can also be used that satisfy the social and legal *shari'ah* requirements. In Pakistan, for instance, *muḍārabah* companies have been established under the *Muḍārabah* Companies and *Muḍārabah* Floation and Control Ordinance 1980 (Khan 1995). These equity-based NBFIs raise funds by issuing *muḍārabah* certificates and use these in various income-generating activities. The resulting profit is shared with investors at an agreed upon ratio.

Another novel contemporary option is crowdfunding that promotes investments in projects that can reap both economic and social benefits. While crowdfunding is relatively new in most developing countries, *shari'ah*-compliant platforms are even rarer. Shekra, launched in the Arab Republic of Egypt in 2013, is the world's first *shari'ah*-compliant crowdfunding platform anywhere that provides opportunities to people to invest in enterprises (CCA and FCA 2013). Crowdfunding requires a supporting ecosystem in terms of regulations,

technology, and active social media penetration. There is need to understand this model and expand it in other countries.

Opening Up Capital Markets to the Bottom 40 Percent and MSEs

Because Islamic capital markets are relatively young and evolving, there are very few products that are catering to the needs of the poor and MSEs. However, with the expansion of the Islamic financial industry, there is a potential for financial markets to contribute to shared prosperity.

One way in which the poorest 40 percent of the population can benefit from the capital markets is to have savings and investment opportunities in Islamic securities. One option is to provide mutual funds that are accessible to lower-income groups. Another option is to issue retail *sukūk*. This not only taps into newer market segments to raise funds, but also serves as an instrument of financial inclusion, as it enables investors with meagre means to participate in alternative investment products. An example of a retail *sukūk* is one issued in 2014 by the government of Indonesia to raise funds to finance development projects such as building roads and ports. The Rp19.3 trillion (\$ 1.7 billion) *sukūk*, paying a return of 8.75 percent per year, is the largest Islamic instrument issued in Indonesia. It was oversubscribed and bought by a variety of investors that included the self-employed (32 percent), private sector employees (27 percent), housewives (17 percent), civil servants (4 percent), and army and police personnel (1 percent) (Ho 2014).

Lack of funding remains a major obstacle in financing MSEs for Islamic financial institutions in general and nonbank financial institutions in particular. One way to overcome this constraint is to raise funds from capital markets in the form of microfinance and social impact funds. For example, Bangladesh Rural Advancement Committee (BRAC) issued a zero coupon tax bond to raise \$90 million in 2007 to finance its microfinance operations. The bond was issued in the local currency *taka* and raised funds domestically from local investors to provide credit to small and tenant farmers in the country (Rennison 2007; Davis and Dubitsky 2008). Unfortunately, this type of arrangement is rare. Islamic financial sector has not yet tapped into capital market to raise funds for inclusive finance.

CONCLUSION

The household and business sectors need financial services so that they can save, invest, get financing, and protect themselves from uncertainties. A developed and robust financial sector would provide a mix of products with different risk/return/maturity profiles to satisfy these needs. At the aggregate level, the financial sector can positively contribute to shared prosperity by promoting growth and reducing inequality and vulnerability. At the disaggregated level, it can provide financing to all market segments, including poor households and micro and small enterprises. The impact of the financial sector on shared prosperity will, therefore, depend not only on the quantity of finance but also its quality in terms of the clientele being served. Moving forward, the financial sector is expected to play an important role in meeting the funding needs of achieving the SDGs and shared prosperity.

The principles and values of Islamic finance provide a sound foundation for the industry to contribute to shared prosperity. Inclusive finance in Muslim countries will require that the Islamic financial sector play an important role in providing financial services to the poorest 40 percent of the population and MSEs. Not only is there a need to come up with products and services that satisfy the needs of the poor and MSEs, but there is also a need to come up with new organizational formats. In order to reflect the foundational principles and values and positively contribute to shared prosperity, however, Islamic financial sector must reorient itself. The industry should strive to develop institutions that can come up with more risk-sharing financial products and services that can fulfill the broader goals of *maqāṣid al-sharī'ah*.

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CHAPTER 5

ISLAMIC BANKING: IS IT GOOD FOR GROWTH?

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and

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Since the modern birth of Islamic banking in the 1960s in the Arab Republic of Egypt, it has expanded rapidly across the globe.⁹²⁾ The expansion has taken place, in particular—though not exclusively—in countries with larger Muslim populations (Imam and Kpodar 2013). From an insignificant beginning, the industry has grown to over \$1.6 trillion in assets in 2012, and is expected to reach \$6.1 trillion by 2020 (Gewal 2013). Not only have local banks in Muslim countries adopted Islamic banking principles, but large multinational banks have established Islamic windows. Islamic finance has spread beyond commercial banks, and now spans investment banks and insurance companies, as well as investment (such as asset management) and financial companies (including leasing). The development of new products, such as *sukūk* (equity-based certificates of investment), has also broadened the range of products available.

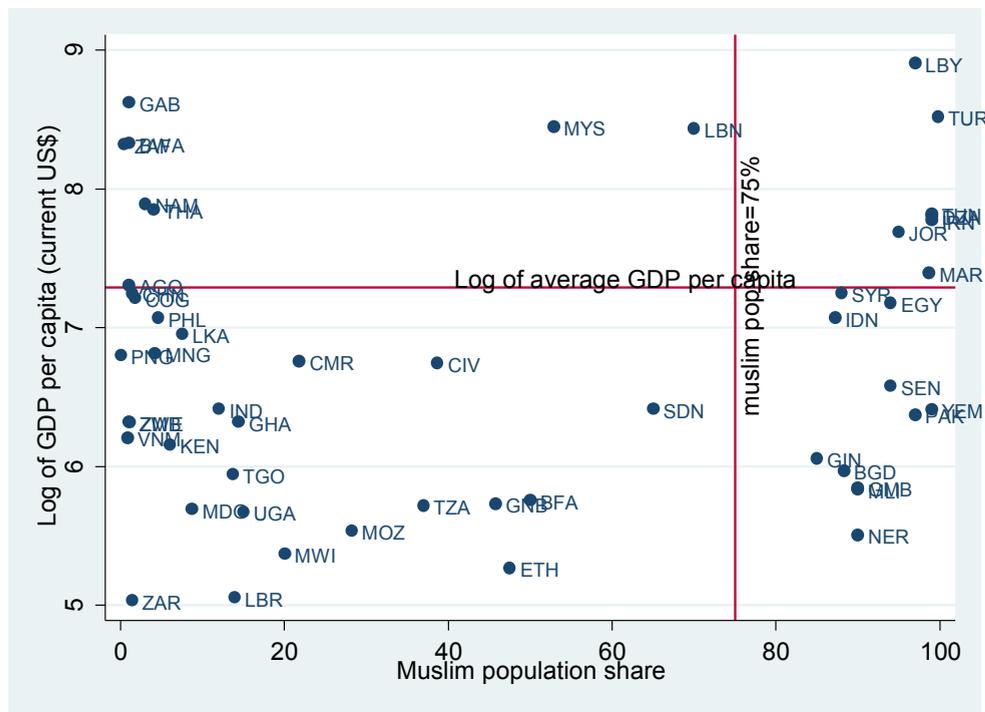
There is mounting evidence—at least for lower- and middle-income countries—that financial sector development is good for growth (see the seminal paper by Levine, Loayza, and Beck 2000). A developed financial sector helps mobilize savings, facilitates the allocation of capital to where returns are expected to be highest, monitors the use of capital once invested, and allows for diversification of risk. Moreover, there is a growing consensus among economists that it does not matter much for economic growth whether the financial system is more bank-based or market-based (Allen and Gale 2000; Levine 2002). The particular institutional arrangements that provide financial services to the economy are not so important; what matters is the level of overall financial development.

However, do these findings that financial sector deepening impacts growth also apply to systems where Islamic banking plays a significant role? Is the development of Islamic banking good for growth? This is an important question to answer, as Islamic banking has unique characteristics that differ from conventional banking; they appear better adapted to characteristics prevailing in poorer countries of the Middle East and North Africa,

92) This study is based on a paper by the same name presented at the Inaugural Annual Symposium on Islamic Finance held in Istanbul, Turkey from September 8–9, 2015.

Sub-Saharan Africa, and parts of South Asia and Southeast Asia. In addition, with a few exceptions, countries with large Islamic populations are typically not highly developed (see figure 5.1), and have often not performed well in economic terms; one of the reasons has been an underdeveloped financial system. This study is not attempting to answer the question of whether the development of Islamic banking would contribute more to financial sector development than conventional banks—an altogether different question. It is simply asking the question of whether Islamic banking is good for growth. There are parallels to the Information Technology Revolution. As information and communication technology was becoming ubiquitous in the 1980s, Robert Solow famously quipped: “You can see the computer age everywhere but in the productivity statistics” (Solow 1987). A whole niche within the economics profession emerged to help explain this apparent paradox. Similarly, Islamic banking has made inroads into many countries, reaching a critical threshold. It is therefore valid to ask whether Islamic banking is becoming visible in the statistics, or whether explanations need to be found to explain why it is not visible (yet).

Figure 5.1 Average GDP per Capita in Islamic and Other Countries, 1990–2010

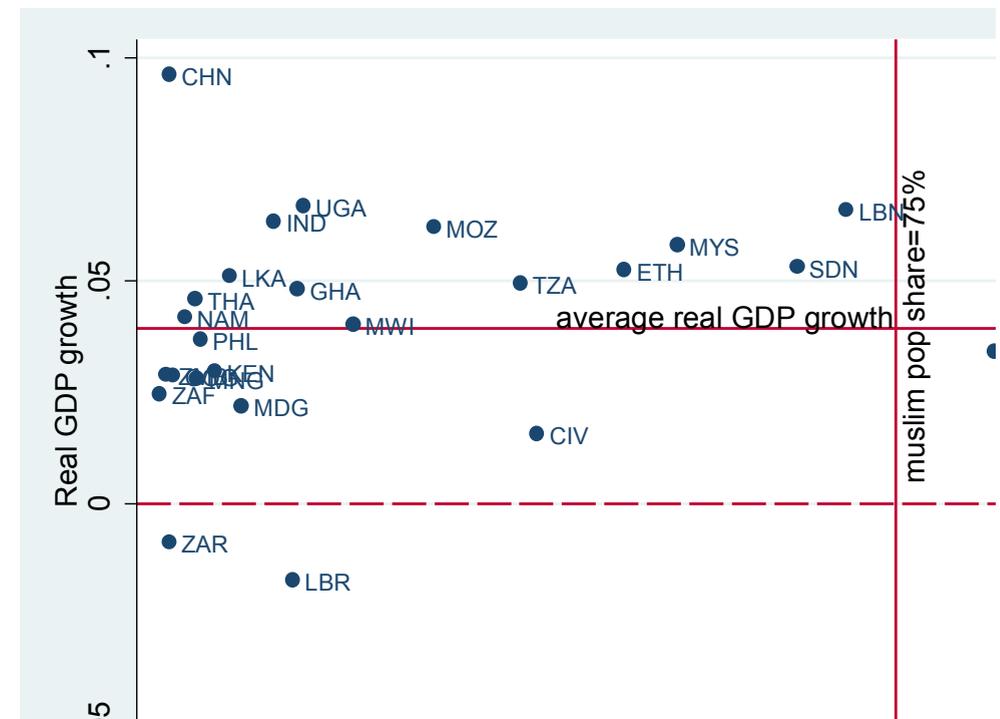


Source: IMF for data ; Alesina and others 2003.

Note: See annex 10A for country names.

Growth in Islamic countries, while not spectacular, has not been dismal compared to other countries with a similar level of development. The widely held perception is that Islamic countries have performed poorly in economic terms since the 1950s, but this does not hold. After an initial strong growth spurt following independence—in sync with other low-income countries—growth rates were subpar following the lost decades of the 1980s and 1990s. While it is true that Islamic countries and subnational regions with large Muslim populations are characterized by low incomes and a low level of social development, with the exception of oil-producing countries of the Gulf Cooperation Council (GCC), they are in fact not much different from other emerging markets and low-income countries (figure 5.2). Once adjustments for low education levels, poor institutions, commodity prices, and the like are made, evidence is mounting that Islam per se is not holding back these countries (Nolan 2003).

Figure 5.2 Average Real GDP Growth: How Islamic Countries Compare to Others, 1990–2010

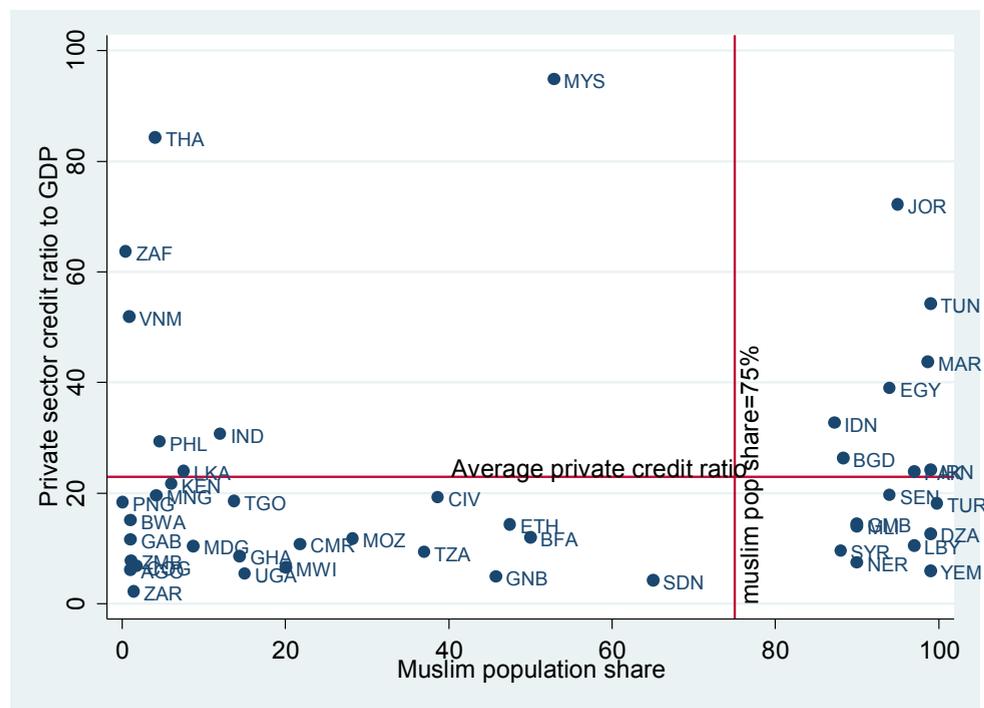


Source: IMF for data ; Alesina and others 2003.

Note: See annex 10A for country names.

Similarly, Islamic countries do not currently stand out in terms of private sector credit to GDP (figure 5.3). However, as Islamic banking becomes more acceptable to a large swath of the population, it could expand faster, as it would not necessarily be a substitute for conventional banking, but it would provide financial products to a part of the population that otherwise would not use the financial system, potentially leading to higher financial inclusion and an acceleration of economic growth in these countries. Currently, while many Muslims use conventional banking services, a large swath of the population—pious individuals who want to adhere to the principles of Islam—are significantly less likely than non-Muslims to own a formal account or save at a formal financial institution after controlling for other individual- and country-level characteristics (Demirgüç-Kunt, Klapper, and Randall 2013).

Figure 5.3 Average Private Sector Credit Ratio to GDP in Islamic and Other Countries, 1990–2010



Sources: Beck, Demirgüç-Kunt, and Levine 2000; Alesina and others 2003.
Note: See annex 5A for country names.

Thus the rapid diffusion of Islamic banking represents a growth opportunity for Islamic countries, as much of the empirical evidence suggests a strong link between financial sector development and growth (see Levine 2005 for a summary). However, the empirical literature has only looked at conventional banking, not Islamic banking. This study aims to rectify this lacuna by considering whether Islamic banking is also potent in raising growth. This study

aims to establish the positive relationship between Islamic banking and economic growth, and not to answer the question of whether the growth-enhancing effect of Islamic banking goes beyond that of conventional banking. Using a sample of low- and middle-income countries with data over the period 1990–2010, it investigates the impact of Islamic banking on growth and discusses the policy implications. The results show that, notwithstanding its relatively small size compared to the economy or the overall size of the financial system, Islamic banking is positively associated with economic growth, even after controlling for various determinants, including the level of financial depth. The results are robust across different measures of Islamic banking development, econometric estimators (pooling, fixed effects, and System GMM), and to the sample composition and time periods.

Literature Review

Although the finance–growth nexus continues to be heavily debated in the literature, the main thrust is that financial development has, by and large, a favorable impact on economic growth. Financial intermediaries carry out five basic functions that serve growth: they facilitate the trading, hedging, diversifying, and pooling of risk; allocate resources; monitor managers and exert corporate control; mobilize savings; and facilitate the exchange of goods and services (Levine 1997). In performing their functions, financial intermediaries mitigate the effects of information and transaction costs, and improve the allocation of resources, thus influencing saving rates, investment decisions, technical innovation, and ultimately long-run growth rates. In turn, economic activity can also influence financial development. It is worth noting that this whole literature implicitly refers to conventional banking. An interesting question is: Does this also apply to Islamic banks?

The literature has evolved over time, and alternated between periods of optimism and scepticism about the benefits of finance for growth. It began with the pioneering work of Schumpeter (1912), who highlights the essential role of banks in financing innovative businesses and increasing productivity. Robinson (1952) challenges this view, arguing that financial development simply follows economic growth. Although Gurley and Shaw (1960) share Schumpeter’s view on the importance of finance for growth, they stress instead the role of financial innovation for economic development, as it facilitates better risk management and a reduction in intermediation costs.

However, following the work of McKinnon (1973) and Shaw (1973), mixed country experiences from the wave of financial liberalization policies in the 1970s and 1980s raised uncertainties about the potential benefits of finance for growth. The studies of King and Levine (1993a, 1993b, 1993c) and Levine (1997) gave a new impetus to the finance–growth literature. The authors thoroughly documented the channels through which financial development positively impacts economic growth and undertook convincing theoretical and empirical investigation to support their hypothesis. Subsequent studies confirmed their findings (including Rajan and Zingales 1998; Levine, Loayza, and Beck 2000), although some more recent studies—especially since the global financial crisis—cast doubt on the strength of the positive relationship between financial development and growth (see, for instance, Andersen and Tarp 2003; Arcand, Berkes, and Panizza 2012; Panizza 2014). There is also

evidence that by increasing the likelihood of banking crises, the positive relationship between financial sector development and growth may be conditional (Guillaumont Jeanneney and Kpodar 2006).

The work of Modigliani and Miller (1958)—who found that capital structure was irrelevant to finance investment projects—suggests that it is likely that Islamic banking and conventional banking will not have different impacts on growth per se if they finance the same projects. Although the benefits/risks of the project are distributed differently for conventional banks than for Islamic banks, the overall return on the project is the same. On the other hand, while Islamic banks perform similar functions to conventional banks, they have distinct features. While some view Islamic banking as being indistinguishable in practice from conventional banking (see, for example, Khan 2010), most scholars think that there are differences, even in practice (see Iqbal and Mirakhor 2013). Islamic banking has many advantages, not only in Islamic countries, but also in low- and middle-income countries in general, that could make it better adapted to the local environment and could be better at stimulating growth compared conventional banking, under certain circumstances. As this study will show, while Islamic banking could, at the macroeconomic level, contain features that may stimulate growth, at the microeconomic level, given that it is still a nascent industry, it still faces hurdles that may make it difficult to fully maximize this advantage. Therefore, this study only looks at whether the development of Islamic banking has a positive impact on growth, not whether it is more “efficient” than conventional banks in increasing growth. What are these distinct attributes of Islamic banking?

It encourages lending (to individuals without assets) and shares risks and rewards. Conventional banks in most countries lend based on some form of guarantee/collateral. The risk-sharing characteristic of Islamic banking means that the borrower and the bank share the risk of any investment on agreed terms, and divide any profits or losses between them, without recourse to guarantees. Risk sharing leads providers of financial capital and entrepreneurs to share business risks in return for a share of profits, suggesting that borrower liabilities are state-contingent, in contrast to conventional banks. This should in principle encourage more investment—notably by individuals who could not otherwise borrow because of a lack of assets that could act as a guarantee—and thereby encourage growth.⁽⁹³⁾

Through the prohibition of *ribā* (interest), the incentives of lenders and borrowers are aligned, thus reducing moral hazard.⁽⁹⁴⁾ At the same time, it helps to spur investment that would otherwise not take place, and thereby growth, and also acts as a shock absorber for countries subject to large economic shocks.

93) Most Islamic financial instruments can be thought of as falling into one of two general families. First, contracts can be classified as venture financing, where the provider of funds to a venture expects a return conditional on the success of the venture (profit and loss sharing). Contracts that are most common include equitable participation (*mushārahah*) in a venture such as an import consignment, and a sleeping partnership, where one party brings capital and the other personal efforts (*mudārahah*) in a defined venture. Second, and rising in importance are arrangements that smooth out payments, where an intermediary's client needs a large lump sum of cash in order to accomplish some project (such as housing or a productive investment). The intermediary enters into an arrangement that, while profitable to it, enables the client to smooth its cash outlay. For example, the provider of funds may acquire a productive asset and make it available to the user of funds for a fee, as in installment sale (*murābahah*), leasing (*ijārah*), or hire-purchase arrangements (see Honohan 2001). These innovations should help economic development in Islamic countries by providing access to financing that is acceptable to the (pious) population.

94) Moral hazard occurs when one person takes more risks because someone else bears the burden of those risks. Moral hazard occurs, for instance, under information asymmetry where the risk-taking party to a transaction knows more about its intentions than the party paying the consequences of the risk.

It raises savings (promotes capital accumulation). In Islamic countries, large segments of the Muslim population do not have access to adequate banking services—often because devout Muslims are unwilling to put their savings into a traditional financial system that runs counter to their religious principles. Therefore, Islamic banking can raise the savings of pious individuals who refrain from using conventional banks. This could thereby increase financial intermediation. Demirgüç-Kunt, Klapper, and Randall (2013) explore the difference between Muslims and non-Muslims within the same country, and find that in the 64 countries they cover, 24 percent of Muslim adults report having a bank account, in contrast to 44 percent of non-Muslims who have one. This under-banking of an important segment of the population prevents savings from being channeled to the formal sector, and therefore not being used efficiently, leading to suboptimal financial intermediation.⁽⁹⁵⁾ Bringing Muslims into the formal sector, by providing them with suitable products, would increase access to finance, and would commensurately increase savings.

It enhances financial stability. Most boom-bust cycles that have occurred around the world in recent decades have exposed several underlying factors that highlight the vulnerability of conventional banking: namely, high leveraging, wholesale financing, and utilization of complex instruments.⁽⁹⁶⁾ In Islamic finance, balance sheet mismatches are absent, as banks do not have asset-liability mismatches, given that short-term deposits finance short-term trading, while for longer-term investments, longer-term deposits are used (Mirakhor 2010). There is also consistent evidence that Islamic banks have higher capitalization than conventional banks. This capital cushion, combined with higher liquidity reserves, explains the relatively better performance of Islamic banks during the recent crisis. Derivatives and other nontransparent products are also not allowed.⁽⁹⁷⁾ This, combined with the sharing of profits and losses, creates a system that is less prone to crisis (Cihak and Hesse 2010; Hassan and Dridi 2010). It is probably fair to say that banking systems that are diversified, through including Islamic banks as a complement to conventional banks, are likely to contribute to financial stability (Imam and Kpodar 2013).⁽⁹⁸⁾

The quality of “modern institutions” is less relevant in Islamic banking. It has long been established that the quality of modern institutions—such as legal systems—is a major determinant of financial sector development, which is a key input into growth (Levine 2005). Islamic countries often do not have strong legal systems; but as Imam and Kpodar (2013) have shown, the spread of Islamic banking is not dependent on the quality of these formal institutions. This does not mean that legal, regulatory and other institutional reforms are not crucial for the success of Islamic finance; it simply means that Islam has often its own “traditional” institutions that can resolve conflicts among parties.

It finances morally acceptable projects. Islamic banking is based on a moral system of

95) A growing body of evidence suggests that better functioning financial systems exerts a disproportionately positive impact on the relatively poor; see Levine (2008) and Demirgüç-Kunt and Levine (2009).

96) Islamic banking prohibits speculative products, which are deemed *gharar* (contracts and transactions that contain excessive uncertainty). This reduces the probability of fraud, for instance. Derivative products are generally viewed as unacceptable under *shari'ah* (Islamic Law), as they involve speculation.

97) While some financial innovations may add to the risk of financial instability, it may not necessarily be a first-best response to abstain from such financial innovations altogether, but this consideration goes beyond this study.

98) Minsky moments, whereby periods of calm create the seeds for financial instability (endogenous financial instability) are absent in Islamic banking (Minsky 1988).

Islam, which allows for the financing of only those assets that are not harmful to society. Islamic banks are not allowed to finance casinos and other activities that are deemed harmful to society, and to the poor in particular. While the standard of “morally” acceptable projects might seem subjective in many cases, there are few gray areas, and in case of doubt, an Islamic scholar will be able to provide an answer. This aspect is difficult to quantify, but could be growth-enhancing by reducing negative externalities imposed on society by undesirable projects. If conventional banking and Islamic banking coexist, this aspect is unlikely to matter much, as *haram* (prohibited) activities can be financed by conventional banking.

All these factors are, in principle, conducive to higher growth and the alleviation of poverty. Moreover, if Islamic banking is more likely to develop in Islamic countries because it is more acceptable to pious Muslims, growth is likely to accelerate more rapidly in these countries than it would if only conventional banking were available.⁹⁹ However, Islamic banks have certain structural weaknesses that counterbalance the positive aspects. These weaknesses are likely to lessen as the industry matures.

Difficulty managing financial risk/operational risk. As Islamic banks are not allowed to use derivatives, it is simply harder for them to mitigate and diversify risk. In addition, given their size, most Islamic banks are highly concentrated by geographical area and sector, accentuating the lack of diversification. Lack of proper accounting standards and clearing and settlement processes, coupled with the lack of stakeholder participation in governance of financial institutions offering Islamic products, lead to lack of transparency, rendering Islamic banks more risky (see Abedifar, Molyneux, and Tarazi 2013; Beck, Demirgüç-Kunt, and Merrouche 2013). Again, all these hurdles should gradually become less constraining as the industry matures and grows in size.

Lack of economies of scale. Islamic banks are often newer, and therefore smaller, than conventional banks. This means that they are often still below optimal scales and thus have higher cost structures (Hassan and Dridi 2010).¹⁰⁰ As the industry grows, it can be expected that the disadvantage of scale will disappear over time. Comparing conventional and Islamic banks and controlling for other bank and country characteristics, Beck, Demirgüç-Kunt, and Merrouche (2013) find few significant differences in business orientation, efficiency, asset quality, or stability. While Islamic banks seem more cost-effective than conventional banks in a broad cross-country sample, this finding reverses in a sample of countries with both Islamic and conventional banks. However, conventional banks that operate in countries with a higher market share of Islamic banks are more cost-effective but less stable.

Lack of liquid instruments. There is no secondary market for Islamic fixed-income products, forcing Islamic banks to have large liquidity buffers, putting them at a disadvantage relative

99) There is sometimes a distorted view that Islamic banks are not profit-maximizing institutions; this is not true. Like conventional banks, they try to be as profitable as possible, but in seeking profits, they are subject to different constraints than conventional banks.
100) Smallness of the financial system has obvious, though not necessarily visible, costs to the macroeconomy. A small financial system implies a lack of economies of scale, as there are significant fixed costs in setting up operations. As more individuals and firms use financial intermediaries, the information flow on customers improves, but a small financial system reduces the information flow function of financial intermediaries (Greenwood and Jovanovic 1990). Smallness of the financial system also limits risk-diversification options for savers and investors alike. In addition, a small financial system implies that profitable investment opportunities will be forgone, thereby limiting growth below potential. The lack of easily available financing reduces the resilience of the economy to shocks, smoothing consumption over time—a feature particularly important for many low-income countries and emerging markets that lack flexibility.

to conventional banks (Moody’s 2009). This is because Islamic banks are prohibited from engaging in activities that include interest, but the way central banks function traditionally in their operation is by purchasing or selling interest-bearing assets. The establishment in 2010 of the International Islamic Liquidity Management Corporation (IILM) should help address this problem. Its objective is to issue *shari’ah*-compliant financial instruments that facilitate more efficient and effective liquidity management solutions for institutions offering Islamic financial services.¹⁰¹ However, this is still a work in progress.

Thus Islamic banks have features that can promote growth, but at the same time are disadvantaged by the lack of economies of scale and liquid instruments—though work is ongoing to address these shortcomings. These varying factors suggest that the answer to the question as to whether Islamic banking promotes growth lies in the empirical evidence. While there is a plethora of empirical studies on the impact of financial development on growth,¹⁰² studies on how Islamic banking development affects growth are nonexistent—a void this study attempts to fill in the next section.

ECONOMETRIC ESTIMATION

The Data and Model

This section attempt to assess the impact of Islamic banking on growth empirically. It is based on a panel of 52 developing economies, of which 29 belong to the Organisation of Islamic Cooperation (OIC) (See Annex 5A for country names). Data span the period 1990–2010, and are averaged over three-year intervals. The sample size is constrained by data availability, in particular on variables capturing Islamic banking expansion and the quality of the institutional environment. In addition, the sample is restricted to low- and middle-income countries, as the macroeconomic variables included in the growth model are more relevant to them, and also because this helps reduce sample heterogeneity. The three-year average represents a good balance between the need to smooth business cycle fluctuations and the need to ensure an adequate number of observations for the regressions.

The analysis relies on a standard growth model, with a set of variables of interest measuring broad financial development and Islamic banking development, and control variables conventionally utilized in the growth literature. The data sources for the variables are found in the Annex 5B. The variables of interest consist of:

Development of Islamic banking. As discussed, there are theoretical grounds for expecting a positive impact of the development of Islamic banking on growth. This makes Islamic banking indicators good candidates for explaining cross-country growth. The analysis measures Islamic banking development by the amount of loans extended by these banks to the private sector divided by nominal GDP. While this indicator gives an idea about the size of the Islamic banking sector, it may not accurately measure the indirect channels through which Islamic banks could ignite growth (facilitating risk sharing, enhancing financial

101) http://www.ifsb.org/press_full.php?id=149&submit=more.

102) Levine (2005) offers an overview of empirical studies on financial development and growth. For a more recent survey, see Panizza (2014).

stability, and mobilizing savings). However, it is reasonable to assume that the larger the Islamic banking sector, the better it can perform its functions, a common hypothesis also made for conventional banking in past studies. Two alternative indicators of Islamic banking development are used: the ratio of Islamic banking assets to GDP, and the ratio of deposits in Islamic banks to GDP. The latter is a useful indicator to gauge the ability of Islamic banks to mobilize savings.¹⁰³ As a robustness check, an indicator of capitalization (the capital-to-asset ratio) was also used. The standard ratios of return on equity (ROE) and return on assets (ROA) was used to measure the financial strength and profitability of Islamic banks.

Development of the overall banking system. There is a general acceptance in the economic literature that financial deepening stimulates growth (for a literature review, see Levine 2005). As a result, the model includes the ratio of private sector credit by commercial banks as a percent of GDP as a measure of the development of the banking sector. Since both conventional and Islamic banking coexist in many countries and evolve together, it is important to control growth for the overall size of the banking system in order to properly isolate the growth impact of Islamic banking. Alternative measures of financial development considered include the ratio of private sector credit by bank and nonbank financial institutions as a percent of GDP, the total assets of financial institutions as a ratio of GDP, and the total financial system deposits as a ratio to GDP.

The control variables include:

Initial real GDP per capita. This variable is intended to control for growth convergence, as the neoclassical model points out that lower-income countries, with lower initial levels of technology and capital, will tend to grow faster than more advanced countries.

Inflation. It has long been argued that uncertainty about inflation lowers real output growth. Inflation uncertainty increases the variability of prices, which distorts the price signal and thereby harms economic efficiency and productivity. In addition, high inflation is likely to be associated with weaker growth, as it is often a reflection of weak quality and unsustainable macroeconomic policies.

Government consumption. The issue of government spending and its effect on economic growth is still widely debated in the economic literature. While government spending is necessary, and has a growth-enhancing impact when it finances public goods such as infrastructure, it can deter growth when excessively dominated by current spending. The hypothesis is that rising government consumption (as a percent of GDP) encourages poor quality spending, leads to an oversized government and often results in a waste of public resources, which crowd out private investment when the government relies on domestic resources to finance growing deficits.

Education. Human capital accumulation, as proxied by the primary school enrollment rate, is expected to have a positive impact on growth through improved labor productivity.

¹⁰³ The lack of data availability prevents the analysis from considering the development of the Islamic bond (*sukuk*) market. The market is still in its infancy and has low volumes.

Trade openness. It can be expected that countries that are more open will experience higher economic growth, as they can take better advantage of economies of scale in production, benefit from technological transfer, promote efficient allocation of resources, and encourage competition in domestic markets. At the same time, trade openness can make countries more vulnerable to exogenous shocks when export concentration is high, making growth more volatile, which ultimately can result in lower long-term growth.

Terms of trade. Improvements in terms of trade are often associated with economic growth. Conversely, deteriorating terms of trade would hamper growth, especially in developing countries where financial markets are shallow.

Quality of institutions. Institutional quality matters for long-term growth, as it determines the incentives of and the constraints on economic actors, fosters better policy choices, and shapes economic outcomes (Acemoglu, Johnson, and Robinson 2004). However, accurately measuring institutional development remains a challenge. While, no perfect or comprehensive indicator exists, the model uses the indicator of rule of law as a proxy for the quality of institutions, as compiled by the *International Risk Country Guide* (ICRG), which is widely used in the literature.¹⁰⁴

The baseline regression looks as follows:

$$G_t = a + bIslBank_t + dFD_t + jX_t + u_t + e_t + v_t, \quad (10.1)$$

where G is the growth rate of real GDP per capita; $IslBank$ is the indicator of Islamic banking development (ratio of loans, assets, or deposits in Islamic banks to GDP); FD is the measure of overall financial development (ratio of private sector credit by commercial banks to GDP); X is the set of control variables described above; u is the country-specific effect; e the error term; and v is the time-specific effect (see annex 5B for the source and description of data). Annex 5C shows the correlation matrix and Annex 5D provides the summary statistics.

The Methodology

Estimating the growth impact of Islamic banking poses several econometric challenges. First, while Islamic banking is growing rapidly, the size of Islamic banking development in relation to GDP or banking assets is often zero or very small in the majority of countries, including Islamic ones. This makes it challenging to identify any statistically significant impact. Second, similar to conventional banking, there may be a reverse causality from growth to Islamic finance, raising an endogeneity issue that needs to be addressed in the regressions. Third, the indicators of Islamic bank development are subject to measurement errors, as only pure Islamic banks are covered by statistics, while Islamic windows (of conventional banks) are not included, due to lack of data. This is because conventional banks often do not separate activities related to Islamic finance from those of conventional banking in their balance sheets and financial reports. The underestimation of Islamic banking development

¹⁰⁴ <http://www.prsgroup.com/about-us/our-two-methodologies/icrg>.

would lead to a downward bias of the estimated coefficient.

In light of these challenges, the analysis uses a range of econometric techniques, which include pooling and a fixed effects estimator to control for country-specific effects, and the System GMM estimator to control for endogeneity bias. The section that follows provides the rationale behind each econometric estimator, and describes what issues they do and do not address.

Main Results

Pooling and Fixed Effects

Table 5.1 presents the results from the estimations using a pooling and fixed effect estimator. The pooling estimator runs ordinary least squares (OLS) with the panel data, without regard to which countries they belong. Unlike the pooling estimator, a fixed effect estimator allows to control for unobservable country-specific effects that are invariant over time, and that affect a country's economic growth. The results from the pooling estimation are presented in columns 1 to 6, while those of the fixed effect estimator are shown in columns 7 to 12. For each series of regressions, the first specification runs the baseline model only with the control variables (columns 1 and 7), while the second specification controls for overall financial development (columns 2 and 8) measured as the ratio of private sector credit by commercial banks in percent of GDP. Subsequent specifications (column 3 to 6, 9 to 12) add in turn the three indicators of Islamic banking development, as well as a composite indicator constructed as the first principal component of the above three indicators of Islamic banking development, using principal component analysis (PCA).

Table 5.1 Islamic Banking and Growth: Pooling and Fixed Effect Regressions

	Pooling						Fixed effects					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Initial GDP per capita	-0.001	-0.012	-0.013	-0.014	-0.014	-0.014	-0.034	-0.102	-0.110	-0.102	-0.101	-0.102
	[0.005]	[0.006]*	[0.006]**	[0.006]**	[0.006]**	[0.006]**	[0.034]	[0.037]***	[0.039]***	[0.037]***	[0.037]***	[0.037]***
Education	0.062	0.059	0.060	0.062	0.062	0.061	0.153	0.165	0.171	0.167	0.166	0.167
	[0.020]***	[0.019]***	[0.019]***	[0.019]***	[0.019]***	[0.019]***	[0.049]***	[0.048]***	[0.048]***	[0.048]***	[0.048]***	[0.048]***
Inflation (log)	-0.084	-0.078	-0.078	-0.080	-0.080	-0.079	-0.085	-0.080	-0.077	-0.080	-0.081	-0.080
	[0.007]***	[0.011]***	[0.011]***	[0.010]***	[0.009]***	[0.010]***	[0.008]***	[0.009]***	[0.008]***	[0.008]***	[0.008]***	[0.008]***
Government consumption/GDP	-0.252	-0.330	-0.328	-0.319	-0.318	-0.321	-0.517	-0.685	-0.670	-0.673	-0.673	-0.671
	[0.101]**	[0.117]***	[0.118]***	[0.118]***	[0.118]***	[0.118]***	[0.218]**	[0.242]***	[0.242]***	[0.241]***	[0.242]***	[0.241]***
Trade openness	-0.026	-0.033	-0.032	-0.030	-0.031	-0.031	0.011	0.007	0.009	0.004	0.004	0.005
	[0.014]*	[0.015]**	[0.015]**	[0.015]**	[0.015]**	[0.015]**	[0.043]	[0.041]	[0.040]	[0.041]	[0.041]	[0.041]
Terms of trade growth	0.119	0.185	0.182	0.180	0.181	0.180	0.111	0.107	0.106	0.107	0.107	0.107
	[0.068]*	[0.067]***	[0.067]***	[0.067]***	[0.067]***	[0.067]***	[0.057]*	[0.056]*	[0.058]*	[0.057]*	[0.057]*	[0.057]*
Quality of Institutions	0.027	0.022	0.022	0.021	0.021	0.021	0.010	0.008	0.008	0.008	0.008	0.008
	[0.004]***	[0.004]***	[0.004]***	[0.004]***	[0.004]***	[0.004]***	[0.006]*	[0.005]	[0.006]	[0.005]	[0.005]	[0.005]
Overall financial development		0.001	0.001	0.001	0.001	0.001		0.002	0.001	0.002	0.002	0.002
		[0.000]***	[0.000]***	[0.000]***	[0.000]***	[0.000]***		[0.001]**	[0.001]**	[0.001]**	[0.001]**	[0.001]**
Loans by Islamic banks/GDP			0.857						5.254			
			[0.475]*						[2.748]*			
Assets of Islamic banks/GDP				0.673						0.711		
				[0.202]***						[0.269]**		
Deposits of Islamic banks/GDP					1.001						0.801	
					[0.233]***						[0.279]***	
Composite indicator of Islamic banking						0.006						0.008
						[0.002]***						[0.003]**
Constant	-0.024	0.051	0.054	0.059	0.060	0.060	0.172	0.587	0.628	0.584	0.580	0.588
	[0.030]	[0.037]	[0.038]	[0.038]	[0.038]	[0.038]	[0.201]	[0.222]**	[0.232]***	[0.218]**	[0.219]**	[0.219]**
Observations	286	252	252	252	252	252	286	252	252	252	252	252
Number of countries	52	45	45	45	45	45	52	45	45	45	45	45
R-squared	0.34	0.33	0.33	0.34	0.34	0.34	0.32	0.37	0.38	0.37	0.37	0.38

Note: Robust standard errors in brackets.

Significance level: * = 10 percent; ** = 5 percent; *** = 1 percent.

The findings confirm the well-known result found in the economic literature that financial deepening matters for growth. The coefficient is positive and significant in all specifications, at least at the 5 percent significance level. More interestingly, for a given level of financial development, Islamic banking is found to stimulate growth. The coefficients for all the indicators of Islamic banking development, including the composite index, are positive and enter the regressions in a statistically significant way, confirming the theoretical predictions, despite the fact that Islamic banking has been small relative to GDP.⁽¹⁰⁵⁾ This result suggests that Islamic banking responds to the specific needs of households and firms, which would have been otherwise unmet and the associated incremental growth would have been forgone. This result also provides evidence that Islamic banking does not appear to crowd out traditional finance—it complements, rather than substitutes for conventional banking—as for a given level of financial development, more Islamic banking raises economic growth.

Regarding the control variables, as expected, accumulation of human capital stimulates economic growth, with the coefficient for the primary school enrollment rate highly significant in all regressions. Testing the secondary school enrollment rate gives similar results, but missing values on this variable reduce the sample size. Countries with sound macroeconomic policies, characterized by low inflation and subdued government current spending, tend to grow faster. This also seems to be the case for countries with positive terms of trade changes and good institutional quality. Further, the hypothesis of economic convergence is supported by the negative and significant sign of the variable initial GDP per capita. In contrast, trade openness seems to have an ambiguous effect on growth, often with a counterintuitive sign, which is not surprising given the contrasting results in previous studies focusing on the growth dividend of trade openness (for an overview, see Winters 2004). Overall, the model helps explain 33 to 38 percent of the variability in economic growth rates

Although the pooling and fixed effect estimators provide interesting results, the coefficients may be biased in the presence of the endogeneity of the right-hand side variables, in particular with regard to the financial sector indicators. This is particularly relevant for Islamic banking indicators, as their potential endogeneity results not only from the reverse causality to growth, but also from measurement errors when the full size of Islamic banking development is not captured in the data.⁽¹⁰⁶⁾

System-GMM

To address the endogeneity issue, not only for the banking indicators but also for some other explanatory variables, the analysis relies on the System-GMM estimator (dynamic panel Generalized Method-of-Moment) developed by Blundell and Bond (1998). They show that the System-GMM estimator, which simultaneously uses both the *difference* in the panel data and the data from the original *levels* specification, produces dramatic increases in both consistency and efficiency relative to the first-differenced GMM developed by Arellano and

105) A cross-country regression averaging the dependent and explanatory variables over the entire period also shows that Islamic banking is positively and significantly correlated with economic growth.

106) Indeed, measurement errors on Islamic banking indicators would be captured by the error term, which will then be correlated with the Islamic banking variable. This violates the assumption of the fixed-effect estimator, whereby the error term is orthogonal to right-hand side variables.

Bond (1991).⁽¹⁰⁷⁾ The one-step System GMM estimator is used, while controlling for sample heterogeneity.⁽¹⁰⁸⁾ Further, to minimize over-fitting of the model, careful attention is paid to the selection of the instruments. For variables considered as predetermined or endogenous, only the first relevant lag is used.⁽¹⁰⁹⁾ To test the validity of the lagged variables as instruments, the standard Hansen test of over-identifying restrictions is used, where the null hypothesis is that the instrumental variables are not correlated with the residual; and the serial correlation test, where the null hypothesis is that the errors exhibit no second-order serial correlation.

The results from the System GMM estimator presented in table 5.2 are comparable to those from the fixed effect estimator.⁽¹¹⁰⁾ Once again, both overall financial system development and Islamic banking development appear to have a meaningful positive impact on economic growth. The coefficients on financial variables should be interpreted with caution, however, given the relatively small size of Islamic banking compared to the overall financial development, which makes them not directly comparable. One way to make the coefficients more informative by taking into account the scale effect is to estimate the coefficients for the standardized financial variables.⁽¹¹¹⁾

The results (in annex 5E) suggest that a one standard deviation increase in the overall financial development of the Islamic banking sector would lead to about 3.4 percent increase in real GDP per capita growth. For a one standard deviation increase in the ratio of loans by Islamic banks to GDP, the impact on growth would be of 0.5 percent, compared to about 0.8 percent for the ratios of assets and deposits of Islamic banks to GDP. However, even with the standardized variables, the regressions do not allow for reliable inference on the magnitude of the growth impact of Islamic banking, although they provide strong evidence on the positive effect of Islamic banking on growth. From that perspective, the fixed effects and GMM System results are quite encouraging, especially given the concern that a significant number of countries in the sample are reported as not having Islamic banking activities (although they might have banks with Islamic finance windows), while in countries where Islamic banks are present, their relative importance in the economy or the banking system is still far from significant.

107) For a useful guide on the application of the System GMM estimator to growth models, see Bond, Hoeffler, and Temple (2001).
108) The two-step method with the Windmeijer's correction produces comparable results.

109) As commonly done in the literature, it is assumed that the initial GDP per capita is predetermined, which rules out contemporaneous correlation with the error term, but not feedbacks from past shocks. The variables of inflation, government spending, and more importantly financial sector development and Islamic banking development, are treated as endogenous. This allows the analysis to address reverse causality issues, measurement errors, and omitted variable bias. Given the small size of the sample, not all the variables can be assumed to be endogenous, as the number of instruments grows very quickly to the point that they can weaken the Hansen test. For practical and theoretical reasons, the variables of primary school enrollment, quality of institutions, terms of trade, and trade openness are considered exogenous. Since the first two variables vary little over time, the high persistence makes lagged values poor instruments for the equations in first differences. Although the System GMM is meant to reduce this bias, the use of these instruments leads to a noticeable increase in the Hansen test probability toward the maximum value of 1. For the other two variables, terms of trade and trade openness, it is assumed that these are likely to be exogenous, considering that the sample consists of relatively small and developing countries. All that said, it is worth noting that the quality of the results from the regressions are not affected when all the right-hand side variables are assumed endogenous, except for the Hansen test probability, which suffers from the high ratio of the number of instruments over the number of observations.

110) In addition, neither the Hansen test nor the serial correlation test rejects the null hypothesis of the validity of the instruments.
111) The regressions are rerun with the financial variables rescaled to have a mean of zero and a standard deviation of one.

Table 5.2 Islamic Banking and Growth: Dynamic Panel System GMM Estimations

	(1)	(2)	(3)	(4)	(5)	(6)
Initial GDP per capita	0.014 [0.019]***	-0.020 [0.011]***	-0.025 [0.011]***	-0.017 [0.011]***	-0.012 [0.011]***	-0.014 [0.011]***
Education	0.038 [0.038]	0.072 [0.029]**	0.080 [0.028]***	0.070 [0.029]**	0.063 [0.030]**	0.064 [0.030]**
Inflation (log)	-0.235 [0.104]**	-0.213 [0.114]*	-0.219 [0.118]*	-0.208 [0.107]*	-0.203 [0.102]**	-0.203 [0.103]**
Government consumption/GDP	-0.718 [0.468]	-0.713 [0.360]**	-0.633 [0.353]*	-0.561 [0.312]*	-0.666 [0.331]**	-0.657 [0.337]*
Trade openness	-0.040 [0.024]*	-0.048 [0.023]**	-0.043 [0.024]*	-0.047 [0.024]*	-0.048 [0.025]*	-0.046 [0.024]*
Terms of trade growth	0.108 [0.082]	0.167 [0.078]**	0.175 [0.079]**	0.162 [0.078]**	0.158 [0.079]**	0.159 [0.077]**
Quality of Institutions	0.017 [0.007]***	0.016 [0.006]***	0.015 [0.006]**	0.015 [0.006]***	0.015 [0.005]***	0.015 [0.005]***
Overall financial development		0.002 [0.000]***	0.002 [0.000]***	0.002 [0.000]***	0.002 [0.000]***	0.002 [0.000]***
Loans by Islamic banks/GDP			1.395 [0.518]***			
Assets of Islamic banks/GDP				0.900 [0.336]***		
Deposits of Islamic banks/GDP					1.300 [0.522]**	
Composite indicator of Islamic banking						0.007 [0.003]**
Constant	0.027 [0.070]	0.169 [0.062]***	0.188 [0.063]***	0.140 [0.059]**	0.127 [0.057]**	0.134 [0.056]**
Observations	286	252	252	252	252	252
Number of countries	52	45	45	45	45	45
AR(2) test prob.	0.35	0.70	0.70	0.67	0.75	0.73
Hansen test prob.	0.07	0.36	0.64	0.67	0.67	0.76

Note: Robust standard errors in brackets. AR(2) = Arellano and Bond test of second order autocorrelation.

Significance level: * = 10 percent; ** = 5 percent; *** = 1 percent.

Robustness Analysis and Alternative Specifications

Table 5.3 presents additional regressions to test the robustness of the relationship between Islamic banking development and economic growth using alternative indicators of Islamic banking. Column 1 uses a step dummy, taking 1 for strictly positive values of the composite indicator if Islamic banking, and zero otherwise to measure the presence of Islamic banking in a given country. The associated coefficient is positive and significant, confirming the above results that for countries with similar level of financial development, those with Islamic banking would experience faster economic growth.

Table 5.3 Dynamic Panel System GMM Estimations with Alternative Indicators of Islamic Banking Development

	(1)	(2)	(3)	(4)	(5)
Initial GDP per capita	-0.027 [0.012]***	-0.026 [0.011]***	-0.030 [0.012]***	-0.028 [0.012]***	-0.028 [0.011]***
Education	0.087 [0.029]***	0.088 [0.027]***	0.089 [0.028]***	0.085 [0.028]***	0.089 [0.027]***
Inflation (log)	-0.219 [0.117]*	-0.221 [0.119]*	-0.217 [0.118]*	-0.218 [0.116]*	-0.221 [0.117]*
Government consumption/GDP	-0.683 [0.350]*	-0.610 [0.327]*	-0.298 [0.277]	-0.667 [0.326]**	-0.615 [0.316]*
Trade openness	-0.043 [0.023]*	-0.043 [0.022]**	-0.036 [0.025]	-0.042 [0.024]*	-0.041 [0.023]*
Terms of trade growth	0.163 [0.078]**	0.180 [0.077]**	0.195 [0.074]***	0.143 [0.080]*	0.161 [0.078]**
Quality of Institutions	0.015 [0.006]**	0.016 [0.006]***	0.014 [0.006]**	0.014 [0.006]**	0.015 [0.006]**
Overall financial development	0.002 [0.000]***	0.001 [0.000]***	0.001 [0.000]***	0.002 [0.000]***	0.001 [0.000]***
Dummy variable for strictly positive values of Islamic Banking					
Composite indicator of Islamic banking		0.036 [0.017]**			
Soundness and profitability of Islamic banks					
Total capital ratio		0.002 [0.001]***			0.001 [0.001]*
Return on equity			0.004		

	[0.001]***				
Return on assets				0.026	0.016
				[0.012]**	[0.007]**
Constant	0.200	0.186	0.167	0.207	0.200
	[0.069]***	[0.063]***	[0.063]***	[0.072]***	[0.067]***
Observations	252	252	252	252	252
Number of countries	45	45	45	45	45
AR(2) test prob.	0.77	0.77	0.77	0.96	0.91
Hansen test prob.	0.42	0.71	0.68	0.55	0.82

Note: Robust standard errors in brackets. AR(2) = Arellano and Bond test of second order autocorrelation. Significance level: * = 10 percent; ** = 5 percent; *** = 1 percent.

The subsequent regressions test the impact of variables related to the soundness and profitability of Islamic banks on economic growth (columns 2 to 5). It emerges that well-capitalized Islamic banks may have a favorable impact on economic growth, probably because healthy banks are less prone to crisis. With profitability measured by the standard ratios of return on equity (ROE) and return on assets (ROA), the analysis finds that Islamic banks' profitability also benefit economic growth.

Using alternative measures of overall financial development does not change the conclusion that Islamic banking matters for growth. The coefficient for Islamic banking indicators retains its sign and statistical significance when bank and nonbank private credit ratio, a broader measure of financial development, is controlled for (table 5.4, columns 1 to 3).

**Table 5.4 Use of Different Indicators of Overall Financial Development
(System GMM Estimations)**

	(1)	(2)	(3)	(4)	(5)
Initial GDP per capita	-0.019 [0.010]***	-0.009 [0.011]***	-0.007 [0.011]***	-0.010 [0.011]***	-0.014 [0.013]***
Education	0.076 [0.029]***	0.065 [0.030]**	0.062 [0.031]**	0.062 [0.030]**	0.069 [0.029]**
Inflation (log)	-0.238 [0.134]*	-0.221 [0.118]*	-0.220 [0.116]*	-0.222 [0.098]**	-0.227 [0.122]*
Government consumption/GDP	-0.574 [0.267]**	-0.588 [0.245]**	-0.558 [0.242]**	-0.538 [0.263]**	-0.321 [0.267]
Trade openness	-0.028 [0.021]	-0.031 [0.020]	-0.033 [0.022]	-0.031 [0.020]	-0.058 [0.024]**
Terms of trade growth	0.169 [0.079]**	0.159 [0.079]**	0.157 [0.078]**	0.158 [0.074]**	0.166 [0.074]**
Quality of Institutions	0.017 [0.006]***	0.018 [0.006]***	0.017 [0.005]***	0.016 [0.005]***	0.010 [0.006]*
Overall financial development (banks and nonbanks)	0.001 [0.000]**	0.001 [0.000]*	0.001 [0.000]*		
Assets of banks and other financial institutions/GDP				0.050 [0.029]*	
Financial system deposits/GDP					0.134 [0.037]***
Loans by Islamic banks/GDP	1.593 [0.683]**				
Assets of Islamic banks/GDP		0.873 [0.373]**		1.067 [0.401]***	
Deposits of Islamic banks/GDP			1.385 [0.616]**		1.507 [0.538]***
Constant	0.152 [0.062]**	0.103 [0.058]*	0.089 [0.055]	0.102 [0.061]*	0.111 [0.065]*
Observations	258	258	258	258	258
Number of countries	45	45	45	45	45
AR(2) test prob.	0.38	0.43	0.42	0.39	0.20
Hansen test prob.	0.67	0.65	0.65	0.58	0.60

Note: Robust standard errors in brackets. AR(2) = Arellano and Bond test of second order autocorrelation. Significance level: * = 10 percent; ** = 5 percent; *** = 1 percent.

In addition, a measure of overall financial development is introduced: the ratio of total financial sector assets to GDP and the ratio of total financial sector deposit to GDP, respectively in the specification using the corresponding measure for Islamic banking (table 5.4, columns 4 and 5). Both the indicators of overall financial development and Islamic banking continue to be positively and significantly correlated with economic growth.

To test the robustness of the results, it is worthwhile to assess their sensitivity to sample composition and the time period. As Islamic banks are likely to emerge and expand in countries with large Muslim population, the sample was restricted to countries with more than 50 percent Muslim population share (columns 1 to 3, table 5.5). In subsequent regressions, this threshold is increased to 75 percent (columns 4 to 6, table 5.5). The results are broadly in line with those obtained for the whole sample and the magnitudes of the coefficients are also comparable,¹¹²⁾ suggesting that countries with smaller share of Muslim population can potentially benefit from Islamic banking. The regressions are rerun with a sample restricted to net oil importer countries (columns 7 to 9, table 5.5) in order to exclude potential outlier countries where Islamic banking development might have been fuelled by oil money. While the three indicators of Islamic banking remain positively correlated with economic growth, the asset and deposit ratios are significant, but not the loan ratio. This probably is a reflection that Islamic banks in net oil importer countries may not enjoy the benefits of large oil money deposits that could be used to scale up loans, compared to net oil exporting countries.

The regressions were also run over different time periods to see if the results hold. First, the period 1996–2010 was considered, leaving out the first half of the 1990s, where Islamic banks were at the nascent stage. Second, the regressions were run over 1990–2007, excluding the 2008–10 period which might be affected by structural breaks associated with the 2008 global financial crisis. The conclusion that Islamic banking is favorable to economic growth holds, regardless of the period considered (table 5.6). The regressions over the period 1996–2007 yield similar results.

112) The difference is not statistically significant. This was cross-checked by introducing the interaction between Islamic banking development indicators and the share of Muslims in the population in the baseline model; there were no conclusive results.

Table 5.5 Sensitivity to Sample Composition (System GMM Estimations)

	Muslim population share > 50 percent			Muslim population share > 75 percent			Net oil importer countries		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Initial GDP per capita	-0.001 [0.010]***	-0.001 [0.009]***	0.011 [0.010]***	0.001 [0.012]***	0.003 [0.008]***	0.010 [0.009]***	-0.014 [0.013]***	-0.010 [0.011]***	-0.008 [0.012]***
Education	0.051 [0.042]	0.059 [0.034]*	0.027 [0.037]	0.071 [0.049]	0.074 [0.036]**	0.055 [0.042]	0.090 [0.029]***	0.087 [0.029]***	0.085 [0.029]***
Inflation (log)	-0.143 [0.104]	-0.136 [0.048]***	-0.129 [0.055]**	-0.131 [0.109]	-0.142 [0.049]***	-0.151 [0.051]***	-0.179 [0.080]**	-0.174 [0.076]**	-0.173 [0.075]**
Government consumption/GDP	-0.760 [0.240]***	-0.728 [0.253]***	-0.675 [0.206]***	-0.710 [0.303]**	-0.736 [0.347]**	-0.669 [0.282]**	-0.561 [0.261]**	-0.535 [0.225]**	-0.556 [0.243]**
Trade openness	-0.033 [0.042]	-0.028 [0.035]	-0.039 [0.040]	-0.038 [0.050]	-0.030 [0.046]	-0.039 [0.046]	-0.048 [0.023]**	-0.046 [0.024]*	-0.047 [0.024]*
Terms of trade growth	0.207 [0.107]*	0.188 [0.098]*	0.204 [0.102]**	0.079 [0.077]	0.061 [0.065]	0.062 [0.071]	0.144 [0.099]	0.140 [0.096]	0.140 [0.096]
Quality of Institutions	0.008 [0.008]	0.008 [0.008]	0.007 [0.007]	0.007 [0.006]	0.007 [0.006]	0.006 [0.005]	0.019 [0.006]***	0.019 [0.006]***	0.019 [0.006]***
Overall financial development	0.001 [0.001]**	0.001 [0.000]**	0.001 [0.001]**	0.001 [0.001]**	0.001 [0.000]**	0.001 [0.001]*	0.001 [0.001]**	0.001 [0.001]**	0.001 [0.001]**
Loans by Islamic banks/GDP	1.196 [0.440]***			1.307 [0.352]***			2.286 [4.091]		
Assets of Islamic banks/GDP		0.650 [0.302]**			0.733 [0.320]**			1.110 [0.606]*	
Deposits of Islamic banks/GDP			0.921 [0.637]			1.252 [0.583]**			1.310 [0.758]*
Constant	0.091 [0.065]	0.083 [0.063]	0.032 [0.065]	0.058 [0.061]	0.047 [0.056]	0.012 [0.058]	0.097 [0.073]	0.074 [0.066]	0.067 [0.067]
Observations	101	101	101	92	92	92	213	213	213
Number of countries	19	19	19	17	17	17	36	36	36
AR(2) test prob.	0.12	0.13	0.11	0.13	0.14	0.12	0.38	0.40	0.41
Hansen test prob.	0.99	0.94	0.94	0.98	0.98	0.98	0.90	0.91	0.90

Note: Robust standard errors in brackets. AR(2) = Arellano and Bond test of second order autocorrelation. Significance level: * = 10 percent; ** = 5 percent; *** = 1 percent.

Table 5.6 Sensitivity to Time Periods (System GMM Estimations)

	1996-2010			1990-2007		
	(1)	(2)	(3)	(4)	(5)	(6)
Initial GDP per capita	-0.018 [0.011]***	-0.015 [0.010]***	-0.010 [0.010]***	-0.021 [0.013]***	-0.008 [0.013]***	-0.008 [0.013]***
Education	0.079 [0.031]**	0.078 [0.028]***	0.071 [0.030]**	0.071 [0.025]***	0.052 [0.029]*	0.052 [0.029]*
Inflation (log)	-0.218 [0.098]**	-0.191 [0.081]**	-0.191 [0.076]**	-0.221 [0.121]*	-0.207 [0.107]*	-0.207 [0.107]*
Government consumption/GDP	-0.771 [0.369]**	-0.626 [0.328]*	-0.744 [0.351]**	-0.395 [0.332]	-0.417 [0.305]	-0.387 [0.304]
Trade openness	-0.046 [0.025]*	-0.049 [0.024]**	-0.052 [0.026]**	-0.040 [0.027]	-0.043 [0.027]	-0.044 [0.027]
Terms of trade growth	0.255 [0.072]***	0.239 [0.070]***	0.235 [0.071]***	0.172 [0.079]**	0.155 [0.080]*	0.155 [0.079]*
Quality of Institutions	0.023 [0.007]***	0.021 [0.007]***	0.021 [0.007]***	0.014 [0.007]**	0.014 [0.006]**	0.014 [0.006]**
Overall financial development	0.002 [0.000]***	0.002 [0.000]***	0.002 [0.000]***	0.001 [0.001]***	0.001 [0.000]**	0.001 [0.000]**
Loans by Islamic banks/GDP	1.065 [0.523]**			1.504 [0.544]***		
Assets of Islamic banks/GDP		0.868 [0.371]**			0.923 [0.349]***	
Deposits of Islamic banks/GDP			1.308 [0.570]**			1.482 [0.573]***
Constant	0.133 [0.062]**	0.103 [0.062]*	0.093 [0.061]	0.146 [0.070]**	0.085 [0.067]	0.079 [0.065]
Observations	182	182	182	224	224	224
Number of countries	45	45	45	45	45	45
AR(2) test prob.	0.60	0.51	0.57	0.70	0.80	0.82
Hansen test prob.	0.62	0.63	0.61	0.28	0.27	0.26

Note: Robust standard errors in brackets. AR(2): Arellano and Bond test of second order autocorrelation. Significance level: * = 10 percent; ** = 5 percent; *** = 1 percent.

Conclusion

The objective of this study is to assess whether the development of Islamic banking is good for economic growth. This is the first study, to our knowledge, that comprehensively assesses this question using robust empirical techniques. It finds that, holding constant the level of financial development and other growth determinants, countries where Islamic banking is developing—and hence its impact on growth is measurable—experience faster economic growth than others. This is a powerful result, and robust to various specifications: different measures of Islamic banking development and econometric estimators (pooling, fixed effects and System GMM) were used, and controls were put in place for country and time-specific dummies.

This finding is also encouraging as, despite its rapid growth, Islamic banking still represents a relatively small share of the economy and of the overall size of the financial system, and it has yet to reap the benefits from economies of scale. Although the study does not suggest that Islamic banking provides more “bang for the buck” compared to conventional banks, it does, however, establish the positive impact on growth. As indicated, there are uncertainties about the magnitude of the growth effect of Islamic banking, which calls for further research as Islamic banks spread and become larger. Should future studies confirm this finding, the policy implications would be significant. One further avenue of research going forward will be to look at the development of Islamic banking at the local level—comparing localities where Islamic banks are present to those where they are lacking—to confirm more robustly the findings of this study.

As the global crisis has illustrated, conventional banking has many weaknesses; one of them is its excessive dependence on leverage. However, Islamic banking, which is one of the fastest growing segments of global finance, has unique features that are highly appropriate for developing countries. In particular, it is based on risk sharing, making its activities more closely related to the real economy than conventional finance; it is also more flexible in the face of shocks, and more inclusive with regard to growth. Not only does Islamic finance help stimulate growth, but it also appears less prone to risks such as bubbles (Hassan and Dridi 2011).

This means that many countries that currently suffer from low growth—a feature often present in Muslim countries—may want to further develop this segment of finance. As an initial step, it is essential to develop proper legislation and regulation, as well as the supporting infrastructure, including the necessary skill set. Future areas of research include better measuring Islamic banking development and assessing the impact of Islamic banking on inequality and social development.

Annex 5A Country Sample

OIC members		Non-OIC members	
DZA	Algeria	AGO	Angola
BGD	Bangladesh	BWA	Botswana
BFA	Burkina Faso	CHN	China
CMR	Cameroon	ZAR	Congo, Dem. Rep.
CIV	Côte d'Ivoire	COG	Congo, Rep.
EGY	Egypt, Arab Rep.	ETH	Ethiopia
GAB	Gabon	GHA	Ghana
GMB	Gambia, The	IND	India
GIN	Guinea	KEN	Kenya
GNB	Guinea-Bissau	LBR	Liberia
IDN	Indonesia	MDG	Madagascar
IRN	Iran, Islamic Rep.	MWI	Malawi
JOR	Jordan	MNG	Mongolia
LBN	Lebanon	NAM	Namibia
LBY	Libya	PNG	Papua New Guinea
MYS	Malaysia	PHL	Philippines
MLI	Mali	ZAF	South Africa
MAR	Morocco	LKA	Sri Lanka
MOZ	Mozambique	TZA	Tanzania
NER	Niger	THA	Thailand
PAK	Pakistan	VNM	Vietnam
SEN	Senegal	ZMB	Zambia
SDN	Sudan	ZWE	Zimbabwe
SYR	Syrian Arab Republic		
TGO	Togo		
TUN	Tunisia		
TUR	Turkey		
UGA	Uganda		
YEM	Yemen, Rep.		

Annex 5B Variable Definition and Sources

Variables	Definitions	Sources
GDP per capita growth	Change in the ratio of real Gross Domestic Product (GDP) divided by the size of the population.	
Growth volatility	Standard deviation of real GDP growth	
Inflation (log)	Change in consumer price index (CPI).	International Monetary Fund (International Financial Statistics)
Government consumption/GDP	General government current expenditure divided by GDP.	
Terms of trade growth	Change in terms of trade index calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base year 2000.	
Education (primary)	The ratio of total enrollment in primary education, regardless of age, to the population of the age group that officially corresponds to the primary education level.	
Trade Openness	The sum of exports and imports of goods and services measured as a share of GDP.	World Bank (World Development Indicators)
Investment to GDP ratio	Total investment as a share of nominal GDP	
Rule of law	The confidence of citizens in law, and the extent that they abide by the rules of the society, such as contract enforcement, property rights, police, and court	World Bank (World Bank Governance Indicators)
Number of loan accounts/Population	Number of loan accounts in commercial banks, MFIs, credit unions and financial cooperatives divided by total population	International Monetary Fund (Financial Access Survey)
Number of deposit account/population	Number of deposit accounts in commercial banks, MFIs, credit unions and financial cooperatives divided by total population	
Banking Crisis	A dummy variable taking 1 in the year a banking crisis occurred and zero otherwise	Laeven and Valencia (2012)
Overall financial development (Bank private credit ratio)	Credit by deposit money banks to the private sector divided by GDP.	
Private credit by banks and other financial institutions/GDP	Demand, time and saving deposits in deposit money banks and other financial institutions as a share of GDP	Beck, Demirgüç-Kunt and Levine (2000); 2013 Financial Development and Structure Dataset
Assets of banks and other financial Institutions/GDP	Credit by deposit money banks and other financial institutions to the private sector as a percentage of GDP	
Financial system deposits/GDP	Claims on domestic real nonfinancial sector by deposit money banks and other financial institutions as a share of GDP	
Share of Muslims in the population	Numbers of Muslims divided by the size of the population	Alesina and others (2003)
Loans by Islamic banks/GDP	Total loans by Islamic Banks divided by GDP	
Assets of Islamic banks/GDP	Total assets of Islamic Banks divided by GDP	
Deposits in Islamic banks/GDP	Total deposits in Islamic Banks divided by GDP	Bankscope database
Islamic bank liquidity ratio	Total liquid assets of Islamic banks divided by their total deposits	
Distance from Malaysia	Minimum distance between Malaysia and a given country (in kms)	Gleditsch and Ward (2001)

Annex 5C Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
GDP per capita growth	(1)	1.00													
Education (primary)	(2)	0.21	1.00												
Inflation (log)	(3)	-0.35	-0.07	1.00											
Government consumption/GDP	(4)	-0.06	0.06	-0.10	1.00										
Trade openness	(5)	0.04	0.29	-0.14	0.22	1.00									
Terms of trade growth	(6)	0.15	0.06	-0.08	-0.02	0.12	1.00								
Rule of law	(7)	0.36	0.19	-0.18	0.27	0.09	-0.01	1.00							
Overall financial development (Bank private credit ratio)	(8)	0.28	0.21	-0.16	0.22	0.42	0.01	0.27	1.00						
Loans by Islamic banks/GDP	(9)	0.10	0.04	0.00	0.03	-0.02	0.06	0.12	0.10	1.00					
Assets of Islamic banks/GDP	(10)	0.11	0.01	0.06	0.00	-0.05	0.05	0.11	0.05	0.78	1.00				
Deposits in Islamic banks/GDP	(11)	0.11	0.01	0.07	0.00	-0.04	0.04	0.11	0.05	0.62	0.97	1.00			
Private credit by banks and other financial institutions/GDP	(12)	0.21	0.22	-0.14	0.27	0.32	0.02	0.21	0.94	0.10	0.05	0.05	1.00		
Assets of banks and other financial institutions/GDP	(13)	0.20	0.23	-0.14	0.27	0.26	0.04	0.21	0.90	0.07	0.03	0.03	0.97	1.00	
Financial system deposits/GDP	(14)	0.29	0.25	-0.16	0.20	0.40	0.06	0.34	0.89	0.13	0.08	0.07	0.79	0.83	1.00

Annex 5D Summary Statistics

Variables	Observations	Mean	Std. Dev.	Min	Max
GDP per capita growth	286	0.05	0.09	-0.39	0.33
Education (primary)	286	0.93	0.24	0.26	1.56
Inflation (log)	286	0.13	0.35	-0.05	4.48
Government consumption/GDP	286	0.14	0.05	0.04	0.41
Trade openness	286	0.71	0.35	0.14	2.14
Terms of trade growth	286	0.00	0.07	-0.37	0.28
Rule of law	286	3.23	1.13	0.14	6.00
Overall financial development (Bank private credit ratio)	252	23.1	21.5	0.4	103.8
Loans by Islamic banks/GDP	286	0.001	0.005	0.000	0.051
Assets of Islamic banks/GDP	286	0.002	0.011	0.000	0.125
Deposits in Islamic banks/GDP	286	0.001	0.008	0.000	0.106
Private credit by banks and other financial institutions/GDP	286	28.1	30.7	0.4	168.2
Assets of banks and other financial institutions/GDP	286	0.34	0.35	0.00	2.08
Financial system deposits/GDP	286	0.32	0.25	0.01	1.15

Annex 5E Islamic Banking and Growth: Dynamic Panel System GMM Estimations with Standardized Coefficients for the Financial Variables

	(1)	(2)	(3)	(4)
Initial GDP per capita	-0.025 [0.011]***	-0.016 [0.011]***	-0.011 [0.011]***	-0.018 [0.011]***
Education	0.079 [0.029]***	0.068 [0.029]**	0.061 [0.031]**	0.070 [0.028]**
Inflation (log)	-0.218 [0.118]*	-0.204 [0.105]*	-0.199 [0.100]**	-0.189 [0.090]**
Government consumption/GDP	-0.641 [0.354]*	-0.581 [0.318]*	-0.681 [0.339]**	-0.491 [0.286]*
Trade openness	-0.043 [0.024]*	-0.046 [0.024]**	-0.048 [0.024]**	-0.051 [0.025]**
Terms of trade growth	0.174 [0.077]**	0.159 [0.077]**	0.155 [0.078]**	0.172 [0.075]**
Quality of Institutions	0.016 [0.006]**	0.015 [0.006]***	0.015 [0.005]***	0.015 [0.006]***
Standardized coefficients				
Overall financial development	0.034 [0.009]***	0.032 [0.008]***	0.032 [0.009]***	0.034 [0.008]***
Loans by Islamic banks/GDP	0.005 [0.002]***			
Assets of Islamic banks/GDP		0.008 [0.003]***		
Deposits of Islamic banks/GDP			0.008 [0.003]**	
Composite indicator of Islamic banking				0.007 [0.003]***
Constant	0.223 [0.067]***	0.171 [0.062]***	0.160 [0.059]***	0.171 [0.067]**
Observations	252	252	252	252
Number of countries	45	45	45	45
AR(2) test prob.	0.70	0.69	0.75	0.63
Hansen test prob.	0.73	0.74	0.76	0.63

Note: Robust standard errors in brackets. AR(2) = Arellano and Bond test of second order autocorrelation. Significance level: * = 10 percent; ** = 5 percent; *** = 1 percent.

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CHAPTER 6

UNDERMINING SHARED PROSPERITY?
RISK SHIFTING AND ISLAMIC BANKING

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Abstract

In the last five decades, advances in information technology and financial innovations have vastly enlarged the capacity for banks to switch regimes from risk transfer to risk shifting. The devastating power of this capacity was amply demonstrated in the financial crisis of 2007/08. The fallout from that crisis has intensified calls for a re-examination of the current banking model and its underlying incentive structure. Risk shifting is, axiomatically, absent in an ideal Islamic financial system; instead, risk sharing lies at its core. Thus the Islamic banking model provides a unique paradigm. However, the current configuration of Islamic banking has grown out of conventional banking and uses many of its techniques and instruments. The main objective of this study is to empirically investigate the risk-shifting behavior in Islamic banks in dual banking systems of OIC (Organisation of Islamic Cooperation) member-states. The two-step dynamic difference GMM (generalized method of moments) is applied to cater to the nature of the data about Islamic banking, which is characterized by a larger dynamic panel and a smaller time frame. Findings tend to indicate that Islamic banking has a limiting effect on risk shifting. The effect, however, is not sufficient to fully nullify the overall risk-shifting incentives. The evidence supports strengthening risk sharing and reforming the configuration of Islamic banking as the way forward for shared prosperity.

Keywords: Risk Shifting, Risk Sharing, Islamic Banks, Sustainable Alternative Banking Model, Two-Step Difference GMM

The Impact of Islamic Banking on Risk-shifting Behavior

The original intent of conventional banking was to serve as a pure intermediary between surplus fund holders and deficit units in the economy⁽¹¹³⁾. In this role, banks transferred risk from depositors to borrowers. An edifice of deposit insurance system and a supervisory/

113) The theory of financial intermediation is premised on the insignificance of delegation costs (Ciancanelli and Reyes-Gonzalez, 2000 and Diamond, 1984)

regulatory structure were erected to protect creditors at the expense of debtors. In the past five decades, however, advances in information technology and financial innovations have vastly enlarged the capacity of banks to switch rapidly from risk transfer to risk shifting regimes.

Keynes (1931, 1936) long argued that risk transfer, through the interest mechanism, leads to two evils of capitalism: worsening income distribution and unemployment. Piketty (2013) validated this argument by demonstrating worsening income distribution worldwide. As economies have grown more prosperous, lower income groups have not shared in the prosperity; meanwhile, the rich have become much richer. The devastating power of risk transfer enhanced by risk shifting was amply demonstrated in the financial crisis of 2007/08. The fallout from that crisis has intensified calls for a reexamination of the current banking model.

The detachment of risk bearing from the right to profit in risk shifting arrangements causes adverse distributional effects. In particular, banks' tendency to shift the risk of losses to external parties, while internalizing gains through debt-based contracts (Sheng 2009), creates a minority class (equity holders and financiers) that benefits from economic and financial growth and excludes a majority (depositors and taxpayers) from sharing in the prosperity: a classic case of privatizing gains and socializing losses. Wealth is expropriated from debt holders to equity holders, through higher leverage and/or return volatility (Calomiris and Carlson, 2016; Jensen and Meckling, 1976). Worse still, the majority stands to bear the brunt of recurrent crises induced by risk shifting.

Risk sharing, on the other hand, supports financial inclusion by reducing participation barriers and overcoming the problems of limited commitment and information asymmetry, which otherwise hinder financial access (Dabla-Norris and others 2015; Hellwig 1998). As a result, risk sharing increases access of lower-income groups to finance and promotes shared prosperity in the short to medium term. In the long term, it maintains financial stability.

Risk sharing is advocated as the principal modality of Islamic finance, based on the holy *Qur'ān* (2:275) and the legal maxims "*al-Ghunmu bi al-Ghurmi*⁽¹¹⁴⁾" and "*Al-Kharaju bi adh-Dhaman*⁽¹¹⁵⁾." Risk shifting is, axiomatically, absent in an ideal Islamic financial system (the Kuala Lumpur Declaration 2012). In such a system, equity holders are expected to share both the upside and downside potential of assets with investment account holders (depositors). Furthermore, a more efficient resource allocation is expected, because the "credible threat of loss" strengthens investment account holders' incentives to monitor Islamic banks (Distinguin, Kouassi and Tarazi 2013; Calomiris 1999). This can potentially foster financial inclusion and reduce the incidence of bank failures and the size of losses incurred by depositors and taxpayers (Esty 1998). Creating an opportunity for shared prosperity is, therefore, a litmus test of the authenticity of Islamic banking. Any empirical evidence of risk shifting by Islamic banks would suggest that the current industry is undermining the contribution of Islamic finance to shared prosperity.

114) No gains without risk.

115) [Entitlement to] gain "is dependent on responsibility [for attendant expenses and possible loss...]" (Dusuki, 2012 p. 4). See also Laldin et al. (2013) for a discussion on Islamic legal maxims and their application in Islamic finance.

The current form of Islamic banking has grown out of conventional banking and uses many of its techniques and instruments. Besides the product design and development that has resulted in the dominance of short term debt-based contracts, rules and laws regulating Islamic banks around the world today tend to replicate those of the conventional system (Lajis, 2015). Whereas significant work has delineated the theoretical foundations of Islamic banking and its axiomatic characteristics, empirical research has been relatively limited and has often focused on issues of efficiency, profitability, and stability. Further empirical assessment of the implications of the current form of Islamic banking is imperative. To this end, this study analyses evidence of risk-shifting behavior in Islamic banks in member-states of the Organization of Islamic Cooperation (OIC). It is the first study to cover OIC member-states in the empirical risk shifting literature. It contributes to the largely under-researched topic of risk shifting in Islamic banks, where a peculiar class of depositors acts as residual claimants. Studies conducted thus far are based on conventional models of banking, where depositors are fixed claimants. Findings have significant implications for Islamic banking reforms and the general framework of regulations and supervision. The research is timely given the recent global financial crisis and the interest it has revived in the sustainability of banking business models and participants' incentive structure. It is also essential in light of the increasing importance of Islamic finance and the newly acquired "commercial significance" of its banking operations (Haneef and Mirakhor, 2014).

The analysis benefits from Arellano and Bond's (1991) two-step difference GMM (generalized method of moments) estimator. This method is used rather than OLS (ordinary least squares), because of the possibility of bias introduced to OLS estimates by the unlikelihood of a strictly exogenous asset risk (the independent variable), the likelihood of reverse causality between the dependent and independent variables of the study, and the properties of the micro panel dataset, all of which could bias OLS estimates.

Review of Relevant Literature

Theoretical Literature

The discussion of risk shifting is rooted in agency theory (Jensen and Meckling 1976). It occurs as a standard moral hazard problem in an environment of information asymmetry. Informationally-advantaged equity holders are incentivized to pursue their self-interests under concealed conflict of interests (Karl and McCullough 2012; Hovakimian, Kane, and Laeven 2003).

The use of leverage further exacerbates equity holders' risk-shifting incentives (Hellwig 1998; Esty 1997a and 1997b). Debt holders' often fixed and predetermined rate of interest reinforces equity's convex payoff structure and its similarity to call options (Jensen and Meckling 1976; Black and Scholes 1973). More specifically, equity holders stand to benefit from excess upside potential, by the virtue of their state-contingent risk-sharing-based contracts, while debt holders' benefits are predetermined contractually. Downside exposure,

on the other hand, is limited by limited liability clauses and is largely borne by debt holders.⁽¹¹⁶⁾ The resulting distributional asymmetry encourages excessive risk taking on the part of equity holders. At the extreme, even investments with negative net present values may be pursued (Hernández, Povel, and Sertsios 2014; Hellwig 1998). Consequently, relatively safer assets are substituted with risky assets, giving rise to the notion of "asset substitution" (Harris and Raviv 1991). The conflict ultimately leads to a transfer of wealth from debt holders to equity holders, in a direct violation of the precepts of shared prosperity (Van Wijnbergen, Zaheer, and Farooq 2013; Bushman and Williams 2012; Esty 1997a, 1997b).

Galai and Masulis (1976) illustrate that a risky undertaking increases debt holders' systematic risk while simultaneously reducing it for equity holders, when it is not backed by a proportionate increase in bank capital. The authors also demonstrate that the value of equity (E) increases with assets' volatility (σ); $\partial E / \partial \sigma > 0$. The larger the derivative, the greater the equity holder's incentive to shift risk (Galai and Masulis 1976).

Risk shifting is not limited to the classical debt-equity relationship. It may occur in different contexts where information is asymmetric.⁽¹¹⁷⁾ This study, however, focuses on risk shifting in dual banking systems where Islamic and conventional banking coexist. In conventional banking, depositors represent one class of debt holders. A moral hazard of risk shifting exists between them and the banks' equity holders.

The ideal Islamic banking system is unique in its proposition to separate commercial and investment banking activities, in conformity with the Islamic law of contract. As such, *amānah*-based short-term demand deposits are supported with 100 percent reserves⁽¹¹⁸⁾ and are maintained exclusively for safe keeping purposes. Investment banks, on the other hand, pursue their traditional intermediary role. They accept surplus funds on a profit-and-loss sharing basis (*muḍārabah*), and channel them to the real economy through projects that match depositors' risk and return profiles. Since the principal (base capital) in profit-and-loss sharing contracts is not protected, no reserve is required for this segment of banking. The risk of bank runs is thus inherently muted and there is no role for deposit insurance (Mirakhor, Krichene, and Shaikat 2012; Askari and others 2012). As a result, the moral hazard problem associated with deposit insurance is likely to be eliminated. At the same time, the risk of capital loss and the contingency of profits make investment account holders residual claimants of the Islamic banks (Abedifar, Molyneux, and Tarazi 2013). This, in effect, reinforces their monitoring incentives and expose banks to greater discipline in the form of higher risk of withdrawals (Beck, Demirgüç-Kunt, and Merrouche, 2013; Van Wijnbergen, Zaheer, and Farooq 2013; Abedifar, Molyneux, and Tarazi 2013).⁽¹¹⁹⁾ The possibility of adverse wealth transfer is also overcome by the dominance of residual claims, making risk shifting less potent (Esty 1997a

116) Danielova, Sarkar, and Hong (2013); Boyd and Hakenes (2012); Wilson and Wu (2010); MacMinn (1987); Jensen and Meckling (1976).

117) Risk shifting has also been analysed in the following contexts: money management (Basak, Pavlova, and Shapiro 2007); the mutual funds industry (Huang, Sialm, and Zhang 2011); pension plans (Rauh 2009); insurance (Karl and McCullough, 2012); and nonfinancial firms (Gilje 2013; Eisdorfer 2008).

118) This is also the essence of the Chicago Plan, proposed in the aftermath of the Great Depression by leading American economists. The proposal advocates a 100 percent reserve against demand deposits and no deposit insurance for investment deposits. See Mirakhor, Krichene, and Shaikat (2012); Askari and others (2012); and Benes and Kumhof (2012), among others.

119) Also known as displaced commercial risk.

and 1997b; Fama and Jensen, 1983).⁽¹²⁰⁾ Given the above characteristics plus the *shari'ah* requirement of a real sector anchor and restrictions on the sale of debt and short selling, leverage is capped in Islamic banks (Van Wijnbergen, Zaheer, and Farooq 2013). Altogether, these characteristics weaken the incentives of Islamic banks to shift risk.

Benefits from risk shifting are lower even when Islamic banks adopt smoothing strategies to mitigate withdrawal risk, such as maintaining profit equalization reserves and investment risk reserves (Van Wijnbergen, Zaheer, and Farooq 2013; IFSB 2010). This is the case because the upside from high-risk projects is no longer monopolized by equity holders but is shared with the investment account holders, in accordance with the profit-and-loss sharing contract.

Empirical literature

A growing body of empirical literature investigates risk shifting in the banking industry. It is, however, dominated by analyses of high-income OECD (Organisation of Economic Cooperation and Development) countries, static regression analyses, and conventional models of banking. An important subset of studies make reference to option-based estimates of the fair value of deposit insurance.^{(121),(122)} These works and others are founded on the conception that modern financial safety nets⁽¹²³⁾ initiate a lethal combination of reduced monitoring on the part of insured depositors and increased protection of equity holders against downside risk. Both these tendencies strengthen incentives to shift risk to depositors, deposit insurers, and taxpayers, in aggregate (a-Marco et al., 2008; Hovakimian, Kane, and Laeven 2003).

Robert Merton is credited for developing the empirical foundation for this stream of risk shifting analysis. In his seminal 1977 paper, he describes deposit insurance as a put option issued by the deposit insurer to the banks' equity holders. The option value is shown to increase with asset risk and leverage (Duran and Lozano-Vivas 2014). The introduction of quasi-flat deposit insurance is, therefore, argued to encourage risk shifting by failing to fully adjust the price for risk shifted (Bhattacharya and Thakor 1993).

Recent empirical literature has, in general, confirmed the presence of moral hazard in the form of risk shifting by deposit-taking banks.⁽¹²⁴⁾ Cross-country variations in the intensity of risk shifting have been mainly ascribed to different institutional environments, different deposit insurance design features⁽¹²⁵⁾ and different regulatory and supervisory frameworks.⁽¹²⁶⁾

120) Ozerturk (2002) shows that no combination of debt and equity claims can induce the entrepreneur to choose a low-risk strategy, except for pure equity.

121) The deposit insurance contract creates multilateral principal-agent conflicts (Kane 1995; Calomiris 1999). Risk is shifted when banks succeed in increasing the risk-adjusted value of their deposit insurance, without being charged for the increase (Bushman and Williams 2012) (see the third equation in the model section).

122) See, for example, Guizani and Watanabe (2010); Bushman and Williams (2012); Hovakimian, Kane, and Laeven (2003); Hovakimian and Kane (2000); Duan, Moreau, and Sealey (1992); Pennacchi (1987); Ronn and Verma (1986); Marcus and Shaked (1984).

123) Modern financial safety nets include implicit and explicit deposit insurance, solvency standards, infusion of public capital, central bank's lender-of-last-resort facilities, and emergency assistance from multinational institutions, such as the International Monetary Fund (IMF).

124) Bushman and Williams (2012); Guizani and Watanabe (2010); Hovakimian, Kane, and Laeven (2003); Hovakimian and Kane (2000); Duan, Moreau, and Sealey (1992); Pennacchi (1987).

125) Loss-control features such as risk-sensitive premiums, coverage limits, and coinsurance provisions are found to deter risk-shifting incentives under deposit insurance (Hovakimian, Kane, and Laeven 2003). The argument of some critics with regard to risk-sensitive premiums is worth noting, however, as they argue that the spread in premiums between the safest and riskiest banks has been insufficient to seriously dissuade risk shifting (Kaufman 1994). Risk-sensitive premiums can be effective only "if a substantial premium loading is present" (Dong, Gruendl, and Schlütter 2013).

126) Significant risk shifting is observed in countries with poor contract enforcement, property rights rules, and governance systems that impede efficient public and private monitoring of financial institutions (Demirgüç-Kunt and Detragiache 2002; Demirgüç-Kunt and Kane 2002).

Other proxies have also been used to test for risk shifting, based on the assumption that a banks' balance sheet reflects its risk preferences, among other things (Mitchener and Richardson 2013). These include key balance-sheet ratios, such as the ratio of nonperforming loans to assets, the ratio of risk-weighted assets to total assets, and the Z-score.^{(127),(128)} The first proxy is a common measure of credit risk. The latter two are broader in scope and serve as measures of overall risk. Landier, Sraer, and Thesmar (2011) and Hooks and Robinson (2002), on the other hand, are among the few researchers who have directly analyzed the asset compositions of insured banks to detect risk shifting.

All in all, the incentive to shift risk is less pronounced for banks whose charter values are prohibitively high (Gropp and Vesala 2004; Keeley 1990),⁽¹²⁹⁾ whose shareholders have relatively high "skin in the game" (Talib 2013), and whose depositors are actively monitoring (Diamond and Rajan 2001). Attempts to align incentives include capital controls. However, stricter disclosure rules and increased capital requirements in regimes that weaken private monitoring and shift the burden of risk management to deposit insurers and other regulatory bodies have not been sufficient. Policy makers are urged to refocus on measures that alter banks' attitude toward risk and increase depositors' incentives to discipline banks (Mitchener and Richardson 2013; Rajan 2006).⁽¹³⁰⁾

The efficacy of such private and public controls, however, depends on informational, ethical,⁽¹³¹⁾ and economic considerations.⁽¹³²⁾ A society's internal culture and ethical traditions are more important than external laws and regulations in shaping risk-shifting incentives (Bernstein 2000). This notion further supports the hypothesised potential of Islamic banks in restraining undesirable risk shifting.

Turning to Islamic banking, risk shifting in Islamic banks remains largely under-researched, as compared to their conventional counterparts. The nascent industry has received increased research attention since the onset of the recent global financial crisis. Empirical literature, however, is focused on such areas as the efficiency and profitability of Islamic banks,⁽¹³³⁾ profit dynamics (Beck, Demirgüç-Kunt, and Merrouche 2013; Chong and Liu 2009); and risk and stability (Bourkhis and Nabi 2013; Abedifar, Molyneux, and Tarazi 2013; Čihák and Hesse 2010), among others. The overwhelming majority of these studies find no significant differences between Islamic and conventional banks in the researched areas. To the researcher's knowledge, there has been no attempt to assess risk-shifting behaviour in Islamic banks. This study, therefore, contributes to a largely under-researched discipline of Islamic banking and offers the first coverage of OIC member states in the empirical risk-shifting literature.

127) The Z-score is an inverse measure of overall risk that quantifies the distance to default based on book values. It is measured as $Z = \frac{E}{\sigma}$, where E is the equity-to-assets ratio, ROA is the return on total assets, and σ is the standard deviation of the rate of return on assets (Duran and Lozano-Vivas 2014).

128) See, for example, Duran and Lozano- (2014); Angkinand and Wihlborg (2010); Aggarwal and Jacques (2001).

129) A bank's charter value is an estimate of its growth opportunities. A high charter value dissuades excessive risk taking by "increasing the cost of financial distress" (Demsetz, Saldenberg, and Stahan 1997). The estimate is positively related to anticompetitive regulations and is commonly proxied by the average market-to-book assets ratio (Galloway, Lee, and Roden 1997; Marcus and Shaked 1984).

130) Depositors may discipline banks by requiring higher rates of return and/or withdrawing their deposits (Demirgüç-Kunt, Kane, and Laeven 2009).

131) Risk-shifting incentives may, therefore, vary with the social capital, solidarity, and ethicality of a given society.

132) See, for example, Hovakimian, Kane, and Laeven (2003); Hovakimian and Kane (2000).

133) See, for example, Abdul Rahman and Rosman (2013); Hassan, Mohamad, and Bader (2008); Mokhtar, Abdullah, and Alhabshi (2008); Chong and Liu (2009); Yudistra (2004); El-Gamal and Inanoglu (2002); Aggarwal and Yousef (2000).

Research Objectives and Questions

In consideration to the centrality of risk sharing in Islamic finance and the far-reaching repercussions of moral hazard, this study aims to offer the first empirical assessment of risk-shifting behavior in Islamic banks and derive implications for the future of shared prosperity.

In particular, the study examines three research questions:

1. In dual banking systems, does the risk shifting behavior of banks depend on their underlying banking model, whether conventional or Islamic?
2. Do Islamic banks engage in risk shifting in a systematic and significant way?⁽¹³⁴⁾
3. What are the factors that determine the magnitude of risk shifting?

The Model

Along the lines of prior research, this study utilizes the deposit insurance put option framework to estimate risk shifting in the largely under-researched dual banking systems of OIC member countries.⁽¹³⁵⁾ The framework provides suitable grounds for testing risk shifting. It links the actuarial insurance subsidy received by a bank to its risk-shifting behavior and infers risk shifting not only to depositors but also to taxpayers and the general public (Duran and Lozano-Vivas 2014). The models in Merton (1977) and Duan, Moreau, and Sealey (1992) provide the necessary foundation. Their models are further extended to estimate the impact of Islamic banking on risk-shifting behavior.

Where risk is measured by the standard deviation of the return on assets, the equation is modified as follows:⁽¹³⁶⁾

$$IPP_{ijt}^* = \beta_0 IPP_{ijt-1}^* + \beta_1 \sigma_{vijt}^* + \beta_2 \sigma_{vijt}^* * IB + \beta_3 \sigma_{vijt}^* * X_{ijt} + \beta_4 \sigma_{vijt}^* * K_{jt}^* + \varepsilon^*$$

where

IPP_{ijt} is the actuarial value of the insurance premium per dollar of insured deposits, i = bank, j = country, and t = time

σ_{vijt} is asset risk

IB is a binary variable that takes the value of 1 if the bank is Islamic and 0 otherwise,

X_{ijt} is a vector of bank-specific control variables

K_{jt} is a vector of country-specific control variables

ε is an error term.

¹³⁴ While deterrents, such as monitoring by investment account holders, could reduce leverage or solicit higher capital in response to increased risk, the change may not be sufficient to fully nullify the bank's risk shifting incentives (Bushman and Williams 2012).

¹³⁵ Other empirical models and common proxies for risk shifting have been disregarded, given concerns about their efficacy, precision, and higher probability of measurement error (Hernández, Povel, and Serisios 2014).

¹³⁶ The superscripted * denotes forward orthogonal deviations transformation of the respective variable (Doornik and others 2002).

Banks succeed in shifting risk when the net changes in σ_v increases the risk-adjusted value of the insurance premium (IPP) (Duan, Moreau, and Sealey 1992). A positive estimate of the net effect of σ_v is thus consistent with observed risk shifting. An estimate of $\beta_2 < 0$ would indicate that Islamic banking has a limiting effect on risk shifting. If banks find risk-shifting behavior to be value-maximizing, such that the net effect of $\sigma_v > 0$, they would manage their overall risk levels accordingly. On the other hand, if banks do not find risk shifting to be beneficial, they would refrain from taking excessive risk, as the consequences will be borne by equity holders (Bushman and Williams 2012).

In order to identify factors that influence the magnitude of risk shifting, a combination of the following bank and country-specific variables are considered:

Bank's capital ratio. On the one hand, an increase in equity can lower moral hazard problems, by exposing more of the bank's "skin in the game." On the other hand, it can increase the bank's risk-taking capacity,

Bank's size. Large banks can benefit from both scale economies and diversification (Hughes, Mester, and Moon 2001; Saunders et al., 1990). At the same time, they might be riskier, since they may try and exploit the too-big-to-fail safety net subsidies (Kane 2010).

Return on assets (ROA). To measure the general profitability of the bank.

Growth rate of real GDP per capita. Favorable economic conditions are expected to deter risk-shifting behavior (Laeven 2002). Financial crises literature, however, suggests an adverse impact. Banks' optimism and appetite for risk may increase as the economy expands (Minsky, 1982 and 1977).

Rule of law. To control for the general institutional environment and the efficiency and the integrity of the country's legal system.

Market power in the banking industry⁽¹³⁷⁾. Measured by the Lerner index.

Presence of a stock market. A stock market dummy that takes the value of 1 when the country has a stock market and 0 otherwise.

The 2008 global financial crisis. A crisis dummy that takes the value of 1 during the recent global financial crises in 2008 and 0 otherwise.

Simple OLS estimators would suffice for unbiased and consistent panel estimation if asset risk (the independent variable) was to be strictly exogenous⁽¹³⁸⁾ and occurred as a pure random event. The strict exogeneity assumption, however, is not plausible. Kane (1995) has long pointed to the shortcoming of treating risk as exogenous. There is an opportunity of reverse causality. Asset risk influences and is influenced by estimates of the fair value of deposit insurance (Bigg 1999). Moreover, path dependencies are characteristic of economics and

¹³⁷ On the one hand, higher market power may reduce risk shifting as it enhances banks' charter values and mitigates self-interested shareholders' incentives to take risk (Gorton and Rosen, 1995). On the other hand, it may intensify risk shifting as it results in a concentrated market with a few too-big-to-fail banks.

¹³⁸ A variable is considered strictly exogenous if it is uncorrelated with current and past errors.

finance. In contrast to a pure random event, economic agents continue to follow the same pattern of behavior so far as it has proven profitable (Shaukat, Hasan, and Othman Alhabshi 2014).

Furthermore, introducing lagged values of the dependant variable in OLS estimators may seriously bias estimated coefficients (Nickell 1981). Given these considerations, heteroskedasticity, and the properties of the micro panel dataset, Arellano and Bond's (1991) two-step difference GMM estimator is used. This dynamic generalised methods of moments (GMM) estimator ensures a consistent and reliable estimation of the parameters of interest (Roodman 2006). Transformation is achieved through orthogonal deviations instead of first differences, in order to preserve the sample size in the presence of time gaps. The two step's standard errors are corrected using Windmeijer's (2005) correction procedure.

In general, the consistency of the GMM estimator depends on the validity of the assumption that the error terms do not exhibit serial correlation and on the validity (exogeneity) of its instruments. To validate these assumptions, STATA offers two sets of specification tests. The first set constitutes the Sargan and Hansen test of over-identification. The null hypothesis of these tests implies that the instruments are orthogonal (Baum, Schaffer, and Stillman 2003) and that all together they are valid instruments. The Sargan statistic is not valid in the presence of heteroskedasticity (Baum, Schaffer, and Stillman 2003). Heteroscedasticity is detected in the sample. As a result, it is the Hansen statistic that is reported in the regression tables.

The second set examines the hypothesis that the error term is not serially correlated. The differenced error term is expected to exhibit first-order serial correlation, by construction, even if the original error term is not. AR (1) is, therefore, uninformative. To check for first-order serial correlation in levels, the analysis looks for second-order correlation in differences AR (2) (Mileva, 2007). Autocorrelation in levels indicates that lags of the dependent variable (and any other variables used as instruments) are not strictly exogenous but in fact endogenous; thus, they are bad instruments.

Failure to reject the null hypotheses of the over-identification and serial correlation tests gives support to this model.

Data

The unbalanced panel data set comprises 272 conventional banks and 75 Islamic banks from 2003 to 2013. The banks come from 19 OIC member countries, where both Islamic and conventional banks coexist (see annex 6A). These are Bahrain, Bangladesh, Brunei Darussalam, the Arab Republic of Egypt, Indonesia, Iraq, Jordan, Kuwait, Malaysia, Mauritania, Pakistan, State of Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, and the Republic of Yemen. The sample is fairly representative of Islamic banking. According to the 11th annual edition of the *World Islamic Banking Competitiveness Report 2014/15*, six countries—Indonesia, Malaysia, Qatar, Saudi Arabia, Turkey, the United Arab Emirates— together commanded 80 percent of the international Islamic banking assets in 2013 (Ernst & Young 2013).

Data availability dictated the sample's size and coverage. Banks must have at least three years of continuous observations to be included into the sample. Banking data is taken from the Bankscope database. Country-level data is derived from key World Bank global databases, such as the World Development Indicators and World Governance Indicators. IPP and σ_v are unobservable but were estimated using option pricing methods (Bushman and Williams2012).¹³⁹⁾

Table 6.1 provides summary statistics of the study's dependent variable and main explanatory variables. A priori inspection of the data gives an impression that Islamic banks are only marginally different from their conventional counterparts. This conforms to the overwhelming majority of Islamic banking studies that suggest the same (Beck, Demirgüç-Kunt, and Merrouche 2013; Loghod 2010). Islamic banks tend to be less levered and better capitalized, whereas conventional banks are more profitable, less volatile, and larger in size.

Table 6.1 Descriptive Statistics of the Sample

	Variable	N*T	Mean	S.D.	Min	0.25	Mdn	0.75	Max
Conventional Banks	IPP	2779	0.01	0.06	0.00	0.00	0.00	0.00	0.86
	DV	2779	65.28	15.03	1.43	58.21	68.25	74.93	156.53
	σ_v	2779	18.26	23.23	0.27	6.95	12.66	20.59	362.40
	EQ	2779	11.70	7.68	-95.94	7.69	10.44	14.27	78.97
	TA	2779	8500.00	16000.00	36.84	750.00	2300.00	8200.00	120000.00
	RoA	2734	1.39	2.43	-72.44	0.81	1.44	2.15	13.20
	RoE	2731	13.62	34.06	-534.93	7.57	13.74	20.40	850.24
	WGI	2779	11.84	3.25	2.43	8.82	11.32	14.03	18.74
	Law	2779	1.78	0.59	0.08	1.23	1.89	2.37	3.04
	GDPPCG	2712	22.67	3.85	2.94	21.18	23.54	24.82	70.03
	Lerner	2045	2.28	0.15	1.81	2.19	2.24	2.40	2.62
	Credit	2697	45.34	27.38	1.27	26.76	35.99	55.52	123.88
Islamic Banks	IPP	571	0.02	0.08	0.00	0.00	0.00	0.00	0.97
	DV	571	60.29	20.41	1.30	51.63	65.23	74.47	111.08
	σ_v	571	21.60	33.34	0.36	7.19	13.09	23.73	453.57
	EQ	571	14.06	12.60	-77.21	7.52	11.19	17.53	82.61
	TA	571	5300.00	9100.00	20.22	620.00	2200.00	5500.00	75000.00
	RoA	563	1.36	2.35	-12.72	0.55	1.13	1.91	21.39
	RoE	563	10.09	31.63	-573.30	5.26	11.19	17.02	101.22
	WGI	571	12.64	3.78	3.88	8.68	13.65	16.02	18.74
	Law	571	1.96	0.68	0.16	1.23	2.26	2.51	3.04
	GDPPCG	553	21.66	4.44	2.94	19.83	22.74	24.37	37.49
	Lerner	372	2.33	0.15	1.81	2.22	2.35	2.46	2.62
	Credit	548	52.69	33.21	2.68	29.11	43.85	71.44	123.88

Table 6.2 presents Pearson's correlation coefficients' matrix. Correlations among the variables are low, suggesting that estimations are not biased due to multicollinearity.

139) The use of synthetic data is common in financial literature (Hovakimian, Kane, and Laeven 2003).

Table 6.2 Correlation Matrix (Pearson)

	IPP	DV	σ_v	$\sigma_v * IB$	TA	EQ	RoA	Law	GDPPCG	Lerner
IPP	1									
DV	0.0472*	1								
σ_v	0.4938*	-0.1574*	1							
$\sigma_v * IB$	0.1275*	-0.1542*	0.2018*	1						
TA	-0.1420*	0.1623*	-0.2093*	-0.0871*	1					
EQ	-0.0258	-0.2742*	0.0217	0.0498*	-0.0568*	1				
RoA	-0.1162*	-0.0797*	-0.0350*	0.0008	0.0505*	0.1608*	1			
Law	0.015	0.0480*	-0.01	-0.0874*	-0.1227*	-0.0488*	-0.0239	1		
GDPPCG	-0.1476*	-0.1190*	-0.1364*	0.0352*	0.4770*	0.0440*	0.0252	-0.1863*	1	
Lerner	-0.1156*	-0.0305	-0.1921*	0.0740*	0.1914*	0.0621*	0.0667*	-0.2120*	0.3920*	1

Note: * indicates significance at the 0.05 level.

Estimation Results

Table 6.3 tabulates the estimation results. Since the issues of serial correlation and exogeneity are crucial to the consistency of GMM's estimates, the diagnostic tests are considered prior to the discussion of results. The estimation fails to reject the null hypotheses of Hansen test of over-identification and AR (2) test. This gives support to the model.

The coefficients of σ_v and $IB * \sigma_v$, β_1 and β_2 , respectively, address the first and second research questions. The coefficient of σ_v is positive and significant at the 10 percent level in the baseline specification (column 1). This is evidence of risk shifting in conventional banks in OIC member countries, and is consistent with the reviewed literature on risk shifting in Japan, the United States, and other countries.

To the extent that β_1 captures the net effect of the tension between banks' risk shifting incentives and outside disciplining forces, the positive estimate suggests that the former dominates in the conventional segment of dual banking systems of select OIC members. The inadequacy of outside discipline seems to render risk-shifting behavior value maximizing. Banks are able to expropriate wealth from deposit insurers and taxpayers by increasing their overall risk and shifting the burden of any resulting losses and erosion of assets' value to the public. This is captured by the higher fair value of deposit insurance premium for every unit of additional risk. *IPP* depends on the probability distribution of the asset values in relation to the face value of deposits on the audit date. It is worth more as the probability that the value of bank assets falls below a certain level of deposits—resulting in bankruptcy—increases (Duan, Moreau, and Sealey 1992; Merton 1977). From taxpayers' perspective, it is the cost incurred by them if/when a bank fails (Ruud 2007).

The coefficient of the Islamic banking interacted term (β_2) in the baseline model (column 1) is negative, as predicted by theory. A negative coefficient implies that risk shifting benefits and incentives are lower in the case of Islamic banks. However, the estimate lacks statistical

significance. This could suggest the irrelevance of the underlying banking model to the practice of risk shifting in the dual banking systems of OIC member countries in relation to the first research question. Banks seem to shift risk regardless of their banking model.

However, Islamic banking practise is not uniform across the board (Vayanos and others 2008). Despite the standard-setting efforts of the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB), the nascent industry still lacks standardization, in contrast to its conventional counterpart. Compliance with these standards is not enforced nor monitored, except where AAOIFI's rulings are adopted at the national level in Bahrain, the Dubai International Financial Centre, Jordan, Qatar, Sudan, and the Syrian Arab Republic. As a result, Islamic banking institutions and products are premised on, sometimes, widely varying interpretations of the *shari'ah* and Islamic legal doctrines. For example, the legality of organized *tawarruq* is debatable.⁽¹⁴⁰⁾ On the one hand, Malaysia has long recognized the innovated concept as permissible and used it extensively in Bursa Malaysia's *Suq Al Sila* transactions. On the other hand, it was declared impermissible by the OIC Fiqh Council, which draws distinction between classical and organized *tawarruq*. The latter view has been largely adopted by Indonesia and the GCC (Gulf Cooperation Council) countries, among others. Consequently, the use of one dummy variable (*IB*) may not suffice to make fair statistical inference about the industry, at this stage. A better alternative could perhaps be to use a three-way interaction between *IB*, σ_v , and a variable denoting the respective country (such as $IB * \sigma_v * UAE$).

Upon introducing the three-way interaction terms,⁽¹⁴¹⁾ evidence arises of significant and opposing impacts of Islamic banking across the unstandardized industry. More specifically, the heterogeneous Islamic banking industries manifest three different impacts on risk shifting. The first aggravates risk shifting. The second reduces risk shifting. The third limited impact is that of effectively nullifying risk shifting. Taken together, this may explain the insignificance of the Islamic banking interacted term in the parsimonious specification of table 6.3 (column 1).

In the interest of the consistency of the GMM estimates and the instruments' validity, the analysis proceeds with only Islamic banking interacted terms specific to Malaysia and Turkey. These are denoted *MYIB* and *TRKIB*, respectively. All other Islamic banking industries are represented with one dummy variable (*IBxMT*), in order to avoid instrument proliferation. The choice of interactions is based on pre-estimation and statistical testing for the equality of regression coefficients.

Table 6.3. Estimation Results

This table reports the results from Arellano and Bond's (1991) two-step difference GMM estimation of:

$$IPP_{ijt}^* = \beta_0 IPP_{ijt-1}^* + \beta_1 \sigma_{v,ijt}^* + \beta_2 \sigma_{v,ijt}^* * IB + \beta_3 \sigma_{v,ijt}^* * X_{ijt}^* + \beta_4 \sigma_{v,ijt}^* * K_{ijt}^* + e_{ijt}^*, t=2002, 2003 \dots 2013.$$

140) Whereas classical *tawarruq* raises liquidity through the purchase of a commodity for a deferred payment and its subsequent sale for a lower cash price to other than the original seller, organized *tawarruq* (at-*Tawarruq al-Munadhdham*) involves buying a commodity from a financial institution on a deferred basis and selling it simultaneously, through the services of the same financial institution, on cash basis (Fahmi and others 2008).

141) For brevity, the analyses were made but not reported but are available upon request.

Following Merton (1977) and Duan, Moreau, and Sealey (1992), IPP is the actuarial value of insurance premium per dollar of insured deposits. All other variables are as defined before. Windmeijer-corrected standard errors are in parentheses. AR(2) is a test for second-order serial correlation in the first-differenced residuals, under the null of no serial correlation. The Hansen test of over-identification is under the null that all instruments are valid. ***, **, * represent significance at the 1 percent, 5 percent and 10 percent level, respectively. The instruments used in the GMM estimation are the lagged levels of IPP_{ijt} , σ_{vijt} , σ_{vijt} , IB_{ijt} , σ_{vijt} , X_{ijt} and σ_{vijt} , K_{jt} .

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
IPP_{it-1}	0.601*** (0.056)	0.262*** (0.065)	0.314*** (0.074)	0.234*** (0.060)	0.239*** (0.056)	0.233*** (0.059)	0.240*** (0.058)
σ_v	0.005* (0.003)	0.137*** (0.028)	0.127** (0.053)	0.124*** (0.017)	0.123*** (0.017)	0.125*** (0.017)	0.121*** (0.018)
$IB*\sigma_v$	-0.00071 (0.005)						
$IB_{xMT}*\sigma_v$		-0.018*** (0.006)	-0.030*** (0.007)	-0.020*** (0.005)	-0.020*** (0.005)	-0.021*** (0.005)	-0.019*** (0.005)
$MY*IB*\sigma_v$		0.038*** (0.007)	0.024** (0.010)	0.036*** (0.007)	0.036*** (0.007)	0.042*** (0.007)	0.046*** (0.005)
$TRK*IB*\sigma_v$		0.048*** (0.007)	0.025** (0.011)	0.050*** (0.016)	0.037*** (0.012)	0.039* (0.021)	0.011 (0.033)
$Size*\sigma_v$		-0.004*** (0.001)	-0.003** (0.002)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)
$Capital_{it-1}*\sigma_v$		-0.001*** (0.000415)	-0.002*** (0.000410)	-0.001*** (0.000329)	-0.001*** (0.000378)	-0.001*** (0.000334)	-0.001*** (0.000328)
$ROA*\sigma_v$		-0.013** (0.006)	-0.010 (0.00990)	-0.016*** (0.00237)	-0.015*** (0.00283)	-0.016*** (0.00236)	-0.015*** (0.00298)
$GDP\ Growth*\sigma_v$			-0.000170 (0.00116)	-0.000220 (0.000862)	-0.000462 (0.000964)	-0.000263 (0.000857)	-0.000746 (0.000922)
$Rule\ of\ Law*\sigma_v$			-0.0130*** (0.00466)	-0.000417 (0.00508)	0.000101 (0.00494)	-0.000612 (0.00527)	-0.000106 (0.00549)

Stock Market* σ_v	0.0291*** (0.00554)	0.0297*** (0.00557)	0.0293*** (0.00565)	0.0297*** (0.00526)			
Lerner Index* σ_v	-0.00813 (0.00607)	-0.00439 (0.00651)	-0.00871 (0.00635)	-0.00150 (0.00674)			
Crisis* σ_v		0.00163 (0.000997)					
$IB_{xMT}*Crisis*\sigma_v$						-0.000356 (0.00244)	
$MY_{IB}*\sigma_v$							-0.00481** (0.00200)
$TRK_{IB}*Crisis*\sigma_v$							-0.00165 (0.00246)
$CB*Crisis*\sigma_v$							0.00357** (0.00139)
F	44.68	45.40	26.65	35.40	31.60	37.49	115.8
No. of observations	1963	1769	2536	1769	1769	1769	1769
No. of banks	302	286	330	286	286	286	286
No. of instruments	66	149	325	227	230	230	230
AR(2) test	0.04	-1.69*	-1.46	-1.38	-1.34	-1.38	-1.29
Hansen test	62.67	116.52	285.48	192.91	194.40	194.68	196.59

Judging by the results of columns 2 to 7, the underlying banking models seem to determine risk shifting in the dual banking systems of OIC member countries. The negative coefficient of the Islamic Banking interaction term ($IB_{xMT}*\sigma_v$) is in line with the theory of Islamic banking and its desired attributes of stability and shared prosperity (Askari and others 2012). It implies that the benefits of and incentives for risk shifting are lower in the case of Islamic banks. This may, in part, justify the relative resilience of Islamic banks during the recent financial crisis (Hasan and Dridi 2010). The size of the coefficient, however, is not sufficient to fully nullify banks' risk-shifting incentives (Bushman and Williams 2012). Islamic banks, therefore, engage in risk shifting in a systematic way. The positive coefficients of $MY*IB*\sigma_v$ and $TRK*IB*\sigma_v$, on the other hand, suggests that Islamic banks in Malaysia and Turkey not only shift risk, but they do so more than their conventional counterparts.

The deviation of Islamic banks' practice from theory, and the lack of risk-sharing

prerequisites, could perhaps explain these contrary findings. In the Malaysian context, for example, the research of Misman and Ahmad (2011) lends support to the observed shifting of risk by Islamic banks. The authors find that Islamic banks in Malaysia managed their earnings through the use of loan loss provisioning, in a fashion similar to the country's conventional banks, over the 1993–2009 period. Analogous results were established by Chong and Liu (2009).

Earnings smoothing, whether via loan loss provisioning or profit equalization reserves, is associated with losses in informational transparency, as documented in an international study by Bushman and others (2007, 2012). The resultant obscuring of banks' fundamentals weakens outside monitoring and increases the scope for risk shifting by banks. It remains to be seen if the trend will be reversed with the implementation of the Islamic Financial Services Act (IFSA 2013) in Malaysia.

Furthermore, it can be argued that Malaysian Islamic banks enjoy unmatched regulatory forbearance and political support, which have, on the one hand, contributed to the double-digit growth of the industry (Ali 2012; Malmendier 2009) but, on the other hand, might have aggravated risk-shifting incentives, unintendedly. Duan and Yu (1999) demonstrate how a greater degree of regulatory forbearance increases the fair value of the deposit insurance premium, incentivizing excessive risk taking.

As for Turkey, the government's response to Ihlas Finans's collapse in 2001 and its introduction of an Islamic deposit insurance scheme may have had the unintended consequence of displacing more private discipline than government regulators could generate in its stead (Hovakimian, Kane, and Laeven 2003).

With regard to the third research question, the strength of risk-shifting incentives is found to be highly state-dependent, as suggested by earlier literature. Other things being equal, banks' size, capital structure, and profitability inversely influence risk-shifting incentives. OIC banks do not appear to exhibit the "too-big-to-fail" paradigm at present. On the contrary, they seem to benefit from both scale economies and diversification as they grow in size (Hughes, Mester, and Moon 2001; Bigg 1999).

The significantly negative coefficient of the bank capital interacted term provides evidence that maintaining more equity capital in the asset structure of the bank incentivizes shareholders to act more prudently and shift less risk. This is in line with the arguments put forth by Talib (2013) and operationalized by Basel Committee on Banking Supervision regarding having more "skin in the game." A similar skin-in-the-game effect arises from bank's ex post profitability.

Turning to aspects of the country's financial system, the stock market interacted term is consistently and significantly positive in all relevant specifications. The presence of stock markets in OIC member countries seems to expand opportunities for opportunistic risk-shifting behavior. This confirms that while stock markets are arguably the first-best avenues for risk sharing (Brav, Constantinides, and Geczy 2002), there are necessary conditions for this to hold. Yartey (2008), for example, finds that political risk, law and order, democratic

accountability, and efficient bureaucracy are crucial for the viability and proper functioning of stock markets. An examination of the current state of affairs in the contemporary Muslim world reveals numerous adversities (Al-'Alwani 1993). Exploitation, corruption, political instability, and lack of trust are just a few (Ng 2014). Furthermore, whereas stock markets are almost nonexistent in most Muslim countries, where they do exist, they are plagued with informational problems and governance issues.¹⁴² Both characteristics are likely to undermine the integrity of stock markets and impair efficient resource allocation, at the same time aggravating risk-shifting moral hazard.

The crisis has the expected impact of aggravating moral hazard in conventional banks through gambling for resurrection (Brunnermeier and Oehmke 2012). No such impact is significant in the case of Islamic banks. On the contrary, the credible threat of loss to investment account holders appears to have had the advantage of strengthening regulators and depositors' disciplinary pressure in Islamic banks in Malaysia (Calomiris 1999).

The findings are inconclusive with regard to the influence of the rest of the macroeconomic variables, with the sole exception of rule of law in the second column, where it appears that banks in strong legal system shift less risk. By capturing the impact of confidence in and compliance by the rules of society, the negative coefficient is consistent with Demirgüç-Kunt and Detragiache (2002), Demirgüç-Kunt and Kane (2002), Laeven (2002) and Fernández et al. (2005) among others, who contend that deposit insurance costs insurers and tax payers dearly in countries with weak institutional environments.

Conclusion

The empirical evidence of risk shifting by Islamic banks, whether minor or major, goes against theoretical predictions and undermines the contribution of Islamic finance to shared prosperity. It, however, appeals to the prevailing view that Islamic banks have, for various reasons, deviated from their axiomatic trajectory. The development of Islamic financial instruments is often criticized for having concentrated on debt-like instruments. While apparently fulfilling the sufficient condition of prohibition of *al-ribā*, the design and economic implications of such instruments, more often than not, resemble their conventional counterparts, as they undergo a process of reverse-engineering (Mirakhor 2011). As the latter are traditionally centered on risk transfer and risk shifting, contagion is largely inevitable. Risk sharing is compromised.

Moreover, the Malaysian and Turkish findings seem to validate fears that the industry's double-digit growth might have outpaced corresponding developments in a complimentary institutional infrastructure that is of utmost importance to cater to its unique risk-sharing value proposition.

Reputational risks aside, risk shifting by Islamic banks entails a sacrifice of some of the most important features of the ideal model of Islamic banking, including close links between the real and financial sectors, financial inclusion, poverty alleviation, relative stability, and

¹⁴² Askari and others (2012); Mirakhor and Askari (2010); Iqbal and Mirakhor (2011); Chapra (2000).

sustainable economic development and growth.

Having said that, the *Shari'ah*-compliant industry appears to mitigate 17 percent of risk-shifting incentives, on average, in general. In other words, incentives for pervasive risk shifting are lower in a majority of Islamic banks even though they are not fully eliminated. This could provide some useful insights regarding the way forward for shared prosperity. The impact of Islamic banking as a deterrent to risk shifting is worth strengthening by expanding the incentives for risk sharing and removing incentives for risk transfer in the current regulatory and supervisory framework. This could be achieved through a market-oriented approach to incentivising risk sharing. The Islamic Financial Services Act of 2013 may provide significant impetus in this regard.

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Annex 6A Distribution of Islamic Banks and Conventional Banks in 19 OIC Member-Countries

Country name	Total Banks		Islamic Banks		Conventional Banks	
	Number	% of Total	Number	% of Islamic Banks	Number	% of Conventional B.
Bahrain	15	4	6	8	9	3
Bangladesh	35	10	5	7	30	11
Brunei Darussalam	2	1	1	1	1	0
Egypt, Arab Rep.	24	7	2	3	22	8
Indonesia	55	16	2	3	53	19
Iraq	7	2	3	4	4	1
Jordan	12	3	3	4	9	3
Kuwait	9	3	3	4	6	2
Malaysia	39	11	16	21	23	8
Mauritania	6	2	1	1	5	2
Pakistan	30	9	8	11	22	8
Qatar	9	3	3	4	6	2
Saudi Arabia	12	3	3	4	9	3
State of Palestine	3	1	1	1	2	1
Syrian Arab Republic	11	3	2	3	9	3
Tunisia	15	4	1	1	14	5
Turkey	31	9	4	5	27	10
United Arab Emirates	23	7	7	9	16	6
Yemen	9	3	4	5	5	2
Total	347		75		272	

Source: Authors' calculation

Note: OIC = Organisation of Islamic Cooperation.

PART 3

**THE ROLE OF ISLAMIC FINANCE IN FINANCIAL
INCLUSION**

CHAPTER 7

MODERNIZING A HISTORICAL INSTRUMENT (ESHAM) FOR
GROWTH AND FINANCIAL INCLUSION⁽¹⁴³⁾

Murat Çizakça

Three Criteria for a Modernized Financial Instrument (*Esham*)

Esham was probably the first financial instrument in the Islamic world that facilitated government borrowing from the public without interest. It was invented by the Ottoman government when it was forced to pay a huge war indemnity to Imperial Russia in 1775.

This study argues that *Esham* can be modernized, and the modernized version can trigger sustained economic growth, as well as enhance financial inclusion.⁽¹⁴⁴⁾

Modernizing and implementing a new version of *Esham* is tantamount to innovation. As argued in Çizakça (2014a), innovation in Islamic finance is both desirable and inevitable. But any innovation in Islamic finance must comply with the following criteria:

1. It must be an instrument of risk sharing rather than risk transfer or risk shifting.
2. It must avoid *ribā* (interest).
3. It must be capable of moving the society toward the *Al-Ghazali/Al-Shatibi* optimum.⁽¹⁴⁵⁾

First Criterion: Risk Transfer versus Risk Sharing

A good starting point is a well-known verse of the Qur'ān (2:275):

“...Allah has permitted trade and forbidden interest...”

In historical context, when two partners—usually a capitalist and an entrepreneur—agreed to do trade, this meant that they also agreed to share the risks associated with the venture by entering into a partnership. The most widespread partnership practiced in history was the *muḍārabah* partnership. How the two partners had to share the risks (and the resulting profits or losses) has been clarified by the classical jurists to the minutest detail. In short, trade was

143) This study was first presented at the 11th IFSB Summit, Knowledge Sharing Partner Session: “New Markets and Frontiers for Islamic Finance: Innovation and the Regulatory Perimeter,” convened on May 20, 2014, in Mauritius. A second presentation of an improved version took place on September 3, 2014, during the Global Islamic Finance Forum in Kuala Lumpur. The author is grateful to the participants of both of these conferences for their valuable comments. Special thanks are due to professors Abbas Mirakhor and Akram Laldin, who agreed to be the discussants at the Kuala Lumpur conference and to Professor Mirakhor, again, for preparing an extensive and constructive critique. Thanks are also due to Professor Obiyathulla Ismath Bacha. A third version was presented at the World Islamic Economy Forum convened in Dubai on October 29, 2014. This fourth version, presented at the World Bank Inaugural Symposium on Islamic Economics and Finance in 2015 in Istanbul, shifts its focus to *Esham*'s potential contribution to growth and financial inclusion.

144) Thus, *Esham* constitutes an excellent example of an instrument that is shari'ah-based rather than a shari'ah-compliant. The former pertains to those developed by Muslims themselves in history, while the latter refers to those reverse engineered from conventional finance by financial engineers.

145) For this concept, see Çizakça (2007).

a de facto as well as de jure risk sharing activity. It can therefore be concluded, without any doubt whatsoever, that since Allah has permitted trade and trade necessitates risk sharing, Allah has also permitted risk sharing. For risk sharing is the essence—the *conditio sine qua non*—of trade.

By contrast, interest, prohibited by Allah, involves risk transfer from the lender to the borrower. Indeed, risk transfer occurs when the lender demands that the borrower pay back the capital loaned at a certain date, regardless of the outcome of the venture. This is known as interest-based debt financing, where the lender does not share in the risks of losses and all the risks are transferred to the borrower (Askari and others 2012, 71). Islamic risk sharing, by contrast, occurs when the parties agree to share, based on ex ante contract, the outcome (profit or loss) of the venture at a predetermined and mutually agreed upon ratio. To sum up, a new innovation being considered—the modernized version of *Esham*—must be based upon risk sharing and avoid risk transfer or risk shifting.⁽¹⁴⁶⁾

Second Criterion: Prohibition of *Ribā*

The second criterion for scrutinizing an innovation—the prohibition of *ribā*, or interest—follows directly from the previous one. But first, it is important to remember under what conditions a financial transaction becomes usurious. A cash-cash transaction would be considered as *ribā* if all of the following conditions hold:⁽¹⁴⁷⁾

1. The loan capital plus an excess or surplus over and above the loan capital must be returned to the lender.
2. This surplus is determined in relation to time with a definite date of redemption.
3. This surplus is stipulated in the loan agreement.

Thus, it is important to consider if the innovation in question fulfills all of these negative conditions and therefore constitutes *ribā*. If it violates even one of the conditions, it does not constitute *ribā*.

Third Criterion: *Maqāṣid al-sharī'ah* and the *Al-Ghazali/Al-Shatibi Optimum*

It has been argued elsewhere that any innovation must help society progress toward the optimum. Since this rather complex argument has been presented in full detail elsewhere (Çizakça 2014a), it will not be repeated here.

The preceding arguments mean that these criteria (risk transfer versus risk sharing, prohibition of *ribā*, and *Al-Ghazali/Al-Shatibi/Pareto* optimum) can be used for any financial innovation. If a new innovation fulfills all three criteria, it should be permitted.

146) According to Abbas Mirakhor, risk transfer involves transferring the risk to the borrower by contract and within his knowledge. Risk shifting, on the other hand, occurs without properly informing the borrower.

147) Al-Rahman, (1975, vol. III, 71) and al-Qusi (1982, 122).

Esham and Its Modus Operandi

This discussion will now take *Esham* (singular, *sehm*) into consideration and examine it from the perspective of these criteria. But first, the modus operandi of *Esham* needs to be explained.

The modus operandi that follows was inspired by the historical precedents mentioned and was then modernized by an interdisciplinary team of scholars at the International Center for Education in Islamic Finance (INCEIF) in Kuala Lumpur.⁽¹⁴⁸⁾

1. **The asset.** The operation starts with the issuer/borrower setting aside an asset that yields regular annual revenue⁽¹⁴⁹⁾. The asset is owned and managed by the issuer, who allocates merely a fraction of the annual revenue for *Esham*.
2. **Securitization.** This revenue fraction is then securitized into equal shares and offered for sale to the public. Each share (*sehm*) authorizes its purchaser, the investor, to receive his/her share of the allocated annual revenue pro rata. This used to be a fixed amount, which made it quite attractive to the investor. Why, notwithstanding this feature, *Esham* does not constitute *ribā*, will be discussed below. Although the historical *Esham* yielded fixed annuities to investors, the modern one can be designed as a fixed and/or a flexible return instrument to reflect the actual revenue generated by the asset.
3. **Duration.** *Esham* shares do not have to be redeemed at the end of a fixed period. With respect to duration, there are usually two kinds of *Esham*: limited for a life time, or perpetual. The investor, who has purchased the *sehm* share, continues to receive his/her share of the annual revenue for as long as he/she lives, or even in perpetuity. The latter is often called *perpetual bonds*, or *perpetual sukūk*, in modern parlance. But *Esham* differs from both: it is neither a bond nor a *sukūk*. It differs from both because of its specific redemption characteristic. A lifetime *Esham* would be issued to a specific person and therefore be a registered share, whereas the perpetual one would be a bearer's share.
4. **Pricing.** Each *sehm* share is sold at a certain multiple of the annuity it will yield to the investor. Naturally, a *sehm* for a lifetime would be cheaper than a perpetual one. There is no fixed rule regarding the initial price of a share; for life-time *Esham* actuarial tables can be used to approximate the expected lifetime. For perpetual *Esham*, pricing would be determined ultimately by the demand and supply of capital – the greater and more urgent the issuer feels the need for capital the cheaper would be the price of each share issued.

Once the initial price is determined by the issuer, perpetual *Esham* can be traded in secondary markets and are fully negotiable. Since life-time *Esham* are registered shares, they cannot

¹⁴⁸⁾ The team was comprised of two economic/financial historians, several scholars of fiqh al-mu'āmalāt, and a professor of finance. The author is grateful to the members of the team for their comments.
¹⁴⁹⁾ A similar instrument was applied in Sudan in the late 1990s, when the government issued certificates backed by securitizing a portion of its tax revenues. I owe this point to Abbas Mirakhor.

be traded. When sold in secondary markets by the initial owner, the price of a share fluctuates, reflecting supply and demand as well as the reliability of the annuity payments. Listed on an exchange, they would behave like participating preferred stocks. Historical examples suggest that a *sehm* could be traded at 75 percent or at par depending upon if the annuities had been paid regularly by the issuer (historically, usually a government) over the long term.

5. **Yield.** Historical *Esham* must have been a hybrid fixed-income and risk-sharing instrument. Fixed returns were paid to the investor in the form of fixed annuities. Profit/loss sharing must have occurred when investors sold their shares to third persons. In this latter transaction, profits must have occurred if the issuer had been paying annuities on time, rendering the shares popular and raising their price. If this was the case, while the seller would obviously benefit from the higher price, the issuer too would benefit as he would have been able to sell new issues of *Esham* at the higher price. If the issuer failed to pay annuities on time, the reverse would happen leading to loss for both the issuer and the seller of *Esham*. In short, *Esham* leads to profit and loss sharing between the issuer and the investor.

With respect to modern *Esham*, there are two alternatives: hybrid, and pure profit/loss sharing. Because of the redemption specifics to be explained below, the fixed annuities of the modern *Esham* can be benchmarked to LIBOR, or they can be set even higher, all the while obeying the prohibition of *ribā*. Alternatively, annuities can be indexed to the actual returns of the asset rendering the instrument a pure profit/loss sharing one. A similar policy was applied in Turkey when the Özal government issued *Esham*-like shares, enabling investors to share the actual profits and losses (never happened) of the Bosphorus Bridge in Istanbul. These so-called GOS shares were later on discontinued when the state felt that build-operate-transfer was a cheaper method of financing such lucrative projects.

Overall income from the asset, as well as securitization, is channeled into two pools: The first pool is reserved for paying the fixed annuities. The second pool contains the retained earnings, which will be accumulated until maturity and invested in the meantime. Although the overall returns generated by the asset will naturally fluctuate, the annuities paid to investors can be fixed because only a small part of the overall fluctuating returns will be earmarked for *Esham* annuities. To give an actual example from the eighteenth century, the gross annual yield of the Istanbul tobacco tax-farm was one million *grus* and the amount reserved for the payment of fixed annuities was merely 400,000 *grus*. Alternatively, as mentioned, the modern *Esham* can be designed as a pure profit/loss sharing instrument, with the annuities reflecting the true revenues generated by the asset.

6. **Redemption.** What makes *Esham* unique is the fact that redemption is at the discretion of the borrower, not the lender. Put differently, the borrower pays back the principal when he/she sees fit. This means that the maturity is decided by the borrower. While this is so, and the borrower may decide to redeem (or not) at an undisclosed time in the future, the investor can sell his/her *Esham* in secondary markets. Just because the borrower/issuer has decided to redeem, the investor is not obliged to sell his/her

Esham. Thus, the borrower/issuer ends up redeeming only those *Esham* whose owners wish to cash.

In the case of perpetual *Esham*, the borrower may not redeem at all. He/she is, however, obliged to pay the annuity on time every year. These payments continue either for as long as the investor lives (lifetime *Esham*) or in perpetuity (perpetual *Esham*). Some current *Esham*-like instruments give the option to the issuer to redeem the shares some 20 years after issuance.⁽¹⁵⁰⁾

Due to the redemption characteristics just explained, *Esham* would be considered not as debt but as equity – a highly advantageous situation regarding the Basel III gearing ratios. Put differently, a company issuing *Esham* would be able to shore up its capital base without worsening its debt/equity ratio.

7. **Third-party guarantee.** If the issuer is a government, certain taxes can be allocated by law to the payment of annuities, or one branch of a government may provide a guarantee for the other. The former, of course, would be a far more desirable alternative for the investor. If it is a private corporation, a reliable and trustworthy third party may need to be found. Third-party guarantee pertains to the payment of fixed annuities only.
8. **Relevance for central banks and open market operations.** The characteristics described render *Esham* an ideal instrument for open market operations of central banks in Islamic countries. Indeed, when central banks want to inject money into the economy, they can buy *Esham* shares from those who wish to sell their shares; and when they want to withdraw money from the economy, they can issue new shares for the public to purchase. Provided that governments issue substantial amounts of *Esham* in small denominations and allow them to be traded in the secondary market, it can be a noninterest-rate-based instrument of monetary policy. Currently, these central banks utilize commodity *murābahahs* or *tawarruqs* as their monetary policy instruments.⁽¹⁵¹⁾ These instruments are subject to *shari'ah* risks, while *Esham* is not.⁽¹⁵²⁾ This is so, not only thanks to the redemption characteristics, but also because when *Esham* shares are sold in secondary markets, whether by the central banks or individuals, the prices would be determined by market forces, with the rate of return becoming market oriented.

Examining *Esham*

Having explained the modus operandi of a modernized *Esham*, the discussion now examines whether this instrument constitutes *ribā*. The starting point is the first criterion and

150) For more information on these instruments, see Çizakça (2013, 92).

151) On the modus operandi of the Malaysian central bank utilizing these instruments for injection and withdrawal of money into the economy, see Bank Negara Malaysia, Annual Report, 2007, p. 87. For a more clear explanation of the modus operandi, see Çizakça 2011, 153–55).

152) *Shari'ah* risk refers to the possibility that a financial instrument loses its legitimacy in public opinion.

the three conditions mentioned by Afzal al-Rahman and Abd al-Mun'im al-Qusi.⁽¹⁵³⁾

With regard to the lifetime *Esham*, the uncertainty of the lifespan of the investor eliminates the certainty of the surplus and violates all three conditions, at once. With regard to the perpetual *Esham*, the lack of a definitive date of redemption and the fact that redemption is at the discretion of the borrower, not the lender, violates the first and the second conditions.

The second criterion pertains to risk transfer versus risk sharing, with the former disallowed and the latter permitted. When an investor sells *Esham* shares in his/her possession in secondary markets, the price will be determined by supply and demand as well as the past payment performance of the annuities. This will render *Esham* a true profit-or-loss-sharing instrument. Moreover, with the redemption at the discretion of the borrower/issuer, risks are not transferred by the lender to the borrower. Instead, a compromise is reached by which while the issuer/borrower redeems his/her debt at his/her discretion, the investor obtains the right to a fixed and regular annuity for as long as the issuer/borrower does not redeem, and he/she retains this right for as long as he lives. Meanwhile, the investor can sell his/her *Esham* on the stock exchange at market prices.

All of this is in sharp contrast to a conventional credit transaction, where the date of redemption of the principal plus the rate of interest is fixed *ex ante* and is clearly stated in the contract.

Some scholars, who fail to understand the modus operandi of *Esham*, quickly condemn it on the grounds that it provides fixed income to investors. These scholars need to understand that Islam is not against fixed income, as such. What Islam prohibits is risk transfer or risk shifting and unjustified enrichment of one of the partners at the expense of the other. *Esham* providing a fair sharing of risks between both the investor and the borrower, and is in conformity with the spirit of Islam and one of its most important principles, justice, '*adl*. These ideas—that is, protection of the weak, and more to the point, the borrower—are confirmed definitively by the *Qur'an*:

“When ye deal with each other, in transactions involving future obligations... Let him who incurs the liability dictate” (II: 282).

Consider also the following verse:

“If the debtor is in a difficulty, grant him time till it is easy for him to repay” (II: 280).

By allowing the borrower to decide when to repay the principal, *Esham* perfectly follows the spirit as well the letter of these *Qur'anic* injunctions.

Moreover, there is evidence that the system has always tried to protect the weak. Indeed, it can be argued that the uncertainty about the lifespan of the investor subjects him/her to a

153) Afzal al-Rahman, quoted in al-Qusi (1982, 122). To repeat, the three conditions are: 1. Any excess or surplus over and above the loan capital is to be returned to the lender.

2. This surplus is determined in relation to time, with a definite date of redemption.

3. This surplus is stipulated in the loan agreement.

high risk. Historians have found cases that in the event of an unexpected death occurring shortly after the investor has made a large investment and bought *Esham*, his/her descendants could apply to authorities and complain that the deceased has died before he/she has been able to receive any income from his/her *Esham*. In such cases, although, legally speaking, the investor had no recourse to any compensation, authorities have made some payments to the family of the deceased. There was apparently no fixed rule for such compensation; it was paid purely as a process of risk sharing and justice, '*adl*'.¹⁵⁴

Thus it can be concluded that *Esham* is not a risk transfer or risk shifting instrument. Indeed, unlike such instruments, it does not transfer all the risks upon the borrower and, instead, following the *Qur'ān*, it protects the borrower by giving the option of redemption at a suitable time. Historically, it has also protected the investor in case of early death. In view of the above, it can be concluded that *Esham* is not usurious. The fact that it was used by the Ottoman Caliphate for more than a century also supports this conclusion.

Finally, *Esham* has been examined from the perspective of the *maqasid al-Shari'ah*, the third criterion. This examination has revealed that *Esham* affects all the components of the *maqasid* positively and should therefore be implemented (Çizakça 2014).

Viewed from a longer perspective, thanks to *Esham*, the Ottomans were able to raise one-third of the war indemnity that they had to pay to the Russian Empire. Within 10 years of its establishment, in 1785, *Esham* generated revenue of 11,500,000 *grus*, which was more than half of the entire revenue of the Ottoman state. It has been calculated that what the previous fiscal system, the *malikane*, was able to generate in 90 years, *Esham* succeeded in generating in only 10 years.¹⁵⁵ So, it can be concluded, with confidence, that *Esham* enables the state to collect substantial revenue from citizens. On the condition that this revenue is used wisely, it can certainly trigger sustained economic growth.

***Esham* and Financial Inclusion**

Esham is a particularly promising instrument for the rising middle classes in the Islamic world. With Islamic countries enjoying the so-called “demographic dividend,” it is expected that hundreds of millions of young people will join the middle classes in the near future. Indeed, the Indonesian middle class, alone, is estimated to comprise 75 million people. It is estimated that this figure will reach 140 million by 2020. In Turkey, on the other hand, recent research revealed that 47.8 percent of the respondents consider themselves to be exactly “in the middle,” while 27.6 percent have stated that they are able to purchase their needs and are able to save. Focusing on the lower second figure of 27.6 percent out of a total population of about 77 millions, it can be estimated that more than 20 million Turks could purchase *Esham* shares (Yılmaz 2012).

These people need fixed or flexible incomes for their old age and offspring. This is a powerful need felt by hundreds of millions of Muslims all over the world. *Esham* provides the ideal solution for such needs because not only does it yield a regular fixed or flexible

¹⁵⁴ I owe this point to Mehmet Genç.
¹⁵⁵ See Genç (1995) and Çizakça (2014b).

income as well as the opportunity to cash in the investment, but it does so without violating the interest prohibition.

Thus, to the extent that these people purchase *Esham* shares, financial inclusion will be enhanced. The huge advantage of *Esham* for the borrower is that the latter does not have to redeem his/her debt at a certain date. Consequently, the borrower is protected and the annuities to be paid to investors can be benchmarked at even a higher percentage than the prevailing interest rate. This would obviously encourage large numbers of additional members of the middle class to enter into the financial system.

Investing the Revenue

The next major question is how the money raised by the issuance of *Esham* should be utilized. History warns that spending the money in warfare is the worst option. Ottomans, who invented the system, were forced to spend the revenue they received for the payment of war indemnity to Imperial Russia. This was followed by other wars during the nineteenth century. Not being able to invest it properly, they eventually faced an ever-increasing burden for the payment of the annuities. Finally, in 1881, the state had to declare bankruptcy. Western lenders, supported by their imperialistic states, then took over the management of all the major revenues of the Ottoman state. In short, the major lesson of history is that *Esham* revenues must be invested very carefully.

Investing the revenue in fee-paying infrastructure investments such as bridges and toll roads might be an obvious alternative. But such investments can also be made through build-operate-transfer schemes, currently the preferred method in Turkey. A less obvious but eventually far more potent investment can be made in research and development. The German *Wagnisfinanzierungsgesellschaft* experiment, however, suggests that research and development should not be managed by the state bureaucracy or the banks. Instead, it must be financed by highly specialized venture capital companies (Becker and Hellman 2002). Indeed, choosing the right entrepreneur to invest in is a highly skilled job that is best left to expert venture capitalists. Therefore, a better method is for the state to be passive investor acting through fund matching. The modus operandi for this can be summarized as follows:

An entrepreneur with a project with high-profit potential persuades the venture capitalist to support him/her.

The venture capitalist encourages the entrepreneur to set up a start-up firm in the form of a joint-stock company

The venture capitalist purchases the shares of this company at a relatively low price.

The government enters the picture here through the *Esham* Management Board. It matches the funds provided by the venture capitalist and purchases further shares of the entrepreneur's start-up.

When the start-up succeeds and goes public, the *Esham* Management Board can sell the

shares it possesses with significant profit.

This *modus operandi* is feasible thanks to the redemption characteristic of *Esham*. Venture capital investments are by definition long-term investments. Permitting the Board to redeem the *Esham* shares when it is suitable to do so—that is, when the start-up company goes public—renders *Esham* the perfect instrument for venture capital investments.

Finally, some scholars have argued recently that *sukūk* can be used to finance the establishment of *waqfs*.¹⁵⁶ But, unless the investors of *sukūk* forfeit their right of redemption, this method is tantamount to establishing a *waqf* with borrowed money, which must be paid back at a certain time. This is not permitted by the *shari'ah*. Perpetual *Esham* solves this problem by allowing the *waqf* not to redeem the shares purchased. Investors would simply be rewarded by the payment of annuities in perpetuity, while the *waqf* would maintain its capital and could also function in perpetuity.

Conclusion

Looked from the macroeconomic perspective, difficult circumstances will exist so long as Muslim countries are forced to borrow on the basis of interest rates. Morally, this creates a huge dilemma, particularly for those states claiming to be Islamic. Indeed, while on the one hand these countries make such claims, on the other, they are forced to borrow with interest, a process that casts serious doubts upon their legitimacy. Externally, such borrowing drains domestic resources and exposes the country to the risk of sudden stops of funds. Internally, for the country to get out of this dilemma, it needs to borrow from its own population. A paradigm shift from risk transfer to risk sharing would greatly facilitate such borrowing.

For this to happen, new instruments are needed. Such instruments need not only redistribute the national income, but also to enhance financial inclusion. *Esham* would redistribute the national income in favor of the middle class and would also ensure their financial inclusion by providing a monetary and fiscal policy instrument that can directly influence private sector portfolio adjustment without resorting to the interest rate mechanism. Providing it is issued in sufficiently small denominations, it can even appeal to the lower-middle classes. Provision of regular fixed or flexible annuities for the middle class would enhance aggregate savings in the economy, with which the government and private sector could finance another round of investments.

In short, while *Esham*, *ceteris paribus*, can trigger sustained economic growth, it can simultaneously reduce the need for Muslim countries to borrow from abroad with interest. *Esham* is a flow that does not create debt and should not be considered as a contingent liability on the balance sheet of the issuer. This is because, the borrower—usually the government—has no obligation to pay back the loan capital; its sole commitment is the regular payment of fixed or flexible annuities. If the issuer is a company, positive implications of this for the Basel III gearing ratios should be obvious. Whether issued by a government or a company, thanks to its redemption characteristics, *Esham* can serve as a very important hedge against

¹⁵⁶ Suruhanjaya Sekuriti (2014, chapter 2). In other words, the *waqf* issues a *sukūk*, and the *sukūk* shares bought by the public constitute the corpus (capital) of the *waqf*.

idiosyncratic risks.

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CHAPTER 8

DESIGNING HOLISTIC FINANCIAL INCLUSION
BASED ON *maqāṣid al-sharī'ah*

Ascarya, Siti Rahmawati, and Hendri Tanjung

Introduction

This study aims to design a holistic model of financial inclusion based on *maqāṣid al-sharī'ah* (the Objectives of Islamic Law) that also includes empowerment and development for the poor to gradually move from extreme poverty to improved status as working poor, and finally to become independent microentrepreneurs. The model integrates social inclusion (empowerment through social and development programs) delivered by not-for-profit institutions with financial inclusion (the provision of affordable microfinancial services) delivered by for-profit microfinance institutions.

This study applies qualitative methods to design an Islamic model of holistic of financial inclusion, including field surveys, in-depth discussions, and focus group discussions. The study also applies Analytic Network Process (ANP) to compare and evaluate several Islamic holistic models of financial inclusion to determine their relative strengths and weaknesses.

The study identifies seven aspects and evaluates their relative importance, suggesting a careful sequencing of development services to maximize impact.

A model used in Indonesia, *Baitul Maal wa Tamwil* (house of wealth and business) is an ideal institution to deliver holistic financial inclusion programs. A charity-based *Baitul Maal* division is responsible for delivering social inclusion using social/ZISWaf (*zakāt, infāq, ṣadaqāt, and waqf*) funds to empower the have-nots (*mustahiq*) to get out of poverty and become self-sufficient. A market-based *Baitut Tamwil* division is responsible for delivering Islamic microfinancial services using commercial funds to serve those *mustahiq* who have graduated from poverty to move forward and develop their microenterprises.

Meeting Poor People's Need for Financial Services

Background

Financial inclusion—the access of financial services, at affordable cost, to disadvantaged and low-income segments of society—is an integral part of Islamic microfinance to provide various Islamic financial services.

Poor people require a variety of financial services for three major types of needs. The first are life-cycle events, including recurrent incidents (such as school fees, holidays like Eid or Christmas, and harvest time); once-in-a-life-time occurrences (such as birth, marriage, and death); or other events (such as home building, widowhood, old age, and bequests to heirs). The second covers emergency needs, including personal crises (such as sickness or injury), the death of a breadwinner or the loss of employment, and theft. The third are investment opportunities, including investments in a business, land, and household assets (such as better roofing, better furniture, a fan, or a television) (CGAP 2006).

Thus poor people do not need only a variety of financial services; they also need a variety of savings vehicles, money transfer mechanisms, and insurance plans. In general, poor people need a variety of financial services just like other people, but at a much smaller scale and at an affordable price (figure 8.1).

Figure 8.1 Poor Clients' Needs for Financial Services



Source: Ascarya, Rahmawati, and Tanjung, based on CGAP (2006, 23).

A survey by the World Bank (2010) shows that only 49 percent of Indonesian households have access to formal financial institutions. This was confirmed by a Household Balance Sheet Survey by Bank Indonesia (2011), which shows that 48 percent of households save their money with formal financial institutions and nonfinancial institutions. Thus 52 percent of households do not have any savings with banks or nonbank financial institutions. Both surveys demonstrate that the access of Indonesians to formal and informal financial institutions is still relatively low, and suggest that the access of Indonesian people to the financial service system must be increased.

Financial inclusion means “the right of every individual to have access to a full range of quality financial services in a timely, convenient, informed manner and at affordable cost in full respect of his/her personal dignity. Financial services are provided to all segments of the society, with a particular attention to low-income poor, productive poor, migrant workers and people living in remote areas.”¹⁵⁷⁾

¹⁵⁷⁾ National Strategy for Financial Inclusion Fostering Economic Growth and Accelerating Poverty Reduction, Secretariat of the Vice President of the Republic of Indonesia, 2012.

Financial inclusion is a national development strategy in Indonesia to boost economic growth through equal income distribution, poverty reduction, and financial system stability. This community-centered strategy needs to target groups that face constraints to accessing financial services. This strategy explicitly targets groups with the greatest need whose financial services are not met. They are placed in three categories (low-income poor, working poor/productive poor, and near-poor) and three cross-cutting categories (migrant workers, women, and people living in remote areas). At least four types of financial services are considered vital to people's life, according to the World Bank (2010): fund deposits, credit, payment systems, and insurance, including pension funds.

Islamic microfinance institutions (IMFIs) should also be able to provide a variety of Islamic microfinancial products and services to fulfill the financial needs of poor and low-income people. In accordance with Islamic teachings, these include a variety of microfinancing, a variety of microsaving, a variety of microinvestment, a variety of *microtakāful* (insurance), a variety of *qurūd* (*qard ḥasan*) a variety of bill payments, money transfers for a variety of purposes, and other newer form of financial services. These include various instruments in accordance with Islamic teachings in the areas of microfinancing, microsaving, microinvestment *microtakāful* (insurance), a variety of *qurūd* (*qard ḥasan*) bill payments, and money transfers, and other newer form of financial services.

One well-known type of IMFI in Indonesia is *Baitul Maal wa Tamwil* (house of wealth and business), or BMT. *Baitul Maal* (*Bait* = house; *al-Maal* = wealth) focuses on collecting compulsory and voluntary charitable contributions, such as *zakāt*, *infāq*, *ṣadaqāt* and *awqāf*, and optimizing their distribution by applying *sharī'ah*-based management. Meanwhile, *Baitul Tamwil* (house of finance/capital) focuses on funding and developing productive businesses, as well as investments aimed at enhancing the quality of human economic life—especially in the micro and small-scale economy. BMT can operate along the lines of the Grameen BMT model, through group financing, or on an individual level. The Grameen BMT model is a model in which the customers are a community consisting of women who are divided into several groups. One group comprises five women. Those women (most of whom are homemakers and microentrepreneurs) gather, and the BMT extends financing and collects savings. They gather weekly, so the transaction can be done on weekly basis. The Individual BMT model is a model in which the target customers are the poor, including the extreme poor and working poor, who save and borrow from the BMT. These BMTs could be the most appropriate partner to empower the poor.

One model to empower the poor, called the graduation model, has been proposed by El-Zoghbi and others (2009). The graduation model is holistic and demands a high level of concerted effort. The key is careful sequencing of development services, along with close monitoring and regular interaction between program staff and participant households. The graduation model consists of six steps: client selection; consumption support; savings services; skills training; asset transfers; and access to credit and sustainable livelihoods.

Helping the poor alleviate poverty through their own efforts and empowering them are necessary in order to improve their well-being. BMT could be utilized as the agent of

empowerment and development, as well as financial inclusion. However, sustainable Islamic models of this extended type of financial inclusion are required to achieve the objective. The most important requirement is that the model of financial inclusion must be holistic and based on *maqāṣid al-sharī'ah*. Holistic means that the model must be integrated in terms of both social inclusion and financial inclusion. *Maqāṣid al-sharī'ah* means that the model should be in line with the Objectives of Islamic Law. Based on this goal, this study explores how to design holistic financial inclusion based on *maqāṣid al-sharī'ah*.

Objective

The objective of this study is to design an Islamic holistic model of financial inclusion that also includes empowerment and development for the poor to gradually move from extreme poor to improved status as working poor, and finally to become independent microentrepreneurs, in order to alleviate poverty and improve their well-being.

Methodology

This study applies qualitative methods to design an Islamic model of holistic financial inclusion, including surveys, in-depth discussions, and focus group discussions. The study also applies Analytic Network Process (ANP) to compare and evaluate several Islamic holistic models of financial inclusion to determine their strengths and weaknesses.

Literature Review

Empowerment and Financial Inclusion in the Islamic Perspective

Empowerment and financial inclusion are two different subjects that are usually discussed separately, although their objectives are closely related. Empowerment is targeted to marginalized people, such as women or poor people, to improve or transform their economic, social, or political situations. Financial inclusion is targeted to financially excluded people, such as the marginalized people microenterprises, and low-income people, to be able to access an affordable and full range of financial services.

Empowerment in the Islamic perspective is intended to reach the have-nots (*mustahiq*). It is an integral part of *Bait al Maal*, as a not-for-profit *zakāt* institution, which collects and distributes *zakāt* for those who deserve it (according to the eight *asnaf*¹⁵⁸ of *mustahiq*). Financial inclusion in the Islamic perspective is an integral part of the for-profit oriented *Bait al Tamwil* to provide various Islamic financial services needed by low-income people and microenterprises. The Islamic microfinance institution called *Baitul Maal wa Tamwil* (BMT) is an integrated Islamic microfinance institution that could combine the *Baitul Maal* function to provide noncommercial empowerment programs and the *Bait al Tamwil* function to provide commercial microfinancial services.

158) The eight *asnaf* is a type or category of eligible beneficiaries of *Zakāh*: *fuqarā* (poor, plural of *faqir*), *masākīn* (needy, plural of *miskeen*), *āmilīn ālayhā* (workers, employed in *zakah* collection and distribution), *muallafāt al qulūb* (those whose hearts are inclined towards Islam), *gharīmīn* (those overburdened with debt), *fi sabilillāh* (in the path of Allah), *ibn al sabīl* (wayfarer), and *riqāb* (bondage, slavery).

Empowerment in the Islamic Perspective

Empowerment as practiced through the microfinance framework is unable to reach the very bottom of the socioeconomic level—the poorest. The poor who do not possess enough collateral or adequate credit histories and required skills are generally excluded from conventional microfinance. As a consequence, inclusiveness is hard to achieve (CGAP 2006).

Moreover, most conventional microfinance providers charge relatively higher interest rates because they have higher administrative costs and risks than a traditional financing portfolio (Obaidullah 2008). This high interest-bearing microcredit is not an answer to the reduction of poverty; it just perpetuates poverty (Mannan 2007).

The poor, characterized by low levels of literacy, lack of education, and high mortality rates, need more than a mere financing. They need health care, education, training, and guidance for their first investment. The government and donor subsidies have not been able to achieve maximum results to meet these basic needs for all levels of poverty.

In the Islamic perspective, poverty is neither caused by the lack or scarcity of natural resources nor is due to the improper synchronization between the modes of production and distribution. Rather, it is a result of waste, opulence, extravagance, and nonpayment of what rightfully belongs to the less able segments of the society (Askari and others 2012).

Against this backdrop, Islamic values provide a comprehensive framework for a complete empowerment program combining alms with financing. The concept of empowerment in the Islamic perspective does not ignore the social safety net for the poorest. To the contrary the issues of social justice, inclusion, and sharing of resources between the haves and the have-nots are emphasized more in the Islamic framework than the conventional one (Khaleequzzaman and Shirazi 2012; Iqbal and Mirakhor 2013).

In this view, property is a means of redeeming rights bestowed by the Creator. Thus wealth distribution become one of the most important objectives to avoid extremes of wealth and poverty (Moheildin and others 2012). *Zakāh*, *infāq*, *ṣadaqāt*, and *waqf*, as the divine tools of poverty alleviation, may empower the poor to be ready to become microentrepreneurs.

Kahf (2002) distinguishes three types of financing from microfinance institutions that can be obtained from alms-based sources. First, loanable funds are given without charge or at a reasonable market rate for the poor. Second, the administrative expenses of the microfinance institutions are obtained from donations, grants, and designated *awqāf* revenues. Third, services to the poor include education, health care, business training, and investment.

Kahf (2002) summarizes the general rules of enriching and empowering the poor to eliminate the poverty that derive from Al Qardawi and Al Mawardi¹⁵⁹:

Basic needs must be satisfied, including physical and physiological needs.

159) As derived from Al Qardawi, Yusuf in Fiqh al Zakah, Mu'assasat al Risalah Publisher, 2nd printing, Beirut and Al Mawardi, Abu Al Hasan (1973) in al Ahkam al Sulthaniyah, al Babi al Halabi Publisher, 3rd printing, Cairo.

A person capable of working and earning may be given assistance to help him or her become a productive earner, including training, rehabilitation, craft's tools, and capital to start a business.

The principle of *Tamleek* means giving an amount of money to, buying goods for, or establishing productive projects for persons deserving of *zakāh*; the recipient should have full authority and a choice/decision as to what is given.

It is permissible to establish service projects such as schools, hospitals, refugee centers, and libraries for persons deserving of *zakāh*.

Assistance should be distributed equitably within the area of collection, between regions of the country, and among Muslim countries in general.

Top priority is given to ending hunger, clothing bodies, curing sick persons, and tending to life-threatening emergencies.

Those who are capable but avoid work are parasitic and are excluded from *zakāh* to force them to seek productive jobs.

Full scholarships may be given to full-time students, not limited to religion.

The poor, who are normally hidden, silent, and invisible, should be given priority.

These general rules indicate that *zakāh* is important tool to reduce poverty, not only for the fulfillment of immediate and subsistence needs, but also for capital goods or entitlements to income. A similar framework integrating *zakāh* and *awqāf* with *sharī'ah*-compliant microfinance becomes a crucial agenda. There is thus great potential use for alms-based programs relevant to microfinance activities (Kahf 2002). Within the context of the Islamic perspective, alms-based tools and microfinance have been used as important instruments of poverty alleviation and economic empowerment.¹⁶⁰

Debt is not preferred by Islam as a means to finance the growing needs of the debtor. In current practice, there is the possibility for the debtor to roll over the debt, so that the debtor pays a previous loan with a fresh issue from the same or other sources. Such a practice harms the economic goals of society. That is why Islamic finance favors asset creation and promotes entrepreneurship. The principle of risk sharing helps improve the efficiency and sustainability of microenterprises. In addition, partnership modes of Islamic finance prove advantageous for institutions by maintaining the real worth of capital, as opposed to conventional finance in economies with high rates of inflation.

Islam encourages people and nations to be independent (including financially independent). A famous saying of Sunan Abu Dawood, *Kitab al-Zakāh*, Book 9, Number 1637, explains, step by step, how to design and implement a strategy of poverty alleviation through economic empowerment (Obaidullah 2008). The *hādīth* states:

160) See Kahf (2002); Ahmed (2004a); Obaidullah (2008); Khaleequzzaman and Shirazi (2012); Iqbal and Mirakhor (2013).

A man of the Ansar⁽¹⁶¹⁾ community came to the Prophet (peace be upon him) and begged from him.

The Prophet (pbuh) asked: Have you nothing in your house? The man replied: Yes, a piece of cloth, which we wear or which we spread (on the ground), and a wooden bowl from which we drink water.

The Prophet (pbuh) said: Bring them to me. The man then brought these articles to the Prophet. He took them in his hands and asked to the assembly of people: Who will buy these? A man said: I shall buy them for one dirham. The Prophet (pbuh) asked twice or thrice: Who will offer more than one dirham? Another man said: I shall buy them for two dirhams.

The Prophet (pbuh) gave these to him and took the two dirhams and, giving them to the man of the Ansar, said: Buy food with one of them and hand it to your family, and buy an axe and bring it to me.

The man then brought it to Him. The Prophet (pbuh) fixed a handle on it with His own hands.

The Prophet said: Go, gather firewood and sell it, and do not let me see you for a fortnight.

The man went away and gathered firewood and sold it. When he had earned ten dirhams, he came bought a garment with some of them and food with the others.

The Prophet (pbuh) then said: This is better for you than that begging should come as a spot on your face on the Day of Judgment. Begging is right only for three people: one who is in grinding poverty, one who is seriously in debt, or one who is responsible for compensation and finds it difficult to pay.

Based on to this *hādīth*, fundamental conditions of successful microfinance program include:

Access of the poorest of the poor to the program.

Careful assessment of the financial health of the poor; inquiry blended with empathy; insistence on the beneficiary contributing and having a stake in the arrangement.

Transformation of unproductive assets of the beneficiary into income-generating ones through rigorous valuation (on the basis of price discovery through the auction method); involvement of the larger community in the process.

Meeting of basic needs on a priority basis and investment of the surplus in a productive asset.

Direct involvement of the program in capacity building in the run-up to income generation; technical assistance to the beneficiary; commitment of top management to the program.

¹⁶¹ Ansar refers to the companions of the Prophet (pbuh) from the inhabitants of Madinah who embraced and supported Islam and who entertained the Muslim emigrants who had emigrated from Makkah and other places

Technical assistance in the form of imparting requisite training to the beneficiary to carry out the business plan/income-generating project; monitoring through a timebound schedule; and impact assessment through a feedback mechanism.

Transparent accounting of operational results and liberty to use part of the income to meet basic needs.

Strong discouragement of seeking charity. Economic empowerment is essential. It rules out dependence on charity, which is permitted only for the poorest of the poor and those overburdened with debt or other obligations with no means of payment in sight.

Financial Inclusion in the Islamic Perspective

In conventional finance, there is a tendency to leave out certain segments of the poor: namely, the poorest of the poor and the destitute. Conventional finance thus only partially addresses the issue of financial exclusion by targeting the “not-so-poor.” The extreme poor are not able to access conventional financing because they lack acceptable collateral. A systematic approach to financial services is needed that covers all segments of society to have appropriate access to finance from formal providers (Obaidullah 2008). The mechanism should not only increase their income, but also reduce their risk of falling back to poverty.

Islamic finance provides a more holistic framework to enhance financial inclusion, eradicate poverty, and ensure a healthy economy by promoting microfinance, small and medium enterprise (SME) financing, and microinsurance (Naceur, Barajas, and Massara 2015). To do so, the approach to financial inclusion from the Islamic perspective addresses two main areas: risk sharing and redistributive instruments (Mohieldin and others 2012; Iqbal and Mirakhor 2013; Iqbal 2014). Both instruments are used to implement the Islamic principles of social justice, inclusion, and sharing of resources. These instruments can complement one another to enable the poor to smooth consumption, build assets, increase income, and start a business (Obaidullah 2008; Iqbal and Mirakhor 2013; Ali 2014).

Promoting risk-sharing contracts provides a viable alternative to risk shifting in conventional debt-loans. Islam ordains three main methods of risk sharing: contracts stipulating how risks will be shared in the financial sector; risk-sharing instruments that redistribute wealth from the economically more able to the less able; and inheritance rules (Iqbal and Mirakhor 2013). Islamic finance bans interest-based contracts (*ribā*) because this transfers all risk to the borrower. As cited in the *Qur'ān* (2:275), Islam ordains contracts of exchange (*al-Bai'*) to be used in all economic and financial transactions.

Islam views wealth as a means of inclusion. Redistributive instruments in Islam (*zakāh*, *waqf*, and *qard ḥasan*) can play a role as catalysts to redeem the rights of the have-nots in the wealth of the haves (Mohieldin and others 2012). It is prohibited to concentrate wealth in the form of overspending (*isrāf*), waste (*itlāf*), and opulent spending (*itrāf*). Islam stipulates some operational mechanisms for redistributive instruments, such as *zakāh* (a 2.5 percent levy on asset-based wealth), *khums* (a 20 percent levy on income), and *sadaqāt* (voluntary charitable contributions). Moreover, Muslims are encouraged to extend *qard ḥasan* as a

more effective means of providing loans to those who are unable to access formal financing channels (Iqbal and Mirakhor 2013).

Iqbal (2014) presents a structured approach to enhance financial inclusion, shown in table 8.1. First, for those who are below the poverty line (in extreme poverty), the instruments of *zakāh*, *ṣadaqāt*, *waqf*, and *khums* can be used as the redistributive pillars, while risk-sharing pillar can occur through collective support. Second, for those who are above the poverty line, the instruments of *qard ḥasan*, *zakāh*, and *waqf* can be used as the redistributive pillars, while microfinance and *microtakāful* can act as the risk-sharing pillar. Finally, low-income people can access hybrid solutions, and the risk-sharing pillar can be implemented through micro, small, and medium enterprise (MSME) financing.

Table 8.1 Structured Approach to Enhancing Financial Inclusion

	Extreme Poverty	Poverty	Low-income
Redistributive pillar	<i>Zakāh, ṣadaqāt, waqf, khums</i>	<i>Qard ḥasan, zakāh, waqf</i>	Hybrid solutions
Risk-sharing pillar	Risk sharing through collective support	Microfinance, <i>Micro-takāful</i>	MSMEs

Source: Iqbal 2014.

Note: MSMEs = micro, small, and medium enterprises.

Previous Studies

Most of recent literature on the subject of empowerment and financial inclusion has come from the conventional perspective, where empowerment and financial inclusion are commonly discussed as two different subjects. Some of selected literatures on empowerment from the conventional perspective is reviewed in Robinson (2001), CGAP (2006), and Armendariz and Morduch (2010). There has been a transition in empowerment programs from microcredit to microfinance. In the process, microfinance has emerged as a broader set of financial services including credit, savings, money transfers, and insurance plans (Robinson 2001; Armendariz and Morduch 2010). Some literature on the subject of financial inclusion in the conventional perspective can be found in Demirgüç-Kunt, Beck, and Honohan (2008), Sarma and Pais (2008), and Demirgüç-Kunt and Klapper (2013). According to Sarma and Pais (2008), a growing body of evidence has convinced many developing economists and policy makers of the positive impact of financial inclusion on economic growth and poverty alleviation. There are at least three important aspects of financial inclusion: access, groups in society, and the financial system (Demirgüç-Kunt, Beck, and Honohan 2008; Demirgüç-Kunt and Klapper 2013).

In the Islamic perspective, the subjects of empowerment and financial inclusion have been discussed in some studies as a separate subject, and in others as an integrated subject. As

a separate subject, the studies of empowerment mostly discuss the disbursement of *zakāh* through *zakāh* institutions or *Bait al-Maal*; examples include Beik (2009), Beik and Arsyanti (2013), and Widiastuti, Sukmana, and Herianingrum (2015). Studies that focus on financial inclusion concentrate on Islamic microfinance through Islamic microfinance institution or *Bait at-Tamwil*; examples include Wilson (2007), Rahman (2010), and Rahman and Dean (2013).

Moreover, some studies—such as Obaidullah (2008), Ascarya and Cahyono (2011), and A. E. E. S. Ali (2014)—discuss empowerment and financial inclusion as an integrated or holistic type of financial inclusion that use both the function of *Bait al-Maal* and *Bait at-Tamwil*. In Indonesia, there is an Islamic financial institution, known as *Baitul Maal wa Tamwil* (BMT), that integrates the function of *Bait al-Maal* and *Bait at-Tamwil*. BMT does not only collect *zakāt*, *infāq*, and *ṣadaqāt* for those who deserve it; it also develops productive business and investment by promoting microfunding and microfinancing activities. Islamic microfinance can range from models that are fully charity based, to a combination of charity based and market based, to fully market based in order to promote justice, fairness, and equity (Ascarya 2014).

Studies on holistic financial inclusion include Mohieldin and others (2012), Iqbal and Mirakhor (2012, 2013), Iqbal (2014), K. M. Ali (2014) and A. E. E. S. Ali (2014). Mohieldin and others (2012) examine the potential of Islamic finance to enhance access to financial inclusion. They propose two main aspects of Islamic instruments. First, risk-sharing contracts can be incorporated into Islamic microfinance services, such as microfinancing, *microtakāful*, and microsavings. Second, redistributive instruments such as *zakāh*, *ṣadaqāt*, *waqf*, and *qard ḥasan*, can offer a comprehensive approach to eradicating poverty. Analyzing data on alleviating poverty in OIC (Organisation of Islamic Cooperation) countries, Mohieldin and others (2012) find that the collection and channeling of *zakāh* through domestic sources and remittances from 20 out of 39 OIC countries could lift the poorest of the poor (those who live on less than \$1.25 per day) above the poverty line. Mohieldin and others (2012) emphasize the role of Islamic microfinance and redistributive instruments as a comprehensive framework of financial inclusion.

Iqbal and Mirakhor (2012, 2013) discuss financial inclusion in the Islamic perspective comprised of Islamic financial instruments and Islamic redistributive instruments based on risk sharing. They conclude that Islamic finance provides a comprehensive framework of financial inclusion through the principle of risk sharing and through Islam's redistributive channels, which are grossly underutilized in Muslim majority countries. They argue that the redistributive instruments may be developed by proper function to optimize the function of such instruments. Furthermore, they argue that application of financial engineering could device innovative ways to develop hybrids of risk sharing and redistributive instruments to enhance access to finance to promote economic development.

Similarly, Iqbal (2014) explores the Islamic perspective on financial inclusion and addresses the issue of financial inclusion from two directions: risk sharing, and specific instruments of redistribution of wealth. The elements of social justice, inclusion, and sharing of resources

between the haves and the have-nots are emphasized as core principles of Islam. The study argues that different approach should be taken for those who are below and above the poverty line. The instruments of the redistributive pillars (*zakāh*, *ṣadaqāt*, *waqf*, and *khums*) and collective support should be directed to the extreme poor (those below the poverty line). Those above the poverty line could be further supported through microfinance and *microtakāful*. Low-income people need a more comprehensive approach to financial inclusion, to prepare them to be micro and small entrepreneurs. This could be addressed through hybrid solutions. The study concludes that *zakāh*, *waqf*, and *qard hasan*, combined with financial engineering, could play a catalytic role in enhancing financial inclusion.

K. M. Ali (2014) investigates the role of Islamic microfinance in alleviating poverty in Muslim communities. Unlike conventional microfinance, which addresses financial inclusion by providing microcredit and other financial services, Islamic microfinance addresses not only financial inclusion but also social inclusion through *zakāh*, *ṣadaqāt*, and *waqf* for segments of the *mustahiq*, such as the extreme poor, or disadvantaged people, such as women. In most Muslim majority countries, the study finds that conventional microfinance actually increases financial inclusion by providing microcredit only to low-income people, thus excluding the extreme poor from access to finance (microfinancial services). The study argues that Islamic microfinance could go beyond the financial inclusion of conventional microfinance to include social inclusion to a segment of *mustahiq*, using Islamic social tools (*zakāh*, *ṣadaqāt*, and *waqf*) to provide basic needs, empowerment, and development. In short, K. M. Ali (2014) proposed holistic financial inclusion that includes social inclusion using social funds and financial inclusion using commercial funds, through Islamic microfinance.

Some studies—such as Kahf (2002) and Ahmad (2004a)—focus on the implicit foundation of holistic financial inclusion built into the process of empowerment that is supported by the institutions of *zakāh* and various charitable activities. Kahf (2002) and Ahmad (2004a) propose establishing a microfinance institution based on *zakāh* and *waqf*. Kahf (2002) provides a detailed discussion of the role of *zakāh* and *awqāf* in reducing poverty. The study emphasizes the relevance of *zakāh* and *awqāf* to microfinance as a holistic approach to the social problem of poverty. It can provide sustained support to poor households until they become self supporting and independent. Kahf (2002) advocates a type of Islamic microfinance that is more consistent with the principle of *Tamleek*¹⁶²⁾ and with the spirit of *zakāh*. Since financing alone has not helped the poor, it is also crucial to meet basic needs and provide education, health care, training, and assistance in starting a business.

Other studies—including Ahmed (2002, 2004b), Obaidullah (2008), and A. E. E. S. Ali (2014)—implicitly discuss holistic financial inclusion, started from the basis of Islamic microfinance and financial inclusion, and then linked them to financing the poor through alms-based sources.

Obaidullah (2008) analyzes the role of microfinance in alleviating the poverty in selected member countries of the Islamic Development Bank. He proposes a composite approach to poverty alleviation by integrating *zakāh* and *waqf* with Islamic microfinance to reduce

162) Giving to recipient in a way that she/he becomes an owner of what is given.

poverty and empower the economy. Social safety nets are needed by the poorest and the destitute before they turn to microfinance. Started with grants to meet basic needs and build assets, a holistic framework then provides opportunities to improve skills, management training, and microsavings and microcredit services. As is being attempted in Indonesia, the study finds strong linkages between grassroot institutions and the formal financial system that allow *zakāh* and *waqf* to be integrated with Islamic microfinance services.

K. M. Ali (2014) presents a theoretical framework for an integrated model of Islamic microfinance. It combines microfinance with principles of *waqf* and *zakāh* to act in sequence. *Zakāh* funds would be used to meet the basic needs and to provide initial investments. *Waqf* funds could cover capital investments. Then, Islamic microfinance could focus on promoting the principles of profit and risk sharing.

Elements of Holistic Financial Inclusion

Based on an extensive review of the literature, this study presents a model of holistic financial inclusion (HFI) designed to integrate social inclusion and financial inclusion. Social inclusion includes social programs and development programs directed to poor people (*mustahiq*) utilizing Islamic social tools, such as *zakāt*, *infāq*, *ṣadaqāt* and *waqf*; these are referred to as ZISWaf funds. Financial inclusion includes a financing program and Islamic microfinancial services utilizing commercial funds provided to help *mustahiq* graduate from poverty. Moreover, HFI should result in positive impacts, including economic impacts, social impacts, and outreach.

The elements of Holistic Financial Inclusion from an Islamic perspective are presented in table 8.2. The complete definitions of and references for the elements can be found in annex 8A.

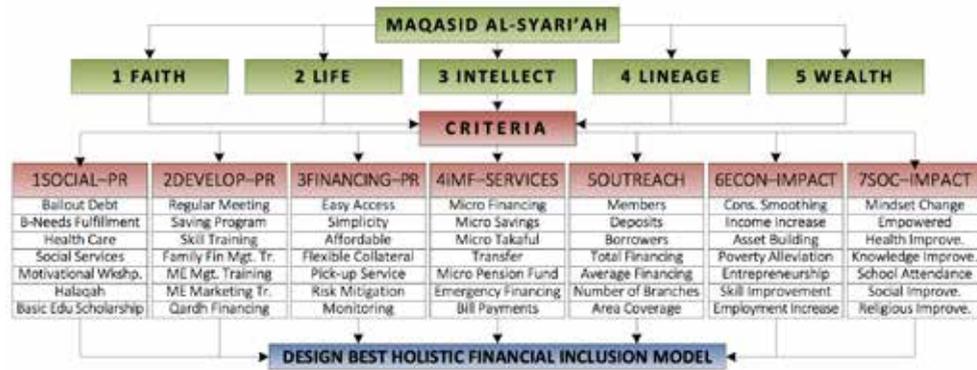
Table 8.2 Elements of Holistic Financial Inclusion

Social-Pr	Development-Pr	Financing-Pr	iMF-Services
<ol style="list-style-type: none"> 1. Bailout Debt 2. Basic Needs Fulfillment 3. Health Care 4. Social Services 5. Motivational Workshop 6. <i>Halaqah</i> 7. Basic Education Scholarship 	<ol style="list-style-type: none"> 1. Regular Meeting 2. Saving Program 3. Skill Training 4. Family Financial Management Training 5. Microenterprise Management Training 6. Microenterprise Marketing Training 7. <i>Qard</i> Financing 	<ol style="list-style-type: none"> 1. Easy Access 2. Simplicity 3. Affordable 4. Flexible Collateral 5. Pick-up Service 6. Risk Mitigation 7. Monitoring 	<ol style="list-style-type: none"> 1. Microfinancing 2. Microsavings 3. <i>Microtakāful</i> 4. Transfer 5. Micropension Fund 6. Emergency Financing 7. Bill Payments
Outreach	Econ-Impact	Soc-Impact	Objective
<ol style="list-style-type: none"> 1. Members 2. Deposits 3. Borrowers 4. Total Financing 5. Average Financing 6. Number of Branches 7. Area of Coverage 	<ol style="list-style-type: none"> 1. Consumption Smoothing 2. Income Increase 3. Asset Building 4. Poverty Alleviation 5. Entrepreneurship 6. Skill Improvement 7. Employment Increase 	<ol style="list-style-type: none"> 1. Mindset Change 2. Empowered 3. Health Improvement 4. Knowledge Improvement 5. School Attendance 6. Social Improvement 7. Religious Improvement 	<ol style="list-style-type: none"> 1. Faith 2. Life 3. Intellect 4. Lineage 5. Wealth

Conceptual Framework

Based on the elements of Holistic Financial Inclusion (HFI) in table 8.2 and the vast literature summarized in annex 8A, figure 8.2 presents the conceptual framework of this study in designing HFI based on *maqāṣid al-sharī'ah*.

Figure 8.2 Conceptual Framework of the Model for Holistic Financial Inclusion

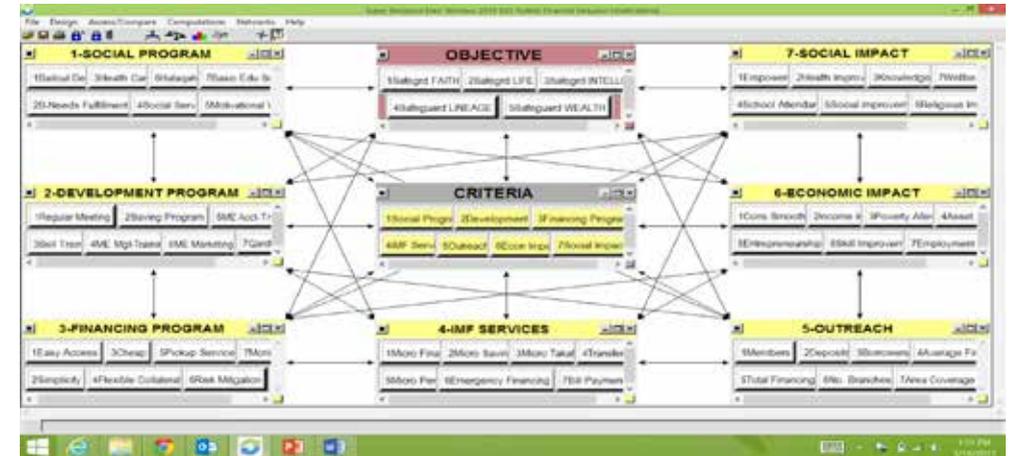


The conceptual framework starts with the five *maqāṣid al-sharī'ah* laid down by Al Ghazali in his book, *al-Mustasfa* (1937), where he broke down *maqāṣid al-sharī'ah* into five important or essential elements: safeguarding the faith (*hifz ad-Deen*); safeguarding the human self, or life (*hifz an-Nafs*); safeguarding the intellect (*hifz al-'Aql*); safeguarding the posterity or lineage (*hifz an-Nasl*); and safeguarding wealth or property (*hifz al-Maal*). All these elements are considered as necessities *darūrīyāt* to achieve the Objectives of Islamic Law.

Following from this, the framework has two clusters for social inclusion (the social program and the development program); two clusters for financial inclusion (the financing program and Islamic microfinancial services); and three clusters for impact (outreach, economic impact, and social impact). Each of these seven clusters has seven elements, derived from the literature. Based on these, the best design for Holistic Financial Inclusion can be proposed.

Based on the conceptual framework in figure 8.2, the corresponding ANP network can be built. It is depicted in figure 8.3.

Figure 8.3 Analytic Network Process (ANP) Network



There are seven clusters for each aspect of social inclusion (1-social program, 2-development program); financial inclusion (3-financing program, 4-Islamic microfinancial services); and impact (5-outreach, 6-economic impact, 7-social impact). There is one cluster for *maqāṣid al-sharī'ah* and one cluster for criteria comprising all seven aspects.

All clusters and their elements are interconnected and interdependent, similar to the process-oriented interactive, integrative, and evolutionary (IIE) model proposed by Choudhury and Hoque (2004).

Data

The primary data for the ANP (Analytic Network Process) analysis were obtained from a survey. Samples are selected from the most knowledgeable responses in the field of social inclusion and financial inclusion from an Islamic perspective, as required by the ANP method. Seven experts in Indonesia were chosen, and filled out simplified pair-wise questionnaires, to maintain consistency among their responses. However, only three questionnaires were completed. ANP does not require a minimum number of responses, since the purpose of the survey is to acquire knowledge from experts. Ideally, the number of responses should match the number of responses in a focus group discussion (FGD), which is between 6 to 12 responses for a normal FGD, or 3 to 5 responses for a small FGD.

Results and Analysis

Results

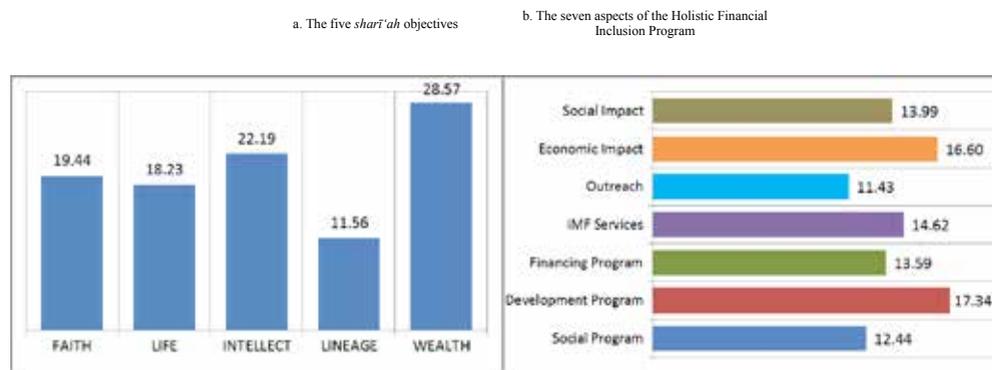
The general overall ANP results, using a geometric mean of all responses (see annex 8B), shows that the most important Objective of Islamic law (*maqāṣid al-sharī'ah*) to be

achieved in holistic financial inclusion is Safeguarding wealth (28.57 percent), followed by Safeguarding the intellect (22.19 percent) and Safeguarding faith (19.44 percent) (see figure 8.4, panel a).

The most important aspect in holistic financial inclusion program is the Development program (17.34 percent), followed by Economic impact (16.60 percent), Islamic microfinancial services (14.62 percent), and Social impact (13.99 percent) (see figure 8.4, panel b). The least important aspects of the holistic financial inclusion program turn out to be Outreach (11.43 percent) and the Social program (12.44 percent).

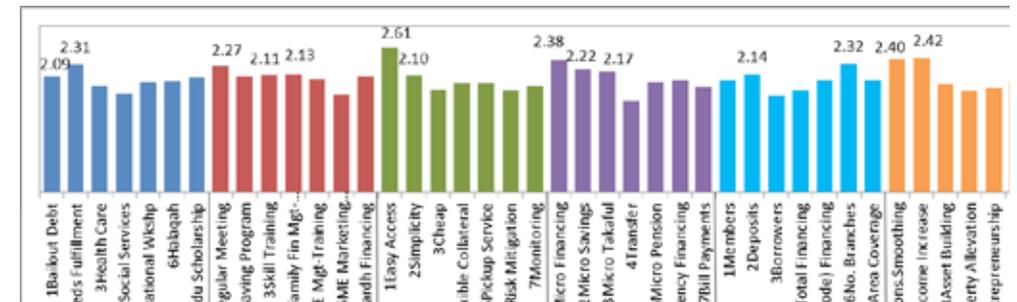
In other words, the Development program (17.34 percent) is the most important aspect of Social inclusion, Islamic Microfinancial Services (14.6 percent) is the most important aspect of Financial inclusion, while Economic impact (16.60 percent) is the most important expected impact from the holistic financial inclusion program.

Figure 8.4 General Results of the ANP



The detailed overall ANP results, using a geometric mean of all responses, show that the most important element of holistic financial inclusion is Easy Access (from the Financing program) (2.61 percent), followed by Income Increase (2.42 percent) and Consumption Smoothing (2.40 percent) (from Economic impact), Microfinancing (from the Financing program) (2.38 percent), Number of Branches (from Outreach) (2.32 percent), Basic Needs Fulfillment (from the Social program) (2.31 percent), and Mindset Change (from Social impact) (2.28 percent).

Figure 8.5 Detailed Results of the ANP



The most important social inclusion element is Basic Needs Fulfillment (from the Social program) (2.31 percent), followed by Regular Meeting (2.27 percent), Family Financial Management Training (2.13 percent), and Skills Training (2.11 percent) (from the Development program).

The most important financial inclusion element is Easy Access (from the Financing program) (2.61 percent), followed by Microfinancing (2.38 percent), Microsavings (2.22 percent), and Microtakāful (2.17 percent) (from Islamic Microfinancial Services).

The most important expected impact from the holistic financial inclusion program is Income Increase (2.42 percent) and Consumption Smoothing (2.40 percent) (from Economic impact), followed by Number of Branches (2.32 percent) (from Outreach) and Mindset Change (2.28 percent) (from Social impact).

Analysis

The most important *maqāsid al-sharī'ah* to be achieved in holistic financial inclusion program is safeguarding wealth, not safeguarding faith or safeguarding life. This is natural, since social inclusion precedes financial inclusion, while social inclusion using Islamic social tools, such as *zakāt*, *infāq*, *ṣadaqāt* and *waqf* (ZISWaf) is intended to narrow the gap between the haves (*muzakki*) and the have-nots (*mustahiq*) through social and development programs, so that *mustahiqs* can gradually step out of poverty and become self-sufficient. These results are in line with a *ḥādīth* (saying) of the Prophet Mohammed (pbuh): “Almost indigence (poverty) becomes disbelief.” This *ḥādīth* is issued by Imam al-Bayhaqī in the book *Syu'abul Faith* (No. 6612). This *ḥādīth* indicates that wealth (to some extent) is very important in this life. Acquiring wealth in a *ḥalāl* (allowed) ways is obligatory for all Muslims. A *ḥādīth* reported by Thabrani says “seeking ‘*ḥalāl*’ (nonprohibited) sustenance is compulsory for every Muslim.”

The second most important *maqāsid al-sharī'ah* to be achieved is safeguarding the intellect, rather than safeguarding faith or safeguarding life. This is true, because the root cause of poverty, underempowerment, and underdevelopment is lack of proper understanding.

The most important aspect of a holistic financial inclusion program is the development program of social inclusion (which at least includes a regular meeting, family financial management training, and skill training). This is to be expected because social inclusion precedes financial inclusion, and financial inclusion of financially excluded poor people (*mustahiqs*) cannot succeed before these poor people are empowered and developed to become self-sufficient. However, the development program should be preceded by the fulfillment of basic needs (at minimum) in the social program.

Within the financial inclusion program, the provision of Islamic microfinancial services (which includes, at minimum, microfinancing, microsavings, and *microtakāful*) is the most important aspect. This should be preceded by easy access to finance. Easy access would break the barrier that prevent poor people from turning to Islamic microfinance institutions (IMFIs), while microfinancing, microsavings, and *microtakāful* are the three Islamic microfinancial services (IMFs) most needed by self-sufficient *mustahiqs* who have graduated out of extreme poverty to grow and expand their microenterprises.

Economic impact, especially income increase and consumption smoothing, is the most important outcome, as expected, while increasing the number of branches of IMFIs, which could expand the outreach of the holistic financial inclusion program, is required. Last but not least, a mindset change among *mustahiqs* is very important, as a prime mover to move forward.

Designing a Holistic Financial Inclusion Program

The design of Holistic Financial Inclusion according to the Islamic perspective should have certain distinct features, compared to other concepts of financial inclusion:

Holistic Financial Inclusion should be based on the *maqāsid al-sharī'ah*, so that all activities and efforts are directed toward the fulfillment of the five *sharī'ah* Objectives.

Holistic Financial Inclusion should comprise social inclusion (including the social program and development) using social/ZISWaf funds carried out by *Bait al-Maal*, and financial inclusion (including financing program and Islamic microfinancial services) using commercial funds carried out by *Bait at-Tamwil*.

The minimum elements of the social inclusion program are Basic Needs Fulfillment (through the Social Program), as well as Regular Meeting, Family Financial Management Training and Skill Training (through the Development Program).

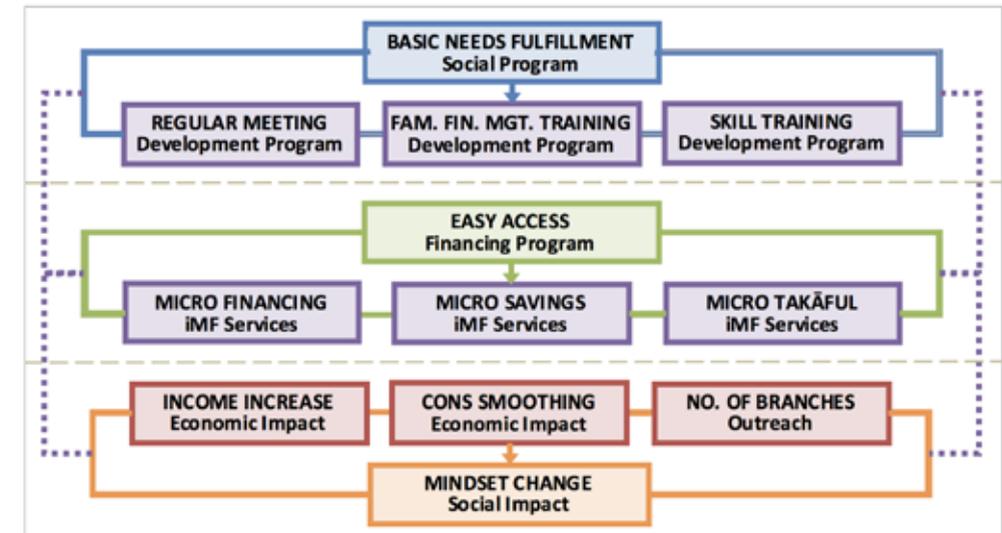
The minimum elements of the financial inclusion program are Easy Access (through the Financing Program), as well as Microfinancing, Microsavings, and *Microtakāful* (through Islamic Microfinancial Services).

The minimum impacts of the Holistic Financial Inclusion Program should be Income Increase and Consumption Smoothing (Economic Impact), large Number of Branches of IMFIs providing HFI (Outreach), as well as Mindset Change (Social Impact), which is key to

triggering *mustahiqs* to act to become more self-sufficient.

Social inclusion by *Bait al-Maal* and financial inclusion by *Bait at-Tamwil* should be integrated within one effective institution to form *Baitul Maal wa Tamwil* (BMT), which has two separate divisions of *Bait al-Maal* and *Bait at-Tamwil*.

Figure 8.6 Design of Holistic Financial Inclusion



While other elements of each of the seven aspects are not among the top priorities, that does not mean that they are not important. They are all important and necessary, but they could be added gradually in due course.

Conclusion and Recommendations

Conclusion

Holistic Financial Inclusion from an Islamic perspective based on *maqāsid al-sharī'ah* comprises social inclusion (responsible for carrying out social programs and development programs), as well as financial inclusion (responsible for carrying out financing programs and Islamic microfinancial services that should produce positive economic and social impacts, as well as wide outreach).

ANP results show that the most important *maqāsid al-sharī'ah* to be achieved by HFI are safeguarding wealth (28.57 percent) and safeguarding the intellect (22.19 percent). These Objectives are in line with the objective of Islamic social tools, especially ZISWaf, to alleviate poverty, as well as to empower and develop the poor (*mustahiq*).

ANP results show that the most important elements of social inclusion are basic needs

fulfilment (2.31 percent) through social programs, as well as regular meetings (2.27 percent), family financial management training (2.13 percent), and skill training (2.11 percent) through devopment programs. The most important financial inclusion elements are easy access (2.61 percent) through the financing program, as well as microfinance (2.38 percent), microsavings (2.22 percent), and *microtakāful* (2.17 percent) through Islamic microfinancial services. The most important positive impacts expected are economic impact (income increase 2.42 percent) and consumption smoothing (2.40 percent), outreach (through a large number of IMFI branches, 2.32 percent), and social impact (mindset change, 2.28 percent). A mindset change among the poor (*mustahiq*) is very important to inspire the poor to transform.

Therefore, the design of Holistic Financial Inclusion based on *maqāṣid al-sharī'ah* must have minimum elements of social inclusion, financial inclusion, and impact, as described in the ANP results.

Recommendations

Holistic Financial Inclusion in the Islamic perspective—in which a not-for-profit division concentrates on social inclusion using Islamic social tools, and a for-profit division concentrates on financial inclusion using commercial funds to finance businesses—is not a new concept; it is integral to Islamic economics and finance. Just as there is no dichotomy between the real and financial sectors in Islamic economics and finance, there is no dichotomy between for-profit and not-for profit activities or institutions.

However, the secular world has made Islamic institutions and their activities adjust their functions so that not-for-profit activities can be carried out only by not-for-profit or charity-based institutions, while for-profit activities can be carried out only by for-profit or market-based institutions. Consequently, social inclusion activities have been carried out by charity-based Islamic institutions, such as *zakāt* institutions. In Indonesia, there are thousands of institutions—both public and private—that focus on the management of *zakāt*, *infāq*, and *sadaqāt* funds, nationally, regionally, or locally.

These dichotomies should be ended so that Islamic institutions can perform their roles as they were intended. One unique and well-known Islamic institution in Indonesia, which could operate as both a charity-based and market-based organization, is *Baitul Maal wa Tamwil* (BMT). The *Baitul Maal* division manages ZISWaf funds to carry out social inclusion, while the *Baitut Tamwil* division is an Islamic microfinance institution that manages commercial funds to provide Islamic microfinancial services in line with the goal of financial inclusion. BMT is regarded as one of the most sustainable models of microfinance for microenterprises in Indonesia (Ascarya 2014).

However, most *Baitul Maal* divisions are not really active because BMTs initially are for-profit IMFIs and they need a separate permit to operate the not-for-profit *Baitul Maal* as a ZISWaf institution. BMTs should have their own regulations to be able to operate, as they should be able to carry out the duty of holistic financial inclusion.

Annex 8A Definitions of and Sources for Elements of the Holistic Financial Inclusion Program

Variable	Definition and Sources
1. Social program	
1. Bailout debt	Bailout debt using <i>zakāt</i> funds is provided to those debtors (<i>al-gharimin</i>) who are overburdened with debt and have no means of payment. Source: Obaidullah (2008, 33); Kahf (2002, 64 and 66)
2. Basic needs fulfillment	Means to meet basic needs, including food, clothing, and shelter, are provided to those (<i>mustahiq</i>) who can not afford them, using <i>zakāt</i> funds. Source: K.M. Ali (2014, 4); Obaidullah (2008, 16, 29, 53); Kahf (2002, 64)
3. Health care	Health care service is provided to the poor through free or low-cost clinics in order to reduce their economic burden. Source: Obaidullah (2008, 2); Kahf (2002, 62)
4. Social services	Social services provide social capital based on brotherhood and comradeship that is set aside in a fund to be used in an emergency, such as an illness, death, or unexpected injury. Source: Obaidullah (2008,10); Ahmed (2002, 39)
5. Motivational support	Motivational support is provided to the poor to inculcate a new spirit to be thrifty, to save, to be productive, and to be successful. Source: Obaidullah (2008, 29); Kahf (2002, 64)
6. <i>Halaqah</i>	<i>Halaqah</i> is a religious gathering where the poor can have a study circle to discuss behavior, ethics, and religious duty. Source: Obaidullah (2008, 29); Ahmed (2002, 57)
7. Basic education scholarship	Education scholarships are provided to children from poor families to enhance human capital and knowledge skills as one of their essential investments. Source: Kahf (2002, 56)
2. Development Program	
1. Regular meeting	A meeting that aims to generate personal and social consciousness by inculcating behavioral change, moral teachings, and social customs. Source: Obaidullah (2008, 64); Ahmed (2002, 32)
2. Saving program	A program that aims to train households to have the discipline to manage cash flow, smooth consumption, save income, and build working capital. Source: ADBI (2014, 47); K.M.Ali (2014, 11); Cull, Ehrbeck, and Holle (2014, 4); Ar-mendariz and Morduch (2010, 6); Hadisumarto and Ismail (2010, 70)
3. Skill training	Training that aims to provide technical skills to those who are economically inactive to be productive; it is an important step to start a business and to raise income. K.M.Ali (2014, 12); Obaidullah (2008, 29, 60); Kahf (2002, 62)
4. Family financial management training	Training that aims to provide a foundational understanding of family financial management so families may plan for and protect their financial future. Source: Tamanni and Mukhlisin (2013, 54); Sahih Muslim (2006, Hādīth No. 562, page1361); An-Nawawi (2001, Hādīth No. 2984, page199)
5. Micro-enterprise Management Training	Training that aims to provide basic skill to manage microenterprises. It includes how to plan, organize, coordinate, and control microenterprises. Source: Rahman and Dean (2013, 302); Obaidullah (2008, 2 and 64); Ahmed (2002, 57); Kahf (2002, 62)
6. Micro-enterprise Marketing Training	Training that aims to provide basic skills for the microenterprises to improve their ability to deliver products or services to market and to build networks to promote the success of their business. Source: Hadisumarto and Ismail (2010, 71); Obaidullah (2008, 29); Ahmed (2002, 57); Kahf (2002, 62)

7.	<i>Qard</i> financing	A loan that does not charge interest and relieves the debtor from repaying the principal. Source: Zada and Saba (2013, 154); Hadisumarto and Ismail (2010, 67); Obaidullah (2008, 64); Ahmed (2002, 38); Ahmed (2004a, 130); Mohieldin and others (2012, 66)
3. Financing Program		
1.	Easy access	There should be no obstacles for the poor to access financial services. Documentation requirements should be low, and the financing program should provide a wide network of infrastructure, such as branches and payment points. Source: ADBI (2014, 45); Karpowicz (2014, 6); GPFI (2012, 3); World Bank (2010, 143); Obaidullah (2008, 62)
2.	Simplicity	The financing program is easy to understand by those with little or no financial literacy. Source: GPFI (2012, 4); Demirgüç-Kunt, Beck, and Honohan (2008, 28)
3.	Affordable	The financing program can be delivered at affordable cost to underserved poor families. Source: Karpowicz (2014, 2); GPFI (2012, 4); Demirgüç-Kunt, Beck, and Honohan (2008, 43); Obaidullah (2008, 59); Kahf (2002, 63)
4.	Flexible collateral	The financing program has low and easily met collateral requirements to promote financial inclusion. Source: Karpowicz (2014, 6); GPFI (2012, 4); Obaidullah (2008, 61); Kahf (2002, 64)
5.	Pick-up service	The financing program provides a service that facilitates alternative approaches for the banker to meet and visit customers personally in their homes and workplaces. Source: Ascarya and Cahyono (2011, 13); Armendariz and Morduch (2010, 97); Rhyne (2009, 164)
6.	Risk mitigation	The financing program incorporates a process to control, evaluate, and reduce risk exposures to the borrowers. Source: Naceur, Barajas, and Massara (2015, 21); Hadisumarto and Ismail (2010, 72); Obaidullah (2008, 10)
7.	Monitoring	The financing program monitors borrowers to ensure that the borrower is meeting the objectives and targets of the financing. Source: Hadisumarto and Ismail (2010, 70); Ahmed (2004a, 113); Ahmed (2002, 56); Kahf (2002, 63)
4. Islamic Microfinancial Services		
1.	Micro financing	A financing program that provides loan in small amounts that must be repaid in a short-time period (weekly or monthly intervals). Source: Ali (2014, 12); Obaidullah (2008, 63); Kahf (2002, 61)
2.	Micro savings	A saving program that offers secure and convenient deposit services for small balances and transactions. Source: K.M.Ali (2014, 12); Bank Indonesia (2014, 4); Obaidullah (2008, 60); Ahmed (2002, 57); Kahf (2002, 64)
3.	Micro <i>takāful</i>	A financial service for low-income persons that aims to mitigate risks, such as the death or illness, and manage shocks from losing an asset. Source: ADBI (2014, 41); K.M.Ali (2014, 12); Bank Indonesia (2014, 4); Cull, Ehrbeck, and Holle (2014, 5); Mohieldin and others (2012, 74); Obaidullah (2008, 64); Ahmed (2004, 130)
4.	Transfer	A financial service that provides remittance services for low-income persons to transfer small amounts of money. Since many poor people earn money in far-off places, they need to transfer money (remittances) to their family. Source: K.M.Ali (2014, 2); GPFI (2012, 4); Obaidullah (2008, 4); Obaidullah and Khan (2008, 12); Ahmed (2002, 41)
5.	Micro pension fund	A financial service that provides protection and retirement plans for the poor when they reach the end of their working period. Source: Yunus (2004, 4079); Rhyne (2009, 33); Obaidullah and Khan (2008, 28); Reyes (2010, 2)

6.	Emergency financing	A financing program that is given to the poor who are coping with a disaster or emergency, such as prolonged illness or injury, theft, or the loss of employment. Source: Obaidullah and Khan (2008, 11 and 12)
7.	Bill payment	A payment service for poor households and microentrepreneurs to pay routine bills, such as electricity bills and water bills. Source: Demirgüç-Kunt, Beck, and Honohan (2008, 112)
5. Outreach		
1.	Members or depositors	The number of adults having an account at a formal financial institution. Source: Bank Indonesia (2014, 9); GPFI (2012, 2)
2.	Deposits	The number of deposit accounts at a formal financial institution. Source: Naceur, Barajas, and Massara (2015, 27); Bank Indonesia (2014, 9); GPFI (2012, 2); Demirgüç-Kunt, Beck, and Honohan (2008, 27)
3.	Borrowers	The number of adults who borrow from formal financial institutions. Source: Naceur, Barajas, and Massara (2015, 15); GPFI (2012, 2); Demirgüç-Kunt, Beck, and Honohan (2008, 26)
4.	Total financing	Total number of outstanding loans extended by a formal financial institution. Source: Naceur, Barajas, and Massara (2015, 15); GPFI (2012, 2); Demirgüç-Kunt and Klapper (2013, 284)
5.	Average of financing	The most frequent amount of deposits and outstanding loans. Source: Ascarya and Sanrego (2007, 7)
6.	Number of branches	The number of branch network providing various services to its customers. Source: Naceur, Barajas, and Massara (2015, 12); GPFI (2012, 3)
7.	Area of coverage	Any access area where individual can perform cash-in/cash-out transactions (bank, ATM, financial service intermediary unit). Source: Bank Indonesia (2014, 9); GPFI (2012, 3)
6. Economic Impact		
1.	Consumption smoothing	A stable amount of consumption over time. When the poor experience a negative shock to their income, their consumption should not change; they can use their savings or other sources of financing. Source: Demirgüç-Kunt, Beck, and Honohan (2008, 105); Obaidullah (2008, 63)
2.	Income increase	The increase in amount of income generated by the poor. Source: A.E.E.S.Ali (2014, 11); Hadisumarto and Ismail (2010, 69); Obaidullah (2008, 59)
3.	Asset building	Broadening access of financial and tangible assets, such as savings and investments in a business empower poor families. Source: K.M.Ali (2014, 2); Hadisumarto and Ismail (2010, 71); Ahmed (2002, 53)
4.	Poverty alleviation	The main objective of financial inclusion because of its positive impact on human well-being, mortality, school attendance, and the like. Source: A.E.E.S.Ali (2014, 2); Hadad (2010, 5); Hadisumarto and Ismail (2010, 69); Demirgüç-Kunt, Beck, and Honohan (2008, 107); Obaidullah (2008, 11); Ahmed (2002, 57); Ahmed (2004, 63); Kahf (2002, 64)
5.	Entrepreneurship	The ability to be entrepreneurial Source: A.E.E.S.Ali (2014, 11); Obaidullah (2008, 63)
6.	Skills improvement	The improvement in skill and knowledge, including technical skills, managerial skills, marketing skills, and business strategy. Source: Naceur, Barajas, and Massara (2015, 22); A.E.E.S.Ali (2014, 10); Hadisumarto and Ismail (2010, 71); Obaidullah (2008, 63)
7.	Employment increase	The increase in employment, as the results of improved skill and knowledge for the poor, which makes them work-ready. Source: Ahmed (2002, 53)

7. Social Impact	
1. Mindset change	Progress toward higher levels of thinking so that the poor are able to change their bad behavior to good behavior. Source: Hadisumarto and Ismail (2010, 71)
2. Empowerment	Poor people are empowered when they have opportunity to access services to improve their financial literacy and financial capability. Source: A.E.E.E.S.Ali (2014, 13); GPFI (2010, 5)
3. Health improvement	Improvement in the quality of health of poor families. Source: Obaidullah (2008, 2); Ahmed (2004a, 54)
4. Knowledge improvement	An improvement in knowledge among the poor as the result of entrepreneurship and social development. Source: Obaidullah (2008, 61)
5. School attendance	Number of children from poor families enrolled in school. Source: Ali (2014, 2); Demirgüç-Kunt, Beck, and Honohan (2008, 103)
6. Social improvement	Improvement in socioeconomic status among poor families by establishing a social safety net and overcoming social exclusion. Source: A.E.E.E.S.Ali (2014, 3); Ahmed (2002, 41)
7. Religious improvement	Improvement in religious life among poor families, as reflected in honesty, discipline, patience, piety, and social responsibility. Source: Hadisumarto and Ismail (2010, 72); Ahmed (2002, 41)

Annex 8B ANP Results

Name	Limiting	Normalized by Cluster	Name	Limiting	Normalized by Cluster
Objective					
Faith	0.028805	0.19443	Lineage	0.017133	0.11565
Life	0.027010	0.18232	Wealth	0.042323	0.28568
Intellect	0.032877	0.22192			
Criteria					
Social Program	0.013818	0.12436	Outreach	0.012700	0.11430
Development Program	0.019262	0.17336	Economic Impact	0.018442	0.16598
Financing Program	0.015100	0.13590	Social Impact	0.015543	0.13988
iMF Services	0.016248	0.14623			
Social Program			Development Program		
Bailout Debt	0.015458	0.14735	Regular Meeting	0.016837	0.15688
Basic Needs Fulfillment	0.017082	0.16283	Saving Program	0.015427	0.14374
Health Care	0.014200	0.13536	Skill Training	0.015647	0.14579
Social Services	0.013186	0.12569	Family Financial Mgt. Training	0.015762	0.14686
Motivational Workshop	0.014733	0.14044	Microenterprise Mgt.-Training	0.015168	0.14133
Halaqah	0.014854	0.14159	Microenterprise Training Marketing	0.013076	0.12183
Basic Educ. Scholarship	0.015393	0.14673	Qard Financing	0.015409	0.14357
Financing Program			Islamic Microfinancial (iMF) Services		
Easy Access	0.019317	0.18314	Microfinancing	0.017607	0.16613
Simplicity	0.015551	0.14744	Microsavings	0.016425	0.15497
Affordable	0.013719	0.13007	Microtakāful	0.016076	0.15168
Flexible Collateral	0.014592	0.13834	Transfer	0.012242	0.11551
Pickup Service	0.01456	0.13804	Micropension	0.014727	0.13895
Risk Mitigation	0.013599	0.12893	Emergency Financing	0.014874	0.14034
Monitoring	0.014138	0.13404	Bill Payments	0.014034	0.13241
Outreach			Economic Impact		
Members	0.014942	0.14311	Consumption Smoothing	0.017777	0.16620
Deposits	0.015827	0.15159	Income Increase	0.017927	0.16760
Borrowers	0.012974	0.12426	Asset Building	0.014471	0.13529
Total Financing	0.013624	0.13049	Poverty Alleviation	0.013491	0.12613
Avg. (mode) Financing	0.014962	0.14330	Entrepreneurship	0.013890	0.12986
No. of Branches	0.017179	0.16454	Skill Improvement	0.014727	0.13768
Area Coverage	0.014901	0.14272	Employment Increase	0.014679	0.13724
Social Impact					

Mindset Change	0.016877	0.15971	School Attendance	0.015285	0.14464
Empowered	0.014739	0.13948	Social Improvement	0.015025	0.14218
Health Improvement	0.014196	0.13434	Religious Improvement	0.015828	0.14978
Knowledge Improvement.	0.013724	0.12987			

Annex 8C ANP Method

Saaty and Vargas (2006) define ANP as a general tool that is helpful in organizing thoughts and experiences, allowing for diverse opinions after discussion and debate, and eliciting judgments and quantifying them in the form of priorities. Azis (2003) describes ANP as a mathematical theory that allows one to deal systematically with dependence and feedback and that can capture and combine tangible and intangible factors by using a ratio scale.

ANP is a new approach in qualitative methods. It is characterized as nonparametric and non-Bayesian. It enables a general framework to be fashioned to make decisions without making any assumptions about the independence of an element at a higher level from an element at a lower level, or about the independence of elements within a level.⁽¹⁶³⁾ The advantage of ANP is its ability to support and synthesize numerous factors within a hierarchy or network. Its simplicity makes it well-suited for various qualitative research in such areas as decision making, forecasting, and resources allocation.

ANP has three steps. The first is to decompose or analyze which objectives to structure the complexity of the problem. The second is to make comparisons and assign values to them to be put on a scale ratio. The third is to synthesize all the previously disparate parts and combine them into one value.

ANP is commonly compared to Analytical Hierarchy Process. While there are similarities, there are also some differences. The similarity between ANP and AHP is that both have the same foundations, such as reciprocity, homogeneity, decomposition, comparison, composition, structuring complexity, transferring into a scale ratio, and synthesis, as well as inconsistency, transitivity, and the deviation concept.⁽¹⁶⁴⁾

Decomposition attempts to structure the complexity into clusters, subclusters, sub-sub-clusters, and so forth. This classification is important to the attempt to reach the proper solution. All elements within each cluster are compared with respect to the main cluster to derive the priority within that cluster. Composition attempts to multiply the local priority of the elements within each cluster with the global priority of the main element. The result is the global priority for all hierarchies.

Both methods also structure complexity. They each employ a hierarchy and use the homogeneity of clusters to model the problem within the ANP or AHP framework. Transferring the values onto a scale ratio is believed to be the most accurate way to measure the factors in building the hierarchy. In this case, ratio measurement is needed to reflect the proportions of the clusters. For simplicity, ratios from a pair factor are used to get the ratio scale. Following this step, the synthesis attempts to gather all the parts into a single measure for the entire model.

¹⁶³ ANP uses a network without deciding the hierarchy level—as it is commonly known in Analytical Hierarchy Process (AHP). Since ANP is an improvement over AHP and is generalized from it, AHP has become the special case of ANP when the network is hierarchical.

¹⁶⁴ Reciprocity means if, for example, A equals 5B, then B must be 1/5 of A. Transitivity means that if A>B and B>C, then A>C (> means preferable). Homogeneity refers to the conversion of the elements into the numerical scale that ranges from 1 (which means equally influential or important) to 9 (which means very influential or important). Inconsistency refers to the possibility that discrepancies may arise in measuring the preference in pair comparisons.

The two models differ in terms of the model framework and dependence, feedback, and accuracy. AHP uses a hierarchy. ANP uses a network. Network models in ANP can be more varied than AHP models and better reflect the complexity of the actual facts. In the hierarchy, there is higher and lower dependence of the clusters, while in network structure, there is feedback. ANP is more accurate compared to AHP. The product of AHP is a matrix and eigenvector, which indicates the priority. The result in ANP is a supermatrix priority scale, which is more stable due to the presence of feedback. Further mathematical and technical details can be found in Saaty (2005) and Saaty and Vargas (2001, 2006) or their newer editions.

Steps of ANP Research

There are three main steps to ANP modeling: decomposition, where the problem is dissected, decomposed, and arranged into an ANP network; measurement, where pairwise comparisons are conducted on all connected elements in the ANP network; and synthesis, where all the measurements are combined to produce priority weights.

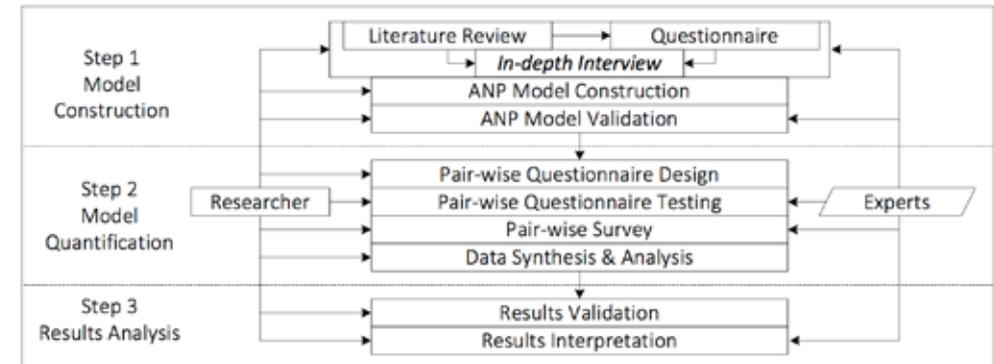
This empirical study followed the three phases suggested by Ascarya (2014): model construction, model quantification, and results analysis (figure 8.7).

Step 1. Model construction or decomposition. This step identifies, analyzes, and structures the complexity of the problems into an appropriate ANP network. It includes literature reviews, questionnaires, and in-depth interviews with experts and practitioners to comprehend the problem fully; construction of ANP network; and validation of ANP network.

Step 2. Model quantification or pair-wise comparison. This step includes: designing pair-wise questionnaires in accordance with ANP network; testing the pair-wise questionnaires with experts; surveying selected experts responses to fill out the pair-wise questionnaires; and processing and synthesizing the data from the questionnaires using ANP software superdecisions.

Step 3. Results analysis. This step includes: validating and interpreting the results.

Figure 8.7 Steps of ANP Research



Source: Ascarya 2014.

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CHAPTER 9

ISLAMIC BANKING: MORE FINANCIAL INCLUSION
FOR ARAB STATES?

Clement M. Henry

Islamic banking continues to grow more rapidly than conventional banking in most Arab and many Muslim majority countries, but the sceptic may ask whether it really has a future, mobilizing broad classes of new economic actors, or is simply diversifying the portfolios of wealthy investors in Gulf countries, where most Islamic banking assets are currently concentrated, apart from the Islamic Republic of Iran. This study explores the potential of Islamic banking to be inclusive: that is, to introduce financial intermediation to populations up until now confined to informal economies. Might it promote social as well as financial inclusion, reaching out to lower-income groups? What would be the political costs and possible benefits to the state actors that regulate these banks in each country?

Financial inclusion really matters; by bringing new classes of people into a commercial banking system, more investment becomes available for economic development involving a wider social base. If properly regulated, a banking system can promote shared prosperity. This study first examines whether any greater inclusion is yet associated with the penetration of Islamic banks into the commercial banking systems of Muslim majority states. While time-series data are not yet available, a cross-section of 38 states, including most of the Muslim world except India, was devised.¹⁶⁵ It displays varying degrees of penetration of Islamic banking and therefore offers an opportunity to examine its possible relationship to World Bank assessments of financial inclusion. Worldwide surveys launched in 2011 by the World Bank's Global Financial Inclusion (Findex) Program offer extensive data about banking behavior, based on country surveys. Financial inclusion can be indicated by the percentages of people who have bank accounts and who actually borrow money from banks rather than other informal sources. The surveys also document the percentages of people who cite religious reasons for not having a bank account. At the country level, these results are included in this study's cross-sectional data set. How, if at all, do levels of financial inclusion correlate with those of Islamic financial penetration? The overview of financial development in much of the Muslim world also examines strategic areas in the Arab region outside the

165) The countries and economies for which market shares of Islamic banks could be estimated are Afghanistan, Algeria, Azerbaijan, Bahrain, Bangladesh, Brunei Darussalam, the Arab Republic of Egypt, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Malaysia, Maldives, Mauritania, Mauritius, Morocco, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, Senegal, South Africa, Sri Lanka, Sudan, Syrian Arab Republic, Tajikistan, Tunisia, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, West Bank and Gaza, and Republic of Yemen. Ben Naceur, Barajas, and Massara (2015) present an alternative way of assessing the potential of Islamic banking for financial inclusion. They compare financial performances of the states in the Organisation of Islamic Cooperation that host Islamic banks with those that do not. They also use data from the World Bank some of which are incomplete or out of date.

Gulf Cooperation Council (GCC) countries where Islamic finance is underdeveloped and may have important potential to bring wider populations of informal economies into their respective banking systems.

The rest of this study focuses on public opinion in the Arab region and particularly on the larger states—Algeria, the Arab Republic of Egypt, Iraq, Saudi Arabia, and Tunisia—for which Arab Barometer survey data are available. The Arab Barometer was devised by political scientists and is principally concerned with political attitudes, not financial behavior. Islamic finance, however, is too closely associated with both local and international politics to be left exclusively in the hands of financial analysts. Specifying the attitudes as well as socioeconomic backgrounds of those most closely associated in a variety of Arab countries with systematic rejection of interest-based finance will offer a more informed appreciation of the potential and limitations of Islamic finance, including their potential political costs and benefits for state regulators.

An Overview of Islamic Banking Penetration

The bulk of Islamic banking assets are concentrated in only four of the GCC countries—Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Their domestic commercial banking systems held over half of the shari'ah-compliant deposits registered in the 38 Muslim majority or adjacent countries identified in this study. GCC banks also fielded many banking subsidiaries elsewhere. Table 9.1 presents the evolution of market shares of Islamic banks in the commercial banking systems of Arab countries and of other Muslim majority countries having either large populations or large market shares.

The four Gulf States were also among the best banked in the sample and registered among the highest rates of financial inclusion, in the sense of people holding bank accounts. Even among the poorest of their respective populations, over 65 percent had bank accounts except in Qatar. The only other states in the sample enjoying such high rates of participation were Bahrain and Oman, also members of the GCC, and Iran and Malaysia. The latter are also major players in Islamic finance: Iran has totally Islamized its banking system. Malaysia has actively encouraged Islamic capital markets as well as banking, having issued over half the sukūk outstanding in 2015, when Islamic banks held at least 23 percent of the country's commercial bank deposits.¹⁶⁶

It does not follow, however, that Islamic finance is attracting depositors who would otherwise stay away from banks for religious reasons. Even in Saudi Arabia, the system most penetrated with retail Islamic banking, where 69.4 percent of those surveyed had a bank account, 23 percent of those without one cited religious reasons for staying away from banks. On other indicators of financial inclusion, such as proportions of people having savings accounts or those receiving financing from banks rather than friends, families, suppliers, employers or the like, the only country with consistently top ratings was Bahrain, the

166) *Sukūk* originating in Malaysia and the GCC countries constituted 54.7 percent and 31.3 percent, respectively, of the total outstanding sovereign and corporate *sukūk* in 2015, according to the Sukūk Monitor, <http://www.zawya.com/sukuk/> (accessed April 15, 2015).

pioneer of conventional offshore banking.¹⁶⁷⁾ As the offshore banking business diminished in the 1980s and 1990s, Bahrain repositioned itself as a major center and hub for Islamic finance, hosting the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and launching the world's first sovereign sukūk in 2001. The Central Bank of Bahrain subsequently took the initiative in developing liquidity instruments for Islamic banks. Its high rates of financial inclusion, however, were perhaps more the fruit of the country's history as a banking center and its educational edge over the rest of the GCC, reflecting earlier oil wealth invested in schools, than more recent surges in Islamic banking.

167) With 82 percent of its adult sample having bank accounts, Bahrain was second only to Iran, with 92 percent; in bank lending, Bahrain was in first place, with Iran falling back to eleventh place, just ahead of Lebanon and Saudi Arabia.

Table 9.1 Shari'ah-compliant Percentages of Commercial Bank Deposits

	Founding Year	1986	1996-98	2007	2011	2012	2013
Gulf States							
Bahrain	1979	6.7	9.8	11.5	46	--	32.4
Kuwait	1977	18	16.2	24.4	31	--	47.3
Oman	2013	n.a.	n.a.	n.a.	n.a.	n.a.	2.0
Qatar	1982	10.4	18.1	13.2	--	--	26.0
Saudi Arabia	1988	n.a.	11.5	13.7	35	--	48.9 ^b
UAE	1975	3.2	7.9	16.1	17	--	24.7
Other Middle East							
Algeria	1991	n.a.	0.8	--	1.6	--	--
Egypt, Arab	1977	9.7	8.1	--	9.7	10.3	10.3
Iran, Islamic I	1983	100	100	100	100	100	100
Iraq	1992	n.a.	--	--	25.0	--	25.0
Jordan	1978	7	8.9	--	11.3	11.3	11.4
Lebanon	1991	n.a.	0.1	--	--	0.4	0.4
Morocco	2015	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sudan	1977	17	27.9	100	100	100	100
Syria. ^a	2005	n.a.	n.a.	--	7.3	--	--
Tunisia	1983	0.2	0.6	--	--	2.7	3.3
Turkey	1985	0.8	3.6	4.3	5	--	6.6
Yemen, Rep.	1996	n.a.	4.0	41.8	31.9	32.6	42.1
Other Afro-Asian							
Bangladesh	1983	--	--	--	65.0	--	20.0
Brunei Darua	1991	n.a.	--	--	37.1	39.1	41
Indonesia	1992	n.a.	0.1	1.9	4.1	4.6	5.0
Kazakstan	2013	n.a.	--	--	--	--	0.1
Malaysia	1983	--	1.6	14.9	21.1	22.3	22.7
Nigeria	2011	n.a.	--	--	--	--	0.4
Pakistan	1997	n.a.	n.a.	--	9.0	--	10.3
<i>Note:</i>							
a. Syrian <i>shari'ah</i> -compliant percentage of private resident deposits in local currency.							
b. Percentage of total assets, not deposits.							

Source: Harvard Islamic Finance Program, various years; McKinsey Co. 2005; Kuwait Bankers training data; EY Islamic Banking Competitive Reports; Indonesian Financial Regulatory Authority (OJK); Brunei Darussalam: <http://www.ambd.gov.bn/Pages/Banks-Financial-Highlights>; OIC Islamic Finance in the OIC Member Countries 2011; APBT 2012, 2013; various Islamic bank annual reports; author's data set.

Note: -- = not available. n.a. = not applicable.

The available cross-sectional data can only correlate Islamic banking penetration with recent rates of financial inclusion surveyed by the World Bank, including the propensity to cite religion as a reason for not having a bank account.⁽¹⁶⁸⁾ Within the sample of 38 countries for which data were available, there are weak positive but statistically insignificant correlations between market shares and/or the longevity of Islamic banking in the country, on the one hand, and, on the other hand, the two principal indicators of financial inclusion derived from the Findex data, the percentages of bank account holders (Accounts) and of bank borrowers (Borrowing).⁽¹⁶⁹⁾ There is little evidence of any significant causal relation between Islamic banking and financial inclusion. The penetration of Islamic banking might be expected in general to reduce religious opposition to banks (with the possible exception of Saudi Arabia, noted above), but the statistical relationship is very weak, even if pointed in the expected direction. Market shares of Islamic banking are negatively associated with religious reservations about banking ($r=-.064$), and the years of Islamic banking activity in a country only slightly more so ($r=-.152$).

In cross-country research, financial inclusion is obviously associated with other variables such as banking traditions, per capita income, the broad money supply (M2) as a proportion of GDP, bank branches per hundred thousand people, credit to the private sector as a percentage of GDP, countrywide education levels and literacy rates, degrees of urbanization, and access to the internet. Since many of these possible determinants are intercorrelated, just a few suffice as controls for examining any possible relationships of Islamic financial penetration or religious objections to financial inclusion. A series of regressions, reported in table 9.2, were run on both indicators of financial inclusion.

Table 9.2 Regressions of Bank Accounts and Borrowing on Possible Correlates

Dependent variable	Bank accounts				Borrowing from banks			
Islamic share		-4.605	-20.45	-10.69		-2.43	-4.63	
Years of Islamic banking	-0.62 *				-0.022			0.032
Religious reason	-134 **	-109 *	-133.9 *	-142.85 **	-41.13 *	-30.57 *	-37.2 *	-29.5 *
GNI per capita	0.001 ***	0.001 **	0 *	0.001 **	0	0	0	0
Money in banks	71.36 ***		55.85 **		4.624			
Branches per 100,000				0.744			0.032	
Private sec credit/GDP		0.342 ***				0.07 *		0.072 *
Adjusted R-squared	0.66	0.66	0.595	0.496	0.22	0.479	0.202	0.478
N=	20	27	20	21	20	22	21	22

Source: World Bank – World Development Indicators, Findex; author's data set

Note: Significance level: * = 5 percent (2-tailed), ** = 1 percent (2-tailed), *** = 0.1 percent (2-tailed).

168) The national averages were extracted from the Findex survey available online. Since the percentages referred only to those people who did not have bank accounts, they were adjusted downward to include the entire national sample in the denominator.
169) Among the 38 countries in the sample, these indicators of financial inclusion were highly correlated ($r=.752$) but deserve to be analyzed separately. Accounts and Borrowing were respectively associated with market shares of Islamic banks ($r=.218$; $r=.303$) and with longevity (the number of years since the first Islamic bank was established) ($r=.117$; $r=.228$).

Whatever the mix of control variables, neither the market shares of Islamic banking nor years doing business in a country have a significant impact on either of the two indicators of financial inclusion. Religious reasons for shunning banks retain a strong statistically significant negative relationship to both indicators of financial inclusion. In other words, Islamic banking does not seem to date to have lessened opposition to banking or to have attracted more people into the formal sector of the economy. If anything, market share and years of stagnant Islamic finance in a country are associated with fewer people having bank accounts or borrowing money from banks, but the results are not statistically significant. Self-exclusion on religious grounds seems to limit financial inclusion in this sample of Muslim countries, and even the existence of Islamic finance is associated with people borrowing more from family, employer, or shopkeepers—not from banks.⁽¹⁷⁰⁾ The stubborn negative relationship between religion and financial inclusion in Muslim countries still remains a challenge to the infant industry of Islamic finance. Arab Barometer survey data, to be discussed later, further confirm a widespread rejection of conventional banking on religious grounds.

Possibly Islamic banking will enjoy greater success in countering the exclusionary impact of these beliefs as it progresses beyond the traditional confines of the GCC countries. Some of the Muslim countries to the west and as well as east of the GCC have the greatest untapped markets, as indicated by the size of their respective economies. As financial deepening (M2/GDP) proceeds, much of the increased money supply will flow into commercial banking, and Islamic market shares may also continue to increase. One way of assessing the untapped potential is to compare the respective sizes of these economies with their respective Islamic bank deposits. The larger the GDP and weaker the penetration of Islamic finance, measured in deposits, the greater the potential of the Muslim majority country for developing Islamic banking.

Table 9.3 estimates the current Islamic deposits bases of the Arab countries along with other principal Muslim majority countries included in the data set.⁽¹⁷¹⁾ From the data in table 9.1 about market shares, the total of shari'ah-compliant deposits is estimated. In the final column of table 9.3 the ratio of current GDP to shari'ah-compliant deposits is computed to offer a rough idea of each country's potential as the Islamic finance movement progresses. Thus Indonesia, for instance, having the largest economy and also the greatest number of Muslim inhabitants, may have a market share of only about 5.1 percent to date, but its ratio of 56 suggests tremendous potential. Nigeria's high ratio portends an African powerhouse of Islamic finance if financial deepening occurs and its Islamic banks gain market share.

Within the GCC, Oman is the latecomer to Islamic banking and may have greater potential to expand than the other more mature banking markets. But the Arab country standouts, in terms of potential growth, are Algeria, Morocco, and to a lesser extent Tunisia, Egypt, and Iraq, where Islamic banks have already gained 25 percent of the deposits (from a very low deposit base). Lebanon also shows high potential, albeit from a tiny Islamic market share.

170) Neither the market shares nor the longevity of Islamic finance seem to bear much relationship to borrowing from banks, but market share is significantly related to informal borrowing ($r=.482$, $p<.003$, $n=35$), whether from family ($r=.358$), employer ($r=.415$), or shopkeepers ($r=.427$ and $.630$).

171) World Development Indicators provide GDP and M2 in current U.S. dollars. IMF International Financial Statistics provide the amount of M2 outside the depository system, to be subtracted from M2.

Its Findex banking profile closely matches Algeria's in numbers of account holders and in those not holding account for religious reasons.⁽¹⁷²⁾ The Arab Barometer, however, offers data that reveal the large differences in banking attitudes between the two countries and point to Algeria's far greater potential.

Table 9.3 Islamic Deposit Bases of Arab and Other Muslim States (2013)

	GDP	M2	Bank deposits	Islamic deposits	Islamic share	GDP/Islamic deposits
	(US billion)				%	
Gulf states						
Bahrain	\$32.9	\$24.3	\$23.1	\$7.5	32.4	4.4
Kuwait	\$175.8	\$114.3	\$109.1	\$51.6	47.3	3.4
Oman	\$79.7	\$31.1	\$27.3	\$0.5	2.0	145.9
Qatar	\$203.2	\$126.0	\$122.3	\$31.8	26.0	6.4
Saudi Arabia	\$748.4	\$419.1	\$379.6	\$185.6	48.9	4.0
UAE	\$402.3	\$245.4	\$234.3	\$57.9	24.7	7.0
Other Arab						
Algeria	\$210.2	\$132.4	\$96.0	\$1.6	1.6	133.2
Egypt	\$272.0	\$214.9	\$174.2	\$18.0	10.3	15.1
Iraq	\$229.3	\$75.7	\$40.3	\$10.1	25.0	22.8
Jordan	\$33.7	\$41.8	\$36.4	\$4.1	11.4	8.1
Lebanon	\$44.4	\$110.9	\$105.4	\$0.4	0.4	105.2
Morocco	\$103.8	\$116.3	\$88.2	\$0.0	0.0	n.a.
Sudan	\$66.6	\$14.0	\$9.7	\$9.7	100.0	6.9
Syria (2010)	--	--	\$19.0	\$1.4	7.3	--
Tunisia	\$47.0	\$31.5	\$26.9	\$1.0	3.6	48.6
WBG	\$11.3	\$1.8	--	--	8.4	--
Yemen	\$36.0	\$14.0	\$9.0	\$3.8	42.1	9.5
Other Muslim Majority States						
Bangladesh	\$150.0	\$91.5	\$80.5	\$16.1	20.0	9.3
Brunei	\$16.1	\$11.3	\$10.4	\$4.2	41.0	3.8
Indonesia	\$868.3	\$356.0	\$308.8	\$15.5	5.1	56.1
Iran	\$368.9	\$48.0	\$45.3	\$45.3	100.0	8.1
Kazakhstan	\$231.9	\$76.5	\$60.8	\$0.0	0.0	n.a.
Malaysia	\$313.2	\$450.9	\$427.6	\$97.1	22.7	3.2
Nigeria	\$521.8	\$114.8	\$99.9	\$0.4	0.4	1305.8
Pakistan	\$232.3	\$95.2	\$72.2	\$7.4	10.3	31.2
Turkey	\$822.1	\$501.5	\$458.1	\$30.2	6.6	27.2

172) Fifty-one percent of the Algerians and only 46 percent of the Lebanese had bank accounts, with about 8 percent in each country citing religious objections. On the financing or borrowing side, however, 16 percent of the Lebanese used banks, compared to only 2 percent of the Algerians.

Source: World Bank – World Development Indicators; author's data set

Note: All data are as of 2103, except for data for Syria, which are for 2010. WBG = West Bank and Gaza

Preliminary Findings of the Arab Barometer

Arab Barometer surveys conducted in 2007–08, 2011, and 2013 indicate that large majorities of representative national samples across the Arab world believe that conventional bank interest is contrary to the teachings of Islam.⁽¹⁷³⁾ Table 9.4 summarizes the information, including only those who agreed or disagreed with the proposition that banks charging interest contradict the teachings of Islam. In the second wave of surveys, conducted in 2011, respondents were also asked whether, “in order to meet the demands of the modern economy, banks should be allowed to charge interest.” While the responses were significantly correlated with the question about the teachings of Islam, the relationship was weak ($r = -.162$, $p < .000$): a fair number of respondents who had agreed that interest was forbidden in Islam also thought that banks should be allowed to charge interest regardless of the religious teachings.⁽¹⁷⁴⁾ The final two columns of table 9.4 therefore report the percentages of those really interest-averse people who agreed both that interest is *haram* (forbidden) and that banks should not charge interest, even for the sake of economic development.

[Please change Palestine to West Bank and Gaza]

Table 9.4 Arab Attitudes toward Bank Interest

	Interest is contrary to teachings of Islam						Interest is never acceptable	
	2006-2008	(n=)	2011	(n=)	2013	(n=)	2011	(n=)
Algeria	88.5%	1123	86.3%	980	89.9%	1124	51.6%	854
Egypt	n.a.	n.a.	72.3%	1126	70.8%	937	33.5%	1086
Iraq	n.a.	n.a.	80.0%	1059	64.7%	994	60.1%	939
Jordan	85.6%	1038	87.2%	1130	88.9%	1737	47.1%	1109
Kuwait	75.8%	650	n.a.	n.a.	77.4%	983	n.a.	n.a.
Lebanon	64.8%	938	68.9%	1202	71.7%	1038	27.4%	1115
Libya	n.a.	n.a.	n.a.	n.a.	82.6%	1149	n.a.	n.a.
Morocco	86.0%	1193	n.a.	n.a.	90.5%	1000	n.a.	n.a.
Palestine	85.1%	1221	85.5%	1152	84.1%	1154	61.3%	1115
Saudi Arabia	n.a.	n.a.	76.7%	1077	n.a.	n.a.	63.6%	992
Sudan	n.a.	n.a.	64.2%	1299	60.2%	1126	41.6%	1224
Tunisia	n.a.	n.a.	85.1%	957	79.5%	1096	42.4%	817
Yemen	81.3%	966	76.8%	1037	80.7%	1087	54.1%	938
Average	81.9%	7129	77.8%	11019	79.1%	13425	47.8%	10189

Source: Arab Barometer: <http://www.arabbarometer.org/>

173) The Arab Barometer (<http://www.arabbarometer.org/>), originally founded at the University of Michigan in 2005 in consultation with the Global Barometer (<http://www.globalbarometer.net/>), partners with the Arab Reform Initiative (<http://www.arab-reform.net/>) in association with other universities in the Arab world to carry out periodic surveys of public opinion. The three waves surveyed representative national samples, each including over 1,000 respondents. The countries covered are reported in table 9.4. 174) Demirgüç-Kunt, Klapper, and Randall (2013, 5), in a 2012 survey of over 5,000 adults focused on banking in Algeria, Egypt, Morocco, Tunisia, and Republic of Yemen, find that 45 percent preferred a *shari'ah*-compliant product over a less expensive conventional bank product, but that 37 percent preferred the conventional product or did not have a preference.

Note: n.a. = not applicable.

These results point to the sharp differences in opinion between the Lebanese and the Algerians.⁽¹⁷⁵⁾ The countries combining substantial bank assets with intense objection to conventional finance are Algeria, Iraq, and possibly Morocco, which is unfortunately missing from the second wave of data. Despite its smaller system, Tunisia also displays strong potential, with 42 percent unconditionally opposing bank interest despite its heritage of modernization under Habib Bourguiba, Tunisia's leader from independence to 1987.

This analysis must focus on the findings of this second wave of public opinion surveys conducted in 2011, since the other waves had no independent check on perceptions of banking to complement the very widespread belief that bank interest is religiously unacceptable. The other surveys suggest that Morocco may share Algeria's potential for Islamic finance, and under its current government Morocco is taking important first steps in promoting Islamic banks in the kingdom. But further analysis of the survey data is possible only for the ten countries included in the final two columns of table 9.4.

The data set offers a wealth of information about social and political attitudes as well as personal data that the potential clients of Islamic banks may share. In 2011, when the survey was conducted, the Arab world was exceptionally open to political research. If indeed the likeliest clientele for Islamic banks are people who are unconditionally opposed to interest-based conventional banking, it becomes interesting to examine the relationships to their respective polities. To what extent are these potential participants in Islamic banking interested in politics? How much trust do they have in state institutions? How do they relate to other ideas and behaviors relating to religious identity? In particular, variables connoting religiosity, conservative family values, secularism, and Islamism can be constructed out of the data set, along with trust in authorities, interest in politics, and socioeconomic status.

The inclusion of Saudi Arabia also permits the hypothesis of portfolio diversification to be tested in the leading dynamo of Islamic finance. Which personal characteristics and social and political attitudes are most closely associated with those Saudis in the sample who unconditionally reject conventional interest-based banking? Wealth, age, and religiosity may point to a clientele in search of shari'ah-compliant substitutes for conventional investment portfolios. Do the other considerably less wealthy Arab countries show similar relationships between these personal characteristics and the rejection of conventional banking?

How, moreover, do other political and social attitudes interact with these personal characteristics? Another hypothesis to be tested is whether being part of the potential Islamic finance clientele is associated with a strong interest in politics and/or with political Islam.

175) These data cannot really be compared to the Findex findings about those citing religion as a reason for not having a bank account. It is still interesting to note the relatively good fit between the two data sets. The raw Findex data would rank the eight countries (excluding Lebanon and Tunisia, the latter for lack of data) as follows, comparing the ranks with the percentages recorded in table 9.4:

1) Iraq	2) WBG	3) Saudi Arabia	4) Jordan	5) Yemen Rep.	6) Algeria	7) Sudan	8) Egypt
60.1%	61.3%	63.6%	47.1%	54.1%	51.6%	41.6%	33.5%

Or is this potential clientele basically apolitical and conservative? Also to be investigated is whether it generally distrusts the state authority, perhaps associated in public opinion with conventional interest-based banking ever since foreign colonizers established both the state and its banks. If so, official efforts to promote Islamic finance might face an uphill challenge, needing to gain trust and support from a hostile constituency

Correlates of Interest Rejection

As a first step toward locating these potential Islamic bank customers, what sorts of personal characteristics are associated with the unconditional rejection of bank interest? In addition to location (urban/rural), age, sex, wealth, and education, "religiosity" is also reported as a variable summarizing personal religious activities,⁽¹⁷⁶⁾ as is exposure through travel to a Western society.⁽¹⁷⁷⁾ Does the personal profile of the potential clientele vary across the Arab states, which differ not only in percentages rejecting bank interest but also in their economic structures, educational systems, degrees of urbanization, and experiences with Islamic finance, as reported in table 9.1?

Table 9.5 Objective Personal Correlates of Interest Rejection

	All	Algeria	Egypt	Iraq	Jordan	Lebanon	Palestine	Saudi	Sudan	Tunisia	Yemen
Urban	.031**	0.065	.134**	-0.015	0.01	-0.006	0.058	-0.049	0.025	-0.049	0.022
N=	10189	854	1086	939	1109	1115	1115	992	1224	817	938
Age	0.011	.074*	-0.04	0.026	0.053	-0.058	0.054	.101**	-0.006	0.054	0.042
N=	10150	854	1086	939	1098	1115	1100	991	1216	817	934
Female	-.027**	-.077*	0.026	0.001	-.133**	0.043	-0.015	0.001	-.112**	-0.021	-.064*
N=	10189	854	1086	939	1109	1115	1115	992	1224	817	938
Education	.054**	0.011	0.047	-0.062	0.059	-.086**	0.021	0.044	.193**	-0.063	.101**
N=	9327	854	1083	939	1106	1115	1111	992	1210	814	917
Wealth	.071**	-0.042	.068*	0.058	-0.009	-.118**	-0.031	.127**	-0.045	-0.052	-0.021
N=	7951	352	974	834	1096	894	1052	821	581	669	678
Unemployed	-0.063	-.072*	0.009	0.008	-.097**	0.037	-0.049	-0.025	-.076**	-0.065	-.129**
N=	10148	854	1086	939	1103	1115	1115	992	1218	817	909
Married	.032**	-0.006	0.008	0.035	-0.002	0.041	0.011	0.018	-0.013	0.034	.085*
N=	10035	826	1086	939	1065	1115	1073	992	1215	805	919
Christian	-.170**		-.099**	-0.013	-0.039	-.316**	-.096**		0.025		-0.066
N=	8229		1082	936	1105	1114	1107		1217		806
Religiosity	.078**	.272**	.062*	-.076*	.080**	-.135**	.161**	0.012	0.032	.136**	0.056
N=	9310	825	1086	929	1106	1108	1111	990	1221	808	934
Trips West	.136**	-.164**	-.118**	-.096**	-0.015	-.083**	-0.056	0.015	-.100**	-0.032	0.005
N=	10021	837	1079	931	1094	1103	1103	949	1194	811	920

Source: Arab Barometer, Second Wave

Note: Significance level: * = 5 percent (2-tailed), ** = 1 percent (2-tailed).

The aggregate correlation coefficients reported in the first column clearly mask wide variations within the national samples. Despite its apparently general statistical significance, for instance, it is only living in an Egyptian urban environment that seems significantly

176) Religiosity was derived from a set of interrelated questions. This analysis assumes that "religiosity" may be understood as a continuum, ranging in intensity, rather than a special state of mind. Respondents were asked on a four-point scale ranging from always to rarely (Tunisians were given "never" as a fifth point) whether they prayed, fasted during Ramadan or Lent, watched or listened to religious programs on TV or radio, attended religious classes in a mosque or church, attended Friday or Sunday prayer services, listened to or read the *Qur'an* or Bible, and read religious books. The scores were then averaged to form a new continuous variable, "religiosity," with the highest scores awarded those who engaged the most in these activities. Alpha (coefficient of reliability) = 0.78. 177) Respondents were asked whether they had traveled to a Western country in the past five years and, if so, for how many months, up to six or more.

associated with the unconditional rejection of interest-based banking. Age, too, has mixed but significant effects, despite its overall apparent irrelevance. It is most strongly associated with interest rejection in Saudi Arabia. Indeed, looking further down the list of possible Saudi correlates, the only other statistically significant one is wealth, pointing to a potential constituency for Islamic investments. These survey results apparently reflect the appetite of wealthy Saudi investors for shari'ah-compliant banking assets that indeed have stimulated the development of Islamic windows in conventional banks and the conversion of some of them to "Islamic" banking since the late 1990s. Curiously, however, personal religiosity does not correlate in a statistically significant way with the rejection of interest in the Saudi sample. Elsewhere, except Sudan and Iraq, the correlation coefficients are positive and statistically significant.

Apparently males tend in general to reject bank interest more than females, but again, country by country the results are mixed. As for education, its positive and statistically significant relationship for the sample as a whole is reversed in Lebanon and to a lesser extent in Tunisia. Clearly the content of education matters, and there is significant cross-country variation. Wealth, too, shows significant variations, again pointing to a "deviant" Lebanon, perhaps because much of the wealth is Christian. Indeed none of the personal characteristics works in the same way across all the countries in the sample.

Iraq is the most puzzling anomaly because religiosity is negatively correlated with interest aversion. Everywhere else religiosity is positively associated with rejecting conventional bank interest. Even in the relatively traditional Islamic societies of Saudi Arabia, Sudan, and Republic of Yemen, there is still a weak positive relationship. In Iraq, by contrast, the relationship is negative and statistically significant. As noted earlier, the country seems to offer promising prospects for Islamic finance, yet religiosity does not appear to be opposed to conventional interest-based banking.

In this country study the survey data identified respondents by sect as well as religion.¹⁷⁸ A closer look at the data indicates that clearly identified Sunnis scored lower on the religiosity scale but also tended to be more opposed to interest-based banking than their Shi'ite compatriots. Clearly multivariate analysis was needed, to disentangle the possible effects of religiosity from sectarian identity. A new independent variable of Shi'ite religiosity was therefore constructed. And since the dependent variable, Interest Rejection, is binary, a logistic regression could be performed on all of the independent variables to separate out the independent effects of each, controlling for the others.

Controlling for all the other variables, education seems significantly associated with greater toleration of bank interest. In Iraq an added level on a seven-point education scale is associated with 12 percent less likelihood (1-.88) of rejecting interest. Household income, too, becomes statistically significant, but works in the opposite direction. Every incremental

178) The questionnaire tactfully asked respondents "If I asked about your religion, would you prefer the answer be..." (listing the following possibilities: 1) Orthodox, 2) Catholic, 3) Protestant, 4) Christian, 5) Sunni Muslim, 6) Shi'ite Muslim, 7) Muslim, 10) Other (specify). Some 37.4 percent responded Sunni; 43.6 percent, Shi'ite Muslim; and 18.2 percent, Muslim. The self-identified Shi'ites were identified, and a new interactive variable of "Religiosity" and "Shi'ite" was constructed.

\$100 of monthly income is associated with an increasing likelihood of 3 percent of rejecting interest. Religiosity still carries a negative sign, but its statistical significance vanishes when the interactive effects of religiosity and Shi'ite identity are taken into account. One unit of Religiosity on a four-point scale among Shi'ites makes them almost 30 percent less likely (1-.707) to reject interest.¹⁷⁹ Exposure to the West still carries significant impact: a couple of months visiting the West are associated with being 35 percent less likely to reject interest!

Before pursuing a similar analysis for other Arab states, the ideational correlates of rejecting interest need to be introduced so as to move the analysis beyond issues of wealth,

Table 9.6 Logistic Regression of Interest Rejection on Personal Correlates—Iraq

	B	S.E.	Wald	df	Sig.	Exp(B)
Urban	0.027	0.172	0.025	1	0.874	1.028
Age	-0.005	0.007	0.508	1	0.476	0.995
Female	-0.081	0.177	0.208	1	0.648	0.922
Education	-0.128	0.055	5.425	1	0.02	0.88
Income\$100s	0.031	0.016	3.908	1	0.048	1.031
Unemployed	-0.134	0.192	0.485	1	0.486	0.875
Married	0.159	0.201	0.624	1	0.43	1.172
Christian	-1.491	1.234	1.46	1	0.227	0.225
Religiosity	-0.136	0.153	0.791	1	0.374	0.873
Relig_Shi'ite	-0.347	0.054	40.636	1	0	0.707
Trips West	-0.44	0.175	6.296	1	0.012	0.644
Constant	3.697	1.419	6.784	1	0.009	40.309

Source: Arab Barometer, Second Wave

portfolio diversification, and personal religious practice to better understandings of the possible politics that may be associated with Islamic finance. If the analysis of public opinion can identify a potential constituency for Islamic finance, how may policy makers either in government or business attract it, with what sorts of political consequences? Assuming that

179) In an alternative model, substituting Shi'ite for Shi'ite religiosity, being a Shi'ite is associated with a 40 percent decline in the likelihood of rejecting interest. Religiosity then retains its statistical significance ($p < .035$) and is associated with a decline of 27 percent in the likelihood of rejecting interest.

the unconditional rejection of interest signifies potential sympathy for Islamic finance, how interested is this potential constituency in politics?⁽¹⁸⁰⁾ Is it Islamist or predominantly secular in outlook, preferring a separation between politics and religion?⁽¹⁸¹⁾ If tending toward soft Islamism—the other end of the secularism scale devised from the survey questions—was it a really “fundamentalist” version of Islamism, to be interpreted from responses to additional questions such as affirming hudud punishments, death to Muslim apostates, and a theocratic form of government.⁽¹⁸²⁾ Or are these potential sympathizers of Islamic finance simply more conservative in their family values.⁽¹⁸³⁾ What relationships, if any, might there be between political Islam and Islamic finance? A further question concerns possible relationships between those opposing interest and their confidence or trust in state authorities. Attitudes toward the government, the judiciary, the police, and the army seemed from the survey responses to be sufficiently inter-correlated to allow for an index of trust in state institutions.⁽¹⁸⁴⁾

Table 9.7 Ideational Correlates of Interest Rejection

	All	Algeria	Egypt	Iraq	Jordan	Lebanon	Palestine	Saudi	Sudan	Tunisia	Yemen
Interest in Politics	-0.009	-0.002	.074*	-.070*	0.019	-0.039	0.041	-.210**	.059*	0.013	.154**
N=	10149	853	1084	938	1107	1110	1115	975	1215	817	935
Secularism	-.079**	-0.029	-0.027	-0.052	-.073*	-0.024	-.073*	0.056	0.012	-0.015	-.083*
N=	10024	813	1082	934	1090	1108	1110	953	1196	803	935
Hardline Islamism	.102**	.161**	0	0.025	0.017	.132**	.169**	-.173**	0.052	0.007	.171**
N=	10186	854	1086	939	1109	1115	1115	989	1224	817	938
Family Values	.136**	.201**	-0.006	.086**	.210**	.177**	.172**	-.155**	.118**	.091**	.197**
N=	10167	850	1086	939	1107	1114	1115	982	1221	816	937
Distrust of State	.035**	-.130**	.151**	0.003	.069*	0.035	0.003	.065*	.067*	0.043	.162**
N=	10119	851	1080	936	1104	1110	1100	977	1215	811	935

Source: Arab Barometer, Second Wave

Note: Significance level: * = 5 percent (2-tailed), ** = 1 percent (2-tailed).

Across the entire sample, many of these variables apparently bear statistically significant relationships to the potential Islamic finance constituency. Within each country, however, these relationships vary widely, and multivariate analysis is needed to discover which ones are really significant, controlling for the effects of the others. To return to Iraq, it would

180) Interest in politics was indicated by averaging the scores of each respondent's self-evaluation and by how much he or she followed the news in his or her country. Alpha (coefficient of reliability) = 0.86.

181) Secularism was the mean of the responses on a four-point scale of strong agreement to strong disagreement with the following: 1) Religious leaders (imams, preachers, priests) should not interfere in voters' decisions in elections; 2) Religious practices are private and should be separated from social and political life; 3) Religious associations and institutions (excluding political parties) should not influence voters' decisions in elections; 4) Mosques and churches should not be used for election campaigning. The scores were averaged to form a new variable, Secularism—or conversely, soft Islamism. The variable had borderline reliability: Alpha = .687. The scores were reversed to give the secularist responses the higher scores.

182) “Hardline” Islam was the mean of responses on a four-point scale to the following: 1) favoring a parliamentary system in which only Islamist parties compete in parliamentary elections; 2) favoring a system governed by Islamic law without elections or political parties; 3) agreeing that the government and *Shura* Council should enact penal laws in accordance with Islamic law; 4) agreeing that your country is better off if religious people hold public positions in the state; 5) agreeing that religious leaders (imams, preachers, priests) should have influence over government decisions; 6) agreeing that in a Muslim country, non-Muslims should enjoy less political rights than Muslims; 7) agreeing that when a person changes his/her religion he/she should be penalized with death. The scores were reversed to give the higher scores to the more hardline responses. Alpha (coefficient of reliability) = .773.

183) Family values were derived from the responses on a four-point scale of strong agreement to strong disagreement to the following: 1) A woman can become the prime minister or president of a Muslim state; 2) A married woman can work outside the home; 3) In general, men are better at political leadership than women; 4) University education for males is more important than university education for females; 5) Men and women should have equal work opportunities; 6) It is permissible for a woman to travel abroad by herself; 7) A woman should obtain her inheritance (she should not be denied her inheritance); 8) Women's share of inheritance should be equal to that of men; 9) Women can assume judicial positions; 10) Women can become ministers. Reversing the scoring for items 3 and 4, the scores were then averaged to form a new variable, “Family Values,” since the conservative responses received the highest scores. Alpha (coefficient of reliability) = 0.803.

184) On a four-point scale, respondents were asked how much they trusted or distrusted the government, the judiciary, the police, and the army. The mean was constructed with a coefficient of reliability, Alpha = .837.

appear from table 9.7 that any constituency for Islamic finance is positively disinterested in politics ($r = -.07$; $p < .05$) and basks in family values ($r = .087$; $p < .01$). Controlling for religiosity and other correlates of interest rejection, are conservative family values still so highly correlated with potential sympathizers of Islamic finance? Is there no significant relationship between these sympathizers and political Islamists, when all other sources of variation are taken into account?

To examine the possible independent impact of political Islam upon attitudes toward conventional interest-based banking, a logistic regression on Interest Rejection was run including all of the possible correlates so as to offer a fuller analysis.⁽¹⁸⁵⁾ Education is no longer a significant negative correlate, but it turns out that the relationships shown in table 9.7

Table 9.8 Logistic Regression of Interest Rejection—Iraq

	B	S.E.	Wald	df	Sig.	Exp(B)
Urban	-0.003	0.182	0	1	0.986	0.997
Age	0.001	0.007	0.02	1	0.888	1.001
Female	-0.044	0.184	0.057	1	0.811	0.957
Education	-0.05	0.058	0.739	1	0.39	0.951
Income\$100s	0.023	0.015	2.282	1	0.131	1.023
Unemployed	-0.224	0.197	1.293	1	0.256	0.799
Married	0.092	0.207	0.2	1	0.655	1.097
Christian	-1.156	1.442	0.642	1	0.423	0.315
Religiosity	-0.324	0.157	4.272	1	0.039	0.723
Religiosity-Shi'ite	-0.191	0.085	5.042	1	0.025	0.826
Trips West	-0.216	0.18	1.438	1	0.231	0.806
Interest in Politics	-0.544	0.117	21.645	1	0	0.581
Secularism	0.225	0.144	2.454	1	0.117	1.253
Hardline Islam	-0.379	0.219	3.0	1	0.083	0.684
Hardline Sunni	0.695	0.219	10.103	1	0.001	2.004
Family Values	0.685	0.182	14.192	1	0	1.984
Distrust of State	0.27	0.138	3.824	1	0.051	1.31
Sunni Distrust	-0.337	0.178	3.593	1	0.058	0.714
Constant	2.177	1.796	1.471	1	0.225	8.823

Source: Arab Barometer, Second Wave

still hold: (dis)interest in politics and family values remain strong correlates. From table 9.8 it can be seen that a unit of interest in politics on a four-point scale is associated with

185) The model in table 9.8 produced a pseudo R-square of 13.6 percent, more than double the model in table 9.6.

42 percent less likelihood in unconditionally rejecting conventional bank interest. One unit on a four-point scale of family values, by contrast, is associated with twice the likelihood of rejecting interest. The negative rather than positive relationship of Religiosity to Interest Rejection still held up, and indeed it turned out, controlling for all the other variables, that its impact is just as statistically significant for Shi'ites as for Sunnis. Regressions were also run excluding one of the two Islamism variables, but the remaining one just gained marginal statistical significance.⁽¹⁸⁶⁾ However, fundamentalist Islam seemed to carry different weights in the respective Muslim sects.

An interactive Hardline-Sunni variable added to the model is shown in table 9.8. It is highly significant: among Sunnis, a unit on the Hardline Islam four-point scale is associated with twice the likelihood of rejecting conventional bank interest, whereas for the rest of the Iraqi population the Hardliners seem less likely to reject interest. Because the degree of distrust of state institutions varied between the sects, an interactive Sunni Distrust variable was included to complement Distrust of State in table 9.8. Here, too, there were interesting differences: Sunnis who were less trusting of state institutions tended to be less likely to reject interest, unlike the rest of the population. Put differently, more trusting Sunnis were also more likely to be potential clients of Islamic banks.

These potential clients seemed uninterested in politics. Indeed, those more interested in politics seemed to associate with secular values, not Muslim fundamentalism.⁽¹⁸⁷⁾ Table 9.8 summarizes the potential profile of an Islamic finance constituency in Iraq: relatively nonpracticing Sunni Muslims, turned off by day-to-day politics and imbued with “fundamentalist” principles as well as conservative family values. And although the Sunnis in the sample on average had less confidence in state institutions than other Iraqis, the Sunnis who were relatively more trusting of state institutions also tended to be more averse to bank interest. Promoting Islamic finance in Iraq might therefore have been a way in 2011 for the government to reach out to some of its politically as well as financially excluded citizens. Might it still? Or might some other party steal the initiative?

The other more promising prospects for Islamic finance among the larger underdeveloped banking systems of the Arab states may lie in Algeria and to a lesser extent in Egypt and Tunisia.

Prospects for Algerian Islamic Finance

As table 9.1 indicates, Islamic banking has stagnated in Algeria since 1991, when it was introduced. The Al Baraka Group created a joint venture at that time with the Banque d'Agriculture et Développement Rurale, one of Algeria's four dominant public sector banks. It opened its doors for business shortly before Algeria's decade of civil war (1992–98), and seems in effect to have been managed like a public sector bank. Efforts to privatize banking in Algeria then went astray in 2003 with a series of spectacular scandals and bankruptcies. Consequently, the government has not encouraged private sector banking, other than foreign

¹⁸⁶ For Hardline Islam, $p < .055$; for Secularism, $p < .06$.

¹⁸⁷ Political interest with Islam, $r = -.039$, $p < .01$; with Secularism, $r = .063$, $p < .01$.

banks, to penetrate what is still predominantly a state-run commercial banking system. The looming international financial crisis—notably, trouble with housing loans at Citibank—deterred the Algeria government from privatizing one of its large public sector banks in 2007.

Algeria exemplifies the seriously underdeveloped financing that has retarded investment and growth in much of the Middle East and North Africa region. One indicator of the impoverished nature of banking systems, shown in table 9.3, is the amount of loose currency outside them. People prefer to hold their cash, at least partly out of widespread distrust for conventional banking, as indicated in the Arab Barometer surveys. The converse, reported in table 9.3, is the proportion of the broad (M2) money supply serviced by the commercial banking systems. Algeria's ratio is higher than Iraq's but lower than that of Egypt or Tunisia. Despite efforts since 1986 to reform the banking system, finance remains the Achilles heel of Algerian development.

The survey data point, however, to a potential constituency that Al Baraka Algeria is not reaching but that other private sector banks might tap, once an adequate regulatory system is in place. A logistic regression including all the ideational as well as personal variables pointed to religiosity, Western exposure, interest in politics, and trust in rather than distrust of state institutions as the significant correlates, along with a positive if only marginally significant relationship to education (table 9.9). The final column recalls the marginal correlates for Algeria recorded in tables 9.5 and 9.7. Age, gender, and employment status lose their statistical significance, whereas Religiosity and Western exposure remain robust correlates, respectively positive and negative, of Interest Rejection. But the most interesting casualty of this multivariate analysis is Hardline Islam. Even if secularism is

Table 9.9 Logistic Regression of Interest Rejection—Algeria

	B	S.E.	Wald	df	Sig.	Exp(B)	correlations
Urban	0.187	0.342	0.298	1	0.585	1.205	0.065
Age	0.006	0.015	0.162	1	0.688	1.006	.074*
Female	-0.277	0.36	0.59	1	0.442	0.758	-.077*
Education	0.192	0.096	3.996	1	0.046	1.212	0.011
Income\$100s	-0.068	0.046	2.206	1	0.137	0.934	-0.042
Unemployed	0.437	0.313	1.946	1	0.163	1.547	-.072*
Married	0.292	0.385	0.575	1	0.448	1.339	-0.006
Religiosity	1.073	0.285	14.161	1	0	2.923	.272**
Trips West	-0.453	0.175	6.699	1	0.01	0.636	-.164**
Interest in Politics	0.426	0.202	4.451	1	0.035	1.531	-0.002
Secularism	0.032	0.271	0.014	1	0.906	1.033	-0.029
Hardline Islam	-0.233	0.352	0.439	1	0.508	0.792	.161**
Family values	0.39	0.293	1.769	1	0.184	1.477	.201**
Distrust of state	-0.91	0.217	17.61	1	0	0.402	-.130**
Constant	-1.975	1.542	1.64	1	0.2	0.139	

Source: Arab Barometer, Second Wave

Note: Significance level: * = 5 percent (2-tailed), ** = 1 percent (2-tailed).

removed from the model, Hardline Islam is no longer associated with statistical significance to Algeria's potential clientele for Islamic finance.⁽¹⁸⁸⁾ Interest in politics, moreover, becomes a significant correlate in the logistic regression. And Distrust of State retains its strong negative correlation. In other words, the relatively educated, politicized Algerian who is devout and trusting in state institutions will be most likely to reject conventional bank interest and be a potential customer for Islam banks.

The findings suggest that Algeria is not only brimming with potential demand for Islamic finance but also that the demand presents a political opportunity. This demand is not associated with Islam, but rather with religiosity as indicated by various behaviors. The potential customers also express an interest in politics as well as strong support for state institutions. Encouraging Islamic banking would make good sense for governments seeking to consolidate the support of a sympathetic constituency. In Malaysia, successive governments took positive steps to encourage Islamic finance so as to neutralize an opposition party that was threatening the hegemony of the ruling party by invoking resurgent Islamic values (Harding 2010, 503). In Algeria, a similar strategy could reinforce regime efforts to keep moderate Islamists in the ruling coalition.

Egypt after the Arab Spring

Egypt is one of the first countries to have permitted the operation of Islamic banks, as shown in table 9.1. President Anwar Sadat supported special legislation to enable the Saudi Prince Muhammad al Faisal to establish the Faisal Islamic Bank of Egypt (FIBE) in 1977. Together with a private Egyptian-owned Islamic bank, they attracted roughly 10 percent of commercial bank deposits by 1985, but rogue money management companies, also claiming to be "Islamic," attracted more substantial shares of deposits and remittances until their Ponzi schemes collapsed in 1988, discrediting the entire idea of Islamic banking in Egypt. Further problems arose in 1991 with the collapse of Abu Dhabi's Bank of Credit and Commercial Investment (BCCI). FIBE, unable to find suitable investments for its customers, had parked some of the investment funds with BCCI, which offered higher returns than the Egyptian government. FIBE consequently lost one-quarter of its balance sheet. It would later recuperate much of it, but Islamic market shares stagnated in Egypt. Bolstered by Islamic windows in Banque Misr and other conventional banks, the Islamic sector finally recovered in the 2000s, almost again reaching 10 percent by 2011.

There may still be some untapped potential. The Arab Barometer survey was conducted in Egypt after the Revolution of January 25 had deposed President Mubarak and facilitated a climate of research where surveying political attitudes became possible. The results recorded in table 9.10 represent public opinion in mid-year, at a time of uncertainty before the elections conducted in December 2011 and January 2012 brought forth a parliament dominated by the

¹⁸⁸ In fact, dropping both Secularism and Hardline Islam from the model would slightly increase its adjusted r-squared, from 23.6 percent to 25.5 percent (Cox and Snell), or from 31.4 percent to 34 percent (Nagelkerke). Family Values then becomes almost significant at the .05 level ($p = 0.051$). In a model excluding Family Values and Secularism, Hardline Islam is still statistically insignificant.

Muslim Brotherhood (46 percent) and the Salafists (24 percent). In March 2011 the military's Supreme Council of the Armed Forces (SCAF) had orchestrated a successful referendum that outflanked the more secularly inclined revolutionaries who were insisting on more time to deliberate about proposed constitutional changes. By the summer of 2011, Egypt was still very much at the beginning of a painful transition from Mubarak to the election of President Mohamed Morsi in June 2012 and his ouster on July 3, 2013. The survey thus occurred before sharper political polarization resulted in prolonged violence and massive government efforts to discredit the Muslim Brotherhood. During the relatively short time Morsi was in power, efforts were made to strengthen Islamic finance, but the legislation concerning sukūk remains a work in progress.

The survey results are of interest precisely because they convey, as in Algeria (but not Iraq), the separation of potential sympathies for Islamic finance from any version of political Islam. In addition to the general political orientations being analysed, the Egyptian survey included questions about party affiliation. Of the 1,219 Egyptians, only 8 were members of a political party, but an additional 95 intended to join one. Of these, only 46 expressed opposition to conventional banks, a bit above the national average of 33.5 percent noted in table 9.4. Among future recruits to the Freedom and Justice Party (Muslim Brotherhood), opinion was divided, with 15 opposed, 11 in favor, and two on the fence, not expressing consistent responses to the questions concerning interest-based banks. By contrast, all three al-Nour (Salafist) Party sympathizers opposed them and therefore might support Islamic finance.

The logistic regression results reported in table 9.10 show that secularism and Islam bear no direct or indirect association with Interest Rejection. They remain statistically insignificant even if only one of them is included in the regression. But at least during the summer of 2011, those who rejected conventional banks were significantly interested in politics. Elsewhere, in most of the Arab world—except Sudan and Republic of Yemen, where Islamic finance was relatively well established—potential customers seemed uninterested in politics, in Saudi Arabia significantly so (table 9.12). In Egypt, political interest was associated with secularism ($r = 0.16$, $p < 0.01$) and opposed to hardline Islam ($r = 0.305$, $p < 0.01$). The Egyptians who unconditionally rejected bank interest also distrusted the transitional government in power in the summer of 2011.

Table 9.10 Logistic Regression of Interest Rejection–Egypt

	B	S.E.	Wald	df	Sig.	Exp(B)	Correlations
Urban	0.501	0.154	10.573	1	0.001	1.651	.134**
Age	-0.008	0.006	1.854	1	0.173	0.992	-0.04
Female	0.054	0.202	0.071	1	0.79	1.055	0.026
Education	-0.05	0.047	1.151	1	0.283	0.951	0.047
Income\$100s	0.067	0.045	2.272	1	0.132	1.07	.068*
Unemployed	0.011	0.186	0.003	1	0.954	1.011	0.009
Married	0.057	0.197	0.084	1	0.772	1.059	0.008
Christian	-1.828	0.637	8.24	1	0.004	0.161	-.099**
Religiosity	0.284	0.166	2.928	1	0.087	1.328	.062*
Trips West	-0.874	0.257	11.555	1	0.001	0.417	-.118**
Interest in Politics	0.216	0.102	4.502	1	0.034	1.241	.074*
Secularism	-0.178	0.136	1.724	1	0.189	0.837	-0.027
Hardline Islam	0.029	0.162	0.033	1	0.857	1.03	0
Family Values	-0.158	0.166	0.905	1	0.342	0.854	-0.006
Distrust of State	0.425	0.136	9.822	1	0.002	1.53	.151**
Constant	0.674	1.339	0.254	1	0.615	1.962	

Source: Arab Barometer, Second Wave

Note: Significance level: * = 5 percent (2-tailed), ** = 1 percent (2-tailed).

Government initiatives, such as moving forward with the sukūk legislation, are driven by hopes of attracting more GCC funding. From the survey it seems there may also be potential clients at home who are interested in public affairs and apparently have little sympathy for Islamism in any of its political forms. Another possible side effect of further government initiatives could be to shore up Salafist support for the incumbent regime.

Tunisia in Transition

When promised important Saudi investments to drain and develop swamps by the Lake of Tunis, President Habib Bourguiba admitted an off-shore Islamic bank as part of the deal. BEST Bank (renamed Al Baraka Bank Tunisia) even briefly acquired limited onshore status in 1988, but under President Ben Ali's regime the bank was not permitted to open new branches. His son-in-law Mohamed Sakhr El Materi opened Ez-Zitouna Bank in 2010, as part of Ben Ali's strategy to placate any potential Islamist opposition that had survived the vicious repression of the Islamist Nahda Party in 1991–92, in the wake of the Gulf War. Table 9.1 shows that it immediately gained market share before the Tunisian Revolution of January 14, 2011 overthrew Ben Ali and the state took over the assets of his 113 family members and cronies, including the Zitouna Bank.

The bank continued to flourish, however, with market share increasing from 2012 to 2013. Despite the country's turbulent transition to democracy as well as Zitouna's dubious origins, Islamic finance steadily grew. The bank was in government receivership, yet its deposits increased by 45.7 percent in 2013. ⁽¹⁸⁹⁾ As in most of the Arab countries, a devout constituency seemed ready to support Islamic finance.

Table 9.11 Logistic Regression of Interest Rejection–Tunisia

	B	S.E.	Wald	df	Sig.	Exp(B)	correlates
Urban	-0.22	0.196	1.293	1	0.255	0.8	-0.049
Age	0.004	0.009	0.22	1	0.639	1.004	0.054
Female	0.228	0.198	1.331	1	0.249	1.256	-0.021
Education	-0.05	0.068	0.52	1	0.471	0.952	-0.021
Income\$100s	-0.01	0.014	0.7	1	0.403	0.988	-0.052
Unemployed	-0.53	0.178	8.945	1	0.003	0.588	-0.065
Married	-0.1	0.235	0.171	1	0.679	0.908	0.034
Religiosity	0.317	0.118	7.269	1	0.007	1.373	.136**
Trips West	-0.02	0.112	0.018	1	0.894	0.985	-0.032
Interest in politics	-0.04	0.107	0.135	1	0.714	0.961	0.013
Secularism	0.03	0.157	0.038	1	0.846	1.031	-0.015
Hardline Islam	-0.09	0.198	0.208	1	0.649	0.914	0.007
Family values	0.22	0.213	1.061	1	0.303	1.246	.091**
Distrust of state	0.312	0.121	6.632	1	0.01	1.366	0.043
Constant	-1.6	1.156	1.918	1	0.166	0.202	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Source: Arab Barometer, Second Wave

Note: Significance level: * = 5 percent (2-tailed), ** = 1 percent (2-tailed).

The logistic regression reported in table 9.11 shows that religiosity, coupled with being employed and distrusting state institutions, retains statistical significance in the multivariate analysis. Behavioral Religiosity trumps conservative Family Values as well as Secularism and Hardline Islam; that is to say, none of the ideational variables is a significant correlate, even if the others are removed from the model. In short, the Tunisians who might support Islamic finance seem quite removed from any partisan politics. Within the sample, the 47 ⁽¹⁸⁹⁾ Zitouna deposits exceeded those of BEST (renamed Al Baraka) Bank by the end of the year. See APBT (2012, 54; 2013, 52).

respondents who claimed they were planning to join the Nahda Party appeared a bit more hardline Islamist than the national average, but they were also less unconditionally opposed to conventional bank interest. During Tunisia's political transition, Islamic banking was not a political issue; it is better known as "participatory finance" and seems likely now to steadily expand its market share. The less Nahda promotes it, the more promising its prospects may be for including religious Tunisians who otherwise reject banks altogether.

In sum, the North African countries for which Arab Barometer survey data are available offer bright prospects for Islamic finance. Neither wealth nor gender turned out even in Algeria to significantly condition attitudes toward bank interest. Thus Islamic banks may appeal across a broad range of populations in these countries. In North Africa, it may find ready constituencies not particularly interested in politics, but for whom family values and religion are important aspects of their daily lives.

Portfolio Diversification in Saudi Arabia

Further analysis of the Saudi data may suggest why Islamic finance achieved its headstart in the GCC countries. The hypothesis of portfolio diversification can be further examined in light of the ideational as well as personal characteristics already discussed. The logistic regression with the full set of variables produced surprising results.

Table 9.12 Logistic Regression of Interest Rejection—Saudi Arabia

	B	S.E.	Wald	df	Sig.	Exp(B)	correlations
Urban	-0.23	0.384	0.36	1	0.549	0.794	-0.049
Age	0.032	0.01	10.932	1	0.001	1.033	.101**
Female	0.06	0.247	0.059	1	0.808	1.062	0.001
Education	0.026	0.071	0.133	1	0.715	1.026	0.044
Income\$100s	0.02	0.006	11.298	1	0.001	1.02	.127**
Unemployed	0.075	0.226	0.112	1	0.738	1.078	-0.025
Married	-0.22	0.254	0.739	1	0.39	0.804	0.018
Religiosity	0.771	0.204	14.278	1	0	2.163	0.012
Trips West	0.045	0.091	0.238	1	0.626	1.046	0.015
Interest in Politics	-0.42	0.098	18.597	1	0	0.656	-.210**
Secularism	-0.26	0.158	2.633	1	0.105	0.774	0.056
Hardline Islam	-0.78	0.177	19.492	1	0	0.459	-.173**
Family Values	-0.37	0.208	3.201	1	0.074	0.689	-.155**
Distrust of State	0.023	0.16	0.021	1	0.884	1.024	.065*
Constant	1.131	1.304	0.751	1	0.386	3.098	

Source: Arab Barometer, Second Wave

Note: Significance level: * = 5 percent (2-tailed), ** = 1 percent (2-tailed).

Age, income, positive disinterest in politics, Hardline Islam, and Family Values all kept their statistical significance, and personal religiosity became a strong predictor of Interest Rejection, while any distrust in state institutions vanished in this multivariate analysis. The hardline version of Islam remains negatively correlated, holding the other variables constant.¹⁹⁰ In other words, a more liberal Muslim is more likely to reject interest than a more hardline fundamentalist. Religiosity, expressed in daily behavioral routines, is still strongly correlated with the rejection of interest when the effects of the other variables are held constant in the multivariate analysis. But Family Values also works in a surprising direction. More liberal family values, not conservative ones, are significantly correlated with rejecting interest.

In short, the picture of the Saudi clientele depicted by the survey is one of wealthy and aging individuals, not particularly dissatisfied with state institutions but turned off by politics and basically liberal in outlook, at least in the context of Saudi Arabia. Their broadly liberal outlook was perfectly compatible with high degrees of religiosity, or religious practices in daily life. Working with Islamic rather than conventional banks was perhaps part of their religious way of life, although in Saudi Arabia virtually the entire retail sector is shari'ah compliant. The survey sheds light on the individual motivations behind the high demand for sukūk and other Islamic financial instruments open to private investors. It seems to be the relatively wealthy investors from GCC countries who motivated the big international banks to expand their shari'ah-compliant menu of investment options. These banks, in turn, will finance the Saudi and other GCC treasuries dependent on oil revenues that continued their decline in 2015.

Conclusion

The biggest finding from the survey data is the broad rejection of conventional bank interest and consequent potential of Islamic finance in the region. Roughly half of the populations sampled have some affinity for one of the leading ideas behind Islamic finance, the rejection of making money out of money. And for the most part, they have little interest in politics, much less political Islam.

Before drawing conclusions about the apolitical nature of Islamic finance, however, it seems only fair to turn briefly to the other countries represented in the Arab Barometer survey to check for possible correlates of the potential constituencies for Islamic finance with political variants of Islamism. Accordingly, the logistic regressions for each country are

¹⁹⁰ When Secularism was removed from the model, Hardline Islam and Family Values gained in statistical significance to the .000 and .033 levels of significance, respectively, with slightly smaller Betas of -.581 and .425.

Table 9.13 Logistic Regressions of Interest Rejection

	Jordan		Lebanon		Palestine		Sudan		Yemen	
	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.
Urban	1.049	0.786	1.471	0.391	1.369	0.034	1.518	0.029	1.232	0.255
Age	1.008	0.202	0.995	0.553	1.02	0.004	1.018	0.096	1.006	0.605
Female	0.727	0.063	1.5	0.037	1.347	0.113	0.628	0.028	1.551	0.03
Education	1.114	0.054	0.917	0.173	1.092	0.125	1.333	0.000	1.158	0.02
Income\$100s	0.993	0.566	0.985	0.222	0.996	0.715	0.973	0.269	0.976	0.376
Unemployed	0.964	0.827	1.096	0.622	0.661	0.026	1.21	0.428	0.794	0.291
Married	0.923	0.608	1.087	0.69	0.74	0.132	1.422	0.183	1.32	0.207
Christian	0.535	0.194	0.169	0.000	0.299	0.077	n.a.	n.a.	n.a.	n.a.
Religiosity	1.403	0.003	1.278	0.021	1.382	0.008	1	0.998	1.115	0.533
Trips West	0.954	0.538	0.86	0.131	0.799	0.026	0.822	0.1	0.914	0.66
Interest in Politics	1.007	0.931	1.053	0.558	0.996	0.962	0.996	0.973	1.226	0.042
Secularism	0.901	0.39	1.318	0.106	1.014	0.92	1.002	0.99	1.035	0.826
Hardline Islam	0.854	0.242	1.055	0.804	1.716	0.000	1.136	0.496	1.838	0.002
Family Values	2.251	0.000	1.271	0.17	1.965	0.000	1.628	0.02	1.533	0.036
Distrust of State	1.06	0.586	1.182	0.128	1.021	0.789	1.209	0.122	1.491	0.001
Constant	0.138	0.044	0.223	0.232	0.071	0.018	0.024	0.005	0.003	0.000

Source: Arab Barometer, Second Wave

briefly summarized in table 9.13, presenting the exponents of the Beta coefficients and their statistical significance.⁽¹⁹¹⁾

In this multivariate analysis, Hardline Islam still retains statistical significance in the Palestinian and Yemeni samples. In West Bank and Gaza, however, any putative association of hardliners with Islamic finance elicits little political interest. That is to say, interest in politics is statistically unrelated to interest aversion, whatever one's understanding of Islam. Among the Palestinians, moreover, interest in politics is significantly related to secularism ($r = .093$, $p < .002$), and definitely not to Hardline Islam ($r = -.090$, $p < .002$). In this respect, the Palestinians resemble the Egyptians discussed earlier. Only in Republic of Yemen does interest in politics go hand in hand with Hardline Islam, family values, and distrust of state institutions, constituting a powerful Islamist clientele for Islamic finance. Republic of Yemen, however, remains one of the most underbanked countries in the Arab region, despite Islamic banking's 42 percent market share (table 9.1).

While the survey cannot specify banking behaviors, its rich political data collected in the wake of the Arab Spring do help place other information about Islamic banking in perspective. Except in Algeria, the Republic of Yemen, and possibly West Bank and Gaza, the potential constituencies for these banks really seem to be apolitical. In Algeria the government might benefit from channelling its interest in politics into Islamic finance. Its potential constituency for Islamic banking generally supports state institutions, so that promoting this form of

191) Any Exp(B) below 1 connotes a negative correlate. Among the Jordanians, for example, being a female was negatively correlated with Interest Rejection: a female is $(1 - .727 =) 27$ percent less likely to reject bank interest. Any Exp(B) above 1 connotes a positive correlate. In Jordan, for example, the most statistically significant correlates of Interest Rejection were Religiosity and Family Values. Holding everything else constant, an increase of Religiosity of one unit on a four-point scale was associated with a 40 percent greater likelihood of rejecting conventional interest-based banking. An increase of one unit in Family Values, also measured on a four-point scale, was associated with a 125% greater likelihood (or odds of over 2 to 1) of rejecting conventional interest-based banking.

banking might be one way of gaining support for restructuring and diversifying Algeria's economy. Comparisons with Iraq are enlightening. Both oil economies, with similar overall GDPs, have underdeveloped financial surfaces, the product of years of state bank monopolies as well as subsequent brutal war and violence. Table 9.3 indicated Iraq's banking assets to be less than half Algeria's. Yet Iraq's Islamic banking has already gained an important foothold in its fragile commercial banking system, whereas Islamic banking has stagnated in Algeria. The survey suggests that it may be an important vehicle for recuperating Sunni support in Iraq. In Algeria's underbanked system, it might also offer greater political and social as well as financial inclusion.

As for Tunisia, the very apolitical nature of its potential constituency for Islamic or "participatory" finance is a distinct advantage. Both Egypt and Tunisia witnessed revolutions being "hijacked," in the view of many, by the Muslim Brotherhood and its Tunisian cousins. While the political transitions took different directions, one common outcome was increased polarization, in Tunisia as well as Egypt, between political Islamists and their religiously more neutral compatriots. By remaining carefully aloof from politics, the banks have better chances of improving their market shares. Previous authoritarian regimes kept a tight lid on Islamic finance, for fear of any association between Islamic finance and Islamist political oppositions. But the Arab Barometer survey data clearly point to the absence of such a relationship. On the ground in Tunisia, moreover, Ben Ali's cynical use of Islamic banking may have compromised it in the eyes of the Nahda Party. Its sympathizers in the survey showed less concern about conventional bank interest than their compatriots on average. In Egypt it was the Salafists rather than Muslim Brothers who seemed most concerned. And despite the political interest associated in Egypt with Islamic finance, the survey results indicate that the authorities need not fear any connection between financial and political Islam.

The governments of Egypt and Tunisia are likely to encourage Islamic banking and finance not so much to satisfy domestic demand as to encourage more investment from the GCC countries. Here again, the survey results point to potential demand for sukūk and other forms of shari'ah-compliant investment from wealthy Saudi families. But as to whether Islamic finance may become really inclusive and self-sustaining across the Arab world, the surveys can only point to a vast potential clientele, part of an arc stretching from Sub-Saharan Africa across to Southeast Asia. As part of a community of practicing Muslims, principally defined in the survey by "Religiosity" and "Family Values," it may overcome the religious objections of some and bring more people out of informal economies. Better time-series data are needed to understand the conditions under which Islamic finance may actually mobilize wealth that would not otherwise circulate and put it to constructive uses.

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PART 4

ISLAMIC MICROFINANCE INSTITUTIONS:
PRO-POOR OR FOR-PROFIT?

CHAPTER 10

ISLAMIC MICROFINANCE INSTITUTIONS:
PRO-POOR OR FOR-PROFIT?**Luqyan Tamanni****Frank Hong Liu****Abstract**

This study examines the performance of Islamic microfinance institutions (MFIs) with respect to their conventional counterparts to find any evidence of differences in sustainability and poverty outreach, amidst increasing competition and commercialization. Using the latest panel data from the MIX Market database, this study benefits from a reliable dataset from 1998 to 2013 that covers microfinance institutions from four regions that have Islamic microfinance institutions: East Asia and Pacific, Eastern Europe and Central Asia, Middle East and North Africa, and South Asia. Islamic microfinance institutions represent about 2.88 percent (38 out of 1,320) of the total. Using Pooled Ordinary Least Squares (OLS) regression to analyze financial performance, poverty outreach, and risk factors, the study finds that there is no conclusive evidence of a trade-off between sustainability and outreach in the Islamic MFIs, and no conclusive evidence on the effect of commercialization (that MFIs reduce outreach to increase profitability). However, the study finds that the profitability of Islamic MFIs is lower than conventional microfinance institutions, indicated by lower Return on Assets and higher Cost per Borrower, despite a higher sustainability measure (Operational Self-Sufficiency). On the other hand, Islamic MFIs have a higher number of poor borrowers, which suggests that poverty outreach is encouraging. Similarly, the average loan size is lower, which suggests that there is a consistent attention to the poorest segment, or depth of outreach, even though the Percentage of Women Borrowers is also lower. In addition, Islamic MFIs recorded a higher percentage of Portfolios at Risk past 30 days, but interestingly lower Portfolio at Risk past 90 days, suggesting that a delay in short-term payment rather than default completely. The study concludes that Islamic MFIs is closer to the pro-poor characteristics of higher depth of outreach and lower profitability, as they deal mostly with the poorest of the poor who borrow small amount of loans and somewhat delay their repayments temporarily.

Keywords: Islamic microfinance, sustainability, outreach

Introduction

The main promise of microfinance is its ability to reach poor segments of society and help microentrepreneurs access capital. The absence of a financing mechanism to target this market opened the way for the innovation of microcredit in the early 1970s (Morduch, 1999). Despite high interest rates and conditionality, the poor and microentrepreneurs were satisfied with the loan they received from these new institutions. The main reasons for such appeal has been immediate access, speed of approval, lack of collateral requirements, and most importantly, a less cumbersome process than commercial banks.

Likewise, microfinance institutions have been happy with the high repayment rates of their loans, the healthy growth of a customer base, and a prospect of becoming financially self-sufficient within a few years (Balkenhol, 2007), in addition to fulfilling their mission of poverty alleviation. While it sounds pretentious, the role of microfinance institutions (MFIs) in poverty reduction programs cannot be underestimated. MFIs have comfortably operated with twin goals of poverty outreach and financial sustainability (Yaron, 1994). This double bottom line, according to Balkenhol (2007), places MFIs somewhere between a “welfare scheme and commercial banking.”

Indeed, microfinance must serve social welfare objectives and at the same time operate as a commercial entity. The high interest rate that MFIs charge has become acceptable, given their high operating costs and the high risk of microlending. The high yield has also enticed commercial banks and fund managers to develop customized products, either directly targeting the poor and microenterprises or indirectly making capital investments in the microfinance institutions (Galema et al., 2011). The dependence of many MFIs on commercial funding is not without a valid reason. As many aid agencies and government programs become more selective, the increasing availability of commercial funds is attractive to MFIs, as they are also facing increasing demand from borrowers and regulatory requirements to manage their already high risk. This dilemma makes commercialization of microfinance almost unstoppable (Armendariz and Labie, 2011a).

Commercialization has several consequences. The more optimistic view suggests that commercialization may improve MFIs’ self-sufficiency, which is essential for long-run sustainability and the ability of MFIs to reach out to larger numbers of poor people (Hamada, 2010). A more pessimistic view considers commercialization the reason why so many MFIs neglect their social objective of poverty alleviation and instead pursue profit above outreach (Hoque et al., 2011).

Against this backdrop, Islamic microfinance is quietly evolving from an experiment into a niche industry in some Muslim countries, especially Bangladesh, Indonesia, Lebanon, Pakistan, Sudan, and Yemen Republic. According to a survey by the Consultative Group to Assist the Poor (CGAP), there are at least 255 Islamic microfinance institutions in the Muslim world today serving more than 1.28 million clients (El-Zoghbi and Tarazi, 2013). Microfinance has always been an important component in the development of Islamic finance in the Muslim world, defined as a financial system that adheres to Islamic principles,

including the avoidance of interest or usury (El-Gamal, 2003). Another important aspect of Islamic microfinance is its role in helping the poor and the unbanked to access financial services, especially in countries where a preference to non-interest financing is significant (Iqbal and Mirakhor, 2013).

Unlike its conventional counterpart, Islamic microfinance is relatively under-researched and underdeveloped. Despite its potential, the outreach of Islamic microfinance accounts for just 1 percent to 2 percent of the total microfinance loans in Indonesia and Bangladesh (El-Zoghbi and Tarazi, 2013). Taking Indonesia as a case study, Seibel (2008) finds that Islamic MFIs have yet to prove themselves as efficient and dynamic providers of microfinance services. Other studies on Indonesia have found that conventional MFIs in Indonesia are the world’s leading example, especially in the case of Bank Rakyat Indonesia (Robinson, 2002, Patten et al., 2001). With its relatively early stage of development, Islamic microfinance faces some pressing challenges, especially the failure of supervision and intensifying competition (Seibel, 2008). The competition comes not only from conventional MFIs, but also from commercial banks that provide almost 90 percent of microcredits in Indonesia (Dar, 2012). This development may also influence Islamic MFIs, along the lines of what has happened in the conventional sector; hence, commercialization is anticipated.

This chapter aims to shed some lights on the issues of commercialization that may affect Islamic microfinance sector by looking specifically at the financial performance and poverty outreach of Islamic microfinance institutions with respect to conventional MFIs. The performance of MFIs is generally assessed by their ability to reach the poor and at the same time remain profitable and sustainable. This is often referred to as double bottom line: a large number of poor people served and a healthy financial profit.

This study finds that the effect of commercialization on Islamic MFIs is less intense than in conventional context. This finding could contribute to the ongoing debate on the trade-off between financial performance and poverty outreach in the overall microfinance literature. The inconclusive nature of these debates in the literature is evident. Studies on mission drift, trade-offs, and commercialization of microfinance are proliferating without any clear winner of the debate. While this is an exciting area of research in itself, the lack of similar studies for Islamic microfinance institutions offers an opportunity to fill the gap.

Literature Review

Microfinance Performance

Microfinance is slowly evolving into a full-fledged financial sector with global presence and impact (Matin et al., 2002). The development of the microfinance sector has been assisted by the expansion of the scope of the financial sector in general and the emergence of new research by a wider academic community. It stems from a promise that microfinance could play an important role in poverty reduction programs in many developing countries. In addition, microfinance is increasingly mandated to achieve an intermediary objective of financial inclusion (Ledgerwood et al., 2012, p.1).

This development provides an impetus for healthy growth and further advancement in microfinance literature. In addition to the increasing popularity and alleged success of many microfinance institutions, the availability of data in recent decades has been the main reason for this surge (Braun and Woller, 2004). Various recent studies have taken stock of the research in microfinance in the last two or three decades, including Armendariz and Labie (2011b), Banerjee et al. (2013), and Cull et al. (2013).

The trade-off between sustainability and poverty outreach is one of most widely discussed aspects of microfinance studies. The debate is triggered by potential implications these studies could have on policy and the structural design of microfinance programs. If the trade-off is indeed established and valid, microfinance stakeholders must choose the goal that is most suitable for their circumstances. If the main objective is reaching out to as many poor people as possible, then they must sacrifice or put up with potential lack of profitability or sustainability, and vice versa.

One of the reasons for the trade-off is the difference in views many stakeholders have in developing their respective microfinance model. The two main views can be classified as “institutionalist” or “welfarist” (Morduch, 2000, Braun and Woller, 2004). Although this classification is not a clear demarcation line, it reveals a fundamental difference of approach in the way stakeholders engage with microfinance sector. The institutionist approach pursues sustainability in order for the MFIs to reach and serve more poor clients over a longer period of time. The welfarist approach focuses on targeted outreach to the poorest, even at the cost of higher subsidies and lower profitability (Conning, 1999).

Three positions emerge from the debate about this trade-off. The first refutes trade-off between outreach and sustainability. The second asserts the prevalence of trade-off. The third advocates the importance of balance between outreach and financial sustainability. The first group of studies suggests that a focus on outreach would not reduce profitability or sustainability of microfinance institutions. These studies find little or no evidence of a trade-off between financial sustainability and poverty outreach, either in the context of a single country (Piot-Lepetit and Nzongang, 2014) or in cross-country analysis (Kar, 2011). In fact, Quayes (2012) finds a positive and complementary relationship between outreach and financial sustainability.

The second group of studies finds that there is a trade-off between outreach and performance. These include studies at the country-specific or cross-country level (Cull et al., 2007). Some studies find a negative relationship between outreach and other performance indicators or a proxy to sustainability, such as efficiency (Hermes et al., 2011, Abate et al., 2013). In this category, some studies vaguely admit the presence of a trade-off or find a limited trade-off between outreach and sustainability, examples include Cull et al. (2009), as well as Mersland and Strøm (2008).

Finally, a growing number of recent studies that have tried to bridge the trade-off gap and provide a different perspective on the debates. They assert that MFIs can still maximize their outreach targets while maintaining a decent rate of profitability. This can be achieved

in certain circumstances, such as where financial sector in the country is underdeveloped subsidies are prevalent. Vanroose and D’Espallier (2013), for instance, suggest that MFIs may reach more poor clients and remain profitable if they operate in the market where the development of the (commercial) banking sector is low. This view is supported by Assefa et al. (2013), who find that when competition is high, it may reduce MFI’s poverty outreach and repayment performance of their clients. Similarly, Conning (1999) suggests that MFIs can still target poor clients and remain profitable without relying on external funding or leverage by carefully mitigating contract design problems and high monitoring costs.

An extension of the trade-off analysis is the literature on mission drift, which looks at how MFIs are deviating from their original objective of poverty alleviation. As in the trade-off debates, the existing literature offers no definite conclusion on mission drift. One group of studies suggests quite strongly that mission drift does occur, as argued by Copestake (2007), Hamada (2010), and Serrano-Cinca and Gutiérrez-Nieto (2013). According to these studies, mission drift may occur as a result of commercialization (Hamada, 2010) or high operational costs to serve the poor (Serrano-Cinca and Gutiérrez-Nieto, 2013).

On the other hand, Mersland and Strøm (2010) find that there is no evidence of mission drift in their samples of 379 MFIs from 74 countries. Along the lines of Vanroose and D’Espallier (2013), they argue that higher competition may have caused the mission drift to disappear (Vanroose and D’Espallier, 2013). In fact, commercialization seems to improve the ability of MFIs to expand their credit outreach because they can raise cheaper funds from commercial lines.

Performance of Islamic Microfinance

The emergence of Islamic microfinance can be traced back to the establishment of modern Islamic banking. The first Islamic bank, Mit Ghamr Savings Bank, founded in 1963, was a rural savings bank that mainly served farmers and small traders in the Nile delta of the Arab Republic of Egypt (Dusuki, 2008). However, Rahman (2007) and Dusuki (2008) point out that despite this historical connection, microfinance has been missing in the development of Islamic banking and finance across the Muslim world. While academics propose to expand the reach of Islamic banking to microentrepreneurs, the interest from the Islamic finance industry at large has been discouraging, at least until several years ago.

In recent years, there have been several attempts that explore the applicability and application of Islamic financing schemes to microfinance. For example, Ebrahim (2009) examined the housing finance using Islamic cooperative targeted for the poor. El-Komi and Croson (2013) tested the repayment behavior of Islamic microfinance borrowers, using experimental economics to confirm the feasibility of Islamic microfinance in the context of information asymmetry and verification. Both studies suggest that Islamic microfinancial services are robust and in certain cases more efficient than other types of financial services targeting the poor.

The contribution of the Islamic microfinance movement in reducing the incidence of poverty is an important area to study. According to a report by the Consultative Group

to Assist the Poor (CGAP), there are more than 600 million of Muslims who live on less than \$2 a day, of whom nearly half would not accept financial support or a loan from an interest-based institutions (El-Zoghbi and Tarazi, 2013). This is certainly an important number to consider, and a significant incentive to create Islamic microfinance institutions. Although some studies assign the role of poverty alleviation to the more developed Islamic banks, such as an important report by Dhumale and Sapcanin (1999), the different needs of microentrepreneurs and the poor make it harder for Islamic banks to serve this segment. The creation of specialized Islamic MFIs is seen as a necessity, and there is evidence that links these MFIs to poverty alleviation (Rahman, 2010).

The empirical studies included case studies of individual MFIs, such as Islami Bank Bangladesh's Rural Development Scheme (Rahman and Ahmad, 2010); Sudan's Agricultural Bank, which successfully increased formal credit supply to the agriculture sector through a profit-sharing financing scheme (Elhiraika, 1996); and the Akhuwat group lending model in Pakistan (Harper, 2012). These studies advocate the applicability of Islamic microfinance in the context of rural financing for microenterprises and the agriculture sector. This is in line with the experiment of Mit Ghamr in Egypt, which can be considered the first Islamic microfinance institution (Dusuki, 2008).

In general, the existing literature on Islamic microfinance is sparse and sporadic, unlike the literature on Islamic finance, which has flourished and expanded in the past decade. For that reason, this study also surveys some empirical studies on Islamic finance as a starting point to examine the performance of an Islamic microfinancial scheme.

Research Objective, Hypothesis, and Contribution

This study seeks to address the question of whether there is any significant difference between the performance of Islamic microfinance institutions and conventional microfinance institutions, especially in terms of financial performance and poverty outreach. The research adopts the notion that microfinance serves dual purposes, or pursues a double bottom line of profitability and poverty outreach. Given some significant differences between Islamic and conventional microfinance institutions, this study suggests that there will also be a difference in their financial figure or bottom line.

The objective compliments existing studies—which unfortunately are still very scarce—, that empirically analyze the performance of Islamic microfinance institutions. This study benefits from the most recent dataset produced by MIX Market, the same source of database used by established studies in microfinance literature. MIX market provides a platform for MFIs to submit or upload their financial data and other information to MIX, which then classifies the data based on MIX specification. MFIs voluntarily submit their information mainly to either comply with the requirement of their existing donors or to attract further funding from new donors or investors. The use of a large dataset may assist in the analysis and produce more credible results. The current study also aims to address the following questions and related hypotheses.

Research question 1: Are Islamic MFIs more profitable than conventional MFIs?

Profit is an important aspect of microfinancing activities, either as an intermediate target to sustain the operations or as the primary motive of the MFIs. Both Islamic and conventional MFIs have a similar mix of MFIs that are either profit oriented or nonprofit oriented. The dataset suggests that there are far more nonprofit than for-profit institutions among Islamic MFIs: the ratio is 82.5 percent to 17.5 percent. In contrast, 57 percent of conventional MFIs are non-profit, while 43 percent are for-profit. However, profit orientation does not guarantee better financial performance or higher profit; Roberts (2013), for example, finds that a stronger profit motive leads only to higher interest rates.

Because Islamic financial institutions (IFIs), such as banks, insurance companies, and microfinance institutions, use the same financial indicators to measure their performance as their conventional counterparts, the current research will follow the same practice. Armendáriz and Morduch (2010) propose some broad financial indicators, together with corresponding ratios, to measure the performance of microfinance institutions, such as asset quality (Portfolio at Risk), profitability and sustainability (Return on Assets), and efficiency/productivity (Cost per Borrower). In addition, a number of other performance measures have been identified in the literature, including higher deposits and portfolio-to-assets ratio (Muriu, 2011); governance (Mersland and Strøm, 2009); and regulation and supervision (Kyereboah-Coleman and Osei, 2008).

This study will examine only profitability and sustainability indicators. Profitability can be measured using ratios such as Return on Assets (ROA) and Return on Equity (ROE), while self-sufficiency can be measured using ratios for Financial Self-Sufficiency (FSS) and Operational Self-Sufficiency (OSS). This research focuses only on ROA and OSS as key indicators for sustainability because they are a more reliable approximation of the sustainability of MFIs, as has been suggested by Anduanbessa (2009) and used by Kar (2011) in a similar study. Likewise, Cost per Borrower (CPB) is included to account for MFI's cost management, as it measures the value of total inputs required to generate a given level of output or number of borrowers (Kar, 2011).

Size or scale of operation is also relevant to MFIs (Kar, 2013). The size of Islamic microfinance sector or industry is significantly smaller than conventional microfinance sector, although arguably both emerged at about the same period in the early 1970s. Individually, average size of Islamic MFI is also relatively smaller than an average conventional MFI. Many Islamic MFIs have not reached their economies of scale level, and many are relying heavily on subsidies and grants from government or donor agencies for funding and operations. This dependency on subsidy may affect the performance of Islamic MFIs as they are competing in the markets where conventional MFIs are much larger and possibly more efficient.

This study examines whether Islamic MFIs could have better or worse profitability performance than conventional MFIs. Therefore, the first hypothesis is as follows:

Hypothesis 1: Islamic MFIs are less profitable and less sustainable than conventional MFIs.

Research question 2: Do Islamic MFIs have better outreach than conventional MFIs?

Islamic financial institutions are socially and religiously driven, which means they may have strong preference for social objectives and less inclination for commercial gain. The formation of the first Islamic bank was motivated by the lack of shari‘ah-compliant financial services accessible to devout Muslim farmers in rural Egypt; thus Mit Ghamr Bank was established in 1963 (El-Komi and Croson, 2013). The same motive to improve welfare of Muslims and serve their needs for interest-free financial services was the main driving force behind the establishment of successive Islamic financial services and institutions, including Tabung Haji in Malaysia (1969), the Islamic Development Bank (1974), and Dubai Islamic Bank (1975).

This close association with the well-being of their customers has also motivated the subsequent creation of Islamic MFIs (Elhiraika, 1996, Harper, 1994). An inclination toward social objectives should drive Islamic MFIs to concentrate on poverty alleviation and aim to serve as many poor clients as possible. This is also supported by the nature of funding sources of Islamic MFIs. Many Islamic MFIs are funded by donors and government programs, and increasingly by Islamic charitable instruments such as zakat and waqf.

It is therefore appropriate to classify Islamic MFIs into the “welfarist” type of microfinance, as opposed to the “institutionalist” type. Welfarist microfinance is characterized by an overall objective to alleviate poverty and improve the well-being of the poorest segment in the community. Thus outreach is the primary goal. On the other hand, institutionalist microfinance emphasizes the important of sustainability and long-term operations of microfinance institutions with the aim to serve larger number of poor people for a much longer period (Morduch, 2000, Hermes et al., 2011).

The objective of many Islamic MFIs is to serve the poorest in Muslim communities and gradually improve their welfare (Ahmed, 2002). There is, however, a growing acceptance that a compromise is possible: MFIs could target the poorest or focus on outreach, but at the same time achieve financial sustainability, at least in theory (Morduch, 2005) or in limited country settings (see the study of Islamic microfinance in Thailand (Tawat, 2014). Thus, Islamic MFIs pursuing outreach can maintain a relatively smaller loan size and target a higher percentage of women borrowers, even if not maximizing the numbers poor customers to be served.

Islamic MFIs are relatively smaller in their scale of operations, given their shorter history, and are equipped with less capital than conventional microfinance sector; thus they may not be able reach out to a large number of poor people. This condition suggests that Islamic MFIs may serve fewer poor people or have lower outreach than conventional MFIs. However, what they lack in numbers, they could potentially make up with the intensity or depth of outreach—by serving the poorest or the most marginalized segment of the customers through smaller loan size and a higher percentage of women borrowers. Therefore, the second hypothesis can be postulated as follows:

Hypothesis 2: Islamic MFIs serve fewer poor people than conventional MFIs, as indicated by negative NAB; however, they will target the poorest and the most vulnerable clients,

indicated by negative (lower) Avg_Loan size, and higher Percentage of women borrowers.

After testing these hypotheses, and based on the findings, this study aims to contribute to a better understanding of Islamic microfinance sector with respect to its conventional partners. In particular, this study will shed some light on the differences between the two counterparts in their financial performance and potential contribution to financing or empowering the poor and microenterprises.

Data, Model, and Estimation Methods

Dataset

The study employs a quantitative research methodology using secondary data mainly from MIX Market (www.mixmarket.org). It is currently the most reliable provider of microfinance database and covers more than 2,400 MFIs globally, of which 38 are Islamic MFIs. Although it includes a growing number of Islamic MFIs, the database covers a fraction of the ever-increasing Islamic microfinance industry. For example, it includes only seven Islamic MFIs from Indonesia, while there are more than 3,000 Islamic MFIs and cooperatives in Indonesia. Coverage is similarly very low for other countries such as Bangladesh and Pakistan.

However, MIX Market is the only reliable choice at present and a useful starting point for this research. It currently posts social and financial performance reports from about 2,400 MFIs from over 50 countries. Most of the data and information are self-reported by the MFIs; some are reviewed and ranked by MIX Market before being presented in an online database and its various publications. Most of the recent and relevant studies in microfinance have used MIX Market as their main source for data on MFIs, including Cull et al. (2007); Hermes et al. (2011); Kar (2011); and Vanroose and D’Espallier (2013).

The data for both Islamic and conventional MFIs have been collected for all countries, and filtered to include only MFIs from the regions that have at least one Islamic MFI. The MFIs are classified into two types of MFIs: namely, Islamic and conventional. This classification of the dataset has not been done by similar studies. The analysis is conducted using a dummy variable, Islamic MFI (MFItype=Islamic) as the main independent variable. The regressions test this variable and other independent variables with two main groups of dependent variables: profitability and outreach. With this method, it is hoped that the analysis will be comprehensive enough to infer the existence in any trade-off between outreach and sustainability for Islamic MFIs, and how that trade-off differs between Islamic and conventional MFIs.

The dataset is unbalanced panel data that consists of performance data from 1,320 microfinance institutions from four regions: East Asia and Pacific, South Asia, Middle East and North Africa, and Eastern Europe and Central Asia. From this sample, 38 MFIs are found to offer Islamic microfinance products. Most operate as full-fledged Islamic MFIs; a few of them offer Islamic microfinance as a window operation. The Islamic MFIs represent about

2.88 percent of the total MFIs in the dataset, and only 3.4 percent of data observations, or 266 out of 7,919 observations, as shown in table 10.1. This percentage is slightly higher than the share reported in a recent study that suggests that the market share of Islamic microfinance is between 1 percent and 2 percent in Muslim countries (El-Zoghbi and Tarazi, 2013).

Table 10.1 Regional Distribution of MFIs

Region	MFI Type		Total (Obs.)
	Conventional	Islamic	
East Asia and the Pacific	1,888	32	1,920
Eastern Europe and Central Asia	2,832	13	2,845
Middle East and North Africa	484	151	635
South Asia	2,449	70	2,519
Total	7,653	266	7,919

Source: MIX Market dataset.

The MFIs are dispersed quite evenly across different regions in the world, with the notable exception of the Middle East and North Africa. Although only 8 percent of overall MFIs in the dataset are from this region, the share of Islamic MFIs in the Middle East and North Africa region is nearly 60 percent. This fact might be crucial in the analysis because the region is predominantly Muslim, which could be an incentive for Islamic MFIs to flourish. Two regions that have no Islamic MFIs have been removed from the sample: namely, Africa and Latin America and the Caribbean. As table 10.1 suggests, Islamic MFIs are located mostly in the Middle East and North Africa region, with South Asia and East Asia and the Pacific trailing far behind. Islamic MFIs in the dataset consist of 38 MFIs originating from 14 countries; a country-breakdown of all Islamic MIFs is presented in annex 10A.

However, as with other studies, such as El-Zoghbi and Tarazi (2013), the dataset has a limitation, especially the very limited coverage of Islamic MFIs. Very few Islamic MFIs are listed in countries such as Bangladesh, Indonesia, and Pakistan, where the number of Islamic MFIs is growing. This is due to the nature of MIX database, which is based on self-reporting. The MFIs that submit data to MIX usually do so to comply with funding requirements or through their ties to global organizations, which set higher disclosure and exposure standards. However, the majority of Islamic MFIs in these countries are independent MFIs or owned by small religious or nongovernmental organizations.

Empirical Model

This research uses Pooled Ordinary Least Squares (OLS) regression to analyze the financial performance and poverty outreach of the Islamic MFIs. This method is used because of its suitability with the nature of the research questions examined. An alternative method, Random Effects (RE) is also used to ensure that the results are robust and reliable. The model follows Kar (2011) and Cull et al. (2007) with a slight modification. While these other authors classify the analysis based on the MFIs' lending methodology, this research classifies the analysis based on the type of MFIs: either conventional or Islamic. The MFI type is presented as an MFIType-Islamic dummy and examined against sustainability indicators as

well as outreach indicators. The regression equation is as follows:

$$(10.1)$$

Where Y is vector of dependent variables consisting of indicators that could measure the profitability or sustainability of the MFIs, as well as outreach performance, as suggested by Armendariz and Morduch (2005) and following Kar (2011). The objective of sustainability regression is to determine whether there is any different between Islamic and conventional microfinance institutions. Similarly, the outreach regression aims to assess whether the outreach of Islamic microfinance is different or similar with its conventional counterparts.

For the sustainability regression, the indicators used as dependent variables are Return on Assets (ROA), Operational Self Sufficiency (OSS), and Cost per borrower (CPB). For the poverty outreach regression, the variables used are Log Number of Active Borrowers, Average loan size per borrower to GNI per capita, and Percentage of women borrowers (PWB).

Similarly, following Kar (2011) and Cull et al. (2007), there are nine explanatory variables: MFI Type, Yield, Outreach, Portfolio quality, Cost indicators, MFI Profit orientation, Regional, MFI age category, and Error term. These indicators consist of the MFIType-Islamic dummy; revenue or Real Yield to Gross Loan Portfolio; outreach variables (only for profitability regression) of Log NAB or number of active borrowers for scale of outreach and Average Loan Balance to GNI/Capita and Percentage of Women Borrowers are measuring the depth of outreach; and portfolio quality as measured by Portfolio at Risk past due 30 days (PAR>30days). The second set of indicators consists of three control variables: Age of the MFIs (categorical variables or Age_new, Age_young and Age_mature), Regional distribution of the MFIs, and Profit orientation of the MFIs (profitstatus_for and profitstatus_non). The error term ϵ_i , where individual effect assumption of $u_i = 0$ is expected to hold, is also included to accommodate any other factors that are not accounted for but that may affect the model.

Dependent variables

The financial performance of MFIs in terms of profitability can be measured using key ratios such as Return on Assets (ROA) and Return on Equity (ROE). The sustainability of MFIs in terms of self-sufficiency can be assessed using the Financial Self-Sufficient (FSS) and Operational Self-Sufficiency (OSS) measures. This research focuses only on ROA and OSS as key indicators for sustainability as they are more reliable approximations of the sustainability of MFIs, as has been suggested by Anduanbessa (2009) and used by Kar (2011) in a similar study. Likewise, Cost per Borrower (CPB) is included to account for MFIs' cost management because it measures the value of total inputs required to generate a given level of output or number of borrowers (Kar, 2011).

ROA is a profitability measure that provides an indication of whether or not the MFIs are making sufficient returns, given a certain size of total assets. A positive ROA may indicate that the MFIs are making some profits (a desirable condition), while a negative ROA is evidence of underperformance or loss (an undesirable condition). OSS measures whether or

not MFIs are self-sufficient; 100 percent OSS indicates that the MFIs are fully self-sufficient, and any figure below 100 percent demonstrates MFIs' inability to produce enough revenues to support their operations. CPB is a ratio of operating expenses to average number of active borrowers. It reveals how cost effective the MFIs are in delivering loans to their borrowers. Cost per borrower is used by Kar (2011), among others.

Poverty outreach indicators cover both the breadth of scale and depth of outreach. They measure both the quantity of poverty outreach (the number of poor people served as clients), as well as the quality (reaching to the least fortunate segments of the poor: women and the poorest of the poor). The variable used for the former is Number of Active Borrowers (NAB) and for the later, Average Loan Size per borrower to GNI per Capita and Percentage of Women Borrowers. These variables have been used in established empirical literature such as Cull et al. (2007).

Log NAB measures the scale of poverty outreach. The Number of Active Borrowers (NAB) captures the extent to which MFIs have provided microcredit to the poor. NAB is a necessary indicator of MFIs' poverty alleviation activity, but not a sufficient one. Having reached a certain number of poor does not mean that the MFIs have served those in dire need of a microcredit. In many instances, clients or borrowers may have been relatively well to do. To mitigate this bias, variables that measure the depth of outreach are also introduced in the equation. Average Loan to GNI/Capita measures the average loan per borrower relative to the Gross National Income (GNI) per capita. The smaller the average loan, the better, because this indicates that MFIs are lending to really poor clients who can afford to borrow only a minimum amount, either for microbusiness or for immediate consumption or income smoothing. Percentage of Women Borrowers (PWB) represents another indicator of depth of outreach; it is assumed that women borrowers are among the marginalized or vulnerable segment of the MFIs' client base. Having a larger percentage of women borrowers in the portfolio may suggest that the MFIs are reaching out or targeting the most vulnerable, or indeed the poorest segment of the community.

Table 10.2 provides a list of dependent variables and their respective definitions suggested by the MIX database.

Table 10.2 Dependent Variables

Variable	Definitions
Return on Assets (percent)	Net Operating Income less Taxes/Assets, average
Operational Self-Sufficiency (percent)	Financial Revenue/(Financial Expense + Impairment Loss + Operating Expense)
Cost per Borrower	Operating Expense/Number of Active Borrowers, average

Source: MIX Market database, <http://mixmarket.org/about/faqs/glossary> (accessed April 25, 2015).

Explanatory variables

Six explanatory variables are used: yield or return indicator, outreach to the poor, cost,

portfolio quality, a set of control variables, and an error term (table 10.3). This group of explanatory variables is similar to the set used in to Kar (2011) and Cull et al. (2007).

Return or yield is the most important contributor to the profitability of financial institutions, including MFIs. At the same time, it represents interest charges or borrowing cost for the clients. Yield is measured in terms of interest and fees received on the loan portfolio. It can be presented either in nominal terms or as the ratio between interest and fees to average gross loan portfolio, or in real terms, as the nominal yield adjusted to inflation rate. For Islamic MFIs, yield is in the form of profit margin or other shari'ah-compliant pricing mechanism. This research uses the real yield on gross loan portfolio, or Yield on GLP (Real), as established in such studies as Cull et al. (2007) and Kar (2011).

Outreach is a proxy for measuring the impact of microfinance intervention on poverty alleviation, although a more rigorous survey should be taken to assess any meaningful impact of microfinance on poverty. Outreach can be examined in two aspects: namely, scale or breadth of outreach, and depth of outreach. Scale of breadth is outreach is measured using such indicators as Number of Active Borrower (Ln NAB) or Gross Loan Portfolio (GLP). Depth of outreach measures whether microfinance is really targeting the poorest segment of the community, through indicators such as loan size to the gross national income per capita (Avg. Loan to GNI/capita) and Percentage of Women Borrowers (PWB). These variables function as proxies of the borrowing patterns of the poorest or most vulnerable: that is, a small size of loan and a higher percentage of loans extended to women borrowers. The smaller the loan size, the poorer the borrowers normally are, and vice versa. Likewise, the higher the percentage of women borrowers in the MFI's portfolio, the closer it is to the more marginalized segment of the community.

Cost indicators consist of variables that have been tested in the relevant literature, especially Kar (2011). They are Operating Expenses to Gross Loan Portfolio and Log Cost per Borrower.

Portfolio quality may also affect the performance of MFIs, as has been suggested by Cull et al. (2007) and Kar (2011). The most commonly used measure of portfolio quality is Portfolio at Risk (PAR), either for those loans that have been due for 30 days (PAR>30) or 90 days (PAR>90 days). The other indicators are Loan Loss Ratio and Write-off Ratio. While PAR represents the potential risk of default, loan loss and write-off represent ex post situations when the MFIs have recorded the loans as in default. This research considers both ex ante and ex post situations.

In addition, some control variables are introduced into the estimation to control for the effects of age of the MFIs (Ln Age_New, Ln Age_Young, and Ln Age_Mature). Similarly, the region variables control for any differences in respective regions where MFIs are located (Region_EAP, Region_SA, Region_MENA). Further, differences in the profit orientation of the MFIs are controlled with two variables: Profitstatus_Non represents all MFIs that are non-profit, while Profitstatus_For represents those MFIs registered as for-profit or commercial entity. All these control variables have been classified by MIX Market, with the

exception of MFI Type dummy, which was classified manually. Finally, the error term is also introduced.

Table 10.3 Explanatory Variables

Variable	Definitions
Yield on Gross Portfolio (nominal) (percent)	Interest and Fees on Loan Portfolio/Loan Portfolio, gross, average
Yield on Gross Portfolio (real) (percent)	$[\text{Yield on Gross Portfolio (nominal)} - \text{Inflation Rate}] / (1 + \text{Inflation Rate})$
Number of Active Borrowers	The number of individuals or entities who currently have an outstanding loan balance with the MFI or are primarily responsible for repaying any portion of the Gross Loan Portfolio. Individuals who have multiple loans with an MFI should be counted as a single borrower.
Gross Loan Portfolio	All outstanding principal due for all outstanding client loans. This includes current, delinquent, and renegotiated loans, but not loans that have been written off. It does not include interest receivable.
Average Loan Balance per Borrower/GNI per capita (percent)	Average Loan Balance per Borrower/GNI per capita (Atlas method, current US\$) GNI per capita: The gross national income, converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.
Percent of Women Borrowers (percent)	Number of Active Borrowers Who Are Women/Number of Active Borrowers
Operating Expense/Loan Portfolio (percent)	Operating Expense/Gross Loan Portfolio, average
Cost per Borrower	Operating Expense/ Number of Active Borrowers , average
Portfolio at Risk > 30 days Ratio (percent)	Portfolio at Risk > 30 days/ Gross Loan Portfolio Portfolio at Risk>[XX] days: The value of all loans outstanding that have one or more installments of principal past due more than [XX] days. This includes the entire unpaid principal balance, including both the past due and future installments, but not accrued interest. It also includes loans that have been restructured or rescheduled.
Portfolio at Risk > 90 days (percent)	Portfolio at Risk>90 days/Gross Loan Portfolio
Loan Loss Rate	$(\text{Write-offs} - \text{Value of Loans Recovered}) / \text{Gross Loan Portfolio, average}$

Write-Off Ratio (percent)	Write-Offs/Gross Loan Portfolio, average Write-Offs: Total amount of loans written off during the period. A write-off is an accounting procedure that removes the outstanding balance of the loan from the Loan Portfolio and from the Impairment Loss Allowance when these loans are recognized as uncollectable.
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Source: MIX Market database, <http://mixmarket.org/about/faqs/glossary> (accessed April 25, 2015).

Estimation Methods

The aim of this research is to compare the performance of Islamic microfinance institutions with their conventional counterparts and find any significant difference between the two types of MFIs in terms of profitability and poverty outreach to the poor. The first part of the analysis estimates financial performance in terms of the profitability and sustainability of Islamic MFIs, where the MFIType_Islamic dummy is the main explanatory variable in the dataset comprising all types of the MFIs. The second analysis examines the outreach of Islamic MFIs using the same estimation model as the first analysis. The dependent variables for profitability and sustainability regressions are Return on Assets (ROA), Operational Self-Sufficiency (OSS), and Log of Cost per Borrower (CPB), as used by Kar (2011) and Cull et al. (2007). A positive sign of the ROA and OSS variables suggest that the MFIs are profitable and sustainable. Log CPB is cost indicator that can explain the results for ROA or OSS, as well as indicate MFIs cost-efficiency, and hence should be negative. This is checked against explanatory variables, especially outreach variables (Log NAB, Avg. Loan to GNI/capita, and PWB); if these variables are negative, this may be evidence of a trade-off between profit and poverty orientation.

The outreach regression follows a definition of outreach suggested by Schreiner (2002) and measures both breadth of outreach (number of poor people reached) and depth of outreach (number of the poorest affected). The former is simply measured by taking the Number of Active Borrowers as the main variable, and the latter is measured through two proxies: namely, Average Loan Size to GNI/capita, and Percentage of Women Borrowers. As indicated by Merstrand and Strøm (2010) in a study using a different model, a positive coefficient for the Average Loan Size suggests a tendency to offer a higher loan size, which is normally given to clients who are less poor, indicating mission drift. Likewise, a negative coefficient of women borrowers is a sign of lower preference for the marginalized segment of clients, also indicating possible mission drift. However, in this study, the focus is only on the Number of Active Borrowers and Percentage of Women Borrowers. A discussion of mission drift, which will focus mainly on Average Loan Balance, will be covered in a separate study.

Explanatory variables for both regressions are Yield to Gross Loan Portfolio (Nominal), Number of Active Borrowers, Percentage of Women Borrowers, Average Loan Balance per Borrower to GNI per Capita, Portfolio at Risk>30 days due, and Operating Expenses to Gross Loan Portfolio. Portfolio quality has also been suggested by (Ayayi and Maty, 2010) as an important indicator to measure the sustainability of MFIs, and in particular, PaR>30 days. Control variables are also introduced: namely, Age, profit orientation status (whether

for-profit or non-profit), and Region.

The results of this exercise shed some lights on the differences or similarities in the performance of Islamic MFIs with respect to their conventional counterparts. At the same time, the results may also indicate the presence or absence of any trade-offs between profitability and poverty outreach for Islamic microfinance institutions.

Results and Discussion

Descriptive Statistics

The summary statistics in table 10.4 illustrate how Islamic MFIs are quite different from the conventional MFIs. The most important difference is the Return on Assets. It is negative for Islamic MFIs, while it is positive for conventional MFIs. This suggests that the MFIs are generally underperforming in terms of profitability. The Average Loan Balance is also strikingly different between conventional and Islamic MFIs, both in nominal terms and in proportion to national income per capita. Islamic MFIs are extending much smaller loans (less than \$1,000), compared to conventional MFIs, whose loans average \$4,300.

Portfolio at Risk is another variable that separates the two types of MFIs. Islamic MFIs are two times riskier than conventional. This may suggest a different character of clients or a different capability of portfolio management. The other dependent indicators, Operational Self-Sufficiency and Cost per Borrower, are quite similar, which suggests that both types of MFIs are equally self-sufficient and are operating at similar levels of cost structure. In fact, the mean value for most of the independent variables is similar for both conventional and Islamic MFIs.

Table 10.4 Summary of Statistics for Conventional and Islamic MFIs

Variable	Conventional			Islamic		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Return on Assets	5764	0.012	0.161	207	-0.028	0.174
Operational Self-Sufficiency	6399	1.152	0.877	239	1.254	0.438
Log Cost per Borrower	5266	4.217	1.523	196	4.603	1.184
Log Number of Active Borrowers	6948	8.714	2.299	246	8.924	1.882
Average Loan Balance per Borrower	6914	4268.119	145883.200	245	911.233	1117.733
Average Loan Balance per Borrower to GNI per Capita	6868	1.582	46.806	242	0.585	0.780
Percentage of Women Borrowers	5180	0.619	0.263	191	0.563	0.228
MFI Type-Conventional	7653	1	0	266	0	0
MFI Type-Islamic	7653	0	0	266	1	0

Yield on Gross Loan Portfolio-Real	4293	0.243	0.165	125	0.256	0.129
Operating Expense to Loan Portfolio	5752	0.229	0.445	210	0.358	0.588
Portfolio at Risk>30 days	5846	0.058	0.150	209	0.119	0.403
Write-off ratio	5172	0.014	0.068	186	0.015	0.053
Age-New	7354	0.202	0.401	258	0.248	0.433
Age-Young	7354	0.225	0.417	258	0.287	0.453
Age-Mature	7354	0.574	0.495	258	0.465	0.500
Profit Status (non-profit)	7212	0.592	0.491	260	0.650	0.478
Profit Status (for-profit)	7212	0.408	0.491	260	0.350	0.478
Legal Status-Bank	7587	0.133	0.339	263	0.160	0.367
Legal Status-Credit union	7587	0.181	0.385	263	0.065	0.246
Legal Status-NBFI	7587	0.294	0.455	263	0.270	0.445
Legal Status-NGO	7587	0.342	0.475	263	0.506	0.501
Legal Status-Rural bank	7587	0.035	0.184	263	0	0
Legal Status-Other	7587	0.015	0.123	263	0	0
Region-EAP	7653	0.247	0.431	266	0.120	0.326
Region-EECA	7653	0.370	0.483	266	0.049	0.216
Region-MENA	7653	0.063	0.243	266	0.568	0.496
Region-SA	7653	0.320	0.467	266	0.263	0.441

Note: Legal status: NBFI = nonbank financial institution; NGO = nongovernmental organization. Regions: EAP = East Asia and Pacific; EECA = Eastern Europe and Central Asia; MENA = Middle East and North Africa; SA = South Asia.

The descriptive statistics table suggests that overall there are some differences between Islamic and conventional MFIs, although the differences are generally not too significant or fundamental. This preliminary analysis is consistent with the hypothesis of this study and the existing literature that compare Islamic financial institutions with conventional financial institutions, such as Beck et al. (2013) and Johnes et al. (2013).

Profitability and Sustainability Regression

Sustainability is an important determinant of the performance of MFIs, regardless of their type, governance, age, and location. Relatively weak sustainability indicators (profitability, operational self-sufficiency, or cost efficiency) may result in MFIs having financial difficulties in covering their operational expenses or having less ability to create meaningful impact in poverty outreach. The importance of profit for MFIs has been emphasized by Conning (1999) and Quayes (2012), among others. The results from the first regression on sustainability and profitability of Islamic MFIs are summarized in table 10.5. The results suggest that Islamic

MFIs have lower Return on Assets than conventional MFIs, and their ROA may even be negative. Although the results are not statistically significant, they are consistent when tested with Random Effects.

One contributing factor to lower ROA is the lower Yield on Gross Loan Portfolio recorded by Islamic MFIs, as indicated by negative real Yield on GLP. Lower yield suggests a typical low-end or generic characteristic of Islamic MFIs' products and pricing structure, and at the same time possibly a higher cost structure. All of the Islamic microfinance products are moderately priced, using two type of contracts, for the most part: cost plus mark-up (murābahah) (65.76 percent of products) and "benevolent loans" (qarḍ ḥasan) (24.84 percent of products) (El-Zoghbi and Tarazi, 2013).

Although murābahah is a commercial contract in which Islamic MFIs typically finance the purchase of goods for their poor clients, cash disbursement is normally not allowed with murābahah, unless a special arrangement is made whereby the Islamic MFI delegates the client to purchase goods on its behalf. As a rule, murābahah allows Islamic MFIs to charge a substantial and agreed-upon mark-up on the sales of goods they finance to the poor. However, the mark-up or profit rate is usually modest, unlike the interest rate charged by most conventional MFIs. By contrast, qarḍ ḥasan allows the clients to borrow and receive cash, and Islamic MFIs are entitled to charge minimum and usually fixed administrative fees on every loan. However, as its name suggest, this type of loan will generate a very minimum income for the MFIs and borrowers should be forgiven in the event of default; hence according to El-Zoghbi and Tarazi (2013), qarḍ ḥasan loans are often dispersed as charity funded by charitable sources of funds such, as voluntary donation of the Muslims (zakāt).

Further, Cost per Borrower (Log CPB), Operating Expense to Loan Portfolio, Portfolio at Risk>30 days, Write-off Ratio, and a few control variables (Age, Region) are all negatively and significantly related to the profitability of Islamic MFIs, especially ROA. Cost management is certainly an issue as evident from a positive Log Cost per Borrower. Major cost components for Islamic MFIs are transaction and monitoring costs, which require each field officer to maintain and monitor the loan performance of every client. Transaction costs for most of the commercial-based Islamic financial institutions are high. This cost is much higher for Islamic microfinance institutions because their economies of scale are much lower than commercial Islamic financial institutions (Hosseini et al., 2009). In addition, the cost of monitoring and enforcing contracts is also high for Islamic microfinance institutions (Suzuki et al., 2013), which makes their operational costs higher than the competition.

Table 10.5 Profitability and Sustainability Regression Results

VARIABLES	Return on Assets	Operational Self Sufficiency	Cost Per Borrower
MFI Type-Islamic	-0.014	0.139**	0.419***
	(0.017)	(0.051)	(0.123)

Yield on Gross Loan Portfolio-Real	-0.010	0.013	-0.136
	(0.012)	(0.086)	(0.123)
Log Cost per Borrower	-0.022***	-0.012	
	(0.003)	(0.012)	
Log Number of Active Borrowers	0.000	-0.006	-0.086***
	(0.001)	(0.006)	(0.014)
Average Loan Balance per Borrower to GNI per Capita	0.001*	-0.003	0.072***
	(0.001)	(0.003)	(0.018)
Percent of Women Borrowers	-0.003	-0.175***	0.044
	(0.007)	(0.052)	(0.079)
Operating Expense to Loan Portfolio	-0.048**	-0.012	
	(0.016)	(0.023)	
Portfolio at Risk>30 days	-0.064	-0.053	0.214
	(0.044)	(0.047)	(0.242)
Write off Ratio	-0.291**	0.600	4.634***
	(0.102)	(0.511)	(0.929)
Age-New	-0.030**	-0.051	0.140
	(0.010)	(0.038)	(0.086)
Age-Mature	-0.002	-0.033	0.071
	(0.004)	(0.028)	(0.049)
Profit Status (for-profit)	0.009*	0.037	-0.056
	(0.004)	(0.024)	(0.044)
Region-EAP	-0.049***	-0.030	-1.275***
	(0.007)	(0.036)	(0.063)
Region-MENA	-0.021**	-0.037	-1.071***
	(0.008)	(0.034)	(0.078)
Region-SA	-0.102***	-0.042	-2.440***
	(0.011)	(0.041)	(0.066)
Constant	0.183***	1.428***	6.034***
	(0.019)	(0.105)	(0.145)
Observations	2,006	2,022	2,022
R-squared	0.215	0.016	0.632
Adj. R-squared	0.209	0.009	0.630

Note: EAP = East Asia and Pacific; EECA = Eastern Europe and Central Asia; MENA = Middle East and North Africa; SA = South Asia.

Standard errors in parentheses: *** p<0.001, ** p<0.01, * p<0.05

In general, this study disputes the results of other studies on Islamic microfinance institutions that reported a positive performance of Islamic MFIs, such as a study on a specific country like Bangladesh (Ahmed, 2002).

The second indicator, Operational Self-Sufficiency, indicates that although a higher percentage of Islamic MFIs are nonprofit, they are self-sufficient. OSS for Islamic MFIs is just over 100 percent, which suggest they are fully self-sufficient and all operational expenses are funded internally by the MFIs, either from funding or revenue generated from financing the clients. Finally, Log Cost per Borrower is positive or higher for Islamic MFIs. This may support the conclusion that Islamic MFIs operate with a higher cost structure and are less efficient compared to conventional MFIs, although the result is not significant.

Finally, the regression result of Log Cost per Borrower is positive, as shown in table 10.5. This suggests that the cost to serve one borrower at Islamic MFIs is higher than the same service provided by conventional MFIs. Cost has been identified as a key component of microfinance performance (Cull et al., 2009, Kar, 2011), especially transaction and monitoring costs of reaching out to the poor, providing them with advice, and monitoring their micro-accounts on a frequent basis. The monitoring cost is relatively higher for Islamic MFIs because they must monitor and ensure compliance to regulations and most importantly to shariah regulations or guidelines.

A higher CPB may also indicate that Islamic MFIs have a lower number of clients or number of active borrowers, which could be related to the difficulty in clients' recruitment or more stringent selection of borrowers, as well as the relatively smaller size of Islamic MFIs. Indeed, Log Number of Active Borrowers (Log_NAB) is significantly related to Cost per Borrower, suggesting the Islamic MFIs may have a higher scale of outreach relative to their lower cost position.

However, Islamic MFIs' depth of outreach (or the ability to serve the poorest segment of the poor) is working against their cost performance. Average Loan Size is positively related to Cost per Borrower, which suggests that when Islamic MFIs raise the Average Loan Size, or provide more loans/financing to the better-off poor, the cost will increase. This result is counterintuitive, as the increase in Average Loan Size (serving the better off poor) would be expected to allow MFIs to charge higher rates and would lower default risk, thus reducing CPB. This discrepancy may be explained by a significant relationship of the Write-off ratio to CPB, suggesting that costs are being pushed up by the higher write-off ratio of the outstanding loan portfolio.

Poverty Outreach Regression

Maximizing the outreach of microfinance to the poor is the most important objective of any microfinance program or a microfinance institution. This section examines the regression results on three proxy indicators of the poverty outreach of Islamic MFIs, both in terms of scale and depth of outreach. The results are summarized in table 10.6. Log NAB for Islamic MFIs is positive, which indicates the higher number of borrowers served or "reached" by Islamic MFIs. This result means that Islamic MFIs have been able to increase their services

to higher number of poor customers during the period of this study.

Return on assets (ROA) significantly influences the ability of MFIs to increase their scale of outreach. Thus Islamic MFIs that are currently suffering from a negative ROA, as suggested in the previous section, should consider improving their profitability. This very significant positive relationship between ROA and Log NAB also endorses the argument put forward by the "institutionists," or those who urge MFIs to adopt sustainability approach and not (only) poverty alleviation objectives.

Welfare-oriented institutions operate differently compared to commercially driven institutions. Islamic MFIs, like other Islamic financial institutions, have been mandated first and foremost to serve the needs of Muslim customers in fulfilling their religious obligation to avoid usury. The next objective is to improve the welfare of Muslim communities, who largely live in poverty. One estimate suggests that nearly two-thirds of the world's poor are of Islamic faith. Although the majority of Islamic commercial banks are "allowed" to work with wealthy customers or corporations, they are continuously being criticized for doing so and are often required by regulations to maintain a certain percentage of their financing portfolio for micro, small, and medium enterprises (Dusuki, 2008).

The results that have been presented in this study confirm in part the hypothesis that Islamic MFIs are welfarist organizations: that is, they have higher outreach. As welfarist organizations, Islamic MFIs are more oriented toward socioeconomic—and, to certain extent, socio-religious—objectives. Accordingly, their operations are driven by the objective of poverty alleviation, and not profitability.

Similarly, their negative and significant Log CPB denotes an adverse effect of cost-efficiency to outreach because a negative CPB allows Islamic MFIs to target and serve more poor clients. Finally, age is also influential to the ability of Islamic MFIs to serve the poor; relatively new Islamic MFIs (those in operation for one to four years) have lower NABs, compared to more mature Islamic MFIs that are able to serve more borrowers, and thus have higher NABs.

Table 10.6 Outreach Regression Results

Variables	Log Number of Active Borrowers	Avg. Loan balance per borrower to GNI/Capita	Percentage of Women Borrowers
MFI Type-Islamic	0.457* (0.217)	-0.474* (0.221)	-0.140*** (0.024)
Return on Assets	0.550** (0.168)	0.923 (0.494)	-0.051 (0.053)
Return on Equity	0.006 (0.013)	-0.019 (0.018)	0.004* (0.002)
Operational Self-Sufficiency	-0.042	-0.050	-0.041***

	(0.047)	(0.071)	(0.010)
Log Cost per Borrower	-0.367***	1.061*	-0.001
	(0.048)	(0.414)	(0.005)
Yield on Gross Loan Portfolio- Real	-0.882***	0.362	0.408***
	(0.233)	(0.238)	(0.037)
Portfolio at Risk>30days	-0.316	-0.311	-0.085**
	(0.528)	(0.397)	(0.027)
Write-off Ratio	-0.358	-4.190*	0.033
	(1.462)	(1.858)	(0.150)
Age-New	-0.614***	0.008	-0.022
	(0.112)	(0.194)	(0.017)
Age-Mature	0.704***	0.040	-0.008
	(0.086)	(0.123)	(0.013)
Profit Status (for-profit)	-0.000	-0.069	-0.046***
	(0.073)	(0.131)	(0.011)
Region-EAP	0.554***	0.578	-0.037*
	(0.121)	(0.576)	(0.017)
Region-MENA	1.029***	0.207	0.013
	(0.130)	(0.496)	(0.024)
Region-SA	1.312***	1.951	0.005
	(0.160)	(1.273)	(0.020)
Constant	10.029***	-4.485	0.621***
	(0.296)	(2.311)	(0.037)
Observations	2,469	2,452	2,010
R-squared	0.329	0.101	0.098
Adj. R-squared	0.326	0.096	0.092

Note: EAP = East Asia and Pacific; MENA = Middle East and North Africa; SA = South Asia.

Robust standard errors in parentheses: *** p<0.001, ** p<0.01, * p<0.05

As for the breadth of outreach, the results are mixed. The high scale of outreach does not translate to Islamic MFIs serving more segments of the marginalized in Muslim communities. Average loan balance is the main proxy to measure mission drift; a positive or higher average loan balance indicates a shift or change in focus of MFIs to a better-off group of clients than they normally serve. In nominal terms, most of the MFIs initially provide loans to poor clients ranging from \$100 to \$500 per client per cycle. Likewise, a negative average loan balance suggests the absence of mission drift, as MFIs continue to maintain a smaller loan size for their borrowers/clients.

Gradually, over a number of years, some clients may increase their loan as their microbusiness or financial needs increase. Although graduation is a desired possibility, with the current pricing structure and limitation of products, it may not be efficient for the clients who have become “richer” to continue borrowing from MFIs. Hence, this assumption reinforces the use of Average Loan Size to GNI/capita as a proxy for mission drift. Moreover, the

graduation from microcredit does not happen very often or to every client, as suggested by Ahlin and Jiang (2008). The key to successful graduation is facilitation of simultaneous microsavings as an additional service to the microcredit.

Table 10.6 confirms that evidence of mission drift or a trade-off in microfinance is generally inconclusive. Regression results imply that there is no convincing evidence of mission drift at Islamic MFIs, as shown by negative coefficient for ROA. In addition, the positive coefficient of new MFIs (Age-New) and negative coefficient when the MFIs are more than eight years old (Age-Mature) implies a decline in Average Loan Balance as MFIs mature—thus disproving the hypothesis of mission drift.

Similarly, the negative coefficient for Percentage of Women Borrowers indicates that Islamic MFIs are reaching a lower percentage of women borrowers, which is statistically significant. This result is not surprising because many Islamic MFIs target family as a unit and not necessarily women as their primary borrowers, unlike Grameen Bank and many of its duplicates that serve 100 percent women borrowers. Islamic MFIs generally provide products that meet the needs of the family or loans that support microbusiness done by any members of the family (Ahmed, 2002); thus a lower percentage of women borrowers is foreseeable.

However, the role of shareholders does influence the Percentage of Women Borrowers, as indicated by a positive relationship between ROE and PWB, but interestingly, profitability is not relevant to PWB. This may suggest that donor agencies or government programs may occasionally encourage or request Islamic MFIs to allocate more financing to women borrowers. Another determinant is Yield on Portfolio. A higher positive yield will increase PWB in the portfolio of Islamic MFIs.

Finally, risk of default and profit orientation may hinder the growth of the Percentage of Women Borrowers in Islamic microfinance institutions, as suggested by the negative sign of the measures for Portfolio at Risk and For-profit Status of MFIs. Meanwhile, Age does not seem to be relevant to the Percentage of Women Borrowers in Islamic MFIs.

Based on the relationship between profitability and age of Islamic MFIs with Average Loan Balance and Percentage of Women Borrowers, it could be argued that at best there is no evidence of mission drift among Islamic MFIs, or at worst the regression results are inconclusive on the mission drift question. Overall, the outreach regressions do not entirely confirm the finding by (Mersland and Strøm, 2010) that MFIs may change over time; while at an early stage MFIs focus on poverty outreach, as they get older or bigger they shift away to more profitable financing (and away from women borrowers). However, the results of this study are consistent with Mersland and Strøm (2010) on scale of outreach.

Additional Test: Riskiness from Lending to the Poor

The performance of Islamic MFIs could also be affected by some risk factors, such as Portfolio at Risk and the Write-off Ratio. Table 10.7 summarizes how these risk factors affect Islamic MFIs.

Table 10.7 Regression Results of Islamic MFIs Riskiness (RE)

Variables	Portfolio at Risk >30days	Portfolio at Risk >90days	Write-off ratio
MFI Type-Islamic	0.090 (0.087)	-0.014* (0.005)	0.005 (0.010)
Return on Assets	-0.202*** (0.054)	-0.011 (0.024)	-0.049** (0.017)
Log Number of Active Borrowers	-0.001 (0.003)	-0.001 (0.001)	0.000 (0.000)
Average Loan Balance per Borrower to GNI per capita	-0.001 (0.001)	0.001 (0.001)	-0.000** (0.000)
Percentage of Women Borrowers	-0.033* (0.015)	-0.021* (0.009)	-0.001 (0.003)
Yield on Gross Loan Portfolio-Real	-0.018 (0.016)	-0.035** (0.013)	-0.010* (0.005)
Log Cost per Borrower	0.005 (0.004)	0.003 (0.002)	0.004** (0.001)
Operating Expense to Loan Portfolio	-0.016** (0.005)	-0.003 (0.003)	0.010 (0.009)
Personnel Expense to Loan Portfolio	0.003 (0.010)	0.005 (0.008)	0.002 (0.004)
Age-New	-0.027* (0.012)	0.010 (0.007)	-0.010*** (0.003)
Age-Mature	0.009 (0.010)	-0.002 (0.004)	-0.001 (0.002)
Profit Status (for-profit)	-0.001 (0.005)	-0.006 (0.004)	-0.003* (0.001)
Region-EAP	0.017 (0.016)	-0.002 (0.007)	0.001 (0.003)
Region-MENA	-0.017 (0.031)	0.006 (0.008)	0.006 (0.005)
Region-SA	-0.001 (0.024)	0.010 (0.010)	0.005 (0.005)
Constant	0.069* (0.028)	0.059*** (0.017)	-0.003 (0.006)
Observations	2,042	2,180	2,056
R-squared	0.041	0.020	0.079
Adj. R-squared	0.034	0.013	0.073

Standard errors in parentheses: *** p<0.001, ** p<0.01, * p<0.05

Note: EAP = East Asia and Pacific; MENA = Middle East and North Africa; SA = South Asia.

First, Islamic MFIs seems to have a relatively higher Portfolio at Risk, with positive coefficients of PaR>30days. However, this higher rate of Portfolio at Risk is only temporary; it does not translate into positive or higher PaR after 90 days, suggesting a lower incident of default among Islamic MFIs.

Secondly, the age of MFIs does contribute to portfolio quality, as indicated by negative coefficients for new MFIs (Age-New) and positive coefficients for mature MFIs (Age-Mature). New Islamic MFIs have a significantly lower Portfolio at Risk and Write-off Ratio than older or mature Islamic MFIs. This suggests that as the Islamic MFIs become more established, their portfolio quality deteriorates, as revealed by positive coefficients of portfolio quality indicator. This finding is consistent with studies on the business cycle of microfinance, such as Hollis and Sweetman (2001) and Wagner (2012) .

Finally, the results for the portfolio quality regression are not very clear as to the effect of commercialization. As expected, sustainability indicators are negatively related to portfolio quality indicators, indicating a sensible approach of the MFIs to reduce outreach and increase profitability. However, the coefficients for outreach (depth and breadth) are not conclusive; breadth of outreach (Log NAB) is negatively related with most indicators, while depth of outreach (Average Loan Size to GNI/capita, and Percentage of Women Borrowers) is inconsistent. Positive coefficients for all outreach indicators, coupled with negative sustainability indicators, could imply that commercialization (MFIs reducing outreach and increasing profitability) does have an impact on portfolio quality. As the results did not indicate this to be the case, such a conclusion cannot be drawn from this study.

Conclusion

This study assesses the performance of Islamic MFIs against conventional microfinance institutions, and looks for evidence of a trade-off between performance and outreach in the Islamic MFIs. The study finds that there is a negative relationship between the type of MFIs and the profitability indicator, and a significantly positive relationship between the type of MFIs and the other two key indicators of operational sustainability and cost structure. Similarly, using outreach indicators, there is evidence that Islamic MFIs have served their poverty outreach objectives, especially in terms of scale of outreach, with a higher number of active borrowers, and also in terms of the depth of outreach, as indicated by lower average loan size—but unfortunately, the percentage of women borrowers is lower.

This result is not unexpected. By their nature, Islamic MFIs should be able to deliver the socioeconomic objectives of poverty alleviation and at the same time meet financial objectives of profitability and sustainability. It is evident that Islamic MFIs have achieved the first objective (poverty outreach), but not the second one (profitability). The results from this analysis have some limitations, mainly the smaller number of Islamic MFIs in the dataset (only 3 percent); this may have affected the quality and strength of the analysis and this research.

However, as the Islamic microfinance industry is steadily growing and more data becomes available, we would hopefully be able to revisit this analysis at a later stage and compare results. As for the current paper, the results are consistent with existing literature and support the hypothesis that Islamic financial institutions serve not only commercial purposes but also socioeconomic objectives: that is, that they are pro-poor.

As for strategic and policy implications, Islamic MFIs need to carefully consider their business model and choice of profit orientation status. This research has identified a few areas of concern: namely, lack of cost efficiency and weak profitability performance, despite intensive outreach. Lower percentage of women borrowers is also an important drawback that needs to be addressed. While targeting family has its merit, however as many studies have suggested, higher percentage of women borrowers is associated with lower risk profile, high repayment rate and better financial performance.

The nominal or actual number of poor people reached by Islamic MFIs is also far less than conventional MFIs, given the size of the latter and their stronger capital base. This is a good reason for Islamic MFIs to grow in size and outreach, and eventually have a real impact on poverty alleviation. For now, some of the encouraging performance measures, such as Operational Self-Sufficiency and Number of Active Borrowers, should be used as stepping stones for achieving sound double bottom lines because the gold standard for MFIs is achieving both financial/commercial soundness and at the same time meeting social objectives of poverty alleviation.

Annex 10A Microfinance Institutions in Countries with Islamic MFIs

No.	Country	Conventional	Islamic
1	Afghanistan	105	21
2	Bangladesh	494	18
3	Indonesia	314	27
4	Iraq	35	25
5	Jordan	71	17
6	Kosovo	102	3
7	Kyrgyzstan	230	10
8	Lebanon	30	16
9	Malaysia	0	5
10	Pakistan	238	31
11	West Bank and Gaza (Palestine)	30	53
12	Sudan	0	12
13	Syria	17	5
14	Yemen	30	23
	Total Observations	1,696	266

Source: Author's estimate based on MIX Market database

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CHAPTER 11

WOMEN'S PARTICIPATION IN ISLAMIC MICROFINANCE IN BANGLADESH AND THEIR ROLE IN SHARED PROSPERITY: AN EMPIRICAL ANALYSIS

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Abstract

In Bangladesh, women make up around 50 percent of the total population of 170 million. The vast majority of Bangladeshi women, especially rural women, were outside the economy until a microfinance program was developed; they could not make a formal financial contribution to their family, as well the country's economy. To enable them to share prosperity, as well as to help alleviate poverty, Nobel Laureate Muhammad Yunus pioneered the concepts of microfinance and microcredit in the mid-1970s. Although this approach has improved the livelihoods of the rural poor, the interest rate is exorbitantly high and the model is completely based on interest, which is prohibited in Islam. To address these issues, Islami Bank Bangladesh Limited (IBBL) launched a shari'ah-based microfinance program named the Rural Development Scheme (RDS) in 1995, aimed at improving the overall socioeconomic status of the rural poor. Currently, some 600,000 microfinance group members, 90 percent of whom are female, are involved in this Scheme. This chapter presents findings of a study using 250 responses in a sample survey of clients of the Rural Development Scheme. The study used economics and econometrics to analyse many facets of the RDS, and concludes that female clients are successfully contributing to their household income, expenditures, and employment, and the scheme was contributing to shared prosperity. Clients also stated that the microinvestment helped them pursue their self-employment and income-generated activities more efficiently, and helped reallocate expenditures and savings within the household to make it more prosperous. Moreover, the RDS model of Islamic microfinancing is founded on the basis of ethical responsibility while promoting economic justice. The study finds that the Islamic microinvestment program appears to spur more ethical and economically desirable behaviour, leading to poverty alleviation. This Islamic microfinance program also provides interest-free loans (qard hasan) to the poor to ensure pure drinking water and sanitation. The program has been replicated in other rural areas of Bangladesh, but outreach to the extreme poor has been very limited. Therefore, the study recommends that this program be extended to the extreme poor, and especially to widowed and divorced women of Bangladesh, in order to share prosperity.

Keywords: Islamic microfinance and impact, Shared prosperity, Rural development financing, Bangladesh

Introduction

Women have been marginalized for millennia in many parts of the world. They are rarely independent in terms of finances and decision-making process and often they are among the most vulnerable (Zoynul and Fahmida 2013). While women make up around 50 percent of the world's population, about 70 percent of world's poor are women (Noreen 2011). In the developed world, women's contribution is immense in different aspects of development. But in the developing world, especially in Muslim majority countries, they have very limited access to trades, industrial institutions, educational services, and health care. Politics and policies that discriminate against women lead to lower family well-being that retards the progressive goals of the country and holds back women (Parveen and Chaudhury 2009). Because of gender-based discrimination and socially constructed subordination, women have an inferior status everywhere in the world, in all aspects of life: political, economic, familial, and social. Their occupational choices are narrower, they earn less than men, and they must struggle to reconcile activities outside the home with their traditional roles. This experience is rooted in the failure to value women for anything other than their reproductive role.

Grameen Bank founder Muhammad Yunus argues that in developing countries, economic development cannot occur unless and until the socioeconomic status of the poor is improved. Women's situation in developing countries is worse than that of men. That is why some of these countries have undertaken poverty alleviation programs for both women and men. Perhaps the most important benefit of economic development for poor women is that it leads to opportunities for self-employment through microentrepreneurship, as opposed to wage employment. The challenge is to develop entrepreneurship and to generate enough productive employment and income opportunities for the poor, and for women in particular. Bangladesh has 170 million people, and more than 35 percent of them still live in extreme poverty (Zoynul and Fahmida 2013). About half the country's population lives below the poverty line, and 80 percent of the extreme poor live in rural areas (Ahmed 2004). In the past two decades, women have faced many constraints on employment that sometimes oblige them to join the labor market under very harsh conditions.

With the idea of alleviating poverty, especially among women, microcredit was developed. This collateral-free institutional loan system has come a long way since it was pioneered by Professor Muhammed Yunus in 1974 in Jobra, a village in Chittagong, Bangladesh. Currently, in its wider dimension, microcredit is known as microfinance and is seen as a legitimate economic tool in the fight against poverty.

The strength of microcredit in its capability to systematically integrate inactive women into the productive workforce, and give them the opportunity to prove their creditworthiness (Chavan and Ramakumar 2003). It is estimated that 25 million people worldwide are now using microcredit to undertake income-generating or self-employment activities; of these, 90 percent are women (Chavan and Ramakumar 2003). The total coverage of microcredit programs in Bangladesh is approximately 13 million households (Ahmed 2004), which is almost half of the total clients of microfinance globally. Microcredit has generated employment for women living in marginal areas, where the majority of such activities as

managing crops, livestock, and fisheries, fuel for cooking as well as domestic chores such as cleaning, cooking, child care, and fetching water. In addition to providing credit, all such institutions also provide training in developing skills and improving the ability of the poor to be self-employed.

Unfortunately, all these institutions provide interest-based credit and the rate of interest is often exorbitantly high, commensurate with the risks of microfinance lending. The interest rates for institutional sources vary from 15 percent to 18 percent. Interest rates for the no institutional sources range from 33 percent to 120 percent and can be as high as 120 percent to 140 percent (Mahmood 2006). Women may suffer because they are forced to sell assets or go hungry in order to raise the money to repay this high level of interest. Microfinance, employment of women, and ultimately, and household welfare.

In addition, hardly any microcredit institutions care about the ethical and moral development of the rural poor, to change their behavior to promote a disciplined approach to economic activity. Ethics, morals, and business behavior are interrelated; a disciplined approach—grounded in ethically consistent behavior—is needed for the sound economic management of households and businesses.

A developing country like Bangladesh, the third largest Muslim country in the world by population, has been fully dependent on interest-based microcredit. To address this issue, Islami Bank Bangladesh Limited (IBBL) launched the Rural Development Scheme (RDS) in 1995. Its main objective is to alleviate rural poverty by providing shari'ah-based microinvestment finance to the agricultural and rural sector to generate employment and raise the incomes of the rural poor. The scheme also provides welfare, moral, and ethical services to the rural populace. Currently, the scheme is being implemented through 129 branches covering 10,023 villages in 60 districts. Some 650,000 group members are covered: 90 percent are women. Besides IBBL's RDS program, Muslim Aid and some other Islamic nongovernment organisations (NGOs) also use Islamic microfinance to promote entrepreneurship as a tool to combat poverty.

The success of microfinance institutions (MFIs) in alleviating poverty has supported the development of faith-based microfinance institutions, including Islamic MFIs. It is generally understood that Islamic microfinance entails the provision of financial services to customers with low income levels without charging interest or *ribā* (Ahmed 2002). Thus this program targets people with low income who lack access to the formal lending system.

These institutions also integrate Islamic social charitable funds such as *zakāt*, *waqf*, and *qarḍ ḥasan* benevolent loans that do not need to be repaid as their sources of funding. This enables Islamic MFIs to distribute funds to the poor community (Obaidullah and Khan 2008; Ahmed 2002). RDS has extended *qarḍ ḥasan* to its clients to establish tube-wells to access pure drinking water and to construct sanitary latrines to safeguard their health.

Because of the distinctive characteristics of Islamic MFIs, Ahmed (2002), (Obaidullah & Khan, 2008), (Abdul Rahman, 2007) argue that Islamic MFIs can perform better compared

to conventional MFIs. Researchers argue that the Islamic teachings that Islamic microfinance institutions build upon improve solidarity and social capital among the clients. This allows them to be better debtors since repayment is considered a religious obligation. As a result, improvements in the profitability and viability of Islamic MFIs are ensured. That is, Islamic social capital increases the productivity of employees of the clients business (thus reducing costs), and at the same time, it reduces the default rate of the clients and also MFIs don't have to monitor their clients as carefully as conventional MFIs, since Islam places such a strong emphasis on contracts and social solidarity (Ahmed 2002).

Despite these claims, to the extent of this author's knowledge, there has been very little research to rigorously assess the impact of Islamic microfinance on clients, particularly in terms of poverty alleviation and women's participation in the family's prosperity. Therefore, this study has undertaken to assess the impact of Islamic microfinance on poor clients' income and livelihood, with special emphasis on women's contribution to shared prosperity, as well as the ethical and moral changes in clients, and their impact on their income and livelihood.

This study has also tried to confirm or refute a positive link between Islamic microfinance and the socioeconomic well-being of women and to explore the context in which Islamic microfinance programs function in Bangladesh and the way their performance can be improved.

In view these two aims, the study address two main research questions: First, how does the provision of Islamic microfinance affect the welfare of clients, particularly women, and their households], either positively or negatively? Second, under what conditions could Islamic microfinance be more beneficial?

Literature Review of Microfinance Impact Evaluation

This study reviewed impact assessments of Islamic microfinance contribution to shared prosperity, the importance of women in the family and society, and the development of ethics and morality through Islamic microfinance and its impact on prosperity. This literature review has also shed light on the success and advantages of Islamic microfinance compared to its conventional counterpart.

There are two types of microfinance institution in the Islamic countries in the world, the conventional microfinance and Islamic microfinance (Microfinance Gateway, 2015). Islamic and conventional microfinance both have a social goal to fight poverty, support entrepreneurship, but Islamic microfinance mixes both Islamic and conventional microfinance finance and the Islamic finance is the financial system which is based on Islamic law called Sharia (Clarke M, 2013).

Conventional Microfinance

Microfinance is very small loans for poor borrowers with little or no collateral, it is a facilities of financial services and a movement for households with low-income to have permanent chance and access to financial services activities to generate income, build assets,

stabilize consumption, and protect against risks as well (Microfinance Gateway, 2015).

Microfinance programs target women, among the most vulnerable members of society, arguably, the disabled and chronically ill are more vulnerable, as are members of certain castes and other marginalized groups who suffer pervasive ethnic, religious, racial, or other forms of discrimination. Qualify this statement by adding the word among who live within households with very few assets. By providing them opportunity for self-employment or other income-generating activities, these programs can improve women's security, autonomy, self-confidence, and status within the household, which in turn improves their empowerment.

A number of impact assessments of microfinance programs have been conducted in various countries. A pioneering study was conducted by Hossain (1988) in Bangladesh, which established the positive contributions microfinance can make in alleviating poverty and improving the living standard of clients. However, these findings were challenged by Morduch (1998), who claimed that the potential impact of microfinance is associated with a reduction in vulnerability, not poverty. PKSf (2005) studied the impact of microcredit on the members of partner organizations of the Palli Karma Sahayak Foundation (PKSF) in Bangladesh and found that absolute poverty was reduced by 9 percent from 1991 to 2000, while moderate poverty declined by 5 percent from 2000 to 2004.

Rahman and Khan (2007) found that provision of microfinance in the form of collateral-free loans is an effective mechanism for poverty reduction, to improve health, education, legal rights, sanitation, and other living standards. Zaman (2001) also reported these findings which were also supported by Morduch (1998). Chowdhury, Ghosh, and Wright (2005) support the positive view of the impact of microfinance on either poverty or vulnerability.

Pitt, Khandker, and Cartwright (2003) concluded that women's participation in microcredit programs helps increase women's empowerment in Bangladesh. It helps women assume a greater role in household decision making, increase their access to financial and economic resources, extend their social networks, improve their bargaining power with respect to their husbands, and increase their freedom of mobility. Microcredit to women also tended to increase spousal communication in general about planning all family's issue and parenting concerns. On the other hand, microcredit to men had a negative effect on several areas of women's empowerment, including physical mobility, access to savings and economic resources, and power to manage some household transactions.

Nessa, Ali, and Hakim (2012) found that microfinance not only improves the earning sources of rural and poor women but also enhanced their abilities, choices, and self-determination in decision making. They studied five dimensions of decision making: household, economic, freedom of movement, property, political, and social. They found a significant increase in all five dimensions due to the effects of microfinance. A similar study conducted by Parveen and Chaudhury (2009) found that microfinance to women reduced gender discrimination, alleviated poverty, increased the exercise of power within the family, and boosted day-to-day self-reliance. By contrast, Garikipati (2010) studied the empowerment of women at the family level and concluded that although the loans benefit the household, they do not necessarily

increase women's empowerment.

In a study focusing on gender discrimination in developing countries, Loro (2013) showed that the rank and supremacy of women had been enhanced significantly since the time that NGOs have launched their activities in developing nations. Loro found that microfinance loans have increased women's self-esteem and self-respect and thereby empowered them. In addition to enhancing the social status of women, microcredits is often economically beneficial, Loro found.

Sanyal (2009) suggests that women's membership in microfinance groups may improve their individual capacity and help reduce the domestic violence. By contrast, Mahmud and others (1996) claim that microcredit increases household violence and imply that it may have a detrimental effect on the women's position within her family and community.

In Pakistan, Nawaz, Jahanian, and Manzoor (2012) found that women have become empowered at the personal, economic, and family levels after using microcredit in various income-generating activities. Empowerment of women at an economic level drives further empowerment in other levels.

In India, a study found that microfinance had a positive impact on women members (Das 2012), Sarumathi and Mohon (2011) found that microfinance can reduce poverty and improve the capacity of rural women.

In Bosnia, Tsilikounas (2000) found positive influence of microfinance services on the improvement of household well-being and clients' business. A similar result was also found by Woller and Parsons (2002) in Ecuador and by Aroca (2005) in Brazil.

In Africa, positive impacts of microfinance services were found by Nelly and Lippold (1998) in Mali; Barnes (2001) in Zimbabwe; Afrane (2002) in South Africa; and Athmer and Vletter (2006) in Mozambique. While Copestake (2001) found positive impacts in Zambia, the study also found that microfinance institutions in this country are not directed to the poorest of the poor. Micro-finance models have spread worldwide, especially to developing countries that are battling with poverty - including Uganda. Micro-finance is being regarded as a window of hope for alleviating poverty and thus enhancing development. This is particularly done by development agencies, who largely trail economic development. Micro-finance can be seen as a means to "killing two birds with one stone" (Lakwo, 2006), as it is claimed to be able to facilitate poverty reduction as well as enhancing women's empowerment.

However, all of these studies only assessed the impact of interest-based microcredit programs, and always found mixed results. Despite all the positive outcomes of microfinance, some observers claim that the rate of interest imposed by conventional microcredit is too high to bring any positive changes in the lives of women. Others point out the high administrative expenses of conventional microfinance institutions. Furthermore, some critics note that the success of microfinance is usually evaluated from the lender's perspective, not the borrowers.

In conventional microfinance, women borrowers often work as collection agents for their

male partners, who then usually direct the credit toward their own personal uses, leaving the women burdened with credit risk. Accordingly, women are pushed into an informal unpaid economic system because their male partners use the credit money to satisfy their own interests. Therefore, this study also reviewed some impact study literatures of Islamic microfinance, which has developed in a shari'ah-compliant manner and often gives women special emphasis in utilizing their investment.

Islamic Microfinance

Islamic microfinance is especially important for women. Not only is it collateral free, but programs are increasingly targeting women for several reasons. Because women's repayment rates are much higher than men, microfinance to women is more cost-efficient. Because women have less access to productive employment in developing countries, microcredit to women is more equitable. Because women invest largely in their children and households, loans to women engender a multiplier effect that improves the effectiveness of the funds.

The provision of different types of Islamic microfinance is supported by different developmental agencies and groups of experts, each according to its own ideology according to various priorities. First, the proponents of the view that development should serve people argue that Islamic microfinance puts people at the heart of the process of development and the policy-making process. Second, the advocates of women's rights believe that Islamic microfinance empowers women since it promotes women's development, while focusing on eliminating gender discrimination. Third, the poverty reduction approach encourages the provision of Islamic microfinance because it empowers the poor, making them economically independent and less vulnerable when facing economic crises. Finally, economic growth experts favour Islamic microfinance because it promotes the development of the least advantaged and least developed regions, promoting growth over the long term.

The top three countries in the world that deal in Islamic financing comprise of Indonesia, Bangladesh and Afghanistan. These countries account for 80% of the global outreach of Islamic microfinance (CGAP, 2008). In Yemen, the conservative Muslim country surrounded by many economic and political problems, the poverty rate has exceeded more than 54% in 2012 and unemployment percentage reached around 45% (World Bank, 2014).

Widyanto and Ismail (2006) found positive impacts of Islamic microfinance, concluding that the amount of financing and demographic variables such as formal education, marital status, and business experience significantly affect the improvement of business assets, business income, and productive assets. However, this study provides no information associated with the specific characteristics of Islamic microfinance that can be used to assess its additional impact on microfinance clients.

Ahmed (2007) and Obaidullah and Khan (2008) showed the significance of Islamic microfinance as a tool to boost economic growth, to counteract the effects of economic instability, and to empower women. The study found that when women, who would otherwise stay at home and dedicate their time to reproductive and household tasks integrate into the

labor market, new windows of opportunity emerge for them.

Osmani (2007) identifies two ways through which empowerment of women due to microfinance can take place; one is through the household and the second one through mingling. While household activities women usually perform are essential, they do not bring them much prestige and recognition as earning of cash income (Osmani, 2007, p.696). That is why the contribution of cash to the household is supposed to give women greater power in decision making.

The concept of empowerment is also central to the rationale of directing Islamic microfinance to women. With respect to women's rights, it champions the capacity of women to undertake new economic activities. With respect to combatting poverty, empowerment is defined as the process of giving more power to the poor without any consideration of age, gender, or ethnicity in order to enable them to benefit from the fruits of development.

Women face additional obstacles since lack of experience and illiteracy make it difficult for them to deal with formal credit services (Endeley and Thompson, 2005). As an answer to these problems the concept of microfinance emerged. The initiative started in a developing country, in Bangladesh, as a response to the failure of the conventional development strategies that emphasise large-scale interventions and the changing economic conditions (Islam, 2006). Microfinance services, especially microcredit, focus on small loans provided to the poor and have been promoted "to address the concerns and needs of poor households that markets and governments fail to adequately meet" (Swain et al., 2008).

The study concludes that during economic recessions, when unemployment is rising, if the main breadwinner of a family is unemployed or the households' income falls, another member of the household seeks employment to counteract the decline in the household's total welfare. This empirical finding gains more importance in the context of the absence of adequate social security schemes.

Ethics and morality have become important issues in business and management studies. In business and management literature specific to entrepreneurship, studies conducted by Mardhatillah and Rulindo (2007, 2008) show a relationship between the level of spirituality and the performance of Muslim microentrepreneurs. Some studies also point out the relation of religiosity to economic growth. Galbraith and Galbraith (2007), for instance, hypothesize a direct relationship between religious attitudes and both economic growth and entrepreneurial activity.

Although many studies have assessed the impact of microcredit around the world, most of them examine conventional microfinance institutions. The few impact evaluations of Islamic microfinance programs in some countries, including Bangladesh, have had a narrow focus. None of the studies on Islamic microfinance has looked into women's contribution to the prosperity of their families as well as their country. Therefore, this study assessed women's participation in Islamic microfinance and their role in shared prosperity using cross-sectional data applying modern econometric, statistical, and economical techniques. The study also assessed the impact of clients' ethics and morality on the prosperity of the women and also

the prosperity of their household.

An Overview of Microfinance in Bangladesh

Microfinance had its start in Bangladesh in the mid-1970s, when Professor Mohammed Yunus launched a pilot experiment in the village of Jobra in Chittagong. In the 1980s, many NGOs launched microcredit program following the model of the Grameen Bank. The establishment of a wholesale fund the Palli Karma Sahayak Foundation (PKSF), an apex organization, in 1990 contributed significantly to the expansion of microcredit programs in Bangladesh in the 1990s.

In 1995, Islami Bank Bangladesh Limited (IBBL) launched a shari'ah-based microfinance program named the Rural Development Scheme (RDS). This Scheme aims to alleviate rural poverty by providing small and micro investments to the agricultural and rural sector to generate employment and raise the income of the rural poor. The scheme also provides welfare, moral, and ethical services to the rural people of the country.

In 2006, the Microcredit Regulatory Authority (MRA) emerged as the regulatory watchdog to monitor and supervise microfinance operations of microfinance institutions that are NGOs. A license from the Authority is mandatory to carry out microfinance operations in Bangladesh. As of December 2015, 945 NGO-MFIs were licensed by MRA.

Currently, microfinance is entering into a new and dynamic phase. New dimensions of microfinance include the launching of initial public offerings (IPOs), innovation in mobile services, and channelling remittances through microfinance institutions using the latest communications technology.

Microfinance is rapidly shifting from a niche product to a globally recognized form of finance and is becoming more sophisticated and diverse. The Bangladesh microfinance sector is mature now. Its assets constituted around 3 percent of GDP in 2010.

How the Rural Development Scheme Works

Two Islamic microfinance strategies coexist to address the needs of two different targeted groups. The first strategy, the protectionist or survival strategy, aims at very poor recipients, for whom survival is the main concern. Small loan amounts are offered, allowing them to address the very urgent and basic needs of consumption through very modest economic activities.

The second strategy, the promotional strategy, targets less poor recipients. The loan amount is higher, permitting substantial investment in income-generating activities. IBBL's Islamic microfinance program, the Rural Development Scheme (RDS), follows this approach.

The target group studied Islamic microfinance, named as RDS, includes destitute women and distressed people, households with 0.50 acres of land either owned or hired for farm activities, or households involved in very small off-farm activities in rural areas. The studied Islamic microfinance in Bangladesh reach only those households having at least 0.50 acres

of land and including members with the capacity to work, but not the extreme poor or poor single women, whether widowed or divorced.

These microfinance activities are concentrated in different locations. Each location comprising the groups of the members there are a centre and the groups of that locations are considered to be the member of that centre. Participants in the Scheme are organized into groups, which are homogenous and self-motivated. The Islamic microfinance group members are required to save at least Tk 10 per week in their savings account at the IBBL. Each group members must contribute Tk 2.00 per week to the centre fund to maintain the expenditure of that centre. Instalments are fixed and paid on a weekly basis. Field officers collect instalments, personal savings to be deposited, and contributions to the centre fund in the weekly centre meetings. This scheme has been implemented since 1995 by IBBL branches all over the country. Currently, there are 650,000 clients across the country, of which 90 percent women and 10 percent are men (IBBL 2014).

The branches of Islami Bank Bangladesh Limited are responsible for implementing the Scheme. Investments in specified sectors are made in four modes: bay' mu'ajjal (credit sales), bay' murābahah (mark-up sales), bay' al-salam (forward sales), and Hire Purchase under shariat al-milk or ijārah (leasing). IBBL's Rural Development Scheme charges a rate of profit of 10 percent of the investment amount. Timely repayment is encouraged by offering a 2.5 percent rebate. The investment recovery rate of RDS is 99.57 percent.

The Islamic nature of the RDS activity is controlled and monitored by IBBL's shari'ah department and shari'ah board, comprising renowned Islamic scholars of Bangladesh, and headed by the Khatib of the Central Mosque of Bangladesh.

In addition to financial activities, this Scheme has a special focus on contribute to the ethical and moral development of its clients. Field officers hold weekly meetings with all the group members and discuss moral and ethical development-related religious issues on the basis of Qur'an and Sunnah. Clients are also urged to practice all religious rituals, which are also monitored through their weekly meetings.

Women's Empowerment for Well-being or Prosperity

In general, well-being in the context of women's empowerment refers to women's contribution or share to their family's prosperity and ownership like control of their lives through expansion of their choices (Kabeer 2001). Women's empowerment refers to women's freedom to make choices, participate in decision making, lead their lives, and control assets, which enables them to contribute to their household's prosperity.

The empowerment of women is also an important precondition for the mitigation of poverty and the maintenance of human rights and basic needs, particularly at the individual level, as it helps construct a base for social mobility (DFID 2006).

While women's empowerment is generally undertaken to improve the condition of women, it may also be applied to any underprivileged part of society to bring it to the same level as

advanced parts of society. In the context of Bangladesh, well-being or prosperity of women means that women have to opportunity for self-developed, and have access to domestic and community resources, opportunities, and power (Kumar, Hossain, and Gope 2013).

There are three approaches to improving women's prosperity or well-being. The first is through social mobilization and collective action because poor women lack the essential capabilities and self-assurance to challenge existing disparities and barriers. Second, the process of social mobilization needs to be accompanied and complemented by economic security (UNDP 2001). Third, and most basically, women's well-being or prosperity as human beings is improved if they have fundamental basic rights such as food, shelter, medicine, and education; have opportunities to develop financial strengths and be involved in decision making from the family to the state level; and are not subject to any violence or discrimination as females.

Bangladeshi society is a glaring example of the lowered status of women, as well as of all sorts of gender-based segregation. More than 60 million people of Bangladesh live below the poverty line; three out of four (74 percent) are female (Khandkar, et. al., 1998). The situation of rural women is even worse. Most rural women are deprived of ways to fulfil their basic needs. They become the victims of acid throwing and are controlled by dowries. They suffer from high rates of mortality, malnutrition, and illiteracy. Against this backdrop, the Bangladesh economy in general is characterized by an unfavourable distribution of land per capita, low per capita income, glaring and widening income disparities, a high level of unemployment and underemployment, low productivity, and persistently high levels of poverty and deprivation.

There is a dire need to let women raise their voice regarding human rights and sociocultural and economic issues, and participate in decision making. One of the best ways of enabling women's well-being is access to credit, so that they can start to earn money.

Starting in the mid-1970s, Grameen Bank led the way in considering the role of creating self-employment opportunities, generating self-confidence, and increasing awareness of their financial and economic possibilities of women in Bangladesh. Today, hundreds of microcredit providers of different sizes operate throughout the country. Most are in rural areas, but some are in urban areas. The large ones include Grameen Bank, BRAC, ASA, and PROSHEKA. IBBL's RDS is one of the few operating in a shari'ah-compliant way, which suits the focus of this study, which assesses whether such a scheme can contribute to women's prosperity in Bangladesh.

Research Methodology

The study covered the RDS initiatives in the Savar and Amin Bazar areas of the Dhaka district. Semi-structured in-depth interviews and focus group discussions with microfinance clients were held. Both primary and secondary data were used. Primary data were collected by interviewing selected clients. Clients were selected through a stratified random selection method. Secondary data were collected from various books, journals, websites, and reports.

Factors to Assess the Impact of Islamic Microfinance on Women's Well-being and Contribution to Shared Prosperity

The techniques and variables used to assess the impact of Islamic microfinance and women's contribution to their household's prosperity are discussed next.

Factors affecting the impact of microfinance

In choosing participants, the RDS considers potential clients' age, education, size of land holdings, and experiences carefully because their ability to make good financial, investment, and business decisions may largely be influenced by such factors. Household assets also help increase their earnings. It is difficult for poor households to hire labor to work on income-generating activities. Thus, they largely depend on family labor. Through the microcredit program, they have the opportunity to utilize their manpower for productive purposes. The rural poor have very limited access to infrastructure such as rural markets and roads. This hampers their economic activities. Access to infrastructure facility and its proper utilization will increase the ability of rural poor to pursue income-generating activities.

Beside income, other factors are related to the borrowers' well-being. It is imperative to enhance human capital. Therefore, RDS provides training and informal education to borrowers, with the aim of enhancing their level of skills in performing income-generating activities.

There are two different methods to measure the socioeconomic impact of microfinance (Cerrutti 2000). The first, the welfarist approach, focuses on improvements achieved by microfinance on recipients' well-being. The second, the institutionist approach, highlights the practical/institutional aspects of microfinance: specifically, the financial sustainability and outreach of microfinance programs (Chaves and Gonzalez-Vega 1996; Buckley 1997). This study is guided by the welfarist approach.

Sources of Data

Quantitative as well as qualitative methods were employed. While more emphasis was given to the quantitative method, qualitative analysis was used to supplement the quantitative approach. Relevant research literature such as books, brochures, articles, and reports on the issues and roles of microcredit and women's empowerment were reviewed. Focus group discussions and in-depth interviews were conducted to assess the areas and extent of empowerment resulting from the intervention of microcredit and identify the challenges and problems faced by the clients.

The impact of Islamic microfinance (through the RDS) on clients' livelihoods was a major interest. Thus an assessment was made comparing clients' current position (December 31, 2012) to their base at the time of becoming member.

The primary data were directly collected during first quarter of 2013 from the two study areas (Amin Bazar and Savar). RDS had served both areas for more than 10 years. From the

list of all clients in the study areas, a second list was prepared from both areas consisting of the clients who had been members for at least three years. It was assumed that without at least three years' involvement with microfinance activities, an impact assessment would not be feasible. From the second list, a third list was prepared separating male and female clients, to aid the comparison of the women's performance against their male counterparts. From these lists, a total of 250 clients (100 women and 25 men from each location) were selected through purposeful networking sampling.

To obtain accurate data, a set of semi-structured and pretested questionnaires were prepared. SPSS software was employed for data entry and to assess the results. The resulting data were then analysed and interpreted.

To gain further information, a focus group discussion (FGD) method was also applied. The participants were allowed to discuss and debate an issue or a selection of issues related to the research questions. Rather than being a simple question-and-answer session, the discussion aimed to capture information regarding the ideas and opinion of the group with respect to various issues.

The Study's Models and Estimations

This study aimed to assess the impact of Islamic microfinance on the income and contribution of women to their own and their household's socioeconomic well-being in Bangladesh in terms of income, possession of assets, schooling of sons, schooling of daughters, health, pure drinking water, sanitation women's role in family decision making, expenditures on guest entertainment and harmonious family relationships. This study also explored the context of Islamic microfinance in Bangladesh and identified ways to improve its performance. No hypothesis was mathematically tested. Instead, various econometric techniques were used to assess the specific impacts of the Islamic microfinance program and how ascertain this program can be more beneficial for the women were assessed.

Regression analysis of cross-sectional data was the main method used. This was supplemented by interviews with field officers of the RDS and discussions with Bangladeshi specialists in this area.

Model Specification

The models used in this study were based on a review of other models. Various techniques, including Descriptive Analysis, Ordinary Least Square (OLS), Weighted Least Square (WLS), Linear Programming (LP), and Simultaneous Equation Systems (SES), have been used to estimate the effect of microcredit on various outcomes, such as income, consumption and saving.

Khandker (2000) used a conditional demand equation to assess the effect of microcredit on the economic outcomes, such as saving. The equation, which uses Ordinary Least Square (OLS), with a log in both sides, is as follows:

$$\dots\dots\dots (11.1)$$

where

SI = size of investment (credit) taken by the borrower,

Y = household income

Xij = independent variables

= constant, and = coefficients to be estimated, = error component in the equation,

This study used OLS regression to assess the effect of microcredit on the dependent variables such as income, savings, and expenditure. The model specification is presented in equations 11.2 and 11.3.

Household Income Model

The study used the following household income model:

$$(11.2)$$

where

Y = change in annual household income, computed as 2012 income minus income the year clients joined RDS

SI = Size of Investment made by the borrowers in 2012

TLS = Total Land Size

FMIGA = number of Family Members engaged in Income-Generating Activities

AGE = Age of the borrowers dummy (1 = more than 40 years; 0 = otherwise)

EDU = Education dummy (1 = up to 5 years of schooling; 0 = otherwise)

EAMC = Ethics and Morals of the Clients dummy (1 = 70 percent or above; 0 = below 70 percent)

GEND = Gender of the clients dummy (1 = female; 0 = male)

= constant, and = coefficients to be estimated, and = error term.

Estimation of Well-Being Based on the Clients' Opinions

The study used a logit model to determine the probability that the clients would be well-off

because of the influence of a particular explanatory variable.

Other researchers, including Begum (1998) and Zaman (2001), have used the logit model to assess the effect of microcredit programs on loan utilization, awareness of standard living, and women empowerment, and have found positive effects of microcredit. The studies used different dichotomous dependent variables. Begum (1998) used awareness of the borrowers; Zaman (2001) used women's empowerment. The logit model in this study used "borrowers' well-being" as the dependent variable. This was divided into two categories: borrowers were well-off; and borrowers were not well-off. The model is presented in equation 11.3:

where

P_i = probability that borrowers were well-off

$1 - P_i$ = probability that borrowers were not well-off

DOM = Duration of Membership (years)

AGE = Age of the borrowers dummy (1 = more than 40 years; 0 = otherwise)

EDU = Education dummy (1 = up to 5 years of schooling; 0 = otherwise)

DFM = number of Dependant Family Members

FMIGA = number of Family Members engaged in Income-Generating Activities

GEND = Gender of the clients dummy (1 = female; 0 = male)

EAMC = Ethics and Morals of the Client dummy (1 = 70 percent or above; 0 = below 70 percent)

α = constant, β = coefficient to be estimated, and ϵ = error term.

Estimation of Women's Well-being and Prosperity Based on the Clients' Opinions

This research presents a socioeconomic impact analysis of women's prosperity using the logit model. Khander (2000) shows that, despite the importance of evaluating microfinance programs in terms of their financial sustainability and outreach, such criteria do not necessarily reflect the real impact on the society and the beneficiaries. A socioeconomic analysis was undertaken in light of the finding by Khander (2000) and others that, despite the importance of evaluating microfinance programs in terms of their financial sustainability and outreach, such criteria do not necessarily reflect the real impact on the society and the beneficiaries. Consequently, this research, as well as the choice of the variables, adopts the welfarist approach to measure the impact of Islamic microfinance.

Ten dimensions were tested, as shown in table 11.1. These dimensions were derived from previous studies (Begum 1998; Mahmud 1999; Haque and others 2011; Nessa, Ali, and Hakim 2012). Clients were asked their opinions about each of these dimensions. A four-point Likert scale was used. Each dimension had four options: very good, good, marginal, and not at all.

The points were summed up for each of the 10 statements and the total score obtained by each borrower was divided by the highest score of 70 in order to create an index of acceptability to ascertain the effectiveness of the microcredit program. The borrowers who received scores less than 70 percent were considered prosperous and coded as zero; otherwise, they were coded as one. These dimensions were derived from various previous literature (Haque and others 2011; Nessa, Ali, and Hakim 2012), Mahmud (1999), and Begum (1998).

Table 11.1 Clients' Progress toward Prosperity after Joining Islamic Microfinance

Areas of improvement	Very good	Good	Marginal	Poor
<u>Score (number)</u>	<u>10</u>	<u>6</u>	<u>4</u>	<u>0</u>
Total income	104	33	29	26
Possession of assets	83	54	21	22
Schooling of the son(s)	81	57	49	48
Schooling of the daughter(s)	46	29	12	11
Perception of health status	68	39	47	39
Pure drinking water	89	39	41	54
Sanitation	54	43	20	15
Expenditure for guest entertainment	40	33	29	52
Pleasant family relationship	41	39	27	18
Family decision making	43	49	61	32

Source: Author's calculation based on the Field survey, 2013

Estimation of Change in Ethical and Moral Development Based on the Clients' Opinions

In the logit model, the dependent variable (clients' ethical and moral development) had two categories: clients "ethically and morally become better-off" under the program (coded as 1); and otherwise (coded as 0).

The model is shown in equation 11.4:

..... (11.4)

where

P_i = Probability that clients were ethically and morally better off

1-Pi = Probability that borrowers were not ethically and morally better off

EDU = Education dummy (1=up to 5 years of schooling; 0=otherwise)

AGE = Age of the borrowers dummy (1=more than 40 years; 0=otherwise)

DOM = Duration of Membership (years)

GEND = Gender of the clients dummy (1=female; 0=male)

= constant, = coefficient to be estimated, and = error term.

Estimation of the [Ethical and Moral Development of the Clients

Opinions were sought from the clients about their awareness and practice of 10 religious activities. Table 11.2 presents the different religious activities. A four-point Likert scale was used to evaluate the clients' moral and ethical development. Each statement had four options: regular, very often, very rare, and not at all.

The points were summed up from each 10 statements and the total score obtained by each borrower was divided by the highest score of 70 in order to create an index of acceptability of the effectiveness of the microcredit program. Clients who received scores less than 70 percent were coded as 0; otherwise, they were coded as 1.

Table 11.2 Estimation of Ethical and Moral Development on the Basis of Religious Activities Performed by the Clients

Areas of religious practice	Regular	Very often	Very rare	Not at all
Score (number)	10 (0)	6 (4)	4 (6)	0 (10)
Saying prayers	154	33	29	26
Know how to recite Holy Qur'an	143	--	--	42
Reciting Holy Qur'an	81	57	49	48
Fasting	196	29	12	11
Favorably disposed to Islamic activities	58	39	47	41
Household Involvement with dowry	0	--	--	154
Maintain Hijab	64	43	20	15
Involvement with interest based loan activities	30	33	29	152
Misunderstanding with husband/wife	21	19	17	118
Involvement with social activities	03	49	61	52

Source: Field survey, 2013. -- = not available.

Analytical Framework

Comparisons were made between individual clients' current status (as of December 2012) and the time of they joined the Rural Development Scheme, on a cross-sectional basis. A total of 250 clients were interviewed. The interviews with 6 clients were incomplete and thus they were dropped from the analysis. The rest of the sample (244) was analysed and

the conventional tabular method was used to describe and compare the performance of the RDS clients. The responses were expressed in terms of percentage/frequencies. Economics, econometrics, statistics, and graphical analysis were used to evaluate the data collected.

Results and Discussion

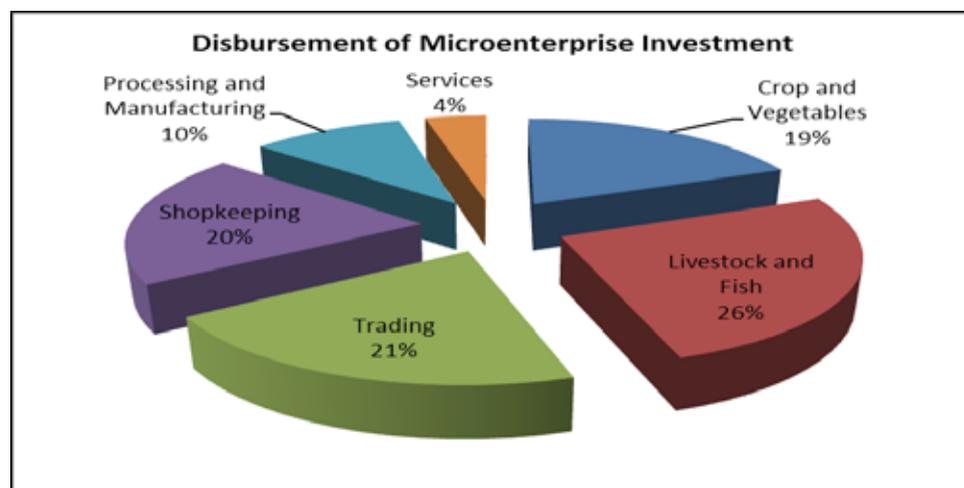
The study results support the findings of previous studies of positive impacts of microfinance. This study found that clients who have used Islamic microfinancing longer have a greater possibility of being more successful, having a higher income, and living in better economic conditions. Women's contribution toward shared prosperity for the household was comparatively better than their male counterparts. The study also explored the state of ethical and moral development of the clients and its impact on their livelihoods and poverty alleviation. The results are presented below.

Demographic Characteristics and Investment Disbursement by Sector

Demographic characteristics studied included age, education, occupation, number of household members gender, and income level. About 92 percent of the respondents were married. The largest share of respondents (38 percent) had a primary school education (grades 1–5 years of schooling), while another 32 percent can only sign their name; they cannot write. Better educated women were much more conscious and concern aware about their economic condition than illiterate woman.

A break-down of investment by sector (figure 11.1) shows that the most investment was in Livestock & Fisheries (26 percent), followed by trading (21 percent) and Shopkeeping (20 percent). The lowest investment was in the service sector (4 percent).

Figure 11.1 Disbursement of Investment of Islamic Microfinance by Sector



Source: Field survey, 2013.

Table 11.3 presents the changes in clients' income levels before and after they received microfinance from the Rural Development Scheme (RDS). Income levels increased for both women and men: for 7 percent of women and 2 percent of men, the increase was more than Tk 18,000 per month. Although not statistically significant, the increase for men is more concentrated in the lower income ranges than women.

Table 11.3 Changes of Monthly Income of the Respondents after Receiving Microfinance

Change in monthly income (Tk)	Female clients			Male clients		
	Number	Percent of women	Cumulative number	Number	Percent of men	Cumulative number
1,000–3,000	9	5	9	8	17	8
3,001–6,000	41	21	50	12	25	20
6,001–9,000	69	35	119	13	27	33
9,001–12,000	33	17	152	6	13	39
12,001–15,000	28	14	180	5	10	44
15,001–18,000	9	5	189	2	4	46
18,000+	7	3	196	2	4	48
Total	196	100		48	100	

Source: Field survey, 2013.

Annual Family Income

Table 11.4 shows that on average female clients' income increased by more than 54 percent from the time they joined the RDS until December 2012. The largest change in income (Tk 14,761 per year) occurred in the agriculture sector (including crops, vegetables, fish, and livestock), followed by small business (Tk 9,628 per year). Income in the service sector also increased significantly in percentage terms, the change was the same as the income change in the agriculture sector. The largest change in come for male client's occurred in the small business sector (42 percent), followed by the services sector (35 percent). Overall the income change for women (54 percent) was much higher than the change for men (44 percent).

Table 11.4 Annual Changes in Household Income by Sector

Sector-wise	Household income		Change in income		Level of significance	
	Dec. 2012	Time of joining RDS	Taka	Percent Change	t-value	Significance
Female clients						
Agriculture	38,754	23,993	14,761	62	3.188	0.001
Small business	31,092	21,464	9,628	45	3.865	0.000
Services	20,705	12,841	7,864	61	5.463	0.000
Others	16,695	11,195	5,500	49	2.507	0.012
Total	107,246	69,493	37,753	54	n.a.	n.a.
Male clients						
Agriculture	32,162	24,977	7,185	29	3.041	0.012
Small business	36,061	25,298	10,763	42	4.015	0.000
Services	21,548	16,003	5,545	35	4.009	0.000
Others	16,827	13,212	3,615	27	2.964	0.051
Total	102,667	71,490	31,177	44	n.a.	n.a.

Source: Researcher's calculations using 2013 field survey data. n.a. = not applicable.

Results of Ordinary Least Square (OLS) Estimation of the Model

One of the prime objectives of the study was to assess the factors influencing households' income, expenditures, and well-being, and clients' ethical and moral development. The Ordinary Least Squares (OLS) technique was used to estimate the effect of different variables of the model. If the regression equation estimation of similar functions had involved more variables, the model would have suffered from low degrees of freedom and multicollinearity problems. Therefore, multicollinearity was tested to determine whether the outcome that some independent variables were not significant could be the effect of multicollinearity. The regression model was reestimated, dropping some variables whose level of significance was very low. The results were significantly improved and hence have been interpreted.

OLS Results for the Household Income Model

It was expected that the amount of investment made by the borrowers would increase their household income. Therefore, this study estimated equation 11.2 to examine the influence of microinvestment on household income.

However, household income does not depend on only one factor; it also depends on the other socioeconomic factors. That is why variables like clients' gender, age, and educational background, the involvement of number of family members in farming, the total land size of the households, and the clients' ethics and morals were considered as independent variables.

Table 11.5 shows the results of OLS for household income. The sign of all the variables are plausible, but only five of them—borrowers' age, size of investment (credit) taken by the borrowers, number of family members involved in income-generating activities, clients' ethics and morals, and gender—had positive and significant impact on household income. The value of R-square was 0.712, which indicates that about 71 percent of the total variation of the dependent variable was explained by the independent variables.

The size of investment (credit) taken by the clients had a positive and significant influence on the household income. This collateral-free investment financing (microcredit) increased their opportunities to start up income-generating activities. It had also increased their ability to invest more in existing economic activities, resulting in more earnings from their investment. One unit (Tk.) of credit increased household income by 1.21 taka. The findings provide new insight into the impact of microfinance, and Islamic microfinance in particular. This study confirms the positive impact that Rulindo and Pramanik (2013) found for conventional microfinance.

The borrowers' age was positively but not significantly related to household income. This may be because most clients are between 18 and 60 years old, and most clients in this age range have similar working capacity. In addition, field supervisors monitor them for certain types of behavior, so their experiences are similar in that regard. Other researchers have found that age has a significant positive influence on borrowers' saving, agricultural production, and household income and consumption (Khandker 2000; Amin, Rai, and Ropa 2003), especially in the case of women. This relationship is based on the finding that the age of woman influences her autonomy, as documented by a number of studies in South Asia (Chaudary and Nosheen 2009).

The results revealed that the number of family members engaged in income-generating activities had a positive and significant influence on their households' income: the higher the number of family members earning income, the higher the family income. This expected result is also supported by Mahmood (2006). The number of sons, in particular, increases family prosperity because male children are more likely to be involved in decision making at the household level or to have influence over the use of the woman's earnings (Salway and Furuta 2006).

Education did not have any significant influence on household income, as there was small

variation in the education level of clients. More than 70 percent of the borrowers had less than five years of schooling. However, the variable had a positive sign. This indicates that education might influence their income level, but more years of schooling and more and better educational facilities are required to realize the effect of education on income.

The gender variable had a significantly positive influence on income. Women performed better than men. Despite that they have household and caregiving responsibilities that men do not. They work outside the paid economy, and their labor is imputed (uncompensated) so fully concentrate on this activity and any extra income they generate is considered extra income for the family. Some men found this small investment to be too small to concentrate on, and hence did not devote enough effort to generate more income.

Ethics and morals had a significantly positive impact on household income. This result is to be expected, as it is assumed that the clients who have good moral and ethical character are honest, so they do not divert the money they borrowed to unproductive uses. They are also sincere in their desire to help their families. This result is supported by Rahman, Chowdhury, and Islam (2008) and Rahman (2010). This result also provides new insight into the role of religiosity in economic performance, in addition to the studies by Nolan (2005), and Galbraith and Galbraith (2007). It confirms that religiosity is able to enhance other socioeconomic measures, which may also contribute to economic growth, as McCleary and Barro (2006) found for such factors as education, self-esteem, family unity, and life expectancy.

Table 11.5 OLS Results of the Household Income Model

Variables	Coefficient	t-value	Sig.
Constant	2.789	21.314	0.000**
Log of investment made in 2012	1.210	2.301	0.020**
Log of total land size	0.221	0.528	0.693
Log number of family members engaged in income-generating activities	1.110	2.010	0.028**
Age of clients dummy (1=up to 40 years; 0 = more than 40 years)	0.332	1.616	0.069
Education dummy (1=up to 5 years of schooling; 0= otherwise)	0.210	0.7283	0.470
Ethics and moral development dummy	0.110	2.817	0.045*
Gender dummy (1=female; 0=male)	0.0215	2.794	0.039*
R-squared: 0.712			

Source: Researcher's estimation using 2013 field survey data.

Significance level: ** = 1 percent; * = 5 percent

Results of the Logit Model of the Impact of Microcredit on Clients' Prosperity or Well-Being

The results of the logit model indicate that microcredit programs enhance women's prosperity and well-being in rural areas of Bangladesh. This may be microcredit clients are more capable in their economic and household decision making—a finding also supported by Pitt, Khandker, and Cartwright (2006).

The logit model estimation results are presented in table 11.6. The Wald statistic for the variable “duration of membership” was 14.44 and was positively and significantly related to the dependent variable. This indicates that longer the clients are involved with the Islamic microfinance program, the better off they were. This result is supported by Rulindo and Pramanik (2013). Both studies find that the clients who have received Islamic microfinance longest (for six or more years) have better operational outcomes.

Clients' age had a positive effect, though not significant, on women's well-being in Bangladesh: a result supported by Haque and others (2011). Older women have better ability to make decisions than younger women because older clients have more experience with life and better understanding about how to balance competing demands on household income and assets (Noreen 2011). Women's contribution to the household's prosperity increases as the age of the women increases. Women's education had a positive association with women prosperity, although it was not significant—a finding supported by Islam (2014) in the case of women's empowerment.

The number of family members actively involved in income-generating activities made a significantly positive contribution to household well-being, as expected—a finding supported by Nessa, Ali, and Hakim (2012). Conversely, the number of dependants in the family had a significantly negative impact on household well-being, which was also expected, because the more dependants there are in the household, the higher the household expenditure and the less the opportunity for likelihood of prosperity.

Clients' ethical and moral development had a positive contribution on their well-being, as expected.

The gender variable made a significantly positive contribution to income. This suggests that Islamic microfinance has brought more prosperity to women than their male counterparts. This result was very much likely as nearly all poor Bangladeshi women were unpaid housewives, and outside the paid economy, before participating in the Rural Development Scheme. Islamic microfinance brought them financial benefits that improved their income. Involvement in the microinvestment program enabled women to utilize their uncompensated work and earn money. They also were able to make decisions about various project activities, which enhanced their abilities in the household decision-making process—a finding supported by Zoynul and Famida (2012). Microcredit promotes women's self-confidence and self-worth (Sarumathi and Mohan 2011). Khan, et. al., (2013) found that by participating in microcredit schemes, women were more likely to participate in the household decision-making process and were more confident in their decision making regarding married life, taking out a loan, spending money received from microcredit, and purchasing or selling materials.

Table 11.6 Estimated Results of Logit Model Results of the Clients' Prosperity

Variable	(B)	Standard error	W a l d statistic	Significance	Odd ratio EXP (B)
Constant	-0.826	0.723	1.432	0.251	0.343
Duration of Membership (years)	0.211	0.071	14.44	0.000**	0.713
Age of clients dummy (1=up to 40 years; 0 = more than 40 years)	0.021	0.251	0.211	0.061*	0.971
EDU = Education dummy (1=up to 5 years of schooling; 0=otherwise)	0.0131	0.241	2.016	0.081	0.581
DFM = number of Dependant Family Members	-0.011	0.145	3.029	0.052*	1.019
FMIGA = number of Family Members engaged in Income-Generating Activities	0.017	0.020	3.031	0.053*	1.010
GEND = Gender dummy (1=female; 0=male)	0.154	0.213	3.416	0.052*	0.816
EAMC = Ethics and Morals dummy (1=70 percent and above; 0=below 70 percent)	0.164	0.243	3.476	0.053*	0.846
Cox and Snell R square: 0.218					
-2log likelihood: 547.145					
Overall accuracy: 79.9					

Source: Researcher's estimation using 2013 field survey data.

Significance level: ** = 1 percent; * = 5 percent

Clients' Opinions about the Factors that Helped Them Accumulate Assets

In addition to increasing their income, the study results revealed that RDS clients also developed their asset base considerably. Therefore, the study attempted to assess the factors that helped clients accumulate assets. The clients surveyed revealed that the Islamic microfinance investment was by far the most important source of funding (table 11.7).

Table 11.7 Clients' Opinions about What Sources Helped Them Increase their Assets

Source	Land property	House	Livestock and poultry	Electric appliances and electronics	Jewelleries	Other assets
Microfinance	52.2	65.7	66.0	45.0	68.0	69.5
Other family income	27.0	23.5	14.5	32.3	16.0	21.2
Inherited property	09.0	4.1	01.7	2.0	7.0	1.5
Khas land	1.1	0.0	0.0	0.0	0.0	0.0
Dowery	1.4	1.3	14.1	2.7	7.2	1.5
Gifts	0.6	0.0	02.6	10.3	1.8	3.4
Other	8.7	5.4	01.3	7.7	0.0	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Researcher's estimation using 2013 field survey data.

Note: Khas land is the land government allocated for the people having less land or land less

Results of the Logit Model for Assessing Clients' Ethics and Morals

It was hypothesized that involvement in Islamic microfinance activities would make a positive contribution to the ethical and moral development of clients. Therefore, an attempt was made to investigate the influence of socioeconomic variables on the dependent variable "moral and ethical development."

From the Islamic perspective, it may be argued that the values embedded in Islamic teachings, such as discipline, honesty, sincerity, and hard work that result from acts of worships such as salaah (canonical praying), fasting, and paying zakāh are likely reasons why respondents with higher religiosity level have higher income and lower poverty status.

Within the literature, Rulindo and Pramanik (2013) found that those whose level of spirituality is higher are relatively less poor especially when poverty status is measured in terms of household income as the benchmark for the poverty line. However, Kauanui and others (2009) were not able to find a difference between microentrepreneurs' levels of spirituality and their age, gender, year in business, industry, and even their business income. Mardhatillah and Rulindo (2007, 2008) also found that the impact of spirituality on the poverty status of Islamic microfinance clients is not directly related to their business income, but their studies acknowledge that clients with higher levels of spirituality are generally wealthier than their counterparts. These findings support the common assumption that having high spirituality level is beneficial for human beings.

The results of the logit model (equation 11.4) estimation show that the age, duration of membership, and gender had positive and significant effects on clients' ethical and moral development. Education also had a positive effect, although the coefficient was not significant; this may be because the clients did not very much in terms of educational attainment (table 11.8).

These results suggest that older women clients who had participated for several years in this Islamic microfinance program were ethically and morally more developed than the male, younger, and illiterate new clients.

Table 11.8 Estimated Results of Logit Model Assessing Clients Ethics and Moral

Variable	(B)	Standard error	Wald statistic	Sig.	Odds ratio EXP (B)
Constant	1.210	0.451	6.110	0.014**	3.008
Membership duration (years)	0.542	0.315	4.121	0.035**	1.145
Education dummy (1=up to 5 years schooling; 0 otherwise)	0.472	0.151	3.816	0.065	0.531
Age of the clients dummy (1=up to 40 years of age; 0 otherwise)	1.411	0.316	14.126	0.000**	0.243
Marital status (1=married; 0 otherwise)	0.112	0.132	2.021	0.093	0.818
Gender dummy (1=female is 1; 0= male)	0.672	0.161	13.016	0.000**	0.511
Cox and Snell R square: 0.218					
-2log likelihood: 557.181					
Overall accuracy: 81.3					

Source: Researcher's estimation using 2013 field survey data.

Significance level: ** = 1 percent; * = 5 percent

Major Challenges Reported and Suggestions Made by the Clients

Like clients in other microcredit programs, RDS microinvestment clients face some challenges that vary according to time, space, location, socioeconomic aspects, and the nature of the program. The program's success largely depends on identifying and solving these problems in a timely manner. Therefore, in order to improve the operations of the program, it is important to clearly identify the borrowers' problems.

The study shows that the majority (79 per cent) of borrowers had a problem with the investment size: the amount of investment they received from the microinvestment providers was inadequate to pursue their income-generating activities adequately.

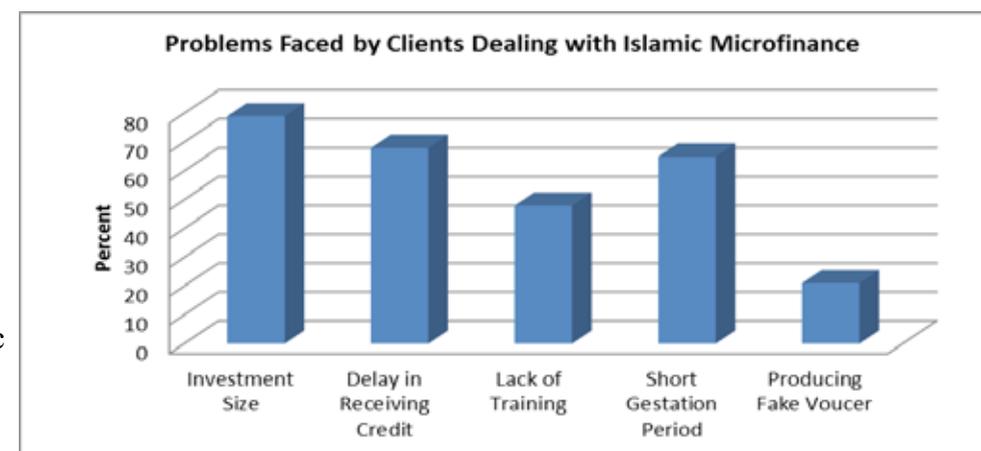
About 68 percent of respondents cited delays in receiving the investment, which was followed by very short period repaying the investment. Some respondents (65 per cent) mentioned that sometimes they needed to start repaying their borrowed money even before they could invest the money. Lack of training facilities to upgrade their skills and improve their technical and Islamic knowledge was an important problem mentioned by nearly half (48 percent) of clients.

Some clients (21 percent) had to produce false vouchers, which is a clear violation of shari'ah. RDS uses only a bay' mu'ajjal product, which is very prone to shari'ah violations because some clients provide fake vouchers without buying the product and simply take the money. If Islamic microfinance providers can establish mu'darabah- and musharakah-based investment contracts, they could generate more income (compared to murabahah-based contracts) (Rulindo and Pramanik 2013) and reduce the chances of shari'ah violations (compared to a bay' mu'ajjal contract).

Takāful-Islamic
Insurance [E]

Some of the respondents mentioned that they can produce a small-scale saleable product but marketing facilities are not readily available; thus it is neither cost-effective for them to take a small amount of product to a far-away market nor can they sell their product when necessary when they want to.

Figure 11.3 Major Problems Clients Face in Dealing with Islamic Microfinance



Source: Field survey, 2013.

Conclusion and Recommendations

The main cause of poverty in Bangladesh is the lack of productive employment opportunities for the huge number of unemployed and underemployed people, which is increasing rapidly and posing serious problems. Women make up nearly half the population in Bangladesh. Many of them live in rural areas, where their sole occupation was housewives until microfinance was developed. This large number of women needs to be engaged in income-generating activities, including opportunities for self-employment, and also need to strengthen their confidence levels to contribute household decision making. There is also a critical role in changing social norms, particularly of men, to accept women as equal partners. This goes way beyond improving women's confidence levels. However, when women have earned income, they do gain legitimacy and bargaining power within the household. There is a wide literature on this.

Islamic microfinance has become a very important tool, especially for the women, in Bangladesh, to combat poverty and enhance the social and economic well-being of its recipients and their households. This research had two aims. First, it sought to confirm or refute a positive link between Islamic microfinance and the socioeconomic well-being of women and their households in Bangladesh. Second, it explored a specific Islamic microfinance program to identify ways to improve the performance of Islamic microfinance

in general. The research also examined the expectations that Islamic microfinance would improve the welfare of recipients and zeroed in on the conditions under which such an offer would be more beneficial.

The results revealed very interesting and important policy implications. The increase in women's income and assets played a very important role in enhancing women's economic independence and sense of self-confidence. It helped to break the cycle of poverty and allowed them to have more control over their lives and economic decisions.

The microfinance offered resembles a subsidy system to target beneficiaries. It was supplemented by ethical and moral development and knowledge-sharing for women who lacked the skills needed to engage in highly profit-making activities or entrepreneurship.

A very important policy recommendation is the need to review existing Islamic microfinance programs and compare them to the successful model offered by the Rural Development Scheme of Islami Bank Bangladesh. Programs should shift from simplistic modes to pluralistic ones that offer services besides Islamic microfinance, such as marketing and training. It is also necessary to redirect Islamic microfinance toward developmental activities that will contribute to the long-term improvement of the well-being of recipients and their households. Such development will be possible when an Islamic microfinance loan allows real and substantial investments in production/investment capital and assets, not only personal assets.

This program enhanced women's security by giving them access to assets and rights and augmented their self-respect by providing choice and independence. Islamic microfinance has enabled poor women to undertake diversified economic activities that generate a flow of stable income throughout the year, and thus has strengthened the survival strategy of poor women. With microinvestment, poor households now own assets they can use to meet contingencies without having to sacrifice their independence, security, and peace of mind by going into debt.

The microinvestment program has also empowered the beneficiaries by raising their social consciousness and importance in family decision making. It improves women's welfare by increasing their total employment time while reducing their other family work responsibilities. Participation of women in Islamic microinvestment program has also increased their mobility.

The most important result revealed in this study is related to the link between receiving an Islamic microfinance investment and the increase in schooling of the recipients' children, hygiene, pure drinking water, and improved sanitation.

It can be concluded from the study that Islamic microinvestment program has benefited the clients in more than one way and women clients have benefitted more than men. Some specific challenges observed in the study, along with recommendations to overcome them, follow.

Most clients utilized their borrowed money for income-generating activities, although some clients spent their investment on house repairing, children's marriage ceremony, furniture purchases, and the like, proper monitoring and supervision should be undertaken to develop their morals and ethics so that they use their money in income-generating activities.

The type of Islamic microfinance examined in this study reaches those people who have at least 0.50 acres of land and also the capacity to work, but does not reach the extreme poor. To alleviate extreme poverty, an integrated approach including zakāt and awqāf would be needed. Government efforts to help generate employment, develop infrastructure, and generate electricity can also alleviate extreme poverty.

Illiterate and poor borrowers are not aware of modern technology so they depend on the traditional methods of farming, resulting in low production. High-quality needs-based entrepreneurship training and services are needed to improve the success of microinvestments.

Focus group discussions pointed out that entrepreneurial women often face problems in marketing products. Islamic microfinance programs can play a role in guiding organized groups in performing marketing functions, especially to promote and sell products to the target consumers at a fair price.

It was observed that some field supervisors do not properly follow the Islamic investment mode (bay' mu'ajjal). This is a violation of shari'ah. Thus proper monitoring and measures must be undertaken to develop their ethics and morals so that they do not violate shari'ah. Mushārah has comparatively less chance of violating shari'ah, so small-scale mushārah mode of investment should be pursued.

Furthermore, there is considerable competition among different programs offering conventional microcredit or Islamic microfinance in the same geographic area. Therefore, there is an opportunity for group members to switch from one program to another, which limits the positive impact of such programs. Some regions have a surplus supply of credit, while others lack supply. There is a need for existing Islamic microfinance programs in Bangladesh to plan better so that these anomalies do not occur in future.

Finally, it is necessary to provide other nonfinancial services to women to help them better manage their Islamic microfinance investments. This can significantly improve the product that Islamic microfinance offers and increases the project's chances of success. If the program is limited to an offer of Islamic microfinance, and if the beneficiary's only concern is to obtain a loan and repay it, then the result will be a vicious cycle of lending and repayment.

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CHAPTER 12

INTEGRATION OF WAQF AND ISLAMIC
MICROFINANCE FOR POVERTY REDUCTION:
THE CASE OF SUDAN

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Abstract

In 2013, the authors of this study developed an Integrated Waqf-based Islamic Microfinance Model (IWIMM) to address the alarming incidence of poverty in the majority of the member countries of the OIC (Organization of Islamic Cooperation). The model had been successfully tested using data from three OIC countries: Bangladesh, Indonesia, and Malaysia. The recent phase of the study covered three additional countries: Nigeria, Pakistan and Sudan. This study discusses the results of a field survey conducted in three locations of Sudan: Khartoum, Kasala, and al-Jazira. A purposive sampling technique was used to solicit the perceptions of 163 Islamic microfinance clients. The survey instrument consisted of 45 items, validated through factor analysis. The study has adopted a partial least square (PLS) technique to validate the IWIMM and test its seven hypotheses. The findings have supported all the hypotheses. Hence the results show overwhelming support by the Islamic microfinance clients for the IWIMM. It is therefore recommended that Islamic microfinance institutions in Sudan explore avenues to implement IWIMM to alleviate poverty in the country.

Keywords: Waqf Resources, Islamic microfinance, Takāful, Project Financing, Human Resources Development, Poverty Alleviation, Sudan

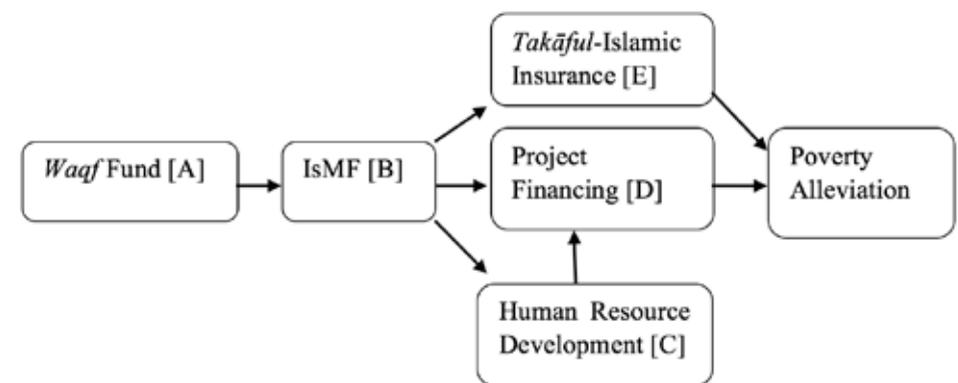
Introduction

Approximately 31 percent of the total population of the 57 member countries of the OIC (Organization for Islamic Cooperation) lives below the poverty line of US\$1.25 per day (Alpay and Haneef 2015). These member countries continue to adopt various measures to alleviate the increasing problem of poverty. One of these measures is the institution of microfinance, particularly the shari'ah-compliant form, which has been steadily growing over the years. Despite the expansion of Islamic microfinance (IsMF), the institution continues to face two primary challenges: lack of access to affordable finance, and the poor quality of human resources, both as providers and recipients of microfinance services.

Unfortunately, the existing Islamic microfinance models have largely failed to address these two major challenges. Therefore, the authors of this study have harnessed the potential of the institution of waqf and integrated it with Islamic microfinance to overcome these two challenges. The institution of waqf has played a vital role throughout Islamic history in enhancing the socioeconomic development of Muslim societies. Hence, integrating waqf and Islamic microfinance institutions is expected to greatly enhance efforts to alleviate poverty in OIC member countries. Several studies have proposed integrating waqf with Islamic microfinance.

However, the ideas in these studies were not conceptualized into an effective and workable framework until the authors of this study developed an Integrated Waqf-based Islamic Microfinance Model (IWIMM) in 2013, in phase I of their research project (Haneef and others 2013). IWIMM comprises six constructs: waqf Resources, Islamic Microfinance (IsMF), Takāful Financing, Project Financing, Human Resource Development, and Poverty Alleviation. Figure 12.1 reproduces the model developed by the authors.

Figure 12. 1 The Proposed Integrated Waqf-based Islamic Microfinance Model (IWIMM)



Source: Alpay and Haneef, 2015

Using a mixed method (qualitative and quantitative surveys), the model in figure 12.1 had been successfully validated in three OIC countries: Bangladesh, Indonesia, and Malaysia. Seven hypotheses were tested:

- H1. *Waqf* Resources contribute positively to Islamic Microfinance
- H2. Islamic Microfinance contributes positively to *Takāful* Financing
- H3. Islamic Microfinance contributes positively to Human Resource Development
- H4. Islamic Microfinance contributes positively to Project Financing
- H5. Human Resource Development contributes positively to Project Financing
- H6. *Takāful* Financing contributes positively to Poverty Reduction
- H7. Project Financing contributes positively to Poverty Reduction

The results of IWIMM's validity test and its acceptability for the three countries varied. By acceptability, it is meant that the clients of Islamic microfinance support and accept the idea of using IWIMM for poverty alleviation in their country. Findings from the qualitative survey (focus group sessions, in-depth interviews, and workshops) have unanimously supported IWIMM and all seven hypotheses. By contrast, only three hypotheses (H2, H3, and H6) are supported by the quantitative survey results (828 respondents) from the three countries. In Bangladesh, only one hypothesis, (H7) is not supported, while four hypotheses (H1, H4, H5, and H7) are not supported by results from Malaysia and Indonesia (Alpay and Haneef, 2015).

In the current phase II of the research project, IWIMM has been tested in three more countries: Nigeria, Pakistan and Sudan. This study discusses the results of the quantitative survey conducted in three locations of Sudan: Khartoum, Kasala, and al-Jazira. The acceptability of the model in Sudan was expected to be overwhelmingly positive because the six constructs of IWIMM relate to a great extent the actual situation in Sudan. For example, the high poverty incidence (UNDP, Human Development reports 1990-2014) implies a need for an alternative poverty alleviation model; the quality of human resources is in dire need of improvement; and the level of the respondents' awareness of Islamic microfinance, waqf, and *Takāful* and their roles in alleviating poverty is expected to be high. These institutions have deep historical roots in Sudan and are widely practiced.

The Poverty Scenario in Sudan

Sudan is a country blessed with fertile land, oil, minerals and various livestock resources. The economy has largely relied on crude oil exports, but the roles of agriculture and livestock farming still remain significant. Despite these resources, most people in Sudan are unemployed and live in extreme poverty.

In 2009, the Central Bureau of Statistics (CBS) conducted the National Baseline Household Survey (NBHS) on poverty, after a long lapse from the first survey (1967–68) and the second (1978–80). The results covered key information on various dimensions of poverty. For instance, based on the estimation of income poverty, around 46.5 percent of the households were under the poverty line. One out of every two individuals was facing extreme difficulty

in affording basic goods. Based on food calorie intake, with the guideline of 2,400 calories per person per day, the poverty rate was substantially higher among rural dwellers (57.6 percent) compared to the urban residents (26.5 percent), and the most affected groups were women and migrants (people displaced by conflict or natural disaster).

The protracted poverty situation is aggravated by Sudan's long civil war (1955–2005) and the loss of oil revenue following the recent separation of South Sudan in 2011. In the post-secession period (2011–13), the poverty rate worsened because of higher inflation and the lifting of the government subsidies on fuel. Consequently, three-quarters of the nearly half of the population (58 percent) who live in rural areas of Northern Sudan (excluding the nomads) are poor. Since agriculture is the predominant sector in the rural areas, poverty among the rural households has remained constantly high.

The poverty scenario varies across states and regions. As shown in table 12.1, the poverty incidence is found lowest in Khartoum, followed by the northern region, while the central and eastern regions are the third lowest. Kordofan and Darfur are the poorest states located in Northern Sudan, where most people live in underdeveloped rural areas. It is also evident from table 12.1 that poverty is predominant in rural areas where the inhabitants mostly rely on agriculture and livestock farming.

Table 12.1 Poverty Incidence in Sudan

State	Total population per statea	Poverty level (% per state)b	Ranking (1): by total population (pop. size per state)	Ranking (2): by % of population over poverty line	Ranking (3): by % of population under poverty line	Percent of rural population per state
Northern	699,065	36	15	10	15	83
River Nile	1,120,441	32	11	11	14	72
Red Sea	1,396,110	58	12	4	8	45
Kassala	1,789,806	36	6	10	11	72
Gadarif	1,348,378	50	9	7	10	72
Khartoum	5,274,321	26	1	12	4	19
Gezira	3,575,280	38	3	9	5	81
White Nile	1,730,588	56	7	6	6	68
Sinnar	1,285,058	44	10	8	12	80
Blue Nile	832,112	57	14	5	13	74
North Kordofan	2,920,992	58	4	4	2	80
South Kordofan	1,406,404	60	8	3	7	77
North Darfur	2,113,626	69	5	1	3	78
West Darfur	1,308,225	56	11	6	9	82

South Darfur	4,093,594	61	2	2	1	74
Total	30,894000	47				64

Source: Sudan Social Safety Net Assessment, the World Bank, May 2014.

Note: Rounded % of poverty levels (World Bank 2011). Rankings are in order of: (1): highest percentage of rural population; (2) highest absolute number of rural population; (3) highest absolute number of households under the poverty line. 1 = highest; 15 = lowest

a. UNICEF/NCCW (2011).

b. World Bank (2011).

Strategies and Programs for Poverty Alleviation in Sudan

Government Strategies and Programs

The government of Sudan has initiated several strategies and programs to alleviate poverty in the country, as reported by the Central Bureau of Statistics (CBS) in 2015. These include:

Establishing a poverty unit under the Ministry of Finance and National Economy in 1999.

Setting up a higher council in 2000 to supervise the preparation and implementation of a poverty eradication strategic paper.

Formulating a draft interim National Poverty Eradication Strategic Plan (NPSP) in 2004.

Launching NPSP in 2008 in line with its 25-year and 5-year strategic plan. In addition, a growth-oriented strategy was initiated for the 25-year period (2007–31) to facilitate sustained economic growth.

Allocating pro-poor spending of 9 percent of Sudan's GDP in 2009. The central bank's monetary policies also supported various poverty alleviation programs. The central bank issued a rule that required commercial banks to allocate 12 percent of their capital to finance various microfinance projects (Ministry of Finance and National Economy).

Making a special allocation for poverty alleviation programs within the fiscal policies of Sudan, defined as "spending that benefits the poor more than the nonpoor; spending that actually reaches the poor and spending to have an impact on the welfare of the poor over time" (Ministry of Finance and National Economy).

Allocating significant funding from zakāt as part of the budget for pro-poor expenditure over the last few decades.

Islamic Microfinance

Since the 1980s, the government of Sudan has been instrumental in transforming Sudan's

interest-based banking system into a shari'ah-compliant one. The Central Bank of Sudan has introduced in 2008 an Islamic microfinance scheme to alleviate poverty. The development of Islamic microfinance in Sudan has proceeded in three phases. In the first phase, the microfinance system was adapted to fit into the existing banking framework. Policy makers were concerned about the higher cost of banking in rural areas and the sustainability of microfinance institutions. A national strategy was formulated in collaboration with government, policy makers, civil society, and local leaders to expand microfinance services. Recognizing the high demand for and limited supply of microfinance] the Central Bank of Sudan established a microfinance unit in 2007. The main purpose of this unit is to undertake appropriate policy and to design the regulatory framework for financial services (covering intellectual, human, and financial capital) in an effective way.

The second phase focused on the selection of suitable financial products to support various income-generating activities for the rural clients. The Central Bank of Sudan introduced two modes of profit- and loss-sharing schemes (mushārahah and muḍārahah). At the same time, the Central Bank also introduced bay'al-salam (forward sale) financing for the relatively better-off clients or farmers who are already involved in various income-generating activities. Later on, some other Islamic products like murābahah (cost plus) and istiṣnā' (construction/manufacturing) were also introduced for the economically active poor clients.

The third phase aimed to roll out the strategy and measure progress. In this phase, the Central Bank made sure that enlisting banks and other financial institutions provided the necessary financial services. To make the initiative more effective, the Central Bank issued a circular in 2008 requiring all banks to reserve at least 12 percent of their total financing portfolio for microfinance clients. Financiers' concerns about risk management were addressed by introducing certain operational criteria for microfinance institutions (MFI). Among those criteria were minimum equity participation, five-year business plans and policy manuals, a loan tracking system, and regular internal and external audits. In 2008, the Central Bank of Sudan established the Microfinance Development Facility to solve the funding problems of MFIs. It is an apex institution funded by the Central Bank and other funders such as multi-donor trust funds. Usually, the donors are mostly engaged in equity-based financing and wholesale financing, as well as other related technical assistance.

Today in Sudan, microfinance providers are classified into at least six groups: banks, government units (Ministry of Welfare and Social Security, Agricultural Bank of Sudan, Industrial Development Bank and Saving Bank, Zakāt Chamber, Social Development Corporation), nongovernmental organizations (NGOs) and civil society organizations (CSOs), social funds, and rural development projects (supported by the United Nations Development Program, UNDP; the African Development Bank, AfDB; the Islamic Development Bank, IDB; and the United Nations Industrial Development Organization, UNIDO).

Despite many opportunities for the vibrant Islamic microfinance in Sudan, the industry also faces numerous challenges. These include limited sources of funds and outreach, lack of coordination among Islamic microfinance providers, ineffective electronic networking and relatively weak infrastructure, high tax levies on Islamic microfinance providers, and

insufficient capacity-building programs for the beneficiaries. Moreover, a considerable share of microfinance funds is allocated to agricultural activities and livestock farming. These two sectors are highly risky and are oversaturated with low-skilled or unskilled labor-intensive human capital. The value added of the produce and their global prices remain low. Thus in the absence of a viable model to address these challenges, various poverty alleviation initiatives will continue to have minimal impact.

Islamic Microfinance and Waqf Institutions

The government of Sudan has taken many steps to reform waqf management in the country. It enacted law and created a legal framework to motivate people to contribute to new waqf properties (Kahf 2003). In 1987, a single public corporation named as “Public Corporation of Awqāf” was formed and became an autonomous body to manage waqf properties. The Corporation supports many activities, such as da’wah programs, educational programs particularly those related to colleges to memorize the Qur’ān, repairing and maintaining mosques, and helping the poor (Ahmed M.M, 2002).

The concept of waqf shares was introduced in 1990 through the Public Corporation of Awqāf (Mohsin 2005). The Corporation motivates and encourages people to participate in its waqf shares. The values of the shares vary from one Sudanese pound (SD1) to SD5 and SD10. The waqf-shares work as follows. First, the Waqf Corporation, as the trustee, issues waqf shares. Second, the contributors or founders purchase the shares of a defined project and receive waqf certificates. Third, the Corporation invests the pooled funds in an Islamic bank based on a muḍārabah contract. Finally, the revenue from the investment is donated to a specific project (Mohsin 2003).

There are also other types of special waqf shares in Sudan. For example, the government created waqf shares for developing the idle waqf land located in Abu Jinzir. Its trustee, Public Corporation of Awqāf, issues waqf shares to solicit funds to develop the land. Once completed, the beneficiaries, who are traders, sellers, and service providers, are asked to pay low rent for the use of the property. Part of the revenue generated is allocated to the poor and the needy.

Another waqf is the Waqf al-Baghdadi, a land waqf created in 1930 also under the trusteeship of the Public Corporation of Awqāf. The beneficiaries are selected from the cohort of medical students of Khartoum University. Part of the rental income from the properties is used to maintain the medical faculty and other portion of the income is retained to create a new waqf (Mohsin 2014). Another type of waqf land, the Mujama’ al-Zahab al-Tijari, had remained underutilized for a century. It is located in the capital city of Khartoum. The Public Corporation of Awqāf, as the trustee, entered into a partnership arrangement with an Islamic bank through a diminishing partnership contract to develop the waqf land (Mohsin 2014). The bank redeveloped the old waqf property and constructed a Gold Commercial Centre. Gold traders, sellers, gold fabricators, and customers are the beneficiaries of the waqf property. The poor and the needy receive only a specific portion of rental from these properties.

It is evident from this brief discussion that the focuses of waqf activities are mostly religious

and for commercial and professional activities. The level of direct involvement of waqf institutions in poverty alleviation programs through microfinance is still negligible. There seems to be promising prospects to integrate waqf institutions and Islamic Microfinance for Poverty Reduction through an integrated and proven model like IWIMM.

Islamic Microfinance and Takāful

Sudan is one of the leading countries in Africa that practices microinsurance, or microtakāful. It has become a role model for others in providing Islamic microtakāful services. As of 2014, there were 33 commercial banks in Sudan, of which 20 provide takāful services. This is in addition to a few microtakāful operators working across the country such as Al Baraka Insurance Co., Al Tawonia Insurance Co., Islamic Insurance Co., Microtakāful Pool and Shiekan Insurance & Reinsurance Co. Sudanese microtakāful was launched in 2008 with the direction and guidance of the Central Bank of Sudan. The main objective of introducing microtakāful is to support Islamic microfinance against default risk and to encourage banks to finance poverty alleviation programs. Currently, microtakāful covers material damages like loss of livestock, loss of property due to theft, fire, or burglary, and other damages related to agriculture. The Sudanese government supports microtakāful and most of the beneficiaries are the clients of Islamic microfinance institutions (Khojali and Hansen, 2010). The challenges facing microtakāful include inefficient risk management tools, lack of reinsurance capacity, and limited insurance products (Ahmed 2013). One of IWIMM’s construct addresses at least two of these challenges: namely, lack of reinsurance capacity and limited insurance products.

Despite all the efforts and poverty alleviation programs particularly in the area of Islamic microfinance, the poverty situation in Sudan has not improved. Rather, the country has become poorer, as reflected in the sharp drop of its Human Development Index ranking from 154th position in 2010 to 171th place in 2012 (UNDP, Human Development Reports 1990-2014). This clearly implies that the existing models have not been effective, and the development of IWIMM is very timely. The next section discusses the methodology used in validating the acceptability of IWIMM in Sudan.

Research Method

This study has adopted a quantitative methodology. A field survey was conducted in Sudan to validate the Integrated Waqf-based Islamic Microfinance Model (IWIMM). A sample of 163 Islamic microfinance clients was obtained from three locations: 61 from Khartoum, where clients are engaged in business activities; 50 from Kasala, where clients are mostly involved in livestock farming; and 52 from al-Jazira, where clients work in agriculture. The small sample size was constrained by time, cultural barriers, and cost. Nevertheless, this sample size is considered appropriate for an effective data analysis. Some researchers argue that statistical analysis in this context can be conducted with a minimum sample size of 100 to 200 (Hoyle 1995).

Six enumerators were selected for the field survey. The enumerators were chosen mainly from the survey areas to facilitate access to the respondents. They were then given informal

training sessions on the objectives of the research and the techniques of collecting the data efficiently. The study adopted the purposive sampling technique for the convenience of data collection. The duration of the data collection was longer than expected (seven months) because of logistical issues, cost, and cultural barriers.

The study employed the PLS-SEM (Partial Least Squares Structural Equation Modeling) research technique and used Smart PLS 2.0 package software for data analysis and hypotheses testing (Ringle, Wende, and Will 2005). PLS (Partial Least Squares) is considered one of the appropriate research techniques when the sample size is relatively small and data may not be normally distributed (Reinartz, Haenlein, and Henseler 2009). The next section presents the survey results.

Results and Analysis

As stated in the first section, the primary objective of this study is to share findings from validating IWIMM and testing its acceptability in Sudan. Accordingly, three result outputs are presented in this section: the demographic profile of the respondents, validation of IWIMM, and hypotheses testing. Descriptive statistics are excluded because they are not the focus of the study.

Demographic Profile of the Respondents

The respondents of this study are represented by both male and female who are mature adults, married, and have large extended families. Most respondent have a low level of education and no vocational training. Their income is relatively high, but offset by high expenditures. The majority are receiving financing from Islamic microfinance institutions. Table 12.2 shows the demographics of the respondents by gender, age, marital status, and family size.

Table 12.2 Distribution of Respondents by Gender, Age, Marital Status, and Family Size

Factor	Category	Number	Percent
Gender	Male	93	57.1
	Female	67	41.1
	Missing data	3	1.8
	Total	163	100.0

Age	15–29 years	12	7.4
	30–44 years	72	44.2
	45–59 years	40	24.5
	60–64 years	34	20.9
	65 and above	1	.6
	Missing	4	2.5
	Total	163	100.0
Marital status	Single	10	6.1
	Married	136	83.4
	Widowed	9	5.5
	Divorced	3	1.8
	Missing data	5	3.1
	Total	163	100.0
Family size	Less than 5	34	20.9
	5–7	51	31.3
	8–10	32	19.6
	More than 10	40	24.5
	Missing data	6	3.7
	Total	163	100.0

Source: Field Survey in Sudan, 2015.

As shown in table 12.2, the share of male respondents (57 percent) is greater than the share of female respondents (41 percent). This is quite surprising and in contrast to microfinance institutions in other countries, such as Bangladesh, Indonesia, and Malaysia, where the female ratio is high. The majority of the respondents (69 percent) are between 30 and 59 years old and are considered economically active. A small share (21 percent) are a little older, but also actively involved in MFIs. This shows the extent to which microfinance institutions in Sudan are important means of survival, even for the older age groups. The majority of the respondents (83 percent) are married, and about half of them have large families, of 8 or more. Such a family structure is common in agro-based African societies. An extended family aids economies of scale and widens participation in various income-generating activities. However, if all the members in a large family depend on single or a few income earners—which is often the case among the poor—it becomes extremely difficult to provide for the basic needs of all the members. This higher dependency ratio is considered one of the causes of poverty in many least developed countries like Sudan.

Education is the most important factor that determines the types of occupation and levels of income. It also provides the necessary skills for managing any business more efficiently. Table 12.3 presents the respondents' educational qualifications.

Table 12.3 Distribution of Respondents based on Level of Education and Training

Factor	Category	Number	Percent
Level of education	Informal education	6	3.7
	Islamic schools/Madrassa	13	8.0
	Primary school	58	35.6
	Secondary school	47	28.8
	Diploma/college	9	5.5
	Tertiary institution	2	1.2
	University	11	6.7
	Missing data	17	10.4
	Total	163	100.0
Years of Schooling	5 years and below	37	22.7
	6–10 years	77	47.2
	10+ years	29	17.8
	Missing data	20	12.3
	Total	163	100.0
Have you taken any vocational training?	Yes	43	26.4
	No	112	68.7
	Missing data	8	4.9
	Total	163	100.0
Devices for loan transaction	Not applicable	75	46.0
	Hand phone/Mobile	28	17.2
	Computer and internet	16	9.8
	Missing data	44	27.0
	Total	163	100.0

Source: Field survey in Sudan, 2015.

As shown in table 12.3, more than half the respondents (64 percent) have both primary and secondary education, whereas few (12 percent) have informal and Islamic education. Only a few respondents (13 percent) have been educated at colleges, tertiary institutions, or universities. Less than half have between 6 and 10 years of schooling and less than one-fifth have 10 or more years of schooling. It is quite unfortunate that the majority of the respondents (68 percent) do not have any vocational training; only a small share (26 percent) has had such training. The result that respondents with minimum educational qualification do not receive any vocational training is unexpected, and raises concerns about the existing MFI approach: MFIs do not set preconditions or requirements for their clients to get training before qualifying for loan. This ease of requirements may lead to the growth of unproductive and inefficient small businesses.

Table 12.4 shows the respondents' distribution based on their occupations before and after joining the microfinance scheme.

Table 12.4 Distribution of Respondents Based on Occupation

Category	Before joining the scheme		After joining the scheme	
	Number	Percent	Number	Percent
Housewife	11	6.7	11	6.7
Farmer/Tiller	37	22.7	49	30.1
Livestock	36	22.1	29	17.8
Factory worker	2	1.2	1	0.6
Civil servant	4	2.5	3	1.8
Business/Services	73	44.8	69	42.3
Other	0	0	1	0.6
Total	163	100.0	163	100.0

Source: Field survey in Sudan, 2015.

As seen in table 12.4, the trend of occupation among the respondents before and after joining the microfinance schemes varies. Some respondents shift occupations after joining the microfinance schemes. For example, the respondents' interest in participation in farming increases from 23 percent before joining the schemes to 30 percent after joining the schemes. By contrast, their interest in participation in other occupations like livestock and business/services declined slightly.

Table 12.5 shows respondents' distribution based on levels of income, expenditures, and savings before and after joining the microfinance programs.

Table 12.5 Distribution of Respondents by levels of Income, Expenditures and Savings (Sudanese pound (SD), \$US1.00 = 5.97500 SD)

Factor	Category	Before joining the scheme		After joining the scheme	
		Number	Percent	Number	Percent
Income	Less than 1000	50	30.7	16	9.8
	1001–4000	81	49.7	52	31.9
	4001–7000	23	14.1	64	39.3
	More than 7000	0	0	22	13.5
	Missing data	9	5.5	9	5.5
	Total	163	100.0	163	100.0

Expenditure	Less than 1000	110	67.5	62	38.0
	1001–4000	40	24.5	39	23.9
	4001–7000	4	2.5	40	24.5
	More than 7000	0	0	13	8.0
	Missing data	9	5.5	9	5.5
	Total	163	100.0	163	100.0
Savings	Less than 400	26	16.0	11	6.7
	401–600	2	1.2	11	6.7
	601–800	6	3.7	6	3.7
	801–1000	0	0	6	3.7
	Missing data	129	79.1	129	79.1
	Total	163	100.0	163	100.0

Source: Field survey in Sudan, 2015.

The survey data in table 12.5 show trends of improvements in the income levels of the clients after joining the microfinance scheme. For example, (14 percent) of the respondents achieved the very high income group of more than SD 7,000 (US\$1,172) and the percentage in the high income group (SD 4,000–7,000) increased from 14.1 percent to 39.3 percent after joining the scheme. Meanwhile the percentage of low-moderate income earners (SD 1,000–4,000) declined from 49.7 percent to 31.9 percent after joining the scheme. These results indicate that microfinance programs to some extent have supported respondents' move to higher income and expenditure brackets. It is difficult, however, to analyze the savings behavior among the respondents because of the higher missing values in the data set.

Level of Awareness among the Respondents about Poverty Alleviation Programs

One of the questionnaire sections of this field survey is to gauge the extent to which the respondents are aware of the various poverty alleviation programs in Sudan, the duration of their involvement in these programs, their sources of loans and the extent to which the loans are adequate. This information was expected to reflect on their answers for IWIMM.

Table 12.6 Distribution of Respondents Based on Awareness Level and Participation in Poverty Alleviation Programs/Schemes

Factor	Category	Number	Percent
Are you aware of any poverty alleviation program/scheme?	Yes	111	68.1
	No	44	27.0
	Missing data	8	4.9
	Total	163	100.0
If yes, kindly identify the program that you are participating in	Government Program/Scheme	110	67.5
	Private Program/Scheme	2	1.2
	NGO Program/Scheme	2	1.2
	Islamic Institutional Program/Scheme	1	.6
	Community-based Program/Scheme	2	1.2
	Missing data	46	28.2
	Total	163	100.0

Source: Field survey in Sudan, 2015.

As shown in table 12.6, more than two-thirds of the respondents (68 percent) are well aware of the various poverty alleviation programs. The survey also shows that the majority of them (68 percent) are involved in government-funded microfinance schemes.

Table 12.7 presents the distribution of the respondents based on the sources of their loan and the extent of their involvement in microfinance programs. The sources and sufficiency of loans are key determinants for selecting suitable businesses.

Table 12.7 Distribution of Respondents Based on Sources of Loan and Involvement in Microfinance Programs

Factor	Category	Number	Percent
Source(s) of loan	MFIs	130	79.8
	Banks	6	3.7
	Family	4	2.5
	Friends	4	2.5
	Others	18	11.0
	Missing data	1	.6
	Total	163	100.0
Years involved in Microfinance Program	1–2	116	71.2
	3–4	14	8.6
	5–6	14	8.6
	Above 6	6	3.7
	Missing data	13	8.0
	Total	163	100.0
Loan sufficiency for business	Yes	37	22.7
	No	80	49.1
	Missing data	46	28.2
	Total	163	100.0
Level of indebtedness	Highly indebted	70	42.9
	Moderately indebted	44	27.0
	Missing data	49	30.1
	Total	163	100.0
Overall assessment of the general financial status of the respondent	Very poor	26	16.0
	Poor	10	6.1
	Missing data	127	77.9
	Total	163	100.0

Source: Field survey in Sudan, 2015.

As shown in table 12.7, the majority of the respondents (80 percent) receive loans from microfinance institutions and only a small number (9 percent) obtain financing from banks, families, and friends. Many of the clients (71 percent) have between one and two years' experience dealing with microfinance institutions. About half of the respondents (49 percent) claim that the loan amounts they receive are insufficient, while about one-fifth of them (22 percent) are contented with the loan amounts for businesses. Less than half (43 percent) reported that they were highly indebted, and about one-quarter (27 percent) reported that they were moderately indebted respectively. The overall financial condition of the respondents was evaluated by the enumerators during their field survey. According to their assessments, only a small number of the clients (22 percent) are found to be poor and very poor (table 12.7). The result is indicative and inference cannot be drawn because of the high proportion

of missing data.

Validation of IWIMM

Validating the Constructs

In this study, reliability and validity of each construct of IWIMM has been carefully measured. The Cronbach's Alpha value has shown level of consistency on various items of the questionnaire (Hair and others 2010). It therefore indicates the overall reliability of the questionnaire (Field 2009). As is evident from table 12.8, all the reliability values of the six constructs are above 0.70.

Table 12.8 Validating the Constructs of IWIMM

Construct	Item	Loading	AVE	CR	Cronbach's Alpha	
Human Resource Development (HRD)	HR1. I have not got enough chance to learn from training centre to do business.	0.855	0.724	0.948	0.936	
	HR10. I have not received training from any MFI to enhance my entrepreneurial ability.	0.869				
	HR11. I have not obtained guidance from any MFI to promote my product in the market.	0.808				
	HR2. I have not gone to school to enrich my knowledge of directing the business.	0.901				
	HR3. I have not received any training on how to improve the quality of my product.	0.903				
	HR4. I have not got the chance to learn how to keep record of my business.	0.823				
	HR9. I have not received any assistance from any MFI to improve my understanding about and practice of religion.	0.788				
	IMF5. I expect easy terms and condition for my loan installment.	0.786	0.699	0.874	0.786	
	IMF6. I expect the institution to offer a wide range of products to satisfy my needs.	0.861				
Islamic Microfinance (IMF)	IMF7. I feel MFI usually offers loan to the well-off borrower than to the abject poor.	0.858				
	Project Financing (PF)	PF2. I will participate in managing the group project.	0.857	0.630	0.833	0.718
		PF3. I will prefer the idea of profit and loss sharing to loan financing.	0.631			
	PF7. I will benefit from the group project because it involves group responsibility.	0.869	0.582	0.874	0.819	

Table 12.8 Validating the Constructs of IWIMM (continued)

Construct	Item	Loading	AVE	CR	Cronbach's Alpha
Poverty Reduction (PR)	PR1. I am still poor because my income and asset have not increased since I joined MFIs.	0.791			
	PR2. I require more loans for my business if I am to come out of poverty.	0.699			
	PR3. I believe that the cost of borrowing is very high.	0.732			
	PR4. I am still poor because much of my money is spent on family problems such as accident and illness.	0.846			
	PR5. I can only get rid of poverty if I have proper skill to run my business.	0.737			
Takāful Financing (TF)	TF1. I do not have enough financial support when I am ill.	0.753	0.605	0.884	0.839
	TF2. I do not have any financial support if I happen to meet accident.	0.866			
	TF3. I do not have protection if my business incurs huge loss.	0.726			
	TF4. I need adequate financial support to the family if I die	0.834			
	TF5. I would like to help others if I can.	0.698			
Waqf Resources (WR)	WR1. Waqf can solve my capital problem to run the business.	0.671	0.586	0.849	0.771
	WR2. Waqf can be used for providing health services in my community	0.805			
	WR3. Waqf resources can be supportive in educating me.	0.817			
	WR5. Waqf money can be used to set up business training centre for the poor in my community.	0.761			

Source: Field survey in Sudan, 2015

Note: AVE= average variance extracted; CR=composite reliability.

Under construct reliability, both the indicator reliability and the internal consistency reliability are considered. In the case of indicator reliability, factor loading should be normally 0.50 or higher and ideally 0.70 or higher (Hair and others 2010). It is clear from table 12.8 that most of the items have factor loading of more than 0.70, suggesting evidence of indicator reliability. Meanwhile for the internal consistency reliability, the values of the composite reliability (CR) of more than 0.70 suggest good reliability (Hair and others 2010). In this study, the CR values of all six constructs are above 0.80.

After confirming the reliability, the study tested the constructs for validity. Two tests were

employed: convergent validity and discriminant validity. To test convergent validity, the variance extracted from each item in a construct is measured to derive the average variance extracted (AVE), whose value should be 0.5 or higher (Hair and others 2010). As can be seen from table 12.8, the AVE values are greater than 0.5 for each construct. On the other hand, discriminant validity is “the degree to which items differentiate among constructs or measure distinct concepts by examining the correlations between the measures of potentially overlapping constructs. Items should load more strongly on their own constructs in the model, and the average variance shared between each construct and its measures should be greater than the variance shared between the construct and other constructs” (Fornell and Larcker 1981; Compeau, Higgins, and Huff 1999).

Discriminant validity is checked by considering the latent variable correlation with the square root of the AVE, which needs to be transferred to the diagonals in the correlation table, as shown in table 12.9. The values in the diagonal must be higher than all other values in the row and column. Since all the diagonal values are higher than all others values in the row and column, the result suggests evidence of discriminant validity.

Table 12.9 Discriminant Validity

Construct	Latent variable correlation with square root of the AVE					
	HRD	IMF	PF	PR	TF	WR
HRD	0.851					
IMF	0.606	0.836				
PF	0.47	0.532	0.794			
PR	0.606	0.568	0.381	0.76		
TF	0.508	0.344	0.391	0.51	0.78	
WR	0.373	0.402	0.389	0.5	0.52	0.77

Source: Field survey in Sudan, 2015

Note: AVE=average variance extracted; HRD=Human Resource Development; IMF=Islamic Microfinance; PF=Project Financing; PR=Poverty Reduction; TF= Takāful Financing; WR= Waqf Resources.

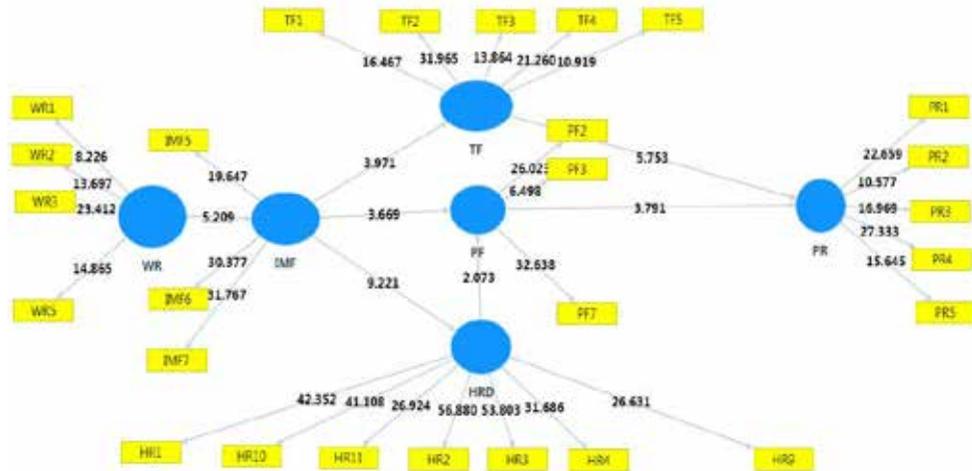
The Measurement Model and the Structural Model

Based on Smart PLS, two sub models were constructed for IWIMM. The measurement model, or the outer model, specifies the relationship between IWIMM's six constructs and the items or indicators in the questionnaires used to measure these constructs. The structural model, or inner model, specifies the relationships between the six constructs (independent

and dependent latent variables). Figure 12.2 presents the two constructed Smart PLS models.

The study has adopted the bootstrapping technique to generate T-statistics to test the significances of both the inner and outer model. Bootstrapping is the most popular and commonly used technique to scrutinize the precision of PLS estimates (Chin 1998). In this technique, as explained by Chin (1998), “N samples set are created in order to obtain N estimates for each parameter in the PLS model. Each sample is obtained by sampling with replacement from the original data set.” A set of 500 subsamples are created for the bootstrapping procedure in this study, as recommended by Chin, Marcolin, and Newsted (2003).

Figure 12.2 IWIMM Structural Model



Source: Field survey in Sudan, 2015

Note: HRD=Human Resources Development; HR=Human Resources; IMF=Islamic Microfinance; PF=Project Financing; PR=Poverty Reduction; TF= Takāful Financing; WR= Waqf Resources.

Hypothesis Testing

As stated, the bootstrapping technique was used to generate statistical measures such as the path coefficient, observed t-statistics and significance level to test the relationships among the constructs and indicators presented in the structural model in figure 12.2. Hence, path coefficients have been used to show the predictive relationships among the six IWIMM constructs. These path coefficient values are also presented in a standardized form in table

12.10 to allow comparison of their relative strengths. For example, the structural model suggests that Islamic Microfinance has the strongest effect on Human Resource Development (0.606), followed by Takāful Financing, which has strong effect on Poverty Reduction (0.428). The hypothesized path relationship between Islamic Microfinance and Human Resource Development is statistically significant ($p = 0.000$). It is clear from the results in table 12.10 that all the hypotheses are supported.

Table 12.10 Hypothesis Testing

Hypo-thesis	Relationship	Std. Beta	Std. Error	T-Values	P-Values	Decision
H1.	Waqf Resources → Islamic Microfinance	0.402	0.077	5.209	0.000	Supported
H2.	Islamic Microfinance → Project Financing	0.39	0.106	3.669	0.000	Supported
H3.	Islamic Microfinance → Takāful Financing	0.344	0.087	3.971	0.000	Supported
H4.	Islamic Microfinance → Human Resource Development	0.606	0.066	9.221	0.000	Supported
H5.	Human Resource Development → Project Financing	0.234	0.113	2.073	0.039	Supported
H6.	Takāful Financing → Poverty Reduction	0.428	0.074	5.753	0.000	Supported
H7.	Project Financing → Poverty Reduction	0.214	0.056	3.791	0.000	Supported

Note: Results generated by using SmartPLS3 Software. ** $p < 0.01$, * $p < 0.05$

The results of the hypothesis testing results indicate that the clients of Islamic microfinance institutions in Sudan have overwhelmingly supported and accepted the idea of using IWIMM for poverty alleviation in the country. Due to their high level of awareness, they believe waqf institutions can contribute positively to the development of Islamic microfinance and to the welfare of the beneficiaries. They support the idea of channelling waqf funds to Islamic microfinance institutions. This of course will require a shift from a mindset that confines the role of waqf to religious functions and investments mostly in waqf illiquid assets such as land.

Once Islamic microfinance is able to access sufficient funds from waqf institutions, the study has confirmed from the clients' viewpoint that Islamic microfinance will then be able to contribute positively to project financing, takāful financing, and human resource development.

The clients are enthusiastic about participating in Islamic microfinance group project financing that is based on Islamic equity financing, as opposed to individual personal financing. They also believe that project financing can contribute positively to poverty reduction. There should be some clear guidelines for this arrangement, however, in order to overcome the agency problem and issues related to moral hazard. Hence proper selection of appropriate candidates for the group project is critical. Islamic microfinance may need to conduct feasibility studies on the potential profitability of the business plans proposed by

clients.

The result has also supported the positive contribution Islamic microfinance can make to takāful. The respondents have indicated that they need security for their lives, families, and businesses. Meeting this need fits well with the culture of giving behavior among poor clients in Sudan. With a high degree of cooperation, clients will be able to pool their funds to cover their physical illness and other losses. In Sudan, the concept of insurance, particularly takāful, is popular. Hence, the construct of takāful in IWIMM will definitely contribute to the welfare of the members. The clients are also supportive of using takāful for poverty reduction, as the provision of takāful would provide security to individuals, family members, and their businesses, thus safeguarding them from poverty.

The empirical results strongly support the need for Islamic microfinance to contribute to human resource development, especially in the form of training to help members effectively make use of microfinance funds. Although the provision of training is optional in most cases, it should be made compulsory for the clients of Islamic microfinance in Sudan, as proposed by IWIMM. The demographic results show that the majority of clients have a low level of education and have not undergone any form of vocational training. The empirical results also show that human resource development can contribute positively to project financing. This implies that the clients need to participate in various human resource development programs before joining the project financing schemes, which are in an equity-based Islamic financing mode. Members who become partners would need to employ their best effort and skills to make the project profitable. The success of this component of IWIMM will largely depend on the relationship between efficient, skilled, and knowledgeable partners and the selection of appropriate projects.

Conclusion

The study has made use of the empirical findings to validate IWIMM and its acceptability. As expected, the six constructs of IWIMM largely relate to the situations of the poor microfinance clients in Sudan and largely appeal to their concerns. This is due to the fact that more than half of the population in Sudan continues to live below the poverty line. This by itself indicates the existing poverty alleviation models have failed to meet their expectations and goals—despite the huge support that the microfinance industry has received from the government of Sudan. Other areas of concern that have enhanced the significance of IWIMM are the poor human resource quality of the labor-intensive microfinance industry and hence the need for human resource development. Meanwhile, the potential of waqf institutions have remained largely untapped and the coverage of microtakāful needs to be widened. The novelty of this study therefore lies in the robustness of IWIMM, which is also simple to understand and relates well to the actual needs of the microfinance clients who are really yearning for such a model.

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Islamic Finance:

A Catalyst for Shared Prosperity?

Islamic Finance: A Catalyst for Shared Prosperity? First Symposium on Islamic Finance

Research in Islamic economics and finance has progressed in many areas, although the emphasis on risk sharing in financial and social contracts is a distinctive feature of Islamic finance. However, certain important aspects of risk sharing and its relevance to shared prosperity are yet to be fully explored and developed. The desire is that human well-being and shared prosperity remains at the very heart of all Islamic finance initiatives. Therefore, the Inaugural Symposium on Islamic Economics and Finance with theme of “Islamic Finance: A Catalyst for Shared Prosperity?” was held on 8-9 September 2015 at Boğaziçi University, Turkey. It is hoped that the symposium contributed toward a better understanding of the role Islamic finance can play in promoting inclusive growth, reducing inequality, and accelerating poverty reduction. This book as well as thoughts within it are expected to pave the way for broader discussion and research in the field, playing a role of motivation and reference source to academics, policymakers, finance professionals and practitioners. The book is published as an attempt to share the knowledge as well as to disseminate the papers and speeches presented in the symposium. sharing (equity and asset-backed financing) offers the right ingredients to mobilize long-term financing provided an enabling legal, regulatory, and financial ecosystem is developed.