ISLAMIC ECONOMIC STUDIES

Vol. 20 No. 2 Muharram 1434H (December 2012)

ARTICLES

ISLAMIC RESEARCH AND TRAINING INSTITUTE
A Member of Islamic Development Bank Group

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Articles

Islamic Research & Training Institute (IRTI)

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بسم الله الرحمن الرحيم

In the name of Allah, the Most Merciful, Most Beneficent

King Fahd National Library Cataloging-in-Publication Data
Islamic economic studies – Jeddah, 2012

Vol. 20, No. 2; 17 x 24 cm
ISSN: 1319/1616
1-Islamic economics
I. Title

ISSN: 1319/1616
LDN: 14-0721

Published by
The Islamic Research and Training Institute
A Member of the Islamic Development Bank Group
P.O. Box 9201 – Jeddah 21413 Saudi Arabia
Tel: (+9662) 6361400, Fax: (+9662) 6378927
Email : irti@isdb.org
Website: http://www.irti.org

Islamic Economic Studies (*IES*) is published biannually, in the months of Muharram and Rajab, according to the Islamic Hijra calendar. *Islamic Economic Studies* is a refereed journal that maintains high academic standards. It is included in the Abstracting Services CD-ROM indexing of the Journal of Economic Literature published by the American Economic Association.

Subscriptions: First class mail is US $35.00 for one year (two issues). The price of a single issue is US $20.00. Subscriptions should be mailed to the following publisher address:

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Targeting and Socio-Economic Impact of Microfinance: A Case Study of Pakistan[1]

NASIM SHAH SHIRAZI[*]

Abstract

An attempt has been made to quantify the targeting of the microfinance and its economic impact on the borrowers. The study has employed the Difference of the Difference Approach to find the net effect of microfinance by employing data collected by Pakistan Poverty Alleviation Fund. The study found that about 30 percent of the borrowers were poor, while 70 percent of the borrowers were non-poor. The impact on the poverty status was found to be marginal. The income of the poor borrowers hardly could grow by 2 percent during the study period. However, the consumption of the poor borrowers increased by 10 percent, which indicates that poor primarily borrow for smoothing their consumption. A significant net effect of microfinance on the consumption (6.71 percent) and income (about 6 percent) of non-poor borrowers has been found. Results show that poor non-borrowers were better off in terms of change in most of their assets compared to the poor borrowers. However, the net effect of microfinance on households durables of the non-poor borrowers was marginal' while the net effect of microfinance on few household durable items like fan, bicycle and sewing machine , of the poor borrowers was found to be positive. Compared to the poor borrowers, the majority of the poor non-borrowers reported no change in their livestock. Similarly, some poor borrowers reported positive changes in their livestock as compared to poor non

[1] This paper is the outcome of the research project completed recently at the International Islamic University Malaysia. I would like to greatly acknowledge the financial grant forthcoming from the Research Management Centre, International Islamic University Malaysia. I am thankful to Yusuf Muhammad Bashir, Ph.D scholar IIUM, who tabulated the data for the paper and the project. I would also like to thank PPAF for the supply of data.

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borrowers during the study period, which shows positive net impact of microcredit on the livestock of the poor borrowers. Expenditures on social and other miscellaneous items were found to be very small.

Key Words: Microfinance, targeting of microfinance, Pakistan Poverty Alleviation Fund, Socio-economic Impact, Microfinance and the poor
JEL Classification: G21, O15

1. Introduction

The system of microfinance has been designed to give low income communities quick and easy access to socio-economic services, and providing opportunities for self-employment and thus a chance to uplift themselves out of poverty. The non-availability of the funds to the poor is considered the major constraint for getting beneficial opportunities. If the funds are made available to the poor then it is expected that they can change their destiny.

The microfinance industry has been growing rapidly in the developing countries especially after the experience of the Grameen bank in Bangladesh. The most recent entrants to the microfinance industry are commercial banks. This modality includes many variants: transformed microfinance NGOs, government owned development banks, reformed state banks and diversification into microfinance by existing commercial banks. Even big multinational banks such as ABN Amro, Citibank and Deutche Bank are now involved in microfinance (Montgomery and Weiss, 2005). Moreover, big financial institutions, such as World Bank and the European bank for Reconstruction and Development, are also helping and backing the microfinance industry (The Economist, 2007).

Just like in other developing countries, microfinance institutions (MFIs) have been growing very fast in Pakistan. More than 18 different institutions are working for uplifting the poor masses. These include micro finance banks, banks with microfinance as separate product line; institutions specialized in rural support programs, such as National Rural Support program (NRSP) and Punjab Rural Support Program (PRSP)[2], and private NGOs. Moreover, an independent professionally managed unit, Pakistan Poverty Alleviation Fund (PPAF), has been established in 2000 for providing development support to civil society

[2] Each province has its own rural support program, such as Sindh Rural Support program (SRSP), Sarhad (now Khaiber Pukhtoonkhawa) Rural Support Program (SRSP), and Baluchistan Rural Support Program (BRSP).

organizations in the country. The target population of the PPAF project[3] are the poor and disadvantaged rural and urban communities. The PPAF gives microcredit to group-based organizations called Community Organizations (COs) through its participatory organizations (POs). The group based procedure of loans[4] serves as a social collateral. Peer pressure is used to monitor and enforce contracts and screen the credential of the borrowers.

Various aspects of microfinance and microenterprises have been discussed in the literature. Few empirical studies have quantified the impact of microfinance on poverty, some have focused on the relation between microfinance and socio-economic indicators, few concentrated on the sustainability and profitability, and few others estimated the return to capital invested in the micro enterprises (see Shirazi, 2008; Shirazi and Khan, 2009). The literature on targeting of the microfinance and the economic impact is limited (see section 2) with reference to Pakistan. Only Gallup Pakistan (2005) has estimated changes in income, consumption, assets and other social variables of the recipients of the microfinance in Pakistan. However, the study did not touch upon the issue of targeting of the funds and also did not decompose the borrowers in the category of poor and non-poor. Therefore this study will quantify the socio-economic impact of microfinance, if any, with reference to Pakistan. More specifically, the study will focus on impact of microfinance on the various income groups including poor borrowers, change in their income and consumption, and change of their assets, if any. In addition to that study will also explore the targeting of the funds i.e. who gets microfinance. The study will utilize the data collected by PPAF and employ Difference of the Difference Approach for the purpose of analysis.

After giving brief introduction in section 1, section 2 is devoted for review of the relevant literature. Section 3 discusses the methodology and data, while section 4 provides the data analysis. Section 5 concludes the paper with some policy recommendations.

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[3] PPAF Provides financial assistance to community organizations through four windows including :i. Lines of credit for expansion of poverty targeted Microcredit/enterprise development programs, ii Grants and Loans for community physical infrastructure on a cost-sharing basis, iii Grants for Health and Education on a cost sharing basis and ,iv Grants to strengthen and build the institutional capacity of partner organizations and communities. However, our analysis are limited to the microfinance due to the data constraint.

[4] The average loan size was reported to be around Rs.11, 445 ranging from Rs.1000 to Rs.300, 000, while the average loan size desired by the borrowers was around Rs.24, 803 (see Gallup, 2005).

2. Review of the Literature

Various aspects of microfinance and microenterprises have been discussed in the literature. Few empirical studies have quantified the impact of microfinance on poverty, some have focused on the relation between microfinance and socio-economic indicators, few concentrated on the sustainability and profitability, and few others estimated the return to capital invested in the micro enterprises (see Shirazi 2008). Microfinance surely bring some changes, which could be positive or negative on individuals, households and institutions (see Cheston et al,1999 and Baker, 2000). Some studies have been focused on the growth of income and expenditures of the borrowers due to microfinance. Hulme and Mosley (1996), for instance, based on the counter factual combined approach, analyzed the impact of microfinance on poverty alleviation using sample data for Indonesia, India, Bangladesh and Sri Lanka and found that growth of income of borrowers always exceeds that of control group and the increase was larger for better-off borrowers. Similarly MkNelly et al. (1996) found positive benefits for the borrowers. Khandker (1998), based on double difference comparison between eligible and ineligible households and between program and control villages, focusing on Grameen, Bangladesh and Bangladesh Rural Advancement Committee (BRAC), found that microcredit alleviated poverty up to 5 percent annually. Furthermore, it was found, that a loan of 100 Taka to a female borrower, after it is repaid, allows a net consumption increase of 18 Taka. For Thailand village banks, Coleman (1999), using the same approach as that of Khandker (1998), found no evidence of any impact of micro finance. Another study by Coleman (2004), found that programs are not reaching the poor as much as they reach relatively wealthy people. Khandker (2003), found that microfinance helps to reduce extreme poverty much more than moderate poverty i.e. 18 percentage points as compared with 8.5 percentage points over seven years. Welfare impact is also positive for all households, including non-participants, as there were spillover effects.

Swain (2004) examines empirical evidence from literature to see the goodness of microfinance as a good poverty alleviation strategy. The evidence shows that microfinance influence is much felt by households at the brink of poverty line, instead of the core poor. Microfinance also reduces vulnerability and smoothing consumption of poor households. Navajas et al. (2000) examine the coverage of five MFIs in Bolivia and discover that majority of the borrowers were close to the poverty line. They also find that group lenders had more depth of outreach than individual lenders, urban poorest were more likely borrowers and rural borrowers were among the poorest of all clients. Also, Servon (1997) studies three MFIs in the US and finds that they served those at the margin of the mainstream economy, not the very poor. Barnes et al (2001) examining MFI in Uganda found positive impact on enterprise level, increased in assets and net revenue, reduced financial vulnerability and increased value, skill and education. However, Schreiner (1999) finds that microfinance is not an effective tool for poverty reduction in US because of weak social cohesion, though it may move more people from welfare to self employment.

Mosley (2001), using data from Latin American countries, found a positive growth of income and assets of the borrowers than control group. The growth of income of the better-off borrowers was larger. However, he could not find any evidence of impact of microfinance on extreme poverty. Banegas et al. (2002), employing Logit model, found positive impact on the income of borrowers. Gallup Pakistan (2005), using counter factual , combined approach, found positive impact of PPAF microfinance on the consumption, income and assets of the borrowers. Shirazi and Khan (2009) employed Counter-factual “Combined approach” and found that Micro credit has reduced the poverty about 3 percentage points on average in Pakistan during 2003/4- 2004/5. Waqar et al (2008), estimated the long term effect of credit on growth and poverty in Pakistan, found out that agricultural credit has a positive impact on the Gross Domestic Product and its effect was more pronounced on the Agriculture GDP. Furthermore impact of agricultural credit in reducing poverty was significant both in the short run and long run Montgomery (2005) found a positive impact of Khushhali bank of Pakistan microfinance lending on the income, empowerment, health and education of the poor. However, he did not find any impact on consumption expenditure of the very poor. His study, in general, shows that even poorest of the poor benefited from the Kushhali Bank’s microfinance program. Saboor et al. (2009) estimated the impact of credit on the income and production level of small farmers using a randomly collected data from Rawalpindi District in Pakistan. The study reveals that for small farmers, credit was not a profiting activity. However, all respondents argued that their expenditures were increasing and they concluded that the credit system should further be improved so that the full benefits could be reaped both in the crop and livestock sectors and miss-utilization of credit by farmers could be minimized. Arif (2006) reviewed poverty reduction programs in Pakistan. He found that various criterion have been used for targeting the poor by different organizations. His review portrays that microfinance organizations use a loose criterion to identify poor and non-poor households. He further pointed out that “ evidence on the targeting efficiency of microfinance is slim”. Shirazi (2008) estimated that micro credit has increased the return to investment of the borrowers. In his study, using Pakistan Gallop data, 2005, he found that micro credit has increased the returns to investment of 79 percent of the borrowers in the range of 15 to 89 per cent per year. Furthermore, the average weighted rate of return to investment was 4.57 per cent per month or uncompounded rate of 54.89 per year. He found that female borrowers were making more return than their male counterparts.

Few studies, which have been summarized in Rahman (2004), have focused on the impact of microcredit on employment and increase in income and expenditure of the borrowers in Bangladesh. Results of these studies show that income of the recipients of micro credit has increased in the range of 8-40 percent. Micro credit has been successful in creating a positive impact on employment. Furthermore, Studies show that microcredit has positively contributed to the social investment, school enrolment, social empowerment, girls schooling and women's non-land asset. Some studies (Choudhury and Bhuiya, 2001; Barnes et.al, 2001; Chen and Snodgrass, 2001) have identified significant positive effects of microfinance on the human resource development among the participants in various countries. Chowdry and Alam (2007) found that the participation of a household in the micro credit program of the Grameen Bank increases consumption of that household significantly. However, there is non-linearity in the increasing trend in consumption of participating households. The consumption level goes up gradually with the increase in the membership duration up to five years of membership, but the growth rate starts declining after that period of membership. Similarly Naveed (1994), Amin *et.al* (1998) and Hashemi *et.al* (1996) found positive impact of microfinance on the women empowerment and welfare. Many impact studies have been made on Grameen bank from different perspectives, which conclude that Grameen Bank's members have been better off in terms of wide range of economic and social indicators including increased income, improved nutrition, better food intake, better consumption on clothing, better housing, lower child mortality, lower birth rate, higher adoption of family-planning practices, better health care, better access to education for the children, empowerment of women participation in social and political activities (see Yunus, 2004). Literature also highlight the beneficial role of microfinance for the poor by smoothing their consumption expenditure, increasing income and savings and diversify their income sources (see Dichter, 1999; Panjaitan et.al, 1999; Remenyi and Quinones Jr., 2000; Morduch, 1998, Khandker, 2003; McKerman, 2002 and Simonwtz, 2002). Wydick (1999) Examining the effect of microenterprise lending on child schooling in Guatemala using logistic regression found that access to credit increases the schooling investment on child and reduces the likelihood of withdrawing children from school to provide family labour.

Although the main objective of the microfinance is to make the funds available for investment in micro enterprises and thus lift the poor people out from poverty and promoting growth, Dichter (2007) casts doubt and says that "recent experience and the economic history of rich countries, however, suggest that these expectations are unrealistic. Most people, poor or otherwise, are not entrepreneurs, so there is little reason to think that mass credit would in general lead to viable business start-ups." Also not all lending programs have been successful. Fifty branches of two major MFIs in Krishna district were closed down by the authorities in Andra Pradesh as a result of allegation of charging interest and forced loan recovery (Shylendra, 2006). Credit at certain time may be disempowering, leading to increase tension within the family (Goetz and Sen Gupta, 1996). Researchers have found borrowers starving themselves to meet repayments and sometimes experienced the disgrace of losing their asset as collateral and loss of self-pride and even sleep as a result of worry on finding money to meet next installment (Copestake, 2002:752). Researchers have also queried group lending. Group lending can be costly to implement, with high default rate, insufficient number of borrowers in a group and perpetual reliance on subsidies (Bhatt and Tang, 2001).

Islamic Microfinance

It has been pointed out that traditional microfinance is reaching and benefiting more to better off than the poor. It is fact that traditional microfinance has been growing rapidly in third world countries, but this is also fact that Islamic microfinance has not got its momentum. Some Islamic microfinance institutions are working in some countries, but still these are in infancy stage, and weak in terms of resource and coverage.

Regarding Islamic microfinance in Pakistan, very few initiatives have been undertaken with very little coverage. Only a few NGOs operate on Islamic principles. The visible examples of Islamic microfinance in Pakistan can be counted as Islamic Relief Pakistan (IRP), Akhuwat, Karakoram Cooperative Bank (KCB), National Rural Support Program and Muslim Aid. All these use *Murābaḥah* as a mode of finance except Akhuwat, which provides interest free loan (*Qarḍ-e-Ḥasanah*). Akhtar et. al (2009) reported that Akhuwat is providing interest free loans for all poor (including the extreme poor) and helping them to get out of poverty. However, their study finds declining growth of loan portfolio with the sharp decline of equity growth over the last five years, which will constraint the financial stability in the future. To overcome this problem, they suggested integration of Islamic microfinance with NGOs, Non-profit Organizations (NPOs), *Zakāt*, *Awqāf* and with *Takāful* as well as with professional training and capacity building institutions of Pakistan to provide Islamic Micro financial services to the poorest of the poor under one roof. On the other side Rural Development Scheme (RDS) of Islamic Bank Bangladesh Limited (IBBL) has not only been treated as a sustainable MFI in the rural development and poverty alleviation of Bangladesh with a short span of time of its establishment but also successful in increasing the household income, productivity of crops and livestock, expenditure, and employment (Parveen, 2009; Rehman and Fariduddin, 2010). An important study has been conducted by Obaidullah (2008) with detailed case studies of RDS of IBBL, the KOSGEB of Turkey and the linkage model of Bank Indonesia. The RDS has been successful by using Sharīʿah compliant model. He observed that RDS has been using *bayʿ-mu'ajjal* as the only mode of finance, and it needs diversification in the use of other Sharīʿah compliant models. The author suggested that the IDB members countries may learn and replicate the success of the KOSGEB model for growth oriented enterprises and the Bank Indonesia linkage model for the provision of microfinance especially Sharīʿah compliant microfinance.

The general picture that emerges from the above review of literature is that opinion differs on the real impact of microfinance. Most of the studies are related with the developing countries and specially Bangladesh. The literature on targeting of the microfinance and the economic impact is limited with reference to Pakistan. Therefore, this study is devoted for the purpose.

3. Methodology and Data Set

3.1. Methodology

In this study a counter-factual "Combined approach" has been employed to study the economic impact of PPAF micro credit on status of the households. This approach combines the "with-without approach" and the "before–after approach". The "with–without approach" provides information of the status of borrowers (target group) and compares it with the status of non–borrowers (control group). The "before–after" approach makes a comparison of the change in the status of group before borrowing and after borrowing for the time period in which the borrowers benefited. There are several other factors that affect the income, consumption and assets of all households overtime irrespective of whether they borrowed or otherwise. This methodology will enable us to capture the net impact of microfinance, and to isolate the influence of other factors on the income, consumption and assets etc. ,if any, of the borrowers.

The respondents have been decomposed into two groups, poor and non poor, by using the official poverty lines. The purpose of decomposing is to analyze and find which category of the borrowers, the poor or rich, are in majority. If the poor are in majority then the microfinance is reaching to the target population, otherwise rich may be getting benefits of the microfinance. We have used the country official poverty line of Rs.878.64 per adult equivalent per month for the year 2004-05 and the same poverty line has been deflated by Core inflation to get the poverty line of Rs.838.22 for the year 2003-04.

More specifically the following formula has been used to find the net impact of micro credit on poverty alleviation.

$P^* = (Pb_{t1} - Pb_{t0}) - (Pnb_{t1} - Pnb_{to})$

Where

P^*: Net impact of micro credit on poverty status of borrower households

$\mathbf{Pb_{t1}}$ is the poverty status of the borrower households with current income level,

$\mathbf{Pb_{t0}}$ is the poverty status of the borrower households with previous income level,

$\mathbf{Pnb_{t1}}$ is the poverty status of the Non- borrower household with current income level and

$\mathbf{Pnb_{to}}$ is the poverty status of the non-borrower household with previous income level,

't_1' represents the duration from Jan 2004 to Jan 2005 and 't_0' stands for the duration from Jan 2003 to Jan 2004.

Moreover, the same procedure has been employed to find the net impact of microcredit on income, expenditure, assets and other social indicators of both the borrower groups- the poor and the non-poor.

3.2. Data Source

We have utilized the data collected by PPAF. Gallup Pakistan (2005) gathered quantitative data from more than 3000 households, covering all provinces of Pakistan, of which more than 1500 were borrowers and the rest were non borrowers (control group). Interviewed were conducted in 114 community organizations from 23 participatory organizations. Data were also collected on the socio-economic variables. Respondents were asked questions about their current and past year's income, consumptions and assets in addition to many other variables related to different aspects of sample households. Details of the quantitative variables used in the study are given in Appendix A.

4. Economic Impact of Microfinance on the Borrowers

4.1. Targeting of the funds and the impact on poor

This section analysis the targeting of the microfinance and its impact on the borrowers. For this purpose both the samples of borrowers (target group) and non borrowers (control group) have been decomposed into poor and non poor categories by using the poverty lines given in section 3.1. Table 1 classifies the borrowers into poor and non-poor categories.

Table-1
Poverty Status of the Borrowers

	Poverty Line Rs. 838.32 per month per adult equivalent (Rs. 4304.77 per HH)		Poverty Line Rs. 878.64 per month per adult equivalent (Rs. 4500.62 per HH)		
	2003-04		2004-05		% Difference
Status	Households (HH)	% of HH	Households	% of HH	
Poor	474	30.46	374	24.04	-6.42
Non poor	1082	69.54	1182	75.96	6.42
Total	1556	100.00	1556	100.00	

Source: our estimates

The Tables shows that about 30 percent of the borrowers were poor in 2003-04 and the rest of the borrowers were found to be non-poor. The main objective of the PPAF is to get the poor out of the poverty by providing them the small loans through its participatory organizations. The data do not support the prime objective of the PPAF as the number of rich borrowers (69.54 percent) exceeds the number of poor borrowers (30.46). This shows miss-targeting of the PPAF's microfinance scheme. Perhaps POs have diverted more funds to the better-off entrepreneurial class rather than the poor community. However, micro finance reduced the number of poor by 6.42 percent (from 30.46 percent in 2003-04 to 24.04 percent in 2004-05) and they moved to the non-poor status.

Table 2 shows the poverty status of the non-borrowers households who were selected for the comparison purpose and to find the net impact of PPAF microfinance. The Table shows that about 30 percent were poor in 2003-04 and the remaining sample households were non-poor in the same year. However, after one year the number of poor households decreased by 3.78 percentage points from 29.53 percent to 25.75 percent. This shows the impact of other factors which have reduced the poverty even among the non-borrowers.

Table-2
Poverty Status of the Non-Borrowers

	Poverty Line Rs.: 838.32 per month per adult equivalent (Rs. 4304.77 per HH)		Poverty Line Rs.: 878.64 per month per adult equivalent (Rs. 4500.62 per HH)		
	2003-04		2004-05		Difference
Status	Households (HH)	% of HH	Households	% of HH	% tot diff
Poor	461	29.53	402	25.75	-3.78
Non poor	1100	70.47	1159	74.25	3.78

Table 3 presents the net impact of microfinance on the borrowers. This table has been constructed by taking the last column of Table 1 and the last column of Table 2. The difference of the difference has been shown in the last column of Table 3. The last column of Table 3 reveals that microfinance has reduced the poverty about 3 percent in the period under study.

Table-3
Net Impact of PPAF Micro Credit on Poverty Status of the Borrowers

Status	Last Column Table 1 (T1)	Last Column Table 2 (T2)	Difference (T1-T2)
Poor	(-) 6.42	(-) 3.78	(-)2.64
Non-Poor	(+) 6.42	(+) 3.78	(+)2.64

4.2. Impact on Households Income

The following Table demonstrates the impact of microfinance on the income of the borrowers. We have already decomposed the sample households into poor and non-poor. The difference in the average income of the poor and non-poor target group and the poor and the non-poor of the control group has been presented in Table 4.

Table-4
Difference in Average Income of the Borrowers and Non-Borrowers

	Borrowers (Target Group)			Non Borrowers (Control Group)			% Diff of the Diff
Mean	2003-04	2004-05	% diff	2003-04	2004-05	% diff	
Poor	3,241	3,557	9.74	3,278	3,536	7.87	1.87
Non-poor	7,055	8,262	17.10	6,998	7840	11.12	5.98*

* Significant at 5%.

The income of the poor borrowers increased by 9.74 percent, while the income of the non-poor borrowers increased by 17.10 percent during the period under study. Similarly the income of the poor non-borrowers increased by 7.87 percent while that of non-poor non-borrowers' income increased by 11.12 percent over the same period. The last column of the Table reports the net effect of the microfinance on the income of the borrowers, which is about two percent (1.87 percent). This increase is marginal and insignificant. However, the net effect of microfinance on the income of the non-poor was about 6 percent and found to be statistically significant.

4.3. Impact of Microfinance on Households Consumption Expenditures

Table-5
Difference in Average Consumption of the Borrowers and Non-Borrowers

	Borrowers			Non- Borrowers			% Diff of the diff
Mean	2003-04	2004-05	% diff	2003-04	2004-05	% diff	
Poor	3,163	3,718	17.55	3,442	3,702	7.55	10.00*
Non – poor	5,599	6,446	15.13	5,807	6,296	8.42	6.71*

* Significant at 5%.

Table 5 presents percentage change in mean consumption of the borrowers and non borrowers. The data reveals that average monthly consumption expenditure of the poor and non poor borrowers increased by 17.55 and 15.13 per cent respectively in the period under study, while average expenditure of the poor and the non-poor of the control group increased by 7.55 percent and 8.42 percent respectively over the same period. The net effect of microfinance on the average consumptions of the poor and non-poor borrowers is given in the last column of the Table. The net average consumption expenditure of the poor borrowers increased significantly (10 percent) while this was 6.71 percent for the non-poor borrowers. As it has been discussed in the review of literature that many poor borrow for the purpose of smoothing their consumption rather than for some productive purpose. Our analysis also supports these findings.

4.4. Impact of Microfinance on Households Assets

This section highlights the assets held and growth in assets, if any, by the control and the target group of respondents. The Table 6 shows that both the groups non-poor borrowers and non- borrowers were having different household durables. These assets are listed in the Table given below. Although the assets of both the categories of respondents increased over time, the net effect of microfinance on households durables found to be marginal. This has been shown in the last column of Table 6.

Table-6
Household Assets and Change in Asset of Non- Poor Respondents

Item	Borrower Percentage change	Non–borrower change	Percentage	Percentage diff of diff
VCR/VCP	10.3	9.4		0.9
Tape Recorder	50.8	51.4		-0.6
Mobile phone	5.1	4.1		1
Radio	56.6	59.6		-3
Air cooler	8.2	6.5		1.7
Iron	80.4	79.8		0.6
Television	55.5	54.3		1.2
Motor cycle	11.4	7.4		4
Fan	87.4	85.6		1.8
Bicycle	55.5	55.9		-0.4
Sewing machine	65.4	66.2		-0.8
Washing machine	46.5	46		0.5
Refrigerator	19.8	18.2		1.6
Suite case	70.7	68.9		1.8

Table 7 reports the percentage change of assets acquisition by the poor borrowers and non-borrowers during the period under study. Table reveals positive change in the growth of assets of households by both the categories of respondents during the period. The last column of the Table shows the net effect of the microfinance on growth of assets of the borrowers. Results show that the poor non-borrowers were better off in terms of change in most of their assets compared to the poor borrowers. The net effect of Microfinance on the growth of assets of the poor borrowers found to be negative except fan, bicycle and Sewing machine, which is also insignificant. The above analysis shows that microfinance does not add to the assets of the poor.

Table-7
Growth of Assets of the Poor Respondents

Item	Borrower (Percentage)	Non –borrower (Percentage)	Percentage diff of diff
VCR/VCP	4.8	5.7	-0.9
Tape Recorder	34.4	35.1	-0.7
Mobile phone	0.3	0.7	-0.4
Radio	57.1	58.5	-1.4
Air cooler	4.3	2.5	1.8
Iron	67.6	66.9	0.7
Television	31.6	33.6	-2
Motor cycle	2.1	3.5	-1.4
Fan	72.9	71.4	1.5
Bicycle	52.5	50.7	1.8
Sewing machine	49.1	43.3	5.8
Washing machine	21.2	23.4	-2.2
Refrigerator	5.1	5.7	-0.6
Suite case	67.3	68.2	-0.9

4.5. Acquisition of Property

Table 8 shows that 8.1 percent of the non poor borrowers purchased houses and 13.7 percent acquired some other property with an average expenditure of Rs 1, 077,815 and Rs 978,083 respectively during the period under study. Likewise 7.8 percent of the non-poor non-borrowers purchased houses with an average expenditure of Rs 1, 984,100 while 0.9 percent of them acquired other property at an average expenditure of Rs. 263,200. Results show a significant difference in other property acquisition by the borrowers.

Table-8
Property Acquisition by the Non- Poor Respondents

	Borrowers		Non-borrower	
	Percentage	Average Value(Rs)	Percentage	Average Value (Rs)
House	8.1	1,077,815	7.8	1,984,100
Other Property	13.7*	978,083	0.9	263,200

* Significant at 5%.

Table-9
Property Acquisition by the Poor Respondents

	Borrower		Non-borrower	
	Percentage	Average Value (Rs)	Percentage	Average Value (Rs)
House	8.3*	1051,613	5.7	1,927
Other Property	2.4*	256,667	0.7	136,667

* Significant at 5%.

Table 9 presents property acquisition by the poor borrowers and non borrowers during the current year. About 8 percent of the poor borrowers acquired houses while 2.4 percent acquired other property at the average cost of Rs 1,051,613 and 256, 667 respectively. Likewise 5.7 percent of the poor non borrowers acquired houses and about one percent of the poor non-borrowers acquired other property. The difference between the two subgroups found to be significant.

4.6. Purchase of Agricultural Related Asset

Table 10 presents acquisition of farm implements by the non poor borrowers and non-borrowers in the study period. About 3.7 percent of borrowers reported acquisition of tractor and the same percentage (3.7 percent) acquired trolley compared to only 0.2 percent and 0.3 percent of non-borrowers who purchased tractor and trolley respectively. None of the two subgroup acquired thresher and truck within the study period while negligible number of both groups (about 0.4 percent) purchased other agricultural equipments during this period.

Table-10
Purchase of Farm Implements by Non Poor Respondents

Asset	Borrower (Percentage)	Non-borrower (Percentage)
Tractor	3.7	0.2
Trolley	3.7	0.3
Thresher	0	0
Truck	0	0
Agric Equipment	0.3	0.4

Table 11 presents the purchase of farm implements by the poor respondents. None of the poor borrower and non borrower acquired tractor, thresher and truck, while less than one percent (0.8 percent and 0.5 percent) of the poor respondents from both the categories acquired trolley and agricultural equipments during the study period.

Table-11
Purchase of Farm implements by the Poor Respondents

Asset	Borrower Percentage	Non-borrower Percentage
Tractor	0	0
Trolley	0.8	0.7
Thresher	0	0
Truck	0	0
Agriculture Equipment	0.3	0.2

4.7. Changes in Livestock

This section discusses the changes in the livestock of the respondents during the study period. The last column of the Table 12 gives net effect of Microfinance on changes of livestock. The column shows either positive, no change or negative change in the number of livestock acquired by the non-poor borrowers and non-borrowers. A great percentage of non- poor borrowers and non-borrowers experienced no change in their livestock during the study period. However, majority of the non-poor non-borrowers experienced no change in their livestock compared with non-poor borrowers. This has been reflected by the negative sign in the last column of Table12.The non-poor borrowers added more animals to their existing stock as compared to the control group. This has been reflected by the positive sign in the last column of the Table 12. The Table shows that the net impact of microfinance has been positive on the livestock of the non-poor borrowers.

Similarly Table 13 reveals the changes in livestock of the poor respondents. The Table shows that majority of the respondents, poor borrowers and poor non-borrowers, reported no change in their livestock. However, few poor borrowers were able to add more cows, bull, goat and sheep etc. to their existing stock of animals than those of poor non- borrowers. This shows a positive net effect of microfinance on the livestock of the poor borrowers. (for detail see table 13).

Table-12
Direction of change in Livestock of the Non Poor Respondents

Borrowers			Non-Borrowers		
Animal	Direction of change	Percentage change	Percentage change	Percentage Difference	Difference of the
Cow	Negative Change	3.3	1.1	2.2	
	No change	69.7	82.1	-12.4	
	Positive change	27.0	16.8	10.2	
Buffalo	Negative Change	1.6	1.3	0.3	
	No change	77.1	80.8	-3.7	
	Positive change	21.9	17.9	4.0	
Bull	Negative Change	27.6	4.8	22.8	
	No change	48.3	90.5	- 42.2	
	Positive change	24.1	4.7	19.4	
Bullock	Negative Change	11.1	5.0	6.1	
	No change	72.2	80.0	-7.8	
	Positive change	16.7	15.0	1.7	
Goat	Negative Change	5.0	1.2	3.8	
	No change	49.8	73.1	- 23.3	
	Positive change	45.2	25.2	20.0	
Sheep	Negative Change	3.3	1.3	2.0	
	No change	41.0	68.4	-27.4	
	Positive change	55.7	30.3	25.4	

Table-13
Direction of change in Livestock of the Poor Respondents

Animal	Direction of change	Percentage change	Percentage change	Percentage Difference	Difference of the
Cow	Negative Change	1.9	0.0	1.9	
	No change	75.4	93.2	-17.8	
	Positive change	23.4	6.8	16.6	
Buffalo	Negative Change	4.5	2.8	1.7	
	No change	80.1	75.7	4.4	
	Positive change	15.6	20.9	- 5.3	
Bull	Negative Change	5.8	0	5.8	
	No change	68.6	88.0	- 19.4	
	Positive change	25.5	12.0	13.5	
Bullock	Negative Change	0.0	0.0	0.0	
	No change	64.4	90.0	-25.6	
	Positive change	35.6	10.0	25.6	
Goat	Negative Change	3.9	6.6	- 2.7	
	No change	44.6	64.1	- 19.5	
	Positive change	51.2	29.3	21.9	
Sheep	Negative Change	0.0	3.6	- 3.6	
	No change	44.4	54.5	-10.1	
	Positive change	55.6	40.0	15.6	

4.8. The Impact of Microfinance on Household Facilities.

This section highlights the impact of microfinance on adding and improving the household facilities for better living, and expenses on other social events. Table 14 depicts the expenditure made by the non-poor borrowers and non-borrowers on their house repair. The average amount spent on repair of houses by the borrowers was higher than non-borrowers. However, the average amount spent on repair of houses by both the categories of respondents was small.

Similarly Table 15 presents the average expenditure on house repair by the poor borrowers and non-borrowers. Table shows that poor borrowers spent larger amount on repair of house than poor non-borrowers. Nevertheless, the average amount spent on house repair by both of the respondents was found to be very small.

Table-14
Expenditure on House repair by Non- poor Borrowers (in Rs.)

Borrower			Non Borrower			% Difference of the difference
Mean Expenditure current year	Mean Expenditure previous year	% change	Mean Expenditure current year	Mean Expenditure previous year	% change	
Rs.2621.93	Rs. 1198.85	Rs. 118.80*	Rs. 1938.65	Rs. 1402.94	Rs. 38.11	Rs. 80.69*

*Significant at 95% level of significant

Table-15
Expenditure on House Repair by Poor Borrowers (in Rs.)

Borrower			Non Borrower			% Difference of the difference
Mean Expenditure current year	Mean Expenditure previous year	% change	Mean Expenditure current year	Mean Expenditure previous year	% change	
2208.25	1520.62	45.22	717.13	487.96	46.96	-1.74

Table 16 presents percentage of the non-poor respondents who improved households' facilities during the study period. The table shows that a small percentage of the respondents from both the groups brought improvements in their houses. However, the percentage of borrowers who improved their house facilities was marginally higher than non-borrowers. Likewise is the case of poor borrowers and poor non-borrowers (see Table 17).

Table-16
Improvement in Household Facilities by Non- poor Respondents (in %)

Facilities	Borrowers %	Non-Burrowers (%)	% differences
Latrine Construction	4.4	3.3	1.1
Water Connection	8.2	2.3	5.9*
Electricity Connection	3.0	2.0	1*
Gas Connection	0.7	0.5	0.2
Telephone Connection	0.8	0.6	0.2

*Significant at 5% confidence level.

Table-17
Improvement in Household Facilities by Poor Respondents (in %)

Facilities	Borrowers %	Non-Burrowers %	% Differences
Latrine Construction	3.2	2.7	0.5
Water Connection	8.2	1.2	7*
Electricity Connection	2.4	2.0	0.4
Gas Connection	0.5	7.4	-5.9
Telephone Connection	0.3	0.5	-0.2

*Significant at 5% confidence level.

4.9. Expenditure on Social Event

Table 18 presents the expenses of non poor on social events during the study period. The Table shows that the percentage of positive changes in expenditure on miscellaneous social events are greater for borrowers on funeral, recreation, female education and child toy than non borrowers, while non borrowers have higher percentage change in the amount spent on illness, male child education, traveling and litigation. The borrowers' expenditure on wedding decreased in the current year. The change in expenses on miscellaneous social events is significant in favor of borrowers for wedding, illness and litigation.

Table 19 presents expenses of the poor respondents on social events. The data show a very small amount spent on different social events by the respondents. However, poor borrowers' expenditures for children education, child toy, traveling and litigation were found to be higher than poor non-borrowers, while non borrowers recorded higher change in spending for wedding, illness, funeral and recreation. The change in expenses on miscellaneous social invents is significant in favor of borrowers for wedding, male children education and toy.

Table-18
Expenditure on Miscellaneous Social Events by Non- Poor Respondents

	Borrower			Non Borrower			Difference of the difference
	Mean Expenditure current year	Mean Expenditure previous year	% change	Mean Expenditure current year	Mean Expenditure previous year	% change	
Expenditure on wedding	3446.46	7431.62	-53.62	2770.40	2519.43	9.96	-63.58*
Expenditure on Illness	2583.06	2442.22	5.77	2204.67	1864.12	18.27	-12.80*
Expenditure on Funeral	1571.07	1358.94	15.61	1389.20	1278.62	8.64	6.97
Expenditure on recreation	1196.05	989.63	20.85	959.15	863.47	11.08	9.77
Expenditure on male children education	2241.14	2047.04	9.48	1665.18	1481.21	12.42	-2.92
Expenditure on female children education	1242.49	1097.09	13.25	1019.39	918.63	10.97	2.28
Expenditure on child toy	481.16	412.38	16.68	476.46	441.13	8.01	8.67
Expenditure on traveling	1947.77	1792.18	8.68	1810.12	1638.52	10.47	-1.79
Expenditure on litigation	457.67	339.60	34.75	530.56	308.56	71.95	-36.20*

*****Significant at 5%.

Table-19
Expenditure on Miscellaneous Social Events by Poor Respondents

	Borrower			Non Borrower			Difference of the difference
	Mean Expenditure current year (Rs.)	Mean Expenditure previous year (Rs)	% change	Mean Expenditure current year (Rs.)	Mean Expenditure previous year (Rs.)	% change	
Expenditure on wedding	1883.46	1527.43	23.30	2157.75	1451.83	48.62	-24.68*
Expenditure on Illness	1631.19	1661.49	-1.82	1771.47	1686.35	5.05	-6.87
Expenditure on Funeral	1272.04	1131.18	12.45	1212.23	1024.76	18.28	-5.83
Expenditure on recreation	830.52	687.79	20.75	740.98	606.19	22.24	1.49
Expenditure on male children education	990.82	826.33	19.91	749.45	692.46	8.23	11.68*
Expenditure on female children education	630.61	539.17	16.96	481.62	445.03	13.75	3.21
Expenditure on child toy	532.27	417.73	27.41	399.46	351.16	13.75	13.98*
Expenditure on travelling	1332.59	1275.95	4.44	1312.50	1247.70	5.19	-0.75
Expenditure on litigation	614.12	454.12	35.23	109.80	142.65	23.03	12.20

*****Significant at 5% confidence interval.

5. Conclusion and Policy Recommendations

The study has been conducted to analyze the socio-economic impact of microfinance on the borrowers in Pakistan. The study has employed the "Difference of the Difference" approach to find the net effects of microfinance. The study has used data collected by Pakistan Poverty Alleviation Fund in 2005. The main objective of the microfinance has been to reach the poor and disadvantaged people who do not have collateral.

The study found that in case of Pakistan all microfinance funds are not going to the poor masses rather the non-poor were the major beneficiaries. Only about 30 percent of the poor were the recipients of the microfinance facilities during the study period, which show miss-targeting of the funds. The impact on the poverty status was found to be positive but marginal. Only about 3 percent of poor could cross the national poverty line. The income of the poor borrowers hardly could grow by 2 percent during the study period. The income of the non-poor borrowers grew at about 6 percent. However, the consumption of the poor borrowers increased by 10 percent, which indicates that the poor primarily borrow for smoothing their consumption. A significant net effect of microfinance on the consumption (6.71 percent) and income (about 6 percent) of non-poor borrowers has been found. Results show that poor non-borrowers were better off in terms of change in most of their assets compared to the poor borrowers. However, the net effect of microfinance on households durables of the non-poor borrowers was marginal' while the net effect of microfinance on few items of household durables like fan, bicycle and sewing machine , of the poor borrowers was found to be positive.

Compared to the poor borrowers, the majority of the poor non-borrowers reported no change in their livestock. Similarly, some poor borrowers reported positive changes in their livestock as compared to poor non borrowers during the study period, which shows positive net impact of microcredit on the livestock of the poor borrowers.. As for as purchase of property and other agriculture related assets are concerned, only about 8 percent of the poor borrowers could purchase some property while about one percent purchased agricultural implements. The majority of the poor borrowers and non-borrowers reported no change in their livestock. However, poor borrowers were able to add more cows, bull, goat and sheep etc. to their existing stock of animals than those of poor non- borrowers. This shows a positive net effect of microfinance on the livestock of the poor borrowers.

Results show some changes in adding household facilities and house repairs by the poor and the non poor borrowers. Both of the respondents spent very small amount on house repair. Likewise very few poor and non-poor respondents added household facilities during the study period. Expenditures on social and other miscellaneous items were found to be small. However, poor borrows spent more money for children education, child toy, travelling and litigation compared to non borrowers who spent a little bit more on wedding, illness, funeral and recreation.

The main purpose of the PPAF was to address the problem of poverty in the country and to provide microfinance to the poor through its participatory organizations and NGOs. Despite the PPAF efforts, the POs and other NGOs failed to target the poor masses. They focused on entrepreneurial class. The PPAF should make sure that funds go to the poor and marginalized communities.

It has been noticed that most of the poor who received microcredit were not benefited much, perhaps they lack entrepreneurial skills. Although PPAF has been stressing the POs for the training of the recipients of microfinance, it seems that POs have neglected the training aspect of the beneficiaries. It is suggested that the borrowers of microfinance also be provided with training in the areas (sectors/trades) in which funds are made available.

The average size of the loan was reported to be about Rs. 11,445 ranging from Rs. 1,000 to Rs. 30,000, while the average loan size desired by the borrowers was around Rs.24, 803. Therefore the loan size may be increased so that the borrowers may get full benefits out of it.

The analysis given above highlights the extent of effectiveness of the traditional microfinance in case of Pakistan. Results show some positive but marginal impact on the social and economic life of the borrowers. However, traditional microfinance is reaching and benefiting more to better off than the poor and unskilled. It has also been observed that most of the poor borrow for smoothing their consumption rather than for some investment purpose. They are caught in a trap and remain poor. This problem can be solved by providing them social safety net and capacity building through *zakāt* and *ṣadaqat*. An inclusive business model is suggested, where consumption requirement may be met through grant and production requirement through finance to include the poor and enable them to be entrepreneurs.

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Appendix A
Descriptive Statistics of Some Variables Used in the Paper

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age of the respondent	3126	16	88	37.89	10.454
Current personal monthly income	3125	0	99000	5409.63	4832.924
Previous personal monthly income	3106	0	50000	4734.10	3314.052
Current monthly HH income	3126	0	145000	7010.83	5132.338
Previous monthly HH income	3125	0	251000	6289.55	6102.558
Current HH monthly consumption	3126	1000	100000	6065.22	5734.861
Previous HH monthly consumption	3126	400	85000	5235.40	4241.402
Value of property	35	-1	4050000	488257.11	856714.958
Value of trolley	9	15000	90000	37388.89	22698.813
Value of agri	10	200	15000	2520.00	4421.111
Value of Tractor	2	215000	240000	227500.00	17677.670
Valid N (listwise)	0				

Note: All sample

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age of the respondent	1563	18	88	37.98	10.515
Current personal monthly income	1562	0	99000	5606.03	5284.458
Previous personal monthly income	1552	0	30000	4661.01	3048.558
Current monthly HH income	1563	0	120000	7204.46	5160.433
Previous monthly HH income	1563	0	251000	6345.12	7348.341
Current HH monthly consumption	1563	1250	100000	6170.68	5694.460
Previous HH monthly consumption	1563	1200	70000	5177.51	3689.816
Value of property	22	-1	4050000	638499.95	1024364.862
Value of trolley	3	45500	90000	61833.33	24496.598
Value of agri	4	200	2000	925.00	763.217
Value of Tractor	0				
Valid N (listwise)	0				

Note: All Borrowers

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age of the respondent	1563	16	80	37.79	10.394
Current personal monthly income	1563	0	83333	5213.36	4327.766
Previous personal monthly income	1554	0	50000	4807.10	3558.988
Current monthly HH income	1563	0	145000	6817.21	5098.386
Previous monthly HH income	1562	0	70000	6233.94	4526.725
Current HH monthly consumption	1563	1000	85000	5959.77	5774.875
Previous HH monthly consumption	1563	400	85000	5293.30	4729.594
Value of property	13	10000	1020000	234000.00	363072.077
Value of trolley	6	15000	35000	25166.67	6823.977
Value of agri	6	500	15000	3583.33	5607.287
Value of Tractor	2	215000	240000	227500.00	17677.670
Valid N (list wise)	0				

Note: All Non-Borrowers

Islamic Economic Studies
Vol. 20, No. 2, December 2012 (29-54)

Dual Banking and Financial Contagion

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Abstract

This paper builds a theoretical model based on Allen and Gale (2000) to analyse how unexpected shock affecting the banking assets in one region can generate bankruptcy in a second region. I also analyse the effect of the presence in a third region of an Islamic bank on the vulnerability of conventional banks to financial contagion. It is interestingly shown that the Islamic bank assets' diversification strategy across the regions reduces the likelihood of financial contagion among conventional banks.

Key Words: Islamic Banking, Conventional Banking, Financial Crisis
JEL Classification: G01, G21,

1. Introduction

The Islamic banks (IBs) assets have continuously increased globally reaching 826 US$ billions in 2010 and projected to 1,130 US$ billions in 2012 (Ernst & Young, 2011). This tendency is also perceivable at the country levels where the share of the IBs assets is growing accounting for 14% in the Middle East and North Africa (MENA) region, 26% in Gulf Cooperation Council (GCC) and 17.3% in Malaysia. Therefore, in many countries the banking system is becoming dual with the simultaneous presence of conventional and Islamic banks. This transformation generated new challenges for the design of regulatory and supervisory frameworks by central banks. It continues also to stimulate studies trying to compare the behavior and performance of the two types of banks. The empirical studies revealed that the current practices of IBs deviate from their theoretical model as the majority of IBs mimic the conventional banks' (CBs) business model by creating

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assets through debt-like instruments with a predetermined fixed rate of return. In average almost 80% of the total assets of an IB are fixed income with short term maturity. While, only 20% are dedicated to long term and risk sharing investments.

El-Hawary el al (2007) and Greuning and Iqbal (2008) claim that the dominance of less risky, low return assets (e.g. *Murābaḥah* and *Ijārahs*) deprives the IB of the benefits of the portfolio diversification, as *Muḍārabah* and *Mushārakah* contracts are more profitable. According to Siddiqi (2006) this behavior could be explained by the low moral hazard and adverse selection problems associated with sale-based transactions compared to the profit and loss sharing (PLS) investments. Another salient divergence with the Islamic banking theory is also revealed by the income distribution. In many cases, IBs distribute profits to the investment depositors even when they accrue loss (El- Hawary et al, 2007; Greuning and Iqbal, 2008). This displaced commercial risk was confirmed by Zainol and Kassim (2010) and Cevik and Charap (2011) who found that the conventional banks' deposit rates Granger cause returns on PLS accounts in Malaysia and Turkey. An analogous result was established by Chong and Liu (2009) in the case of Malaysia showing that the retail Islamic deposit rates mimic the behavior of conventional interest rates. Beck et al (2010) carried an empirical investigation on a broad cross-country sample and reached the same conclusion since they identified few significant differences in business orientation, efficiency, asset quality between conventional and retail Islamic banks. The stability of IBs relatively to the CBs was analyzed by Cihak and Hesse (2010) who found that IBs are stronger only when they have small size. They also found no positive impact of the IBs' presence on the financial strength of conventional banks.

The analysis of the stability of IBs relatively to CBs becomes more relevant when the analysis's period include the recent global financial crisis. Indeed, the crisis induced a series of failure of many CBs and constitutes a good test of the stability of IBs. From a theoretical perspective, the Profit and Loss Sharing (PLS) principle enables the IBs to maintain its net worth under difficult economic situations. Indeed, any shock that could generate losses on their asset side will be absorbed on the liability side. (Ahmed, 2002; Cihak and Hesse, 2008). However, a growing number of studies show that the recent crisis has impacted not only the CBs but also IBs. Hasan and Dridi (2010) have reached the same conclusion using a sample of 120 Islamic and conventional banks in 8 countries. Beck et al (2010) showed that conventional banks operating in countries with high market share of Islamic banks are more cost-effective but less stable. Besides, their results confirmed the relatively better performance of IBs during the recent crisis. According to Syed Ali (2007) *Ihlas Finance House*, the Turkish Islamic financial institution was closed during the financial crisis of 2000-2001 due to liquidity problems and financial distress that originated from its strategic error to allow withdrawals from Investment Accounts. “On the contrary other SFHs (Islamic financial institutions) which survived the crisis did not en-cash the investment deposits and advised their clients to hold them to maturity.”[1]

The objective of this paper is to shed light on another angle of the interaction between Islamic banks and conventional banks. More precisely I analyze the behavior of an IB when bankruptcy occurs in the conventional banking sector and delve if the presence of the IB reduces the likelihood of financial contagion within CBs[2].

One of the justifications of the existence of banks in the conventional “fractional reserve system” is their role as “pools of liquidity” providing depositors with insurance against idiosyncratic shocks that affect their consumption needs (Freixas and Rochet, 2008). In this system, banks hold a fraction of their deposits as cash reserve and the remainder fraction to finance profitable but illiquid investments. When offering demand deposit contracts, a bank become inherently vulnerable to bank run which takes place when all depositors panic and withdraw their deposits immediately irrespective to their consumption (liquidity) needs. This liquidity shock (excess of the immediate demand for liquidity which obliges the bank to liquidate its long assets since its short assets are insufficient) has been considered as the triggering event in the theory of banking crisis that focused on contagion among banks[3]. Allen and Gale (2000) show that an unforeseen liquidity shock could generate the bankruptcy of the entire banking system under different configurations of the interbank market structure. In Allen and Gale (2000), banks belonging to different regions are cross-holding deposits on the interbank market. The authors show that the completeness of the latter (each bank is connected to all banks) reduces the likelihood of transmission of a bankruptcy from one region to another. The opposite happens when the interbank is incomplete (each bank is connected to small number of banks). This is because in the first configuration each bank of the different untroubled regions liquidates a small amount of its long asset

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[1] Syed Ali (2007, page 12).

[2] Financial contagion between banks occurs when the bankruptcy of one bank causes the bankruptcy of a second bank or groups of banks (Allen and Gale, 2000).

[3] The term “liquidity” is linked here to the concept of “funding liquidity” which refers to the availability of funds and the ability of a solvent bank (a financial institution in general) to perform its intermediation function. The other concept is “market liquidity” which refers to the ease with which positions may be traded without significantly affecting their corresponding asset price (Crockett, A., 2008; Hesse, H. et al., 2008).

and responds to the liquidity needs of the troubled bank without suffering a bankruptcy.

In Freixas et al (2000) a liquidity shock hitting one important bank may prompt the depositors to run on solvent banks if they fear that there is insufficient liquidity in the banking system. However, as stated by Adrian and Shin (2008) “the domino model (of contagion) paints a picture of passive financial institutions that stand by and do nothing as the sequence of defaults unfolds.” In practice, financial distresses are more likely to be triggered through the impact of price changes on the banks’ balance sheets. Mishkin (1998) affirms that the deterioration in bank balance sheets could result from excessive risk-taking due to inadequate bank regulation and supervision or because of negative shocks such as interest rate rises, stock market crashes, among other factors. This is confirmed by the 2007 subprime crisis which originated as a relatively small credit default event[4]. During this crisis the difficulty to access funding was coupled with the decline of the prices of the structured mortgage assets deteriorating the balance sheets of many banks exposed to the U.S. asset-backed securities (Hesse et al., 2008). As a consequence, major investments banks like Lehman Brothers bankrupted and other banks as Northern Rock and Bear Stearns were rescued.

This paper builds a theoretical model that analyses the effect of an Islamic bank presence on the propagation of bankruptcy across two conventional banks. We consider that the conventional banks belong to two different regions and that the Islamic bank belongs to a third region. Each region is characterized by different investment opportunities available in different industries and populated by a continuum of consumers (depositors) of mass 1. The interconnectedness between the regions takes the form of direct investments (purchasing of equity shares) by banks of one region in the investment projects of the other region. When a bankruptcy occurs in one region, the other region is impacted due to the premature termination (liquidation) of the investment projects financed by the bankrupted bank. We consider that this bankruptcy could generate a negative externality in the form of reduced return of the remaining long investment projects. In practice, in case of a banking crisis, banks are likely to cut on their lending in order to shrink their asset base and restore their capital ratio. Since all businesses rely on finance

[4] “A 1 percent gain or loss in the US stock market is about the same order of magnitude of the likely subprime mortgage losses that will be gradually realized over the next few years.” (Adrian and Shin, 2010, p. 2)

to function the economic activity will slow[5] and the economies of scale are likely to decline reducing the return of the investment activities. In our model we enable different levels of the negative externality affecting the return of the long investment projects. This externality affects the return of the Islamic bank without causing its bankruptcy due to the amortizing effect of the Profit and Loss Sharing investment accounts. In addition, we show that the IB is incited to use its liquid funds to reduce the premature liquidation of the long investment projects by acquiring - at a discount - the shares of the investment projects initially owned by the bankrupted conventional bank. This in turn limits the negative effect on the bankruptcy externality on the second conventional bank and reduces the likelihood of its financial contagion. In our knowledge, this is the first theoretical attempt that analyzes this type of interaction between the IBs and CBs.

The rest of the paper is organized as follows: Section II develops a model of financial contagion within a banking system comprising only two conventional banks. Section III assesses the effect of the IBs' presence on the propagation of bankruptcy among the conventional banks. Finally section IV summarizes the main results.

2. A Model of Simultaneous Bankruptcy of Two Conventional Banks

In this section we develop a theoretical model based on Allen and Gale (2000) to analyse how unexpected shocks affecting the banking assets in one region can generate simultaneous bankruptcy of the conventional banks across two different regions. Many features distinguish our model from the above mentioned ones. For example we consider inter-banking linkages through the financing of common investment projects instead of cross-holding of deposits through the interbank money market as it is the case in Allen and Gale (2000). Besides, the source of the financial fragility is an unexpected productivity shock[6] affecting the investment project instead of the liquidity shock. Finally, we show that a decrease in the cost of premature termination of the investment project (liquidation cost) increases the vulnerability to simultaneous bankruptcy of the banks in the two regions. This result is opposite to that obtained by Allen and Gale (2000) in the context of a liquidity shock that propagates through the interbank deposit market.

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[5] The investment spending and economic activity might remain depressed for a long period in industrialized countries due to the "debt deflation" (Mishkin, 1998; Bhattacharya et al., 1998). For example this was the case of Japan in the early 1990s and U.S. in 1930-1933.

[6] This unforeseen exogenous productivity could be triggered by a political instability which worsens the macroeconomic environment.

2.1. The Economic Environment

There are three dates $t = 0, 1, 2$. There is a single consumption good and the economy is divided in two regions labeled A and B which can be interpreted as geographical regions with particular specialized sectors within a country. Each region contains a competitive banking sector which could be represented by a single bank and a continuum [0,1] of identical consumers (depositors).

Investment opportunities

In each region banks have two types of investment opportunities. First, there is a storage that yields a unit safe return. Indeed, one unit of the consumption good invested in this short investment at date t produces one unit of the consumption good at date $t+1$. Second, there is a long term investment project that has a higher expected return but matures after two periods and yields the following stochastic

$$R = \begin{cases} R_H & \text{with probability } 1/2 \\ R_L & \text{with probability } 1/2 \end{cases} \tag{1}$$

gross return over the two periods
with $R_H > 1 > R_L$ and $E[R] = R_a = (R_L + R_H)/2 > 1$ signifying that the long asset is more productive in average than the short asset. If R_H occurs the economy is in the high state of the nature S_H otherwise it is in the low state S_L.

Definition 1. *The "liquidation cost" is the cost of premature termination of the investment project*.

If the owner of the investment project is asked by his financiers to repay their capital while the production process has not completed it is natural that this will generate additional costs for the firm (e.g. the project owner will be obliged to borrow or to sell a part of its raw material/equipment) and generate lower cash flow. Another justification of the liquidation cost rests on the fact that in presence of economies of scale (which is the case of many industries) the premature liquidation of a part of the investment project reduces its size and causes the decreasing of its productivity. Therefore, the long asset is not completely illiquid and each unit of the long asset can be prematurely liquidated to produce rR units of the consumption good at *date 1 (*where R is given by 1*)* such that $r<1$ and $rR_a < rR_H < 1$.

Economic signals

All the uncertainty is resolved at date 1 when banks and depositors observe a signal S $\in \{S_1, S_2\}$ that predicts with perfect accuracy the state of the nature that will take place in regions A and B at date 2. As in Allen and Gale (1998) this signal can be thought as a leading economic indicator that predicts the value of the investment projects cash-flows in each region. Although, there is an uncertainty at date *0* regarding the states of the nature that will occur at date 1, its distribution is known by all banks and depositors and is given by Table 1.

Table-1
Distribution of the State of Nature across the two Regions

	A	*B*	*Probability*
S_1	S_H	S_L	1/2
S_2	S_L	S_H	1/2

Hence in region *i=A, B* there is a probability ½ that the state of the nature S_H occurs and a probability ½ that the state S_L occurs. It is clear that given this distribution of the states of nature, the average gross return of the investment opportunity across the economy (comprising the two regions) is certain and equals R_a in each state[7].

Banks' inter-linkages

In order to diversify their assets banks will invest in the short investment as well as in the two regions' long term investment projects. Banks invest by acquiring equity shares issued by the projects' owners. This direct investment in the region was discussed in Allen and Gale (2000) when they argued that their model could be extended to the case of risky long asset[8]. This diversification reduces the risk of

[7] In each region there is an investment of 1 unit of the consumption good. Therefore the total investment across the economy (the two regions) is equal to 2 units. In case of S_1 or S_2 the total output across the two regions is certain and equal to $R_H + R_L$. The uncertainty (which is released at t = 1) concerns which region will contribute with R_H and which one will contribute with R_L. Therefore for two units invested at t = 0 the economy produces $R_H + R_L$ at date t = 2. It follows that the average return is $(R_H + R_L)/2 = R_a$.
[8] The authors argued that their results will remain the same if the financial interconnectedness between the regions takes the form of claims held by banks in one region on banks in another region.

each bank long term investment since it guarantees it a certain average gross return of R_a. In the absence of this diversification the gross return is random and may be equal to R_H or R_L depending on the state of the nature that occurs in the bank's region.

In addition, it is possible that the liquidation of the long investment project by one bank reduces the return of the entire investment projects even if they are continued till their maturity. In this case, the return of the long term investment project becomes φR instead of R where $r < \varphi \leq 1$. If φ equals one there is no negative externality. In conclusion, the liquidated investment project generates no cash flows at date 2 and rR at date 1. Whereas, the remaining investment project of the region generates the following cash-flows at date 2

$$\varphi R = \begin{cases} \varphi R_H & \text{with probability } 1/2 \\ \varphi R_L & \text{with probability } 1/2 \end{cases}$$

<u>Depositors (Consumers)</u>

Each region contains a continuum of mass 1 of ex ante identical consumers (depositors). A consumer has an endowment equal to one unit of the consumption good at date 0 and nothing at dates 1 and 2. Consumers are initially uncertain about their time preferences. At date 1 each consumer knows whether he is an *early consumer* who only want to consume at date 1 or *late consumer* who only want to consume at date 2. In addition, this is a private information of the consumer which is not observable by banks. Hence, late consumers can pretend to be early consumers and withdraw their deposits at date 1 if they will obtain higher return than withdrawing at date 2. It is only in section 2.2 that we assume that a social planner can identify the type of each consumer. At date 0 each consumer has a probability γ to be an early consumers and a probability 1 - γ to be a late consumer. Therefore, the ex-ante preferences of a consumer could be represented by

$$U(c_1, c_2) = \begin{cases} u(c_1) & \text{with probability } \gamma \\ \delta u(c_2) & \text{with probability } 1\text{-}\gamma \end{cases}$$

However, they mentioned that "*If, instead of holding claims on banks in other regions, banks were to invest directly in the long assets of that region, there would be a spillover effect, but it would be much weaker*" (Allen and Gale, 2000; page 31).

Where c_t denotes consumption at date t =1, 2 and $\delta < 1$ is the discount factor. The utility function *u(.)* is assumed to be twice continuously differentiable, increasing, and strictly concave. In ex-ante terms the expected utility of a consumer is

$$EU = \gamma Eu(c_1) + (1-\gamma)\delta Eu(c_2) \tag{2}$$

2.1. Autarky

We start by the simplest case where each consumer chooses independently the quantity y that he invests in the short asset and $x = 1 - y$ that he invests in the long investment project. If he has to consume early then the quantity x should be liquidated at date 1. Therefore, we have

$$\begin{aligned} c_1 &= y + rRx \\ c_2 &= y + Rx \end{aligned} \tag{3}$$

Where R is the random cash-flow of the investment project given by (1) which is revealed at date 1. Initially at date 0 the consumer chooses the allocation (x^a, y^a) so as to maximize its expected utility EU under the constraints (3). At date 1 all the uncertainties are released and we have the following cases

	Early Consumer	Late Consumer
High return R_H	$c_1^a = y^a + rR_H x^a < 1$ $c_2^a = 0$	$c_1^a = 0$ $c_2^a = y^a + R_H x^a$ with $y < c_2^a < R_H$
Low return R_L	$c_1^a = y^a + rR_L x^a < 1$ $c_2^a = 0$	$c_1^a = 0$ $c_2^a = y^a + R_L x^a < 1$

Since $rR_L < rR_H < 1$ and $R_L < 1$ the allocation (x^a, y^a) will be ex post (at date 1) suboptimal in all the cases. Indeed, if the consumer is an early one the optimal decision is $(x, y) = (0,1)$ and the consumption is $c_1 = 1 > c_1^a$. While, if the consumer is of a late type and the return is high the optimal decision is $(x, y) = (1,0)$ and the consumption is $c_2 = R_H > c_2^a$. When the consumer is of a late type and the return is low the optimal decision is $(x, y) = (0,1)$ and the consumption is $c_2 = 1 > c_2^a$. This inefficiency can be mitigated by a social planner who maximizes the expected utility of the entire population of consumers overs the economy (two regions).

2.2. The Optimal (symmetric) Allocation

We now consider that there is a social planner that collects the two units of consumption good endowment of the consumers across the two regions. He invests $2y$ units in the short asset and x in the long investment project of region A and x in the long investment project of region B. Therefore, the total quantity of the consumption good available at date 1 is $2y$ whereas it is $R_H x + R_L x = 2R_a x$ at date 2. The social planner maximizes the following social expected utility $EU = 2\gamma Eu(c_1) + 2(1-\gamma)\delta Eu(c_2)$ which is the sum of the consumers expected utilities. The parameter γ (respectively 1 - γ) represents the probability for an individual to be an early (late) consumer. Since the total mass of consumer in the economy is equal to 2 and using the law of large numbers, the probability 2γ (respectively $2(1-\gamma)$) represents also the fraction of early (respectively late) consumers in the economy. Therefore, the social planner program is given by

$$\begin{cases} \underset{(x,y)}{Max}\ EU = 2\gamma Eu(c_1) + 2(1-\gamma)\delta Eu(c_2) & (4) \\ s.t. & \\ 2x + 2y = 2 & (5) \\ 2\gamma c_1 \le 2y & (6) \\ 2(1-\gamma)c_2 = 2R_a x + (2y - 2\gamma c_1) & (7) \end{cases}$$

Recalling equation (2) it is clear that maximizing the objective function (4) is equivalent to maximize the expected utility of each individual consumer in the economy belonging to region A or B (which are ex-ante identical). Constraint (5) means that the value of the total investment equals to the available funds. Constraint (6) signifies that consumption needs of the early consumers 2γ are covered by the investment $2y$ in the short asset. Constraint (7) signifies that the output $R_a x$ from the investment projects plus the residual quantity from the short investment after the payment of early consumers equals the consumption needs of the late consumers. It is simple to show[9] that the solution of the planning problem is characterized by the following conditions:

$$\begin{cases} u'(c_1^*) = \delta R_a u'(c_2^*) \\ c_1^* = y^* / \gamma \\ c_2^* = R_a x^* / (1-\gamma) \end{cases} \qquad \begin{matrix} (8) \\ (9) \end{matrix}$$

Since the utility function u is concave the late consumer obtain higher amount than early consumer $c_2^* \geq c_1^*$ if and only if [10]

$$\delta R_a \geq 1 \tag{10}$$

Under this condition a late consumer has no incentive to declare he is an early one to obtain c_1 and store it to consume at date 2. Therefore, even if the planner cannot observe the consumers' types the latter will correctly reveal it. Thus, the above characterized optimal allocation can be achieved in this more general case.

Lemma 1.

The optimal allocation dominates the autarky allocation.

Proof. See the appendix.

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[9] Constraints (6) and (7) hold with equality since it Is not optimal to invest in the short asset above the consumption needs at date 1, i.e. $y = \gamma c_1$. This is because it is possible to invest in the investment projects across the economy and obtain a higher certain gross return Ra>1. Hence, the constraint (7) becomes $c_2 = R_a x / (1-\gamma)$. Using equation (5) we obtain $c_2 = R_a (1-\gamma c_1) / (1-\gamma)$. After replacing c_2 by the previous expression in the objective function (4) and calculating the derivative relatively to c_1 we obtain the first first-order condition $Eu'(c_1) = \delta R_a Eu'(c_2)$ which gives us equation (8) because c_1 and c_2 are deterministic contrarily to the case of autarky.

[10] $c_2^* \geq c_1^* \Leftrightarrow u'(c_2^*) \leq u'(c_1^*)$ since u' is a decreasing function. Using (8) we obtain $u'(c_2^*) \leq \delta R_a u'(c_2^*)$ or equivalently condition (10).

By pooling the deposits of a large number of consumers the social planner can offer to them insurance against their uncertain consumption needs. This is done by providing early consumers some of the high yielding risky asset without exposing them to the volatility of the investment projects in their region.

2.3. Decentralization of the Optimal Allocation

In each region there is a continuum of banks constituting a competitive banking system. Banks are assumed to be identical and adopt the same behavior which simplifies the analysis by considering a representative bank for each region. Each consumer deposits his endowment of one unit of the consumption good in the representative bank of his region in exchange of a contract (c_1^*, c_2^*) (which is the solution of the planning problem) allowing him to withdraw either c_1^* units of consumption at date 1 or c_2^* units consumption at date 2. In the rest of the paper we denote (c_1^*, c_2^*) by (c_1, c_2). Since the deposit contract is not contingent on the state of nature that will occur in regions A and B the question that arises is how banks of the two regions could perform the role played by the social planner in the previous section. This is done through the investment in the long term investment projects in regions A and B[11]. Indeed, the bank belonging to region $i=A,B$ invests its one unit of deposit in a portfolio (x^i, y^i, z^i) where x^i and y^i represent respectively the amount invested in the investment project and the short asset of region i and and z^i the investment in the investment project of region $j \neq i$. Therefore, given the distribution of states of the nature across the two regions (given by table 1), the portfolio (x^i, y^i, z^i) of bank $i=A,B$ satisfies the following conditions:

$$x^i + y^i + z^i = 1 \tag{11}$$

$$y^i = \gamma c_1 \tag{12}$$

$$R_H x^i + R_L z^i = (1-\gamma) c_2 \tag{13}$$

$$R_L x^i + R_H z^i = (1-\gamma) c_2 \tag{14}$$

where condition (12) says that the liabilities of the bank at date 1 are covered by the short asset. Conditions (13) and (14) signify that the output of the long term investment enable each bank to pay its depositors a constant amount c_2 whatever

[11] In Allen and Gale (2000) the decentralization of the first best is realized through the interbank deposit market.

the state of the nature it takes place. Indeed, the liabilities of the bank at date 2 are covered by the sum of the output of the long assets across the two regions. It is simple to show[12] that each bank holds the same investment in the long term projects of the two regions:

$$x^i = z^i = \frac{1-\gamma c_1}{2} \tag{15}$$

Hence by diversifying their long term investment across the two regions, banks are able to satisfy their budget constraints in each state of the nature and at each date $t = 0, 1, 2$ while providing their depositors with the optimal consumption allocation through a standard deposit contract.

2.4. Productivity Shock and Bankruptcy

We perturb the decentralized first best allocation by introducing a new state S_C where an unexpected shock affects the productivity of the investment projects in region A. Table 2 presents the characteristics of the different states of the economy in terms of the investment projects' return.

Table-2
Distribution of the Long Asset's Return with the Perturbation

	A	*B*	*Probability*
S_1	R_H	R_L	1/2
S_2	R_L	R_H	1/2
S_C	R_H- ε	R_L	0

Hence in region i=*A*,*B* there is a probability ½ that the state of the nature S_H occurs, a probability ½ that S_L occurs and banks assign a zero probability to the state S_C at date 0. Thus, the sum of the probabilities of the states of nature equals 1. Since banks did not expect the realization of the state S_C, contracts and investment decisions at date *0* are the same as before. If S_1 or S_2 occurs, the first best allocation is realized. However, if the third state S_C occurs, the unexpected shock ε reduces the high return of the investment project in region A. We showed in section 2.4 that the the diversification of bank's assets across the two regions enables the

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[12] From (13) and (14) we have
$$R_H x^i + R_L z^i = R_L x^i + R_H z^i \Leftrightarrow \left(R_H - R_L\right) x^i = \left(R_H - R_L\right) z^i \Leftrightarrow x^i = z^i$$

decentralization of the optimal allocation. However, this strategy exposes the banks of region B to the negative unexpected shock happening in region A.

When state S_C occurs the average return of the investment projects across the economy is lower than expected. As illustrated in table 2 region B has the same return R_L but region A faces an unexpected productivity shock lowering the return R_H by ε. At date *1* all the depositors observe a signal (an economic indicator) revealing perfectly that the state S_C will occur at date *2*. Therefore, late depositors may withdraw their deposit prematurely at date 1 claiming they are early depositors and causing a bank run.

Definition 2. *There is a bankruptcy when the bank run deplete all the assets of a bank at date 1 and the latter cannot honor its engagement as specified in the demand deposit contract.*

The following proposition presents the condition of bankruptcy of banks in regions A and B.

Proposition 1.

i) If $\varepsilon \le \varepsilon_m(r)$ *then there is no bankruptcy.*

ii) If $\varepsilon > \varepsilon_m(r)$ *then banks A and B are bankrupt.*

with

$$\varepsilon_m(r) = 2\mathrm{R}_a - \frac{(1-\gamma)\,y}{(1-\mathrm{r}(1-\gamma))x^B}$$

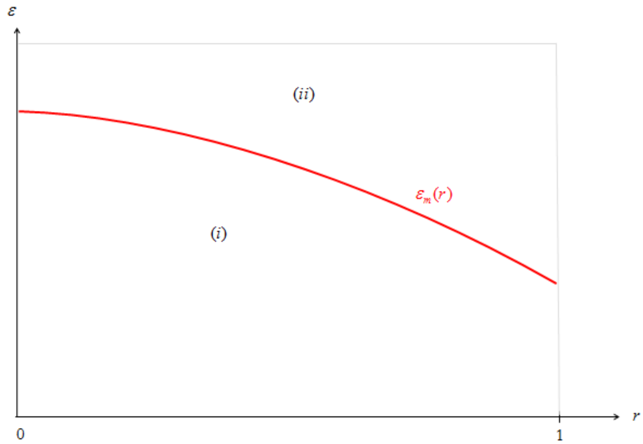
Proof. See the appendix.

Region (i) represents the different combinations of (r,ε) for which neither bank A nor B are bankrupt. It is clear that for the bankruptcy to take place it is necessary that the productivity shock ε affecting the productivity of the long investment project in region A assets exceeds the minimum threshold $\varepsilon_m(r)$. Another interesting result to note is the fact that the economy becomes more vulnerable to the bankruptcy of banks A and B as the liquidation cost (1– r) decreases. This result is opposite to that obtained by Allen and Gale (2000) in the context of a liquidity shock that propagates through the interbank deposit market. It seems counterintuitive but in our case this is due to the fact that late consumers have lower incentive to early withdraw their deposit when the liquidation cost is higher. In Allen and Gale (2000) the liquidation of the long asset is not an option but always happen for the bank that faces the liquidity shock.

Figure 1 represents the results of proposition 1 in the diagram (r, ε) where r is the liquidity cost defined in section 2.1.

Figure-1

The Bankruptcy Regions in the Diagram (r, ε)



2.5. Partial Diversification and Bankruptcy of Bank B

Until now there is a complete symmetry between banks A and B. Let's now assume that bank B partially diversify its portfolio and chooses the following portfolio $((1+\rho)x^B, y^B, (1-\rho)z^B)$ where y^B is defined by (12) and (x^B, z^B) are the optimal solution of the first best decentralization problem given by (15). This means that bank of region B over-invests in the long-term investment projects of its region and under-invest in the projects of region A. Naturally, this undermines the final remuneration of its late depositors who obtain $c_2^{'}$ verifying $c_1 < c_2^{'} \leq c_2$. Instead of equation (13) and (14) we have the following conditions for bank B:

$$R_H(1+\rho)x^B + R_L(1-\rho)z^B = (1-\gamma)c_2^{'} + \pi_\rho \tag{16}$$

$$R_L(1+\rho)x^B + R_H(1-\rho)z^B = (1-\gamma)c_2^{'} \tag{17}$$

where π_ρ represents an additional revenue for bank B which could be justified as a reserve requirement in case of good performance of the region B. Although this portfolio allocation does not permit to realize the first-best allocation, it reduces the exposure of bank B to the unexpected productivity shock that takes place in the state S_C. The following proposition gives the new regions of bankruptcy across regions A and B.

Proposition 2. Under the condition that the negative externality of bank A bankruptcy is such that $\varphi > \varphi_m$, then bank B is less vulnerable to the bankruptcy triggered by the negative productivity shock relatively to the case of full diversification. Indeed, the bankruptcy of bank B takes place if $\varepsilon > \varepsilon_m^B(\varphi, r) > \varepsilon_m(r)$ with

$$\varepsilon_m^B(\varphi, r) = 2\mathrm{R}_a + \frac{2\rho \mathrm{R}_L x^B - (1-\gamma)\,y}{(\varphi - \mathrm{r}(1-\gamma))x^B} \tag{18}$$

$$\varphi_m = 1 - \frac{2\rho \mathrm{R}_L x^B}{(1-\gamma)y}\big(1 - r(1-\gamma)\big) \tag{19}$$

Proof. See the appendix.

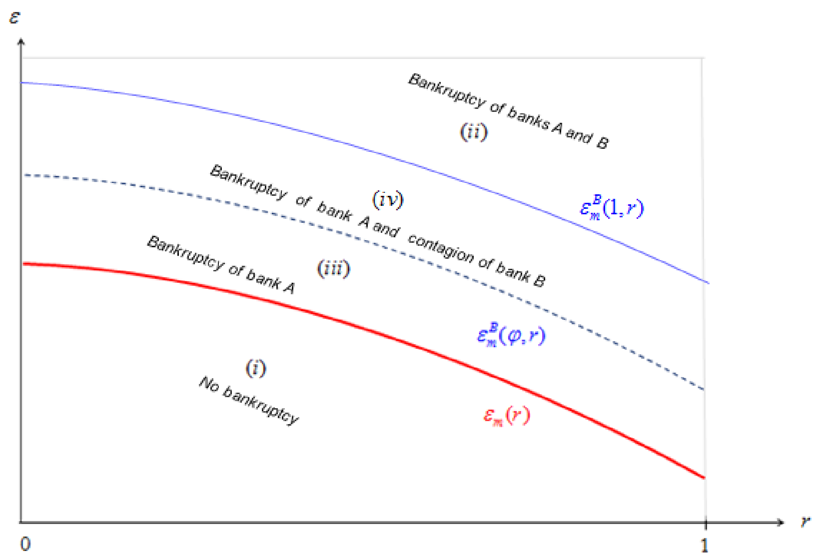
Definition 3. There is a financial contagion from bank A to bank B when the bankruptcy of the latter is due to the negative externality of the former's bankruptcy.

Lemma 2. For a given (φ, r), financial contagion occurs when the productivity shock belongs to the region $\left[\varepsilon_m^B(\varphi, r), \varepsilon_m^B(1, r)\right]$.

Proof. Noting that by assumption $\varphi_m > r$ it is simple to show from (18) and (19) that $\partial\varepsilon_m^B(\varphi, r)/\partial r < 0$ and that $\partial\varepsilon_m^B(\varphi, r)/\partial\varphi > 0$. Figure 2 represents the results of proposition2 in the diagram (r, ε) for two values $\varphi = 1$ and $\varphi < 1$. Compared to the results of proposition1 (illustrated by figure 1) there is now two intermediate regions (iii) and (iv). In region (iii) the bankruptcy occurs only for bank A. In this region bank B is partially affected by the negative shock reducing the productivity of the long term investment in region A as well as by the premature liquidation of the investment projects financed by bank A across the two regions. In region (iv) bank B is also bankrupted. However, this bankruptcy do not take place if there is no externality from the bankruptcy of bank A in the form of reduction of long term investment project return (i.e. if $\varphi = 1$). In other words, if bank A is (exogenously) rescued the bank B will not go in bankruptcy since the productivity shock in region (iv) is inferior to the threshold $\varepsilon_m^B(1,r)$. Therefore, we could qualify the region $\left[\varepsilon_m^B(\varphi,r), \varepsilon_m^B(1,r)\right]$ as the region of financial contagion which disappears if $\varphi = 1$.

Figure-2

The Bankruptcy Regions in Case of Partial Diversification of Bank B



3. The Presence of an Islamic Bank and Financial Contagion

Allen and Gale (2000) conclude that an interbank market for one-period loans opening at the second period could limit the contagion to other banks but cannot avoid the bankruptcy of the bank faced with a liquidity shock. In this section, we analyze if the presence of an Islamic bank in a third region C could avoid the bankruptcy of the conventional bank in region B.

3.1 Characterization of the Islamic Bank

A representative Islamic bank is located in region C which contains a continuum [0,1] of consumers (depositors). Each consumer deposits his endowment of one unit of consumption good in one of the two deposit contracts offered by the Islamic bank: a *demand deposit contract* or a *Profit Sharing Investment account*. I assume that a fraction β of the consumers hold a demand deposit contract enabling them to withdraw one unit of consumption at date 1 or at date 2 conditionally on the liquidity shock they face at date *1*. Hence, they do not share the bank's long asset risk but only want to keep their deposit intact in order to pay their expenditures. At date *1*, only the fraction $\gamma\beta$ early consumers will withdraw their deposit and the IB will carry the remaining amount of deposit $(1-\gamma)\beta$ to date *2*. The fraction $1-\beta$ of depositors hold a Profit Sharing Investment account which enable them to withdraw their deposit only at date 2. The investment holders accept to be paid an amount contingent on the long asset return. For simplicity, we assume that the IB sector is competitive so that the share of the investment cash-flows that goes to the Profit Sharing Investment account holders is $\mu = 1$ and the share of the IB is $1-\mu = 0$. Therefore, the payoff of the Profit Sharing Investment account is given by

$$c_2^{is} = \begin{cases} R_H & \text{with a probability 1/2} \\ R_L & \text{with a probability 1/2} \end{cases} \tag{20}$$

3.2. The IB Diversified Portfolio

We assume that the distribution of the long assets' return in region C is ex-ante symmetrically correlated with those in regions A and B. Table 3 shows that we have the same distribution of return for regions A and B as in table 2.

Table-3
Distribution of the Long Asset's Return in the Presence of an IB

	A	*B*	*C*	*Probability*
S_1	R_H	R_L	R_H	1/4
			R_L	1/4
S_2	R_L	R_H	R_H	1/4
			R_L	1/4
S_C	R_H- ε	R_L	$R_{H,L}$	0

The only difference concerns the distribution of the return in region C where the IB exists which is detailed in the following. There is an equal probability of ¼ for the high return and the low return to take place conditioned on the realization of state S_1 or S_2. Therefore, the sum of the probabilities of all the possibilities for the

IB is equal to 1. Let's also note that the IB like the CBs do not expect the realization of the state S_C which explains that the probability initially assigned to this state is zero. Let's now show that the IB could reduce the risk of the profit sharing investment account while holding the same expected return by diversifying its portfolio across the three regions by investing $(1-\beta)/2$ in region C, $(1-\beta)/4$ in region A and $(1-\beta)/4$ in region B. This strategy will provide the investment account holders with the following remuneration which replaces that presented in (20):

$$\hat{c}_2^{is} = \begin{cases} \frac{3}{4}R_H + \frac{1}{4}R_L & \text{with probability } \frac{1}{2} \\ \frac{3}{4}R_L + \frac{1}{4}R_H & \text{with probability } \frac{1}{2} \end{cases} \qquad (21)$$

From (20) and (21) we obtain $E(\hat{c}_2^{is}) = E(c_2^{is})$ while $\mathrm{var}(\hat{c}_2^{is}) < \mathrm{var}(c_2^{is})$. This diversification strategy will however expose the IBs to the negative effect of the unpredictable crisis state S_C. The following section delves with the reaction of the IB in this state.

3.3. Could the Presence of an Islamic Bank reduce the Vulnerability to Financial Contagion?

When the investment account holders observe the negative shock affecting the assets of the IB they have no incentive to early withdrawal their investment. This is not only because the contract stipulates that withdrawal is only possible at the maturity of the long asset but also because (contrarily to the conventional banks' late consumers) there is no additional benefit from doing this. Therefore, the negative shock on the asset side could be entirely passed-through to the liability side of the IBs. However, fearing a confidence crisis that pushes its investment account holders to switch to other competing banks the IB may not remain passive particularly if there is simultaneous bankruptcy of banks A and B which results in the liquidation of a high proportion of the long assets in regions A and B. According to Syed Ali (2007) *Ihlas Finance House* allowed withdrawals from its Investment Accounts during the Turkish financial crisis of 2000-2001 to advertise its financial strength relatively to its competitors or to cool down the confidence crisis. This strategy which appeared to be a strategic error and led to the closure of *Ihlas Finance House* intended initially to keep the confidence of the clients. In our model, the IB adopts the strategy of the competitors of *Ihlas Finance House* who survived the crisis and refused to pay prematurely their investment account holders (Syed Ali, 2007). In addition, we assumed that the Islamic banking sector is competitive in region C thus our representative IB will try to reduce the pass-through of the CB's bankruptcy to its investment account holders. This will be clarified in the rest of the section.

<u>Assumption 1</u>

The negative externality affecting the return of the long investment projects due to bankruptcy is increasing with the proportion l of liquidated investment project.

$$\partial(1-\varphi) / \partial l > 0 \tag{22}$$

Proposition 3.

i) The presence of the Islamic bank in region C reduces the vulnerability of bank B to Contagion.

ii) The higher the liquidity available for the Islamic bank the lower is the vulnerability of bank B to Contagion.

Proof. If the crisis state S_C takes place the return of the investment account will be the following:

$$\hat{c}_2^{is,C} = \begin{cases} \frac{1}{4}R_{H,L} + \frac{1}{4}(R_H - \varepsilon) + \frac{1}{4}R_L & \text{if no bankruptcy} \\ \\ \frac{1}{4}R_{H,L} + \frac{1}{4}\varphi(R_H - \varepsilon) + \frac{1}{4}\varphi R_L & \text{if banks A and/or B is bankrupt} \end{cases} \tag{23}$$

The only solution for the IB in region C to limit the deterioration of its assets in this situation is to ensure the continuing financing of the maximum proportion of the long investment projects in region B. For this to happen the IB should be able to use its available liquidity at date 1 which is equal to $(1-\gamma)\beta$ (corresponding to the late demand deposits) to purchase the maximum proportion m of projects financed by bank A in region B. The IB should pay at least the unitary price rR_L which bank A could otherwise obtained. The purchased asset will provide the IB a payoff R_L generating an additional profit of $mR_L - mrR_L$. This operation will also reduce the negative externality affecting the return of the long investment projects which is captured through the new value of the parameter $\varphi' > \varphi$. Therefore, the IB will remunerate its investment account holders $\hat{\hat{c}}_2^{is,C} > \hat{c}_2^{is,C}$ given by

$$\hat{\hat{c}}_2^{is,C} = \left(\frac{1}{4} R_{H,L} + \frac{1}{4} \varphi'(R_H - \varepsilon) + \varphi' \frac{1}{4} R_L \right) + \frac{R_L(1-r)m}{1\text{-}\beta} \tag{24}$$

Using the results of lemma 2, it is clear that the region of bankruptcy of bank B is reduced by the above described behavior of the IB. Indeed, the latter by acquiring a proportion of the long term investment project of bank A is also reducing the exposure of bank B to the negative externality resulting from the bankruptcy of A.

Figure 3 illustrates the effect of the presence of the Islamic bank on the region of financial contagion which shrinks from $\left[\varepsilon_m^B(\varphi, r), \varepsilon_m^B(1, r) \right]$ to $\left[\varepsilon_m^B(\varphi', r), \varepsilon_m^B(1, r) \right]$.

Figure-3

The Bankruptcy Regions in the diagram (φ, ε) in Presence of an Islamic Bank

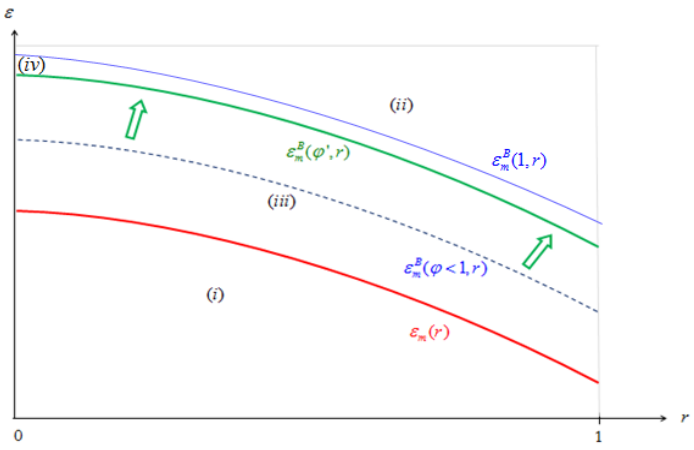


Figure 3 shows that the region (iv) of contagion is now reduced compared to that in figure 2. The presence of the Islamic bank enlarged the region (iii) of non-bankruptcy of bank B in the case of bankruptcy of bank A. Hence, the IB's presence generates in this region the same effect on bank B as would do a lender of last resort.

5. Conclusion

The share of Islamic banks in the banking system of many countries is growing. This transformation generated new challenges for the design of regulatory and supervisory frameworks by central banks and motivated many research studies aiming to compare the behavior of IBs relatively to CBs. This paper shed light on the optimal behavior of an IB when bankruptcy occurs in the conventional banking sector. To this end we develop a theoretical model inspired from Allen and Gale (2000). In this model an unexpected shock affects the banking assets in one region and generates financial contagion among the conventional banking sector. We show that the presence in a third region of an Islamic banking sector (offering demand deposit accounts as well as Profit and Loss Sharing investment accounts) reduces the vulnerability to financial contagion.

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Appendix

Proof of Lemma 1.

Let's define a function f as following

$$f(y) = EU(y) = \gamma u(y/\gamma) + (1-\gamma)\delta u(R_a(1-y)/(1-\gamma)) \tag{A1}$$

The first derivative of f is given by

$$f'(y) = u'(y/\gamma) - \delta R_a u'\left[R_a(1-y)/(1-\gamma)\right] \tag{A2}$$

Given the conditions (8) and (9) we have

$$f'(y^*) = 0 \tag{A3}$$

It is easy to calculate the second derivative of f and to find that it is strictly negative given the assumption that the utility function u is strictly concave.

$$f''(y) = \frac{1}{\gamma}u''(y/\gamma) + \frac{\delta}{1-\gamma}u''(R_a(1-y)/(1-\gamma))$$

Therefore the function f is strictly concave with a maximum in y^*. Therefore we have

$$f(y) \le f(y^*) \text{ with equality } \Leftrightarrow y = y^* \tag{A4}$$

This is true in particular for $y = \gamma$

$$f(\gamma) = \gamma u(1) + (1-\gamma)\delta u(R_a) \le f(y^*) \tag{A5}$$

Let's now turn to the autarky allocation. From equations (3) we have the following relations

$$\begin{aligned} E(c_1^a) &= y^a + rR_a x^a = y^a + rR_a(1-y^a) < 1 \\ E(c_2^a) &= y^a + R_a x^a = (1-x^a) + R_a x^a < R_a \end{aligned} \tag{A6}$$

From equation (2) we obtain the following expression of the expected utility in autarky

$$EU^a = \gamma Eu(c_1^a) + (1-\gamma)\delta Eu(c_2^a) \tag{A7}$$

Since the utility function is strictly concave we have the following Jensen inequality $Eu(.) < uE(.)$ which enables us to obtain from (A7) and (A6)

$$EU^a < \gamma u\left[E(c_1^a)\right] + (1-\gamma)\delta u\left[E(c_2^a)\right] < \gamma u(1) + (1-\gamma)\delta u(R_a) \tag{A8}$$

Finally the proof is completed by combining (A8) and (A5) since we have

$$EU^a < \gamma u(1) + (1-\gamma)\delta u(R_a) \le f(y^*) = EU^* \tag{A9}$$

Where EU^* represents the expected utility of a consumer in the presence of the social planner.

Proof of Proposition 1. Late consumers of banks A have an incentive to withdraw their deposit prematurely at date 1 (and store it for consumption at date 2) if they obtain a larger payment than waiting until date 2. The value of bank A total assets at date 2 is $(\mathrm{R_H} - \varepsilon)\mathrm{x^A} + \mathrm{R_L z^A}$ then late consumers will receive at date 2 a payment $\tilde{c}_{2A}$ given by:

$$\tilde{c}_{2A} = \frac{(\mathrm{R_H} - \varepsilon)\mathrm{x^A} + \mathrm{R_L z^A}}{1-\gamma} \quad \text{(A10)}$$

However, if they decide to withdraw their deposit at date 1 late consumers will trigger a bank run constraining bank A to liquidate its long asset and retrieve its investment in the long term project of region B. They will receive at date 1 a payment $\hat{c}_{2A}$ given by:

$$\hat{c}_{2A} = y + r(\mathrm{R_H} - \varepsilon)\mathrm{x^A} + \mathrm{rR_L z^A} \quad \text{(A11)}$$

Since there is a symmetry of the problem relatively to banks A and B, the value of bank B total assets at date 2 is $\mathrm{R}_L\mathrm{x}^B + (\mathrm{R}_H\text{-}\varepsilon)\mathrm{z}^B$ and late consumers will receive at date 2 a payment $\tilde{c}_{2B}$ given by:

$$\tilde{c}_{2B} = \frac{\mathrm{R}_L\mathrm{x}^B + (\mathrm{R}_H\text{-}\varepsilon)\mathrm{z}^B}{1-\gamma} \quad \text{(A12)}$$

However, if they decide to withdraw their deposit at date t = 1 late consumers will trigger a bank run on B which liquidates its long asset and pays its depositors $\hat{c}_{2B}$ given by:

$$\hat{c}_{2B} = y + r\mathrm{R}_L\mathrm{x}^B + \mathrm{r}(\mathrm{R}_H\text{-}\varepsilon)\mathrm{z}^B \quad \text{(A13)}$$

Late consumers of bank i=A,B have an incentive to run on their bank if $\hat{c}_{2i} > \tilde{c}_{2i}$ which is equivalent after using equations (15), (A13) and (A14) to

$$\varepsilon > \varepsilon_m(r) = 2\mathrm{R}_a - \frac{(1-\gamma)y}{(1-\mathrm{r}(1-\gamma))x^B} \quad \text{(A14)}$$

Proof of Proposition2. Late consumers of banks B have an incentive to withdraw their deposit prematurely at date 1if they obtain a larger payment than waiting until date 2. The value of bank B total assets at date 2 if bank A defaults ($\varepsilon > \varepsilon_m(r)$) is

$\varphi R_L(1+\rho)x^B+\varphi(R_H-\varepsilon)(1-\rho)z^B$ then late consumers will receive at date 2 a payment $\tilde{\tilde{c}}_{2B}$ given by:

$$\tilde{\tilde{c}}_{2B}=\frac{\varphi R_L(1+\rho)x^B+\varphi(R_H-\varepsilon)(1-\rho)z^B}{1-\gamma} \tag{A15}$$

However, if they decide to withdraw their deposit at date 1 late consumers will trigger a bank run constraining bank B to liquidate its long asset and retrieve its investment in the long term project of region B. They will receive at date 1 a payment $\hat{\hat{c}}_{2B}$ given by:

$$\hat{\hat{c}}_{2B}=y+rR_L(1+\rho)x^B+r(R_H-\varepsilon)(1-\rho)z^B \tag{A16}$$

Late consumers of bank B have an incentive to run on their bank if $\hat{\hat{c}}_{2B}>\tilde{\tilde{c}}_{2B}$ which is equivalent after using equations (15), (A15) and (A16) to

$$\varepsilon>\varepsilon_m^B(\varphi,r)=2\mathrm{R}_a+\frac{2\rho\mathrm{R}_L x^B-\left(1-\gamma\right)y}{(\varphi-\mathrm{r}(1-\gamma))x^B} \tag{A17}$$

Since we are in the case $\varepsilon>\varepsilon_m(r)$ then we should have the following condition on φ

$$\varphi>\varphi_m=1-\frac{2\rho\mathrm{R}_L x^B}{(1-\gamma)y}\left(1-r(1-\gamma)\right)$$

Islamic Economic Studies
Vol. 20, No. 2, December 2012 (55-120)

The Role of Islamic Finance in Enhancing Financial Inclusion in Organization of Islamic Cooperation (OIC) Countries

Mahmoud Mohieldin, Zamir Iqbal,
Ahmed Rostom & Xiaochen Fu [1]

Abstract

The core principles of Islam lay great emphasis on social justice, inclusion, and sharing of resources between the haves and the have nots. Islamic finance addresses the issue of "financial inclusion" or "access to finance" from two directions — one through promoting risk-sharing contracts that provide a viable alternative to conventional debt-based financing, and the other through specific instruments of redistribution of the wealth among the society. Use of risk-sharing financing instruments can offer Sharīʿah-*compliant microfinance, financing for small and medium enterprises, and micro-insurance to enhance access to finance. And redistributive instruments such as Zakāh, Ṣadaqat, Waqf, and Qarḍ-al-ḥasan complement risk-sharing instruments to target the poor sector of society to offer a comprehensive approach to eradicating poverty and to build a healthy and vibrant economy. Instruments offered by Islam have strong historical roots and have been applied throughout history in various Muslim communities.*

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The paper identifies gaps currently existing in Organization of Islamic Cooperation (OIC) countries on each front, that is, Sharīʿah-*compliant micro-finance and financing for small and medium enterprises and the state of traditional redistributive instruments. The paper concludes that Islam offers a rich set of instruments and unconventional approaches, which, if implemented in true spirit, can lead to reduced poverty and inequality in Muslim countries plagued by massive poverty. Therefore, policy makers in Muslim countries who are serious about enhancing access to finance or "financial inclusion" should exploit the potential of Islamic instruments to achieve this goal and focus on improving the regulatory and financial infrastructure to promote an enabling environment.*

Keywords: Islamic finance, financial inclusion, access to finance, risk sharing.
JEL Classification: G21, G22, G32

Introduction

There is voluminous literature in economics and finance on the contributions of finance to economic growth and development. Many factors qualify finance to matter for development and growth. Financial development and intermediation has been shown empirically to be a key driver of economic growth and development. Financial intermediation between savers and borrowers together with a combination of information, enforcement, and transaction costs in conjunction with different legal, regulatory, and tax systems gives rise to the structure if financial systems around the globe (Levine 2005). Financial systems motivate savers to save by offering them a range of instruments to fit their financial needs, channels savings to investors and in the process broadens investment opportunities, increases investment, ameliorates risk sharing, increases growth of the real sector, enables individuals and business entities to smooth income and consumption profiles over time. Recent empirical evidence showed that this process doesn't only lead to economic development but it also plays a positive role in reducing poverty and income inequality.

Although the linkage of financial development with economic development is established, a high degree of the financial development in a country is not necessarily any indication of alleviation of poverty in the country. There is growing realization that in addition to financial development, the emphasis should be to expand the accessibility to finance which can play a more positive role in eradicating poverty. Development economists are convinced that improving access and making basic financial services available to all members of the society in order to build an inclusive financial system should be the goal. Enhancing the access to and the quality of basic financial services such as availability of credit, mobilization of savings, insurance and risk management can facilitate sustainable growth and productivity, especially for small and medium scale enterprises. Although the research in this area is at its early stages it is already making promising progress. For example, Demirguc-Kunt, Beck and Honohan (2007) argue that finance is not only pro-growth, but also pro-poor.

Despite of its essential role in the progress of efficiency and equality in a society, 2.7 billion people (70% of the adult population) in emerging economies still have no access to basic financial services,[2] and a great part of the them come from countries with predominantly Muslim population. With growing interest in developing a financial system compliant with the Sharīʿah (Islamic Law), it would be worthwhile to explore what is Islam's perspective on financial inclusion and economic development. Islamic finance is growing at a fast pace all over the globe as the demand for financial products and services compliant with Sharīʿah keeps growing. However, the focus of such financial products and services is on financial intermediation through banking and capital markets activities but the availability of financial vehicles catering to the poor is either non-existent or still at very early stages.

This paper argues that the core principles of Islam lay great emphasis on social justice, inclusion, and sharing of resources between the haves and the have nots. Islamic finance addresses the issue of financial inclusion from two directions—one through promoting risk-sharing contracts which provide a viable alternative to conventional debt-based financing, and the other through specific instruments of redistribution of the wealth among the society. Both risk-sharing financing instruments and redistributive instruments such as *Zakāh*, *Ṣadaqat*, *Waqf*, and *Qarḍ-al-Ḥasan* complement each other to offer a comprehensive approach to eradicating poverty and to build a healthy and vibrant economy. Instruments offered by Islam have strong historical roots and have been applied throughout history in various Muslim communities. The paper concludes that Islam offers a rich set of instruments and unconventional approaches if implemented in a true spirit and can lead to reduced poverty and inequality in Muslim countries plagued by massive poverty. Therefore, the policy makers in Muslim countries who are

[2] WBG Financial Access 2009

serious about enhancing access to finance or "financial inclusion" should exploit the potential of Islamic instruments to achieve this goal.

Section I briefly discusses the concepts of financial inclusion and economic development in the conventional thinking. Section II provides theoretical background on the Islamic approach to financial inclusion and economic development. Section III examines various vehicles offered by Islamic finance to enhance access while section IV discusses main the gaps and challenges of implementing such techniques. Finally, section V offers policy recommendations and concluding remarks.

Section I
Financial Inclusion and Economic Development

In conventional finance, financial access is especially an issue for the poorer members of society including potential, or would be, entrepreneurs. They are commonly referred to as "non-banked" or "non-bankable" and in the case of potential entrepreneurs they invariably lack adequate collateral to access conventional debt financing. While access to finance may be important for economic growth, the private sector may not be willing to provide financing to some areas because of the high cost associated with credit assessment, credit monitoring and because of the lack of acceptable collateral.

Financial inclusion, a concept that gained its importance since the early 2000s, has been a common objective for many governments and central banks in developing nations. The concept initially referred to the delivery of financial services to low-income segments of society at affordable cost. During the past decade, the concept of financial inclusion has evolved into four dimensions: easy access to finance for all households and enterprises, sound institutions guided by prudential regulation and supervision, financial and institutional sustainability of financial institutions, and competition between service providers to bring alternatives to customers. Traditionally, the financial inclusion of an economy is measured by the proportion of population covered by commercial bank branches and ATMs, sizes of deposits and loans made by low-income households and SMEs. However, availability of financial services may not equal financial inclusion, because people may voluntarily exclude themselves from the financial services for religious or cultural reasons, even though they do have access and can afford the services (Beck and Demirguc-Kunt 2008).

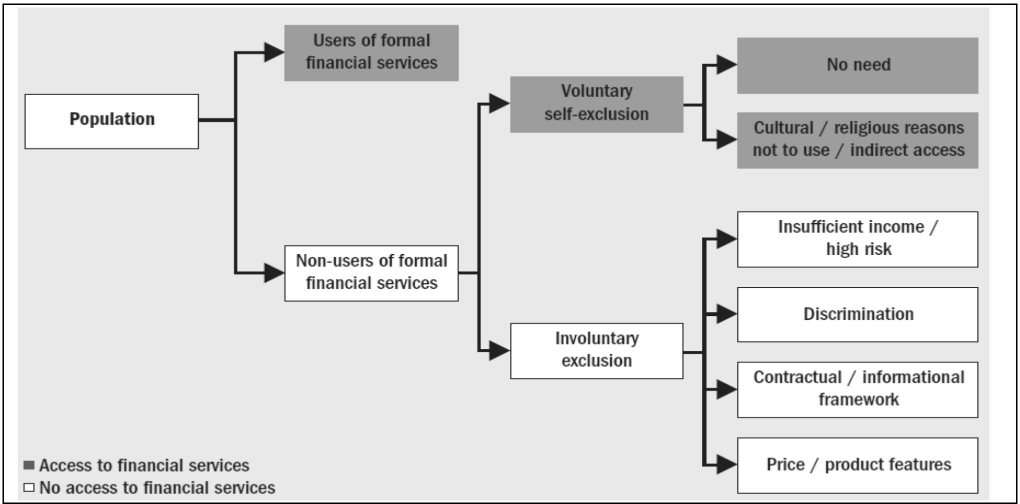
What distinguishes use of financial services from access to financial services? To what extent is lack of use a problem?

Figure-1 below illustrates the difference between access to and use of financial services. The users of financial services can be distinguished from non-users, who either cannot access the financial system or opt out from the financial system for some reason. Within the non-users, first, there is a group of households and enterprises that are considered un-bankable by commercial financial institutions and markets because they do not have enough income or present too high a lending risk. Second, there might be discrimination against certain population groups based on social, religious, or ethnic grounds (red-lining). Third, the contractual and informational framework might prevent financial institutions from reaching out to certain population groups because the outreach is too costly to be commercially viable. For example, in Bangladesh, Pakistan, and the Philippines, it takes more than a month to get a small business loan processed. In Denmark, the wait is only a day. Finally, the price of financial services may be too high or the product features might not be appropriate for certain population groups. While the first group of involuntarily excluded cannot be a target of financial sector policy, the other three groups demand different responses from policy makers. In addition, there could be a set of users who voluntarily exclude themselves from the system due to conflicts with their religious or ethical or moral value system.

Development economists suggest that the lack of access to finance for the poor deters key decisions regarding human and physical capital accumulation. For example, in an imperfect financial market, poor people may find themselves in the "**poverty trap**", as they cannot save in harvest time or borrow to survive a starvation. Similarly, without a predictable future cash-flow, the poor in developing countries are also incapable of borrowing against future income to invest in education or health care for children.

Without inclusive financial systems, poor individuals and small enterprises need to rely on their personal wealth or internal resources to invest in their education, become entrepreneurs, or take advantage of promising growth opportunities. Financial market imperfections, such as information asymmetries and transactions costs, are likely to be especially binding on the talented poor and the micro- and small enterprises that lack collateral, credit histories, and connections, thus limiting their opportunities and leading to persistent inequality and slower growth. However, this access dimension of financial development has often been overlooked, mostly because of serious gaps in the data about who has access to which financial services and about the barriers to broader access.

Figure-1
Factors of Financial Exclusion



Source: The World Bank (2008) Finance for All? Policies and Pitfalls in Expanding Access, A World Bank Policy Research Report, World Bank, Washington, DC. USA

The inevitable trade-off between wealth accumulation and social inequality in the early stage of economic development also implies the crucial role of access to finance in social equality progress. Galor and Zeira (1993) and Banerjee and Newman (1993) imply that financial exclusion not only holds back investment, but results in persistent income inequality, as it adds to negative incentives to save and work and encourages repeated distribution in a society. Beck, Demirguc-Kunt and Levine (2007) conclude that building a more inclusive financial system also appeals to a wider range of philosophical perspectives than can redistributive policies: redistribution aims to equalize outcomes, whereas better functioning financial systems serve to equalize opportunities. Empirical studies by Beck, Demirguc-Kunt and Levine (2007) show that countries with deeper financial systems experience faster reductions in the share of the population that lives on less than one dollar a day. Almost 30% of the cross-country variation in changing poverty rates can be explained by variation in financial development.

Section II
Concept of Economic Development and Inclusion in Islam

Islam is considered a rule-based system which specifies rules for social and economic activities of the society. In this respect, economic principles of Islam deal with (a) the rules of behavior (similar to the concept of economic institutions) as they relate to resource allocation, production, exchange, distribution and redistribution; (b) economic implications of the operations of these rules; and (c) incentive structure and policy recommendations for achieving rules compliance that would allow convergence of the actual economy to the ideal economic system envisioned by Islam.[3]

Islam asserts unambiguously that poverty is neither caused by scarcity and paucity of natural resources, nor is due to the lack of proper synchronization between the mode of production and the relation of distribution, but as a result of waste, opulence, extravagance and nonpayment of what rightfully belongs to the less able segments of the society.[4]

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 (Mirakhor and Askari, 2010). The first specifies a dynamic process of the growth of the human person toward perfection. The second addresses the utilization of natural resources to develop the earth to provide for the material needs of the individual and all of humanity. The third dimension of development refers to the progress of the human collectivity toward full integration and unity. Happiness and fulfillment in a person's life is not achieved by a mere increase in income, but with a full development of a person along all three dimensions. At the same time, economic progress and prosperity is encouraged in Islam since this provides the means by which humans can satisfy their material needs and thus remove the economic barriers on the path to their spiritual progress. Economic transactions are based on freedom of choice and freedom of contract, which, in turn, require property rights over possessions to be exchanged.

It is widely recognized that the central economic tenant of Islam is to develop a prosperous, just and egalitarian economic and social structure in which all members of society can maximize their intellectual capacity, preserve and promote their health, and actively contribute to the economic and social development of society. Economic development and growth, along with social justice, are the foundational elements of an Islamic economic system. All members of an Islamic society must be given the same opportunities to advance themselves; in other

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[3] Iqbal and Mirakhor (2011)

[4] Mirakhor and Askari (2010), Askari, Iqbal, Krichene, and Mirakhor (2011)

words, a level playing field, including access to the natural resources provided by God. For those for whom there is no work and for those that cannot work (such as the handicapped), society must afford the minimum requirements for a dignified life: shelter, food, healthcare and education.

One of the most important economic institutions that operationalizes the objective of achieving social justice is that of the wealth distribution/redistribution rules of Islam. Islam aims for just distribution of resources by creating a balanced society that avoids extreme of wealth and poverty, a society in which all understand that wealth is a blessing provided by the Creator for the sole purpose of providing support for the lives of all of mankind. To avoid a state of extreme wealth and extreme poverty, Islam prohibits unconstrained wealth accumulation and imposes limits on consumption through its rules prohibiting overspending (*isrāf*), waste (*itlāf*), ostentatious and opulent spending (*isrāf*). It then ordains that the net surplus, after moderate spending necessary to maintain a 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. Islam considers the more able as trustee-agents in using these resources on behalf of the less able. In this view, property is not a means of exclusion but inclusion in which the rights of those less able in the income and wealth of the more able are redeemed. The result would be a balanced economy without extremes of wealth and poverty. The operational mechanism for redeeming the right of the less able in the income and wealth of the more able is the network of mandatory and voluntary levies.

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

Redistribution refers to the post-distribution phase when the due share of the less able is collected through voluntary and involuntary levies. These expenditures are essentially repatriation and redemption of the rights of others in one's income and wealth. It is the recognition and affirmation that the Creator has created the resources for all of mankind who must have unhindered access to them. Even the abilities that make access to resources possible are due to the Creator. This would mean that those who are less able or unable to use these resources are partners of the more able.

2.1. Inclusion through Risk-Sharing

One of the core economic principles of Islam is the notion of risk-sharing. This is based on the principle of liability, which states that profit is justified on the basis of taking responsibility, possibly even becoming responsible for the loss and the consequences. This legal maxim, said to be derived from a saying of the Prophet (pbuh) that "profit comes with liability," implies that Sharīʿah distinguishes lawful profit from all other forms of gain and that entitlement to profit only when there is also the liability, or risk, of loss.

Islam has long endorsed risk sharing as the preferred organizational structure for all economic activities, specifically the most comprehensive application of risk sharing and going beyond anything put forward by modern theories.[5] On the one hand, Islam prohibits, and without any exceptions, explicit and implicit interest-based contracts of any kind and requires mandatory risk sharing with the poor, the deprived and the handicapped based on its principles of property rights.

Since the central proposition of Islamic finance is risk-sharing, any debt-based instrument that is structured based on extracting a rent (interest) as a percentage of the principle that was loaned for a specific time period and without the full transfer of the property rights over the money loaned to the borrower, is eliminated from the financial system. One result of this type of debt-based transaction is that the risk is borne by the borrower. Rather, Islam proposes a mutual exchange (*al-bayʿ*) in which one bundle of property rights is exchanged for another, thus allowing both parties to share the risks of the transaction—something which is sanctioned. The emphasis on risk-sharing is evident from one of the most important verses in the Qur'ān with respect to economic relations (2:275).[6]

2.2. Inclusion through Instruments of Redistribution in Islam

Full compliance with the rules of Sharīʿah (Islamic Law) covering resource allocation, production, and exchange, and the distribution of resulting income and wealth not only ensures economic development and growth, it also ensures economic justice. The rules ensure that justice prevails before production takes

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[5] Askari, Iqbal, Krichene, and Mirakhor (2011)

[6] The verse states that: "... they say that indeed an exchange transaction (*bayʿ*) is like a *ribā* (interest-based) transaction. But Allah has permitted exchange transactions and forbidden interest-based transactions," (Qur'ān, 2:275). For further details on risk-sharing aspects of Islam, see Askari, Iqbal, Krichene, and Mirakhor (2011)

place, during the exchange, and in the distribution of resulting income and wealth. Justice before production is achieved by ensuring that all members of the society have equal opportunities with respect to access to and utilization of resources. This is achieved through the rules contained in the framework of Islam's property rights.[7] Basic axioms of property rights in Islam provide a firm foundation for the collectivity's right of legislative mandate that requires transfer from those more able to the less able and the individuals should be fully aware that there are members in the society who are unable, for a variety of reasons, to use the resources, but still have rights in them. Therefore, returns from the use of these resources by the more able must be shared with the less able. All these rights must be redeemed from the income and wealth which result from their use.

Various levies are imposed on the production or the income, to redeem the rights of those who are not able to participate in the economic activities. Islam places great emphasis on redistribution of income and wealth and legislates institutions for this purpose such as *Ṣadaqat, Zakāh, and Qarḍ-al-Ḥasan*. It is important to realize that in no way are these levies to be considered charity, as often misunderstood by laymen and scholars alike.[8] In the following section, we will briefly discuss three main instruments of redistributions including *Zakāh*, *Ṣadaqat*, and *Qarḍ-al-Ḥasan* for the poor, or the unbanked. These instruments are envisaged to enhance access to financing while addressing equity and contributing to poverty alleviation.

The first redistributive instrument is *Zakāh*.[9] An individual who earns more than what he or she consumes must pay *Zakāh*, which is calculated according to his or

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[7] See Mirakhor (1989) and Iqbal and Mirakhor (2011). The first axiom of the Islam's property rights framework is that Allah is the Creator and the Ultimate Owner of all property. Man has been granted the right of possession of property only during his life time in this world. The second axiom is that the right of possession is a collective right, and individuals can only earn priority in the use of these resources. Individuals are to use these resources with the full understanding that Allah's ultimate ownership and the collectivity's prior right of possession remain intact.

[8] Mirakhor (2004) The fact that the general Qur'ānic terms for these levies, such as *Zakāh* or *Ṣadaqat* are translated into "charity" is an indication of this general misunderstanding. In fact, *Zakāh* indicates a cleansing of the resulting production, or income from the rights of others in them, i.e., *Zakāh* purifies the product or income resulting from an economic activity from the rights of others in the surplus.

[9] Mirakhor and Askari (2010). The etymological derivation of this important word has been traced to verbs that in English translate most closely as **''to be pure'' or ''to be pious**.'' *Zakāh* also signifies virtue in general, as well as—in the Qur'ān —giving and the pious gift. Thus, *Zakāh* is seen as an act of purification leading to self improvement. Others have emphasized its link to the verbs ''to grow''

her level of net worth (essentially a wealth tax). Business capital and housing are exempt from *Zakāh* taxation in order to promote investment in capital and construction and to encourage home ownership. It is important to note that *Zakāh*, is *not* a substitute for taxation by the state, which may institute other forms of taxation to finance additional social, economic, infrastructural, and related programs to attain social and economic goals.

Obviously, in theory *Zakāh* is to be given willingly, not to be paid grudgingly, if Divine Law is to be fulfilled. Its obligations are to the community as a whole: they are to be made specifically and directly to the community's less fortunate members, neither to an impersonalized government nor to its revenue-collecting agencies. According to the Qur'ān, poverty and denial of assistance to the needy is forbidden. The Qur'ān goes on to explain that material inequalities are not a manifestation of spiritual inequalities. Rather, such inequalities should be overcome through human effort and are thus meant to foster brotherhood, again stressing the importance of *Zakāh*.[10]

The second instrument of redistribution is *Ṣadaqat* (voluntary social spending). Researchers argue that according to Islam, poverty exists not because economic resources are scarce, but because they are misallocated, inefficiently managed, unproductively hoarded, and unevenly distributed. Independent social spending, according to Islam, is the best possible way for members of the Islamic social order to promote a more equitable distribution of wealth and resources. Muslims with the financial capacity to donate beyond their *Zakāh* requirements are therefore strongly encouraged to further invest in *Infāq* and *Ṣadaqat*.

The term *Ṣadaqat* (the plural of *Ṣadaqat*) is a derivative of the root word meaning truthfulness and sincerity because such contributions or payments are symbolizes the strength of the sincerity of a person's belief (Qur'ān, 2:26; 2:272). The rationale of *Ṣadaqat* payments is explained as the expenditures intended for redeeming the property rights of those who are excluded from the production cycle for any reason. The payment of such levies is considered a contractual obligation between the surplus producer and God—the ultimate owner, the instant an individual begins using resources created for all by Him. He is obligated to return to others what would have been rightly theirs, had they been able to fully

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and ''to increase,'' and have interpreted the giving of *Zakāh* as leading to a significant increase of blessings, both of material property in this world and of spiritual merit for the next.

[10] Proper collection, distribution, and governance of *Zakāh* contributions are considered the responsibility of government. This has been the practice in the past in several Muslim states..

participate in the use of resources in production and in exchange. On these grounds, it is argued that these levies cannot be considered charity.[11]

The third instrument of redistribution is *Qarḍ al-Ḥasan* (literally meaning a 'beautiful loan') which is a loan granted to the needy and is mentioned in the Qur'ān as "beautiful" (*al-ḥasan*).[12] It is a voluntary loan without the creditor's expectation of any return on the principal. Additionally, while the debtor is obligated to return the principal, the creditor, on his own free will, does not press the debtor for an exact timing of its return. Again, in the case of *Qarḍ al-Ḥasan*, God promises multiple returns to such a "beautiful loan." Unfortunately, the full potential of this institution to mobilize substantial resources for the empowerment of the economically weak or dispossessed has not been realized. While the first two instruments, i.e. *Zakāh* and *Ṣadaqat* are essentially gifts, *Qarḍ-al-Ḥasan* is designed to meet the financing needs of the poor and is a loan that has to be repaid. It is, however, a loan without interest and with the term of the loan determined by the borrower alone.[13]

To summarize, Islam recognizes claims based on equality of liberty and opportunity, which are reflected in the degree of access to resources, the degree and extent of the ability of persons to actualize their potential liberty and opportunity, and the right of prior ownership. The right that the less able have in the wealth of those who have greater ability and opportunity to produce greater wealth is redeemed through the various levies (*Zakāh, Khums*[14]*, Ṣadaqat, Nafaqa*, and so on), the payment of which is not beneficence but a contractual obligation that must be met. Islam also encourages beneficence over and above these obligatory dues, but these levies are in the nature of returning to others what rightfully belongs to them. Shirking from this obligation causes a misdistribution of wealth, which Islam considers as the major source of poverty. In the morality of property rights, Islam unequivocally considers all individuals entitled to a certain

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[11] Askari, Iqbal, Krichene, and Mirakhor (2011). An incentive structure is designed by Islam by which there is a promise of multiple returns for *Ṣadaqat*. In fact, the Qur'ān promises the return to *Ṣadaqat* from God in an increasing rate (see verses 265 and 276 of Chapter 2 of the Qur'ān).

[12] It is speculated that the reason why it is called beautiful is because in all the verses in which this loan is mentioned, it is stipulated that it is made directly to God and not to the recipient (see, for example, verse 17, Chapter 64). Mirakhor (2004)

[13] . A number of verses in the Qur'ān stress the importance of this instrument. The Prophet is reported to have said that the reward for al- *Qarḍ al-Ḥasan* is eighteen fold while that for *Ṣadaqat* which is charity and does not have to be repaid is only tenfold.

[14] *Khums* denotes obligation to contribute one-fifth of income from specific sources to charity. There is disagreement on the sources between different schools of thought.

standard of life; and it is this entitlement that entails the satisfaction of their claim as a matter of equity and justice.

As we shall see, instruments of Islamic finance enable risk sharing and risk diversification through which individuals can mitigate their idiosyncratic risks. Levies—mandated or otherwise—such as *Zakāh*, *Ṣadaqat* and *Qarḍ-al-Ḥasan*, enable the idiosyncratic risks of the poor to be shared by the rich, thus helping to reduce the poor's income–consumption correlation. In other words, the poor are not forced to rely entirely on their low level (or no) income to maintain a decent level of subsistence living for themselves and their families. It is possible that at some point even these levies can be instrumentalized to be included in the full-spectrum menu of Islamic financial instruments for risk sharing. In that event, Islamic finance would become a risk manager for society (Askari, Iqbal, Krichene, and Mirakhor, 2011).

Section III
Enhancing Inclusion through Risk-Sharing Instruments

Empirical studies provide strong evidence that the proportion of the Muslim population using financial services is less than their non-Muslim counterparts (El Hawary and Grais, 2005). Lack of access of the poor to finance is undoubtedly the most crucial factor in the failure to bring about a broad-based ownership of businesses and industries and thereby realize the egalitarian objectives of Islam. As mentioned earlier, access to finance can be enhanced in Islamic economy through two approaches. The first is taking the same route as conventional finance and through replicating traditional modes of inclusion such as micro-finance, micro-SME, and micro-insurance (see Box 1). This section discusses the issues in each mode of financing and reviews how each is implemented to make it compliant with Sharīʿah. The second mode of enhancing inclusion is through Islam's redistributive mechanisms such *Zakāh*, *Ṣadaqat*, *Qarḍ-al-Ḥasan*, and *Waqf*. This is an area which is not formally developed in most of the modern-day Islamic countries.

Box 1 – Core Conventional Tools to Enhance Financial Access

Micro-finance:

Two important problems in access to credit services for households are lack of collateral or steady future income and high transaction costs. Microfinance institutions have tried to overcome these two constraints by innovations such as group lending schemes. Conventional literature focuses on how microfinance unleashes the productive potential of small and unbankable borrowers.

Small Medium Enterprises (SME):

Countries with a higher level of GDP per capita have larger SME sectors in terms of their contribution to total employment and GDP. (Ayyagari, Beck and Demirguc-Kunt 2003). As the largest providers of new jobs and major source of technological innovation in most countries, SMEs have functioned as the engine of growth for both developed and developing economies. As for poverty reduction, SMEs are more likely to employ poor and low-income workers then larger firms; sometimes, SMEs are the only source of employment in poor regions and rural areas. However, market failures may cause biases against SMEs. For example, high risks for cost-searching and coordination failure across sectors always prevent start-ups from entering a new market. Thus, industry policies favoring SMEs, such as credit subsidies and tax credits, are recommended for developing countries.

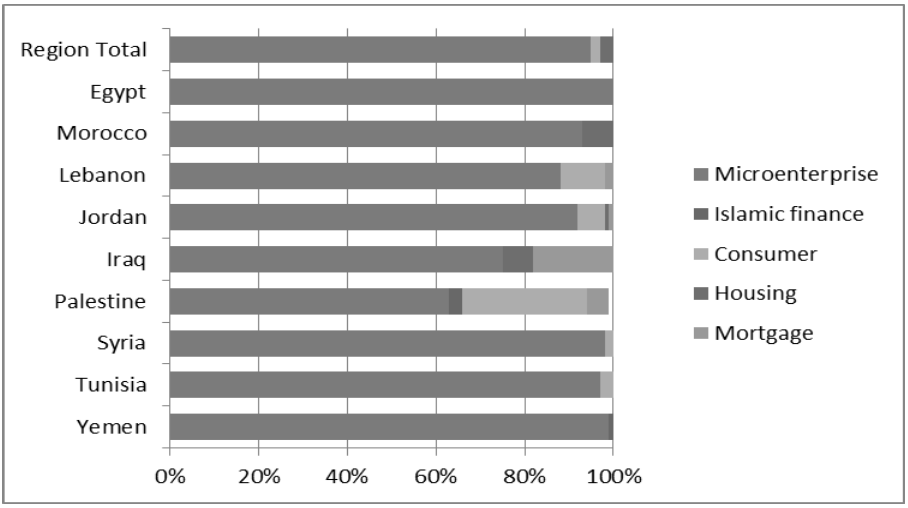
Micro-insurance:

(Outreville, 1990; Ward and Zurbruegg, 2002; Beck et al., 2007) provides evidence of a positive causal relationship between insurance penetration and economic growth. The policyholder benefits by increased access to a wider range of products with increased coverage and greater sustainability; and the partnering insurance company has access into a new market without taking extensive marketing, distribution, or administration costs. More importantly, the partner-agent model facilitates the pooling of risks between the formal and informal sectors.

3.1. Sharīʿah-*Compliant Micro-Finance*

In most OIC countries, Islamic financing instruments comprise only a small fraction of microfinance supply. In Syria for example, Islamic microfinance comprised only 3 percent of outstanding microfinance loans in 2006. Similar situations are also found in other MENA countries (See Figure-2). Since MENA countries are relatively more financially developed than the rest of the OIC countries, the figure implies an even lower coverage rate of Sharīʿah compliant microfinance in all the OIC countries. Providers of Islamic microfinance also tend to be small in size. 80 percent of the global outreach of Islamic microfinance concentrates in only three countries, Indonesia, Bangladesh, and Afghanistan. Islamic microfinance products are also limited in their diversity, e.g. over 70 percent of the Islamic finance products offered are *murābaḥah* (cost plus). The narrow range of products offered is continuously excluding low-income individuals and small enterprises from access to Sharīʿah-based finance.

Figure-2
Microfinance Products offered in MENA



Source: (Sanabel 2010)

However, there are some signs that this limited selection may increase: in Egypt, Bank Misr plans to introduce Islamic microfinance activities to its 33 Islamic branches, and also develop a *muḍārabah* (profit sharing agreement) product in addition to the *murābaḥah* product; in Yemen, Tadhamon Islamic Bank opened an MSE division in late 2006; and in the UAE, Noor Islamic Bank and

Emirates Post Holding Group announced plans to establish a company to offer Sharīʿah-compliant financial services to low-income clients. [15]

Table-1 provides a survey of different implementations of Sharīʿah-compliant microfinance institutions in Syria, Bangladesh, Iran, and Indonesia. Although the Islamic microfinance projects follow similar concepts of conventional microfinance, including group saving and monitoring, targeting female borrowers, etc., two characteristics distinguished them from conventional ones. First, Sharīʿah compliant microfinance institutions actively adopted various Islamic financial tools, such as trade and project finance, *Murābaḥah,* as well as non-financing instruments such as *Waqf and Qarḍ al-Ḥasan*, in the process of absorbing savings and making loans. Some of these institutions also gained funding support from *Zakāh* collection. Second, since interest income is prohibited, most institutions charged administrative/service fees plus a portion of the profit from the business venture. Looking back, the innovative combination of traditional and Islamic finance has been successful in most cases under study, as suggested by the relatively high recovery rate and fast expansion of their scale in recent years. Despite success in implementing Sharīʿah-compliant micro-finance, the practice has not spread as widely as one would have hoped. We discuss some of the challenges in the next sections of the paper.

[15] (Pearce 2010)

Table-1
Survey of Islamic Micro-Finance Case Studies

Paper/ Country	Institution	Purpose	Business Size	Client size/volume	Islamic instrument of financing
(Asaad 2007) **Syria**	UNDP supported village funds	The village funds are self-managed and autonomous in their decision-making, which has included the adoption of financial practices consistent with local values.	• Between Sep 2000 and Dec 2002, 22 village funds were established. • UNDP contributed $370,000 in equity. • Repayment rate as of 31 Dec 2002 was 99.7%. ROE was 17%	• Average loan balance per borrower/per capita GDP is 61%. • Till the end of 2003, 5,674 loans were disbursed.	*Murābaḥah*
(Ahmed 2007) **Bangladesh**	Islamic Bank Bangladesh Limited (IBBL): Rural Development Scheme (RDS)	RDS is a Sharīʿah based microfinance model of poverty alleviating program, mainly for the poor woman of the rural area of Bangladesh. Target group includes destitute women, distressed people, and households with less than 0.5 acres of land.	• Up to Dec 2006, 1,368 Field Officers engaged in supervision • An investment amount of $135 mln • 118 branches in 8,057 villages • Recovery rate was 99%.	294,908 borrowers, 92% or which are woman.	*Bayʿ-Mu'ajjal, Bayʿ-Murābaḥah, Bayʿ-Salam*, and Hire Purchase under *Sherkatul Melk* (HPSM).
(Mannan 2007) **Bangladesh**	Social Investment Bank Ltd "SME programs" and "Family Empowerment Micro enterprise Program"	Helping poor family to purchase materials commodities for trading, manufacturing and service concern.	• As of 2005, the family empowerment micro credit program has a total outstanding of $0.3mln, with a recovery rate of 96% • SME program has a total outstanding of $1.1mln, with a recovery rate of 94%	n.a.	*Waqf* and Mosque properties, cash-*Waqf* certificate, joint-venture projects for management of Hajj affairs
(Kazem 2007) **Iran**	1,229 *Qarḍ-al-Ḥasan* Funds (GFs)	With the objective of helping low-income group through short-run credit grant, GFs provide Sharīʿah compliance services to individuals who are unable to fulfill banks loan collateral requirements and thus were deprived from obtaining credit.	• Total value of loans is $169 mln • Total value of deposits is $227 mln • 60% of the total loans had been paid back.	• 6,480,237 depositors • 1,777,583 borrowers	*Qarḍ-al-Ḥasan* Funds

Paper/ Country	Institution	Purpose	Business Size	Client size/volume	Islamic instrument of financing
(Arabmazar 2007) Iran	Bank keshavarzi of Iran "Hazrat Zeynab Project"	Finance women producers and farmers of agricultural sector with loans under $600 with the maximum repayment period of 5 years.	• A revolving fund is about $44 mln	• 117,322 women borrowers	*Qarḍ al-Ḥasan* funds, *Qarḍ al-Ḥasan* saving accounts
(Kholis, AG and SH 2007) **Indonesia**	BMT[16] Al-Ikhlas, BMT Bina Ummah, and BMT Dana Syariah	BMT is a unique Islamic micro finance institution established by Indonesian Muslims to abolish ceti or rentenir (Usurer) in Indonesian Muslim societies by providing many financing schemes for helping micro and medium entrepreneurs.	• Up to November 2006, there are more than three thousands BMTs in the country. • About 65 BMT's of them are located in Yogyakarta. • Only 42 BMT which reported their performance to PINBUK Yogyakarta regularly.	n.a.	*Murābaḥah* contract for SMEs, *Muḍārabah* saving account, Pendidikan saving account, HajiSaving Account, Qurban/Aqiqah saving account, *Walimah* saving account, *Wadīʿah Damanah Aidil Fitri*, Saving Account, *Amānah* saving account
(Nurahayati and Wahyuni 2007) **Indonesia**	BMT Masjid Al Azhar	Serving those under-developed areas. Helping in developing productive business by promoting saving activity and assist financing economic activities in those areas.	• In 2005, total financing given was $0.71 mln • Balance of outstanding loan was $0.21 mln • Total balance of savings was $0.23 mln	• In 2005, served 1,446 total debtors • 3,821 depositors	n.a.
	BMT Al Kariim	Helping the poorest of the poor, the poor, working poor and micro enterprises in the informal sector in the Pondok Indah neighborhood.	• In 2005, total financing given was $0.38 mln • Balance of outstanding loan was $0.08 mln • Balance of savings was $0.16 mln • Balance of fixed term savings was $0.21 mln	• In 2005, served 1,324 debtors • 5,075 saving account depositors • 87 fixed term saving users	n.a.

[16] BMT, *Baaitul Māl wat Tamwil*, or Islamic Savings and Loan Cooperatives

3.2. Sharīʿah-*Compliant SME Financing*

Islamic finance highlights the significance of profit-sharing finance, which can have positive economic effects similar to direct investment leading to strong economic development.[17] Promotion of entrepreneurship and risk-sharing are two key features of Islamic finance and given that SMEs require both encouragement to entrepreneurship and risk-sharing, there is a natural fit for Islamic finance and SME financing. Islamic SME finance concepts can be seen to provide a comprehensive asset-based economic and equitable model that fulfills expectations such as social justice and human centered sustainable development.

Tools required for SME's finance are not found to be different from the mainstream forms for Islamic financing in general. The necessary and sufficient conditions for full compliance with Sharīʿah should be satisfied, in terms of risk sharing (lenders and borrowers share profits and losses), in addition to the fact that return on capital shouldn't be fixed.[18]

Financing modes that best suit SMEs include *muḍārabah* (principle/agent) and *mushārakah* (equity partnership). Both forms serve a useful purpose: they provide investors with high liquidity at low risk. Islamic banks were recently encouraged to provide more profit-sharing finance and are developing arrangements to reduce risks and the costs of funding. Many innovative examples were provided in Asutay (2011), among which is setting up specialized institutions, as well as introducing new consistent products with the aim of reducing risks through pooling the funds and establishing *Wakālah* agencies to perform monitoring and to minimize moral hazard.

However, Sharīʿah compliant SME finance is not limited to these instruments; innovative approaches tend to involve more comprehensive financing schemes that mix the aforementioned saving as a tool for insurance hedging against future turbulence. *Ijārah* has been one of the most widely used forms of financing SMEs as it reduces the startup cost in addition to providing security to lenders.

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[17] For further detail, see work for Askari, Iqbal and Mirakhor (2008), Chapra (2008) and Asutay (2011),

[18] The three main forms of Islamic finance include *murābaḥah* (trust finance), *mushārakah* (partnership finance), and *muḍārabah* (markup contract sale). These are in addition to Salam contracts, *Ijārah* and *Qarḍ Ḥasan*, and *Awqāf*[18]. Other forms of long term and sophisticated forms include *salam* forward purchase credit and *istiṣnāʿ* project financing. See also Iqbal and Mirakhor (2011)

The issue with promoting SME financing is not the availability of appropriate tools but the challenge is to provide an enabling environment as we observe in the following sections.

3.3. Micro-*Takāful*, Risk Sharing and Poverty Alleviation

Takāful is a cooperative insurance mechanism that evolved in the late 1970s in Sudan and Egypt. The concept is similar to conventional mutual risk mitigation, in which risk sharing is expressed as ta'awuni (mutual protection). Based on the experience of conventional micro-insurance services and to complement Islamic microfinance products, the first Micro-*Takāful* scheme was established in 1997 in Lebanon. Micro-*Takāful* distinguish itself from *Takāful* by targeting the low-income individuals who are living slightly above the poverty line and usually work in informal sectors. As of January 2010 Micro-*Takāful* providers exist in Lebanon, Indonesia, Malaysia, Sri Lanka, Bahrain and Pakistan.[19]

Micro-*Takāful* has long been considered as one of the most promising segments among other Sharīʿah-compliant financial products. The main argument is that Micro-*Takāful* can play an important role in poverty alleviation through risk-sharing among low-income individuals. Deeper insurance penetration leads to faster economic growth.[20] Policyholders benefit by increased access to a wider range of products with increased coverage and greater sustainability; and the partnering insurance institutions gain access to a new market without taking extensive marketing, distribution, or administration costs. More importantly, the partner-agent model facilitates the pooling of risks between the formal and informal sectors. Like microfinance, Micro-*Takāful* helps under-privileged people sustain their financial wellbeing, provides them with a feeling of togetherness, solidarity, and security, and opens avenues for joint efforts for mutual benefits. In addition, as many micro-*Takāful* institutions raised their funding from *Zakāh*, they can also improve the redistribution efficiency and provide a financially sustainable approach to benefit the Islamic society at large.

[19] (ICMIF *Takaful*, 2010)
[20] (Outreville, 1990; Ward and Zurbruegg, 2002; Beck *et al*., 2007).

3.4. Islam's Redistributive Institutions to Enhance Inclusion

Use of Islam's redistributive institutions such as *Zakāh*, *Ṣadaqat*, *Qarḍ-al-Ḥasan* and *Waqf* has enormous potential to enhance access to finance.

How can *Zakāh* contribute to poverty alleviation?

The concept of *Zakāh* could be expanded to provide a sustainable source of income for the poor. It is seen as a significant tool for promoting financial inclusion and economic growth. If '*Zakāh*' funds are managed properly, pooling these funds and encouraging the poor/beneficiaries to direct the funds towards starting a micro/small business would contribute to a more conducive developmental impact and help reduce disparities within the economy. '*Zakāh*' is also perceived as an important tool for continually circulating liquidity in the system. Imposing it on aggregate wealth, including gold and silver and idle balances, benefits the system from unutilized resources and induces more investment and employment. This in turn paves the way for innovations to introduce alternative financial products that would achieve both effective accommodations to the nature of micro and small businesses in addition to poverty alleviation. Practical examples could include *muḍārabah* agreements with institutional investors and facilitating access to dedicated *Zakāh* funds. No doubt, introducing such financial instruments to direct '*Zakāh*' resources promotes more social equity and equality in a sustainable and productive manner and could maximize the value added of such resources.

Zakāh has great potential as the main resource of social spending supporting poverty alleviation in Islamic society. The argument is not only theoretically true, but can be supported by statistical evidence. Here we used the method adopted by (Shirazi and Fouad 2010) to estimate the *Zakāh* collection in OIC member countries. Besides updating the data source, we also took the potential *Zakāh* collation in the form of incoming remittances into consideration. Table 2 shows estimates of the percentage of *Zakāh* proceeds to GDP according to different economic structures of selected Muslim countries based on the methodology by (Kahf 1989).

Tabler-3 estimates the resource shortfall to fill the poverty gap while Table-4 estimates the *Zakāh* collection based on domestic and remittance contributions[21] and determines whether the *Zakāh* collection is sufficient to cover the estimated shortfall. Using this estimation, we find supporting evidence that 20 out of 39 OIC countries can actually alleviate the poorest living with income under $1.25 per day out of the poverty line simply with domestic and remittances *Zakāh* collection.

This does not mean that it is a totally new source of poverty reduction mechanism using *Zakāh* as it is already distributed to the poor in several Islamic countries but we can make an argument that proper collection, streamlining, accountability, prioritization, and allocation to productive activities can have significant impact on enhancing access and opportunity for the poor segment of the society which will ultimately lead to reduction in poverty.

Table-2
Percentage of estimated *Zakāh* proceeds to GDP in selected Muslim countries

	Z1[22]	Z2	Z3
Egypt, Arab Rep.	2.0	3.9	4.9
Indonesia	1.0	1.7	2.0
Pakistan	1.6	3.5	4.4
Qatar	0.9	3.7	3.2
Saudi Arabia	1.2	3.7	3.4
Sudan	4.3	6.3	6.2
Syria	1.5	3.1	3.1
Turkey	1.9	4.9	7.5
average	1.8	3.9	4.3

Source: (Kahf 1989)

[21] *Zakāh* collected from remittances is estimated by the 2.5% of the remittances saved domestically (2.5%*domestic savings rate*incoming remittances).
[22] (Kahf 1989): "Z1 was estimated accordance with the majority traditional view according to which *Zakāh* was levied on agriculture, livestock, stock in trade, gold, silver and money. Z2 was based in according with the views of contemporary Muslim scholars where *Zakāh* can be deducted from net returns of manufacturing concerns and building rents and from net savings out of salaries. Z3 was based on Malikite views, where *Zakāh* base includes buildings and other fixed assets except those assigned for personal and family use.

Table-3
Resource Shortfall to Fill the Poverty Gap[23]

(1) Country name	(2) Survey year	(3) GDP (PPP) current USD (million)	(4) Total pop. (million)	(5) Poverty gap at $2 a day (PPP) (%)	(6) Poverty gap at $1.25 a day (PPP) (%)	(7) Resource shortfall under $2 per annum (million)	(8) Resource shortfall under $1.25 per annum (million)	(9) Resourc e shortfall under $2 per annum as % of GDP	(10) Resourc e shortfall under $1.25 per annum as % of GDP
Group 1: countries with moderate resource shortfall (<=1.0 percent of GDP)									
Malaysia	2009	384,878.87	27.47	0.16	0.00	32.08	0.00	0.01	0.00
Kazakhstan	2007	169,633.06	15.48	0.26	0.05	29.39	3.53	0.02	0.00
Jordan	2006	26,142.82	5.54	0.62	0.10	25.08	2.53	0.10	0.01
Albania	2008	26,449.68	3.14	0.85	0.19	19.50	2.72	0.07	0.01
Azerbaijan	2008	76,730.04	8.68	1.52	0.25	96.31	9.90	0.13	0.01
Maldives	2004	1,197.43	0.29	2.53	0.14	5.33	0.18	0.44	0.02
Iran	2005	643,503.42	69.09	1.80	0.34	907.80	107.17	0.14	0.02
Kyrgyz Rep	2007	10,620.40	5.23	5.46	0.08	208.65	1.91	1.96	0.02
Syrian Arab Republic	2004	70,017.06	18.51	3.28	0.20	443.24	16.89	0.63	0.02
Gabon	2005	17,839.03	1.37	5.02	0.90	50.18	5.62	0.28	0.03
Turkey	2005	781,243.40	71.17	2.64	0.88	1,371.57	285.74	0.18	0.04
Egypt, Arab Rep.	2005	333,218.41	77.15	3.45	0.39	1,943.13	137.29	0.58	0.04
Morocco	2007	127,848.85	31.22	3.15	0.54	718.00	76.93	0.56	0.06
Iraq	2007	94,969.20	29.95	5.55	0.60	1,213.32	81.98	1.28	0.09
Group 2: countries with Intermediate resource shortfall (>=1.0 percent of GDP and >= 6 percent of GDP)									
Algeria	1995	129,750.66	28.27	23.60	1.40	4,869.54	180.54	28.27	0.14
Cameroon	2007	39,768.07	18.66	8.21	1.20	1,118.35	102.16	18.66	0.26
Indonesia	2009	965,571.03	229.96	15.48	3.62	25,986.93	3,798.15	229.96	0.39
Suriname	1999	2,018.46	0.46	11.74	5.90	39.48	12.40	0.46	0.61
Yemen, Rep.	2005	46,125.24	21.02	14.76	4.18	2,265.26	400.95	21.02	0.87
Guyana	1998	1,538.50	0.76	6.94	3.90	38.37	13.48	0.76	0.88
Pakistan	2005	340,262.06	155.77	18.74	4.35	21,309.92	3,091.59	155.77	0.91
Djibouti	2002	1,239.64	0.76	14.58	5.29	81.20	18.41	0.76	1.49
Tajikistan	2004	8,774.25	6.45	16.76	5.06	789.55	148.98	6.45	1.70
Cote d'Ivoire	2008	34,295.23	20.59	17.79	7.50	2,674.13	704.61	20.59	2.05
Senegal	2005	18,208.36	11.28	24.66	10.80	2,030.84	555.89	11.28	3.05
Uganda	2009	39,813.64	32.71	21.25	8.26	5,074.12	1,232.71	32.71	3.10
Uzbekistan	2003	42,757.17	25.57	33.18	15.04	6,192.85	1,754.46	25.57	4.10
Gambia, The	2003	1,457.33	1.44	24.88	12.05	260.87	78.97	1.44	5.42
Bangladesh	2005	163,728.14	153.12	33.81	13.08	37,792.51	9,137.94	153.12	5.58
Benin	2003	9,135.56	7.36	33.50	15.73	1,799.43	528.08	7.36	5.78
Group 3: countries with severe resource shortfall (>=6.0 percent of GDP)									
Togo	2006	4,962.81	6.14	27.92	11.37	1,252.43	318.77	25.24	6.42
Guinea	2007	9,777.15	9.62	31.03	14.96	2,178.00	656.28	22.28	6.71
Mali	2006	12,672.38	12.12	36.50	18.79	3,228.87	1,038.88	25.48	8.20
Guinea-Bissau	2002	1,256.42	1.37	34.83	16.52	347.96	103.15	27.69	8.21
Nigeria	2004	224,618.00	137.54	46.89	29.57	47,080.76	18,556.44	20.96	8.26
Niger	2007	9,248.52	14.14	30.59	11.92	3,157.49	768.99	34.14	8.31
Comoros	2004	628.48	0.59	34.18	20.82	146.70	55.85	23.34	8.89
Burkina Faso	2003	12,090.91	12.85	39.26	20.27	3,683.78	1,188.71	30.47	9.83
Mozambique	2008	18,885.83	22.38	42.91	25.18	7,011.17	2,571.39	37.12	13.62
Sierra Leone	2003	2,722.93	4.73	37.53	20.30	1,296.57	438.32	47.62	16.10

[23] (2)-(6): Data source: World Bank Databank; (7) = 2*(5)*365*(4)/100; (8) = 1.25*(6)*365*(4)/100; (9) = (7)/(3)*100; (10) = (8)/(3)*100

Table-4
Zakāh Estimation to Fill the Poverty Gap[24]

(1) Country name	(2) Survey year	(3) GDP PPP Current USD (Billion)	(4) Muslim pop. (%)	(5) Adjusted GDP PPP USD (Billion)	(6) Domestic *Zakāh* (Billion USD)	(7) Incoming remittances (Billions USD)	(8) Domestic savings rate (% of GDP)	(9) *Zakāh* considering Remittances (% of GDP)	(10) resource shortfall under $1.25 per annum as % of GDP	(11) Does *Zakāh* cover (10)?
Albania	2008	26.45	79.9	21.13	0.38	1.50	1.60	1.44	0.01	y
Algeria	1995	129.75	98	127.16	2.29	1.12	28.11	1.77	0.14	y
Azerbaijan	2008	76.73	99.2	76.12	1.37	1.55	64.89	1.82	0.01	y
Bangladesh	2005	163.73	89.6	146.70	2.64	4.31	18.06	1.62	5.58	n
Benin	2003	9.14	24.4	2.23	0.04	0.06	5.98	0.44	5.78	n
Burkina Faso	2003	12.09	59	7.13	0.13	0.05	4.51	1.06	9.83	n
Cameroon	2007	39.77	17.9	7.12	0.13	0.17	18.53	0.32	0.26	y
Comoros	2004	0.63	98.3	0.62	0.01	0.01	0.00	1.77	8.89	n
Cote d'Ivoire	2008	34.30	36.7	12.59	0.23	0.20	17.85	0.66	2.05	n
Djibouti	2002	1.24	96.9	1.20	0.02	0.01	4.87	1.75	1.49	y
Egypt	2005	333.22	94.6	315.22	6.30	5.02	15.71	1.90	0.04	y
Gabon	2005	17.84	9.5	1.69	0.03	0.01	58.35	0.17	0.03	y
Gambia	2003	1.46	95	1.38	0.02	0.06	11.05	1.72	5.42	n
Guinea	2007	9.78	84.4	8.25	0.15	0.15	9.68	1.52	6.71	n
Guinea-Bissau	2002	1.26	42.2	0.53	0.01	0.02	0.00	0.76	8.21	n
Guyana	1998	1.54	7.2	0.11	0.00	0.01	16.94	0.13	0.88	n
Indonesia	2009	965.57	88.2	851.63	8.52	6.79	33.76	0.89	0.39	y
Iran	2005	643.50	99.4	639.64	11.51	1.03	41.09	1.79	0.02	y
Iraq	2007	94.97	99	94.02	1.69	0.00	0.00	1.78	0.09	y
Jordan	2006	26.14	98.2	25.67	0.46	2.88	0.00	1.77	0.01	y
Kazakhstan	2007	169.63	56.4	95.67	1.72	0.22	43.84	1.02	0.00	y
Kyrgyz Republic	2007	10.62	86.3	9.17	0.16	0.71	0.00	1.55	0.02	y
Malaysia	2009	384.88	60.4	232.47	4.18	1.13	36.03	1.09	0.00	y
Maldives	2004	1.20	98.4	1.18	0.02	0.00	46.15	1.77	0.02	y
Mali	2006	12.67	92.5	11.72	0.21	0.21	14.75	1.67	8.20	n
Morocco	2007	127.85	99	126.57	2.28	6.73	23.37	1.81	0.06	y
Mozambique	2008	18.89	22.8	4.31	0.08	0.12	1.57	0.41	13.62	n
Niger	2007	9.25	98.6	9.12	0.16	0.08	0.00	1.77	8.31	n
Nigeria	2004	224.62	50.4	113.21	2.04	2.27	0.00	0.91	8.26	n
Pakistan	2005	340.26	96.3	327.67	5.24	4.28	15.21	1.55	0.91	y
Senegal	2005	18.21	96	17.48	0.31	0.79	14.09	1.74	3.05	n
Sierra Leone	2003	2.72	71.3	1.94	0.03	0.03	0.00	1.28	16.10	n
Suriname	1999	2.02	15.9	0.32	0.01	0.00	11.25	0.29	0.61	n
Syrian Arab	2004	70.02	92.2	64.56	0.97	0.86	20.20	1.39	0.02	y
Tajikistan	2004	8.77	84.1	7.38	0.13	0.25	0.61	1.51	1.70	n
Togo	2006	4.96	12.2	0.61	0.01	0.23	0.00	0.22	6.42	n
Turkey	2005	781.24	98	765.62	14.55	0.89	16.49	1.86	0.04	y
Uganda	2009	39.81	12.1	4.82	0.09	0.75	12.52	0.22	3.10	n
Yemen	2005	46.13	99.1	45.71	0.82	1.28	0.00	1.78	0.87	y

Source: World Bank Databank

[24] (4) data source: wikipedia.org. (3) (7) (8) data source: World Bank Databank. (8) Savings rate is floored to zero if negative (5) = (3) * (4) (6) = (5)*reference ratio of Z1 from

Table-2 (9) = ((6) + (7) * (8) * 2.5%) / (3) (10) = Column (10) from Table 3 (11) = Y if (9) > (10), N otherwise.

***Qarḍ-al-Ḥasan* as a tool for financial inclusion**

Qarḍ-al-Ḥasan (QH henceforth) is defined in Sharīʿah as an interest free loan. It is usually granted from well off lenders to poor borrowers. It can also be directed from borrowers to intermediaries that can redirect it on their behalf to poor borrowers. QH is therefore a non rewarding loan (with no expected return) and the borrower is under obligation to repay the loan depending on the borrower's financial capacity to do so. Loan procedures are usually informal and social capital is the basic collateral for this instrument.

The main objectives of *Qarḍ al-Ḥasan* could be:

- To help the needy fellow people.
- To establish better relationship among poor and the rich.
- The mobilization of wealth among all people in the society.
- To perform a good deed that is encouraged and appreciated by the *Allah* (SWT) and His messenger.
- To strengthen the national economy.
- To facilitate the poor to create new jobs market and business ventures by using their merits, skills and expertise.
- To establish a caring society.
- To eradicate unemployment problem from the society.
- It can remove social and economic discrimination from the society, and

While the conventional microfinance industry has been globally growing at 13 percent per annum since early 1990s, only very limited information is available on micro finance institutions (MFI's) operating under QH. A relatively small number of interest-free loans are operating in Pakistan (www.akhuwat.org.pk) and there are some small-scale micro-/rural banks in Indonesia. However, no organized institutions are known to be operating on the basis of QH except in Iran where QH has been utilized effectively to provide finance for the needy and where these institutions are widespread throughout the country.

Also QH funds have been operating in Iran since the Islamic Revolution they have enjoyed phenomenal growth and a successful track record. QH funds in Iran, by and large, provide small consumer and producer loans and, in some cases, engage in profit-sharing activities with small producers and firms, thus supplementing the fund's capital. These funds are usually associated with local mosques or other religious organizations and sometimes with guilds or professional associations. The capital is contributed by the more well-to-do who are at liberty to withdraw their funds at any time. These funds operate with reasonably low administrative costs since most are managed on a voluntary basis by the people within the group.

A recent survey on QH based finance that has been operating with the objective of helping low-income group through short-run credit in Iran shows that there exited 1,229 *Qarḍ-al-Ḥasan* Funds (Kazem 2007). Total loans amounted to $169 mln, and deposits totaled to $227 mln with 60% of the total loans had been paid back (please see table 1 for a comprehensive survey on literature).

Conventional micro finance (MF) and *Qarḍ-al-Ḥasan* Microfinance (QHMF) have both similarities and differences. MF charges interest, an abomination from an Islamic perspective, and MF schemes resort to collective punishments for defaulting, yet under QHMF, usually donors/subscribers introduce the borrowers and cosign for their loan, yet no collective punishment is usually imposed in case of default. On the other hand both instruments target the same income groups and they have both effectively contribute to avoiding informational problems by relying on peer monitoring, as well as good knowledge of the borrower reputation. In addition, neither requires collateral as a prerequisite for a loan.

QH can also be considered an excellent venue for supporting SME's and penetrating to lower income levels that are deprived of financial resources that is not properly tapped in Islamic countries. It provides a reliable source of funding to economic development and targets minimizing the lending risk as it build on pooling and social collateral. In addition, it commends payback and therefore benefits from the potential recirculation of funds in poor and extremely low tiers of the economy. While the social cost of QH funds lies mainly in the opportunity cost of using these funds in alternative projects, the social benefits of availing funding to MFI's at zero cost acts a good catalyst for growth and provide an extremely high social benefits through creating jobs and generating incomes to the poor, deprived and unprivileged.

Waqf **(endowment) as a tool to enhance financial inclusion**

Waqf (pl. *Awqāf*) are basically real non perishable properties that are voluntarily donated for philanthropic purposes. *Awqāf* are dominated by fixed property mainly land or buildings, but can be applicable also to cash, shares, stocks, and other assets. The concept of *Awqāf* is a well-practiced phenomenon in recent times in both the Muslim and non-Muslim world. *Awqāf* are usually named endowments in Non Muslim countries and are providing a wide range of services especially in education and community services[25]. '*Awqāf* by definition needs an institutional setup to ensure perpetuity and good governance..

In a nutshell, a *Waqf*, whether in North Africa or India, functions as follows: a founder who has accumulated private wealth decides to endow his personal property for a specific, often pious, purpose. The amount of the original capital, corpus, the purpose for which it is endowed and all the other conditions of management are clearly registered in a deed of endowment submitted to the authorities. In this way the privately accumulated wealth of a pious Muslim becomes God's property. The founder strictly stipulates how the annual revenue of the *Waqf* should be spent. This revenue (usufruct) may be allocated completely for a social welfare purpose (*Waqf* khayri), or to a group of beneficiaries.

The management of the *Waqf* is entrusted to trustees, whose functions may be fulfilled by the founder himself during his lifetime. Thus, there are four major components of any *Waqf*: the three groups of individuals; the founder, the beneficiaries, the trustees and the endowed capital itself, or the corpus. The cash *Waqf* was a special type of endowment and it differed from the ordinary real estate *Waqf* in that its original capital, (*aṣl al-māl*) consisted purely or partially, of cash. Historically, *Awqāf* was so popular in Islamic countries especially amongst the well off tier of the society especially in early seventh and eighth century (ÇIZAKÇA 1998). However, it didn't serve as a sustainable tool for economic development due to some social and political turbulence. Sustainability of *Awqāf* institution was closely correlated to the persistence of political systems.

In modern Islamic economics, *Awqāf* are mainly directed to provision of social services health, education, municipal, etc. *Awqāf* Institutions (AI's) provided such

[25] As per earlier work of ÇIZAKÇA 1998, It is well known that charitable endowments have a history considerably older than Islam and it is also very likely that Islam may have been influenced by earlier civilizations. Ancient Mesopotamia, Greece, Rome as well as the pre-Islamic Arabs certainly knew of charitable endowments. The extent to which Islamic *awqāf* were influenced by these ancient institutions and the extent to which they were the product of the genius of Islam is a question that is still not resolved: while Roman origins have been rejected, primarily Byzantine, but also Mesopotamian, Sasanid, Jewish and Buddhist influences have been accepted as plausible. Thus, we have a fairly clear situation; Muslims were urged strongly to endow their assets in the service of mankind and they knew how to do it from the earlier civilizations, which had dominated the geography they had found themselves in.

services in at no cost whatsoever to the government given AI's are properly governed and administrated. On the macroeconomic front, AI's are seen serving the ultimate goal of reducing government spending, which contributes to reducing the budget deficit, inflation and government borrowing (other things equal).

This is sensed through setting up a dedicated institutional setup with the purpose of providing free services at to the society in order to contribute to maximizing welfare. This is efficiently achieved while fully binding to resource constraints as the main operational feature of this setup builds on maintaining the property itself and not consuming it through the process. In addition to helping achieve inter-generational equity, *Awqāf* help also achieve intra generational equity through supplying services to much consecutive generations. This setup needs simple pre-requisites to ensure optimal social returns; this includes honesty of caretakers, entitled legal identity and finally efficient administration. This in turn alters Timur Kuran's imprecise judgment and assessment to *Awqāf*. Kuran thinks the nonprofit setup of *Awqāf* wasn't intended as it was initially proposed for corporatization[26]. This is not necessarily right as, *Awqāf*; since its inception, were meant to provide non-fee charitable services to contribute to overall welfare of society. Another significant feature is that it is intended by construction to facilitate access to assets and social services and hence is not by any mean perceived as structural stagnation.

Section IV
Gaps and Challenges of Enhancing Inclusion through Islamic Finance

Although the OIC countries have experienced rapid economic growth and financial expansion during the past decade, low level of financial inclusion is still constraining the development of many Islamic economies. The argument is based on our analysis of two recent databases, the Doing Business Report 2011 by the World Bank and the Financial Access Report 2010 by the CGAP. In order to obtain a comprehensive analysis of the financial inclusion status of OIC countries, we calculated and compared the financial access related indicators of OIC countries with those of other groups of countries, i.e., GCC, OPEC, OECD, OIC excluding GCC, MENA region, low Income countries, and developing countries.[27] We use the data from OECD countries as benchmark, because OECD countries have

[26] (Kuran 2011)

[27] The low income countries and developing countries are defined by the country classification by the World Bank published in January 2011.

achieved a highly developed financial environment after overcoming many similar issues facing OIC countries currently.

We also separately examined financial inclusion in GCC and non-GCC among the OIC countries to see the dispersion of the financial inclusion status among all OIC countries. GCC are economically more developed and thus more comparable to its counterparties, such as OPEC and MENA region countries, whereas a comparison between non-GCC and low-income countries should provide more meaningful implication regarding the financial inclusion gap of the poorer OIC countries. We also included the developing countries in our analysis as another benchmark to see whether the OIC countries are lagging behind the average developing economies on a global level in terms of financial inclusion enhancement.

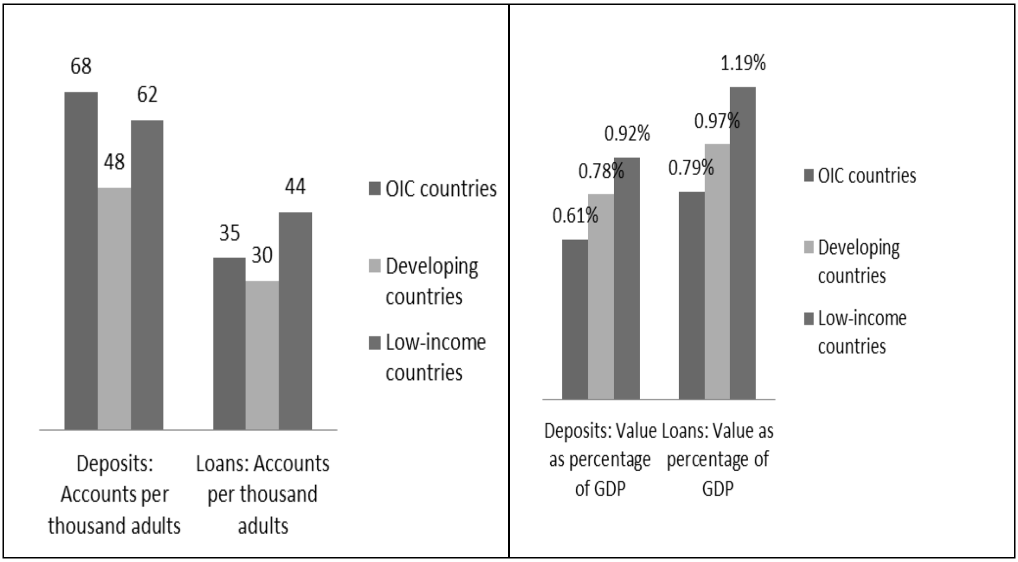
Below, we discuss main gaps in current implementation of Sharīʿah-compliant micro-finance, SME, and micro-insurance which are hindering their effectiveness to enhance the financial inclusion.

4.1. Gaps in Financial Inclusion – Microfinance (MF)

Strong demand for Islamic microfinance services in OIC countries is not met by the supply. An IFC-commissioned market studies in the MENA region suggest that between 20 and 60 percent of interviewed microenterprises and low income individuals indicated a preference for Sharīʿah-compliant products. For some, the lack of Sharīʿah-compliant products is an absolute constraint to financial access, while for others, this is a preference and they continue to use conventional financial services in the absence of competitive Islamic ones.[28] This gap is supported by statistics in Figure-3, which suggests that despite the fact that OIC countries have more MF deposits and accounts per thousand adults, values of MFI deposits and loans as percentage of GDP are still much lower in OIC countries (0.61% and 0.79%) compared with developing countries (0.78% and 0.97%) and low income countries (0.92% and 1.19%).

[28] (Pearce 2010)

Figure-3
Limited scale of Microfinance deposits and loans



Box 2 provides more examples of the strong and unmet demand for Islamic microfinance in selected OIC countries.

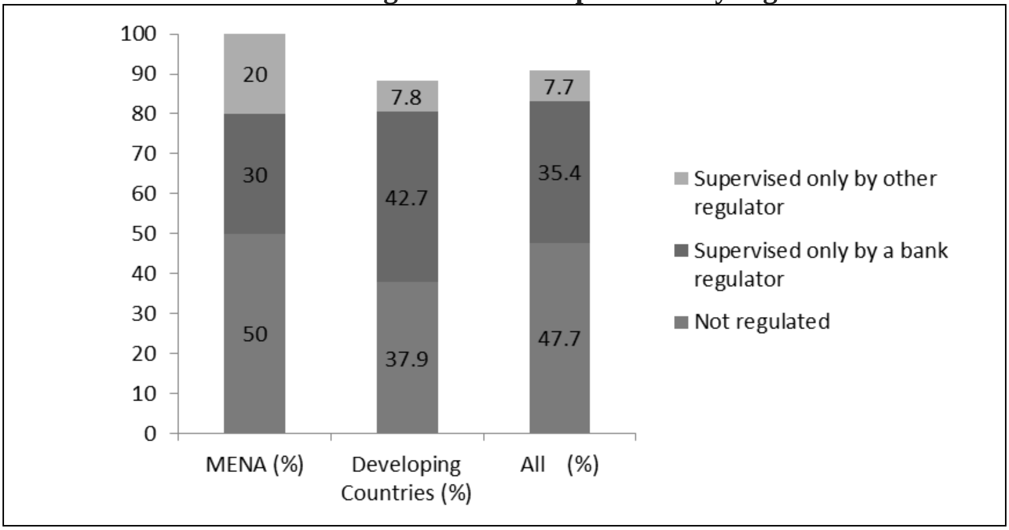
Box 2 – Strong demand for Islamic microfinance in different countries

- In the West Bank and Gaza, more than 60% of low-income survey respondents prefer Islamic products to conventional products, and more than half of them still do if the Islamic products come at a higher price. (PlaNet Finance 2007)
- In Jordan, 24.9% and 32%, respectively, of those interviewed cite religious reasons for not obtaining conventional loans. 18.6% of those interviewed rank religious reasons as the single most important factor in obtaining a loan. (IFC and FINCA 2006)
- In Algeria, a 2006 study by Bankakademie International revealed that 20.7% of micro enterprise owners do not apply for a loan primarily due to religious reasons. (Bankakademie International 2006)
- In Yemen, it is estimated that 40% of the poor demand Islamic financial services, regardless of a higher price. (source: Phone interview with Executive director of the National Microfinance Foundation, Yemen)
- In Syria, an IFC survey revealed that 43% of respondents considered religious reasons to be the largest obstacle to obtaining a microcredit. In addition, 46% of respondents who had never applied for a loan stated that religious reasons were the primary reason they had never applied. Nearly 5% of current borrowers said they would not apply for another loan for religious reasons. (IFC/ The World Bank 2007)
- In Indonesia, according to a 2000 Bank Indonesia report, 49% of the rural population of East Java considers interest prohibited and would prefer to bank with Sharia-compliant financial institutions.
- In Lebanon, the success in outreach of Islamic programs relative to conventional MFIs strongly suggests that large numbers of poor people prefer Sharia-compliant finance.[1] In addition, microfinance practitioners report that many of the Lebanese poor refuse financial services unless they are Sharia-compliant. (Hamze 2001)
- Microfinance practitioners working in certain regions in Afghanistan, Syria, and Indonesia report similar results from their market surveys. (The Dubai Islamic Bank)

Source: World Bank Memoriam

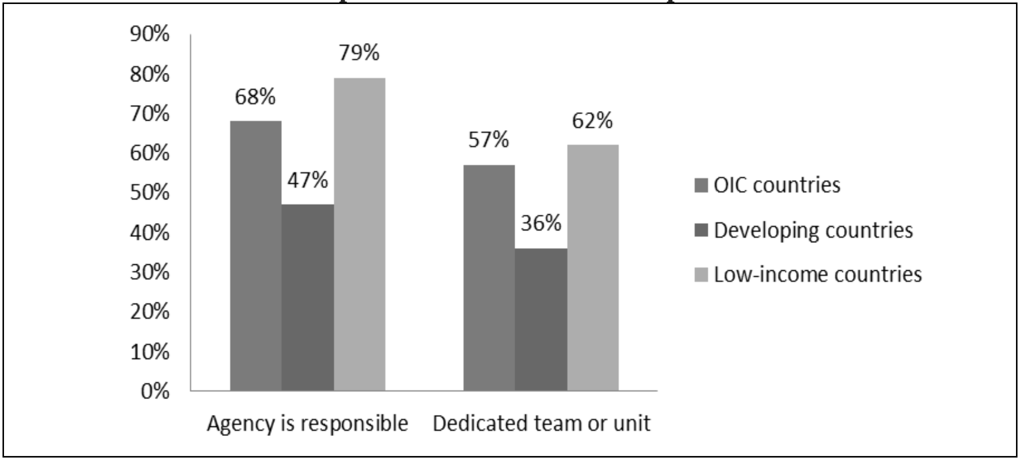
The gap of microfinance in OIC is not only demonstrated by its limited scope, but also by the lack of regulation in OIC countries compared to other developing countries. In MENA region for example, only Egypt, Morocco, Syria, Tunisia, and Yemen have specific legislation for Microfinance institutions (Figure-4). Also, according to the CGAP financial access database (Figure-5), 68% of the covered 37 OIC countries have appointed agencies to promote access to finance in rural areas, while 57% of the countries have dedicated team or unit in charge of the task. The ratios are above the developing countries average, but below the low-income countries average.

Figure-4
Microfinance regulation and supervision by region



Source: Peace (2010), M Khaled, CGAP (2010)

Figure-5
Who is responsible for rural finance promotion?



Source: CGAP(2010)

Although the Islamic microfinance institutions emerged in different forms and structures in different regions (See Table-1), the industry faces similar key challenges across countries.

First, absence of accounting standards has substantially constrained the expansion of Sharīʿah-compliant microfinance institutions in OIC countries. Although Islamic microfinance is developing fast, most central banks have not yet incorporate the special category into the existing regulatory and accounting framework. For example, up to Nov 2006, there are more than three thousands BMTs in Indonesia, 65 of them are located in Yogyakarta. Only 42 BMTs reported performance to PINBUK Yogyakarta regularly (Kholis, AG and SH 2007). In addition to the accounting standards, information technology assistance, risk management supervision, and infrastructure provision are also major concerns of Islamic microfinance providers.[29]

Second, knowledge gap regarding Sharīʿah rules among working staff challenges the development of many institutions. Since the whole industry is still in its infant stage, most employees have little background in Islamic finance before.

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[29] Notes on risk management issues: Rise and fall of SGGFs in 2003 resulted from their stepwise lending scheme, non-separation of depositors from borrowers, and the housing recession. There is no single institution which can provide guarantee in the case of liquidity problem for BMTs in Indonesia. (Kholis, AG, & SH, 2007).

The knowledge gap increased the risk of the institution's deviation from Sharīʿah rules and deterred Sharīʿah-compliant financial product innovation. –Many evidences support this concern. For example, (Ahmed, 2007) found that RDS of the IBBL in Bangladesh extensively uses financial tools such as *Bayʿ-Mu'ajjal* and *Bayʿ-Murābaḥah* without knowing the Sharīʿah implication of the terms. The knowledge gap may also trigger reputational risks of the institutions: found that in Indonesia, society prejudice toward operations of BMT that are not in line with Sharīʿah rules may cause trust degradation among potential and current clients.

Third, the Sharīʿah rules increase the complexity of Islamic microfinance products and innovation process. The essence of Islamic finance is its close connection with real economy. In some cases, this central rule has brought problems for development of Sharīʿah-compliant microfinance business in certain countries. In the BMT case in Indonesia, no leading competitive commodity can be financed even though the funding channel has been well-established. In other cases, the strong linkage between Islamic finance and real economy also led to promising produce innovation. For example, (Kaleem 2007) argues that *Bayʿ Salam* contract, a deferred delivery contract where delivery of commodity occurs at some future date in exchange of some advanced price fully paid at spot, may help enable 5.44 mln small farmers to gain money to grown their crops and feed their families up to the time of harvest. Similarly, (Isnaji 2007) claims that formulating an "Islamic micro finance version program" under regular investment fund will also help coconut farmers in under-banked Muslim areas.

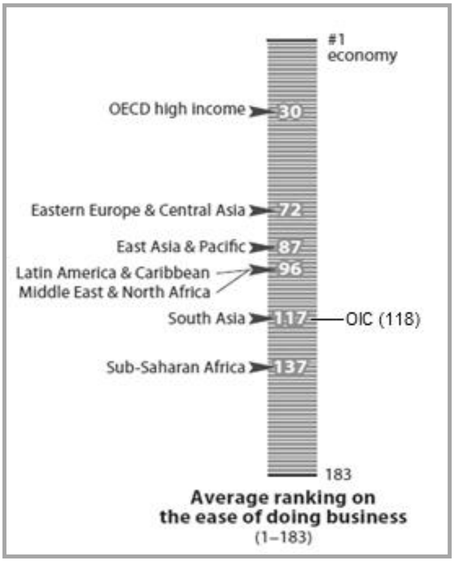
Fourth, how to attract more Islamic clients to enter the market is a big issue for both government and microfinance institutions. While further expansion of the Sharīʿah-compliant microfinance would be constraint by the growth of demand for such services, society's understanding of Islamic financial products is still limited. In order to tap larger proportion of potential market, both institutions and governments should exert more efforts to educate low income Islamic individuals and invite them to use available services.

4.2. Gaps in Financial Inclusion – SMEs

SMEs in OIC countries still lack easy access to credit on general. As the most comprehensive measurement of business environment faced by SMEs across countries, the Doing Business Report 2011 shows that OIC countries rank 118 on average, much lower than the average developing countries (100) in terms of ease of doing business (See Figure-6). This statistics imply that the business regulation and their enforcement in OIC countries are dragging OIC economies behind other developing economies, especially in the aspect of providing credit for SMEs. If we exclude GCC countries from the OIC countries, the average rank of the group drops even lower, approaching to the average level of low income countries covered in the survey. Many reasons contributed to the lack of financial access for SMEs in OIC countries. Among them, SME transparency, reliable collateral by SMEs, credit information systems, and weak creditor rights are the four largest issues emphasized by interviewed banks. (See Figure 7).

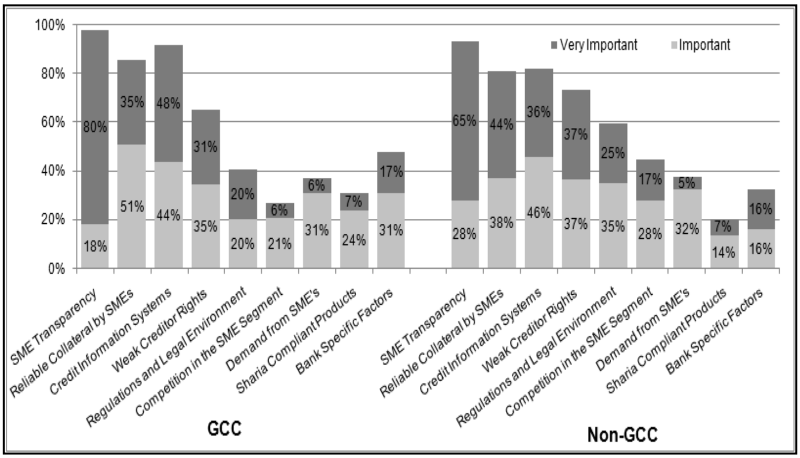
The detailed statistics shown in Figure-8, suggests that the OIC countries lag far behind in all four aspects of ease of getting credit. First, collateral and bankruptcy laws protection is weak. The OIC group score 4 in strength of legal rights index, compared with the benchmark of 7 among OECD countries. Second, the credit information kept by public credit registry and private credit bureau are inaccessible for the public. OIC countries score only 2 in the depth of credit information index compared to the benchmark of 5 of the OCD countries. Third, both public and private credit information system are still underdeveloped. In OIC countries, only 5% of adults have credit histories covered by public registry, while only 6% of the adults have credit histories covered by the private credit bureau. For GCC countries, although they outperform the OIC average in the overall ranking significantly (43 compared to 118), such gap is more likely to be attributed to the shorter time and lower costs of starting a business or enforcing contracts, rather than the easier credit environment. In other words, all OIC countries, regardless of GCC or non-GCC, face similar challenges in credit provision.

Figure-6
Average ranking on the ease of doing business



Source: Initial graph based on (Solf 2011)

Figure-7
Percentage (%) of Banks responding that Obstacle is Very Important or Important for SME Financing: GCC vs. Non-GCC



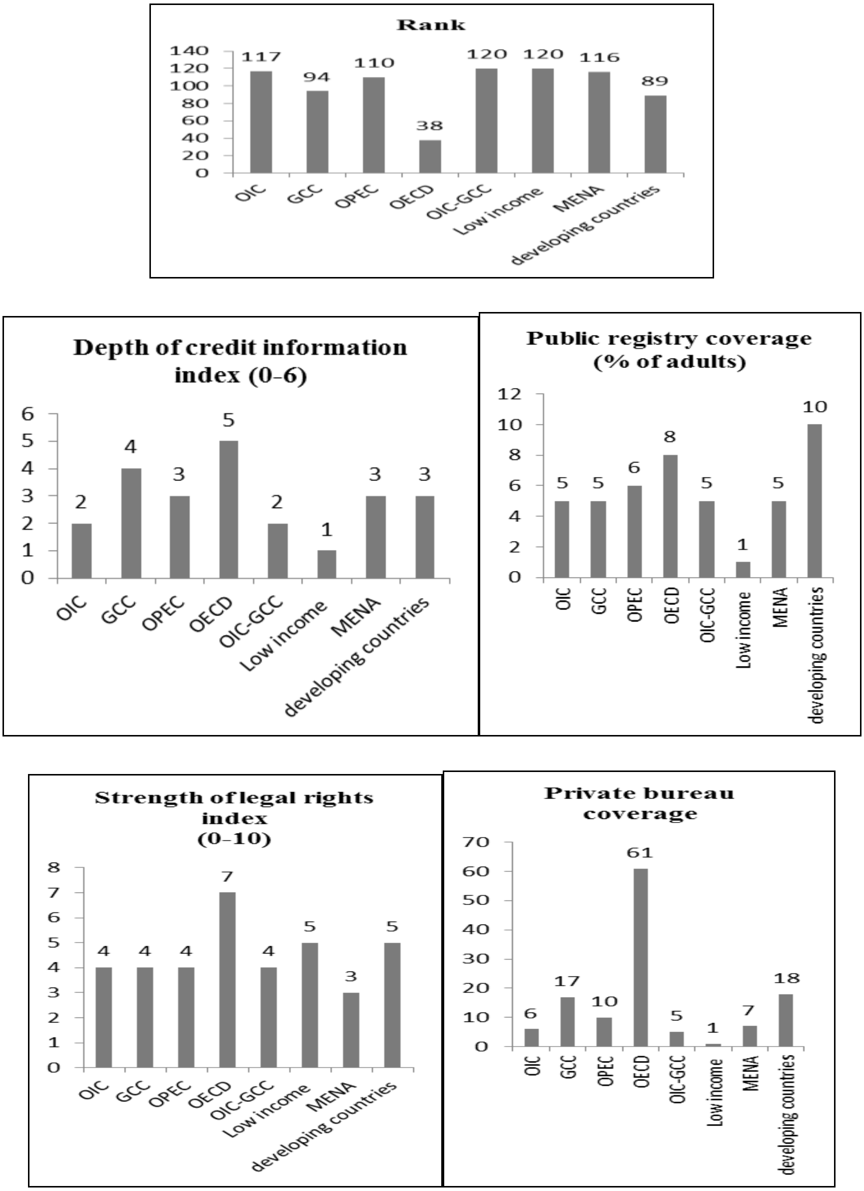
Source: (Rocha, et al. 2011)

Box 3 Key Indicators from the Doing Business Report

- Starting a business: all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business.
    - Procedure is defined as any interaction of the company founders with external parties (for example, government agencies, lawyers, auditors or notaries).
    - Time is recorded in calendar days. The measure captures the median duration that incorporation lawyers indicate is necessary to complete a procedure with minimum follow-up with government agencies and no extra payments.
    - Cost is recorded as a percentage of the economy's income per capita. It includes all official fees and fees for legal or professional services if such services are required by law.
    - The paid-in minimum capital requirement reflects the amount that the entrepreneur needs to deposit in a bank or with a notary before registration and up to 3 months following incorporation and is recorded as a percentage of the economy's income per capita.
- Getting Credit: the legal rights of borrowers and lenders with respect to secured transactions through one set of indicators and the sharing of credit information through another.
    - The strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending.
    - The depth of credit information index measures rules and practices affecting the coverage, scope and accessibility of credit information available through either a public credit registry or a private credit bureau. The public credit registry coverage indicator reports the number of individuals and firms listed in a public credit registry with information on their borrowing history from the past 5 years.
    - The private credit bureau coverage indicator reports the number of individuals and firms listed by a private credit bureau with information on their borrowing history from the past 5 years.
- Enforcing contracts: the efficiency of the judicial system in resolving a commercial dispute.
    - The list of procedural steps compiled for each economy traces the chronology of a commercial dispute before the relevant court.
    - Time is recorded in calendar days, counted from the moment the plaintiff decides to file the lawsuit in court until payment.
    - Cost is recorded as a percentage of the claim, assumed to be equivalent to 200% of income per capita.

Source: The World Bank, Doing Business

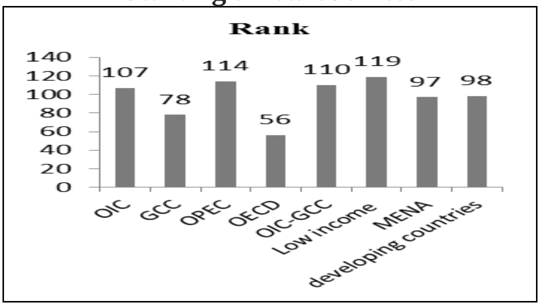
Figure-8
Getting credit

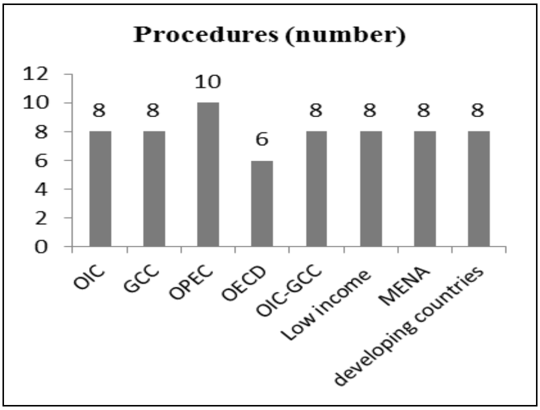


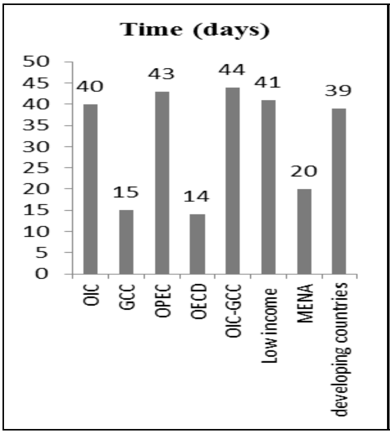
Source: Doing Business Report 2011

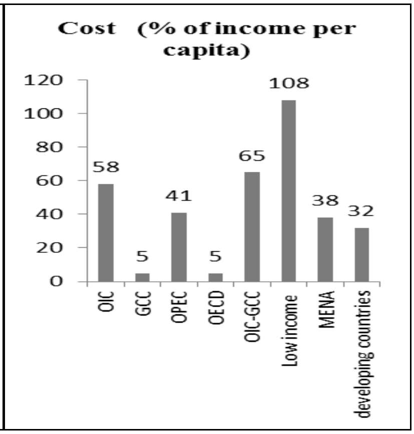
In addition to the challenge of access to credit, SME in OIC countries also suffer from difficulties to start a business and enforce contracts, which further slow down the life cycle of SMEs and becomes obstacles for them to obtain financial investment. Starting a new business requires 40 days and 8 procedures on average in OIC countries. The official fees for legal procedures and professional services required by law amount to 58% of income per capita, and the opportunity is only open to those business with a minimum capital equals to 122% of income per capita. On comparison, in OECD countries, it only takes 14 days and 6 procedures to start a new business, and both cost (5% of income per capita) and paid-in minimum capital (15% of income per capita) are insignificant (See Figure-9 and figure 10).

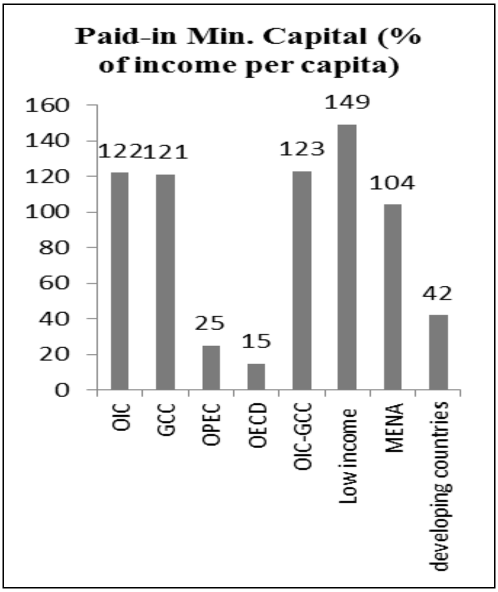
Figure-9
Starting a new business





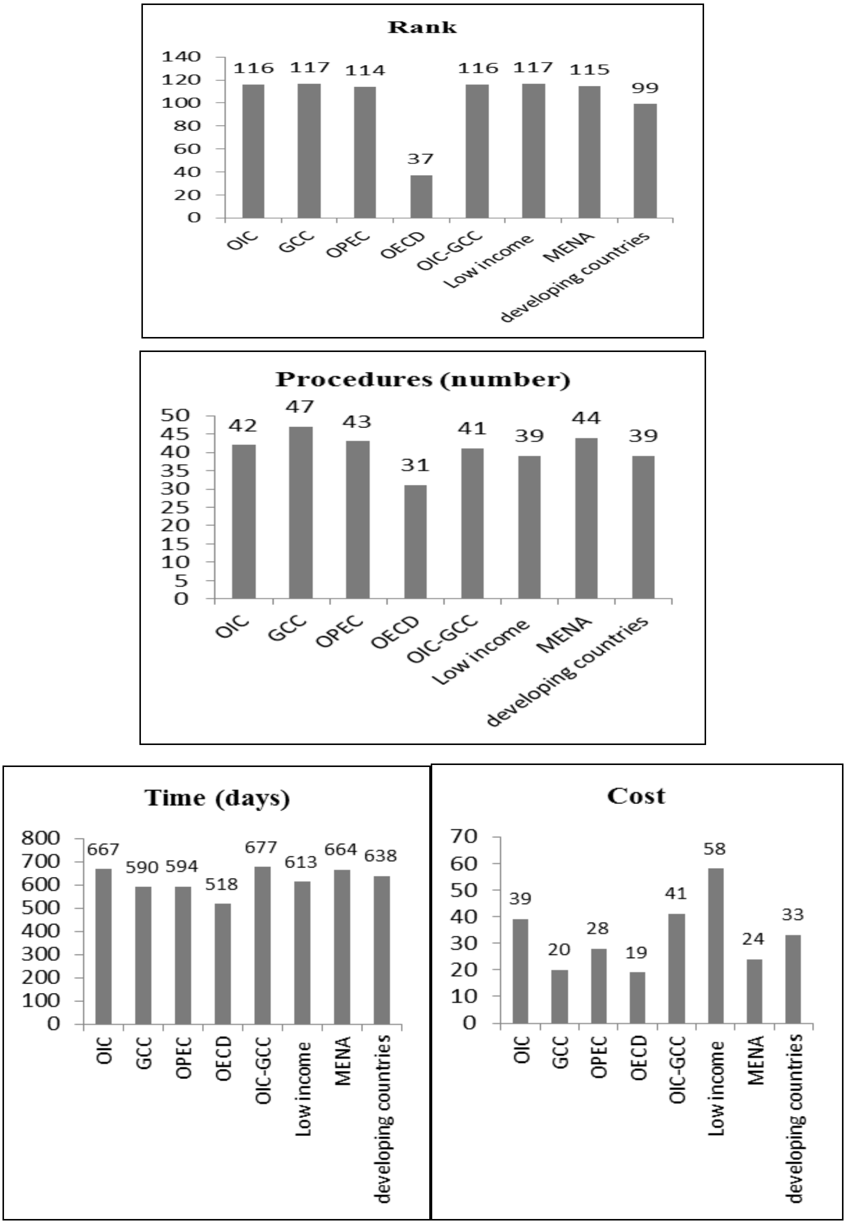






Source: Doing Business Report 2011

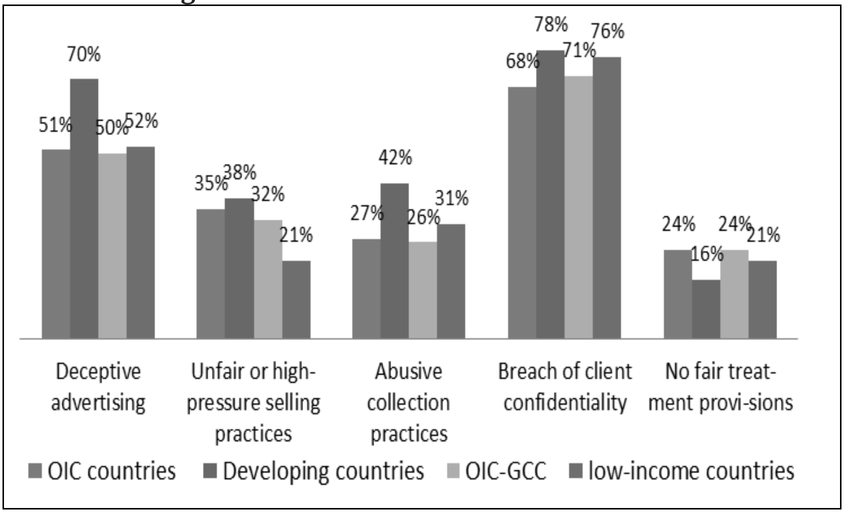
Figure-10
Enforcing contracts



Source: Doing Business Report 2011

Weak regulatory framework for financial agencies and business disputes resolution underscored the strong demand for financial inclusion reform in OIC countries. The statistics show that OIC countries fell behind other developing countries in terms of regulatory supervision coverage. For example, only 59% of microfinance institutions are under regulation compared with the average level of 72% in low income countries (Table). Current laws are also insufficient to provide enough protection for disputes resolution. Take the instance of client confidentiality protection, only 68% of OIC countries provide laws to restrict such unfair treatment, while 78% of developing countries do (See Figure-11).

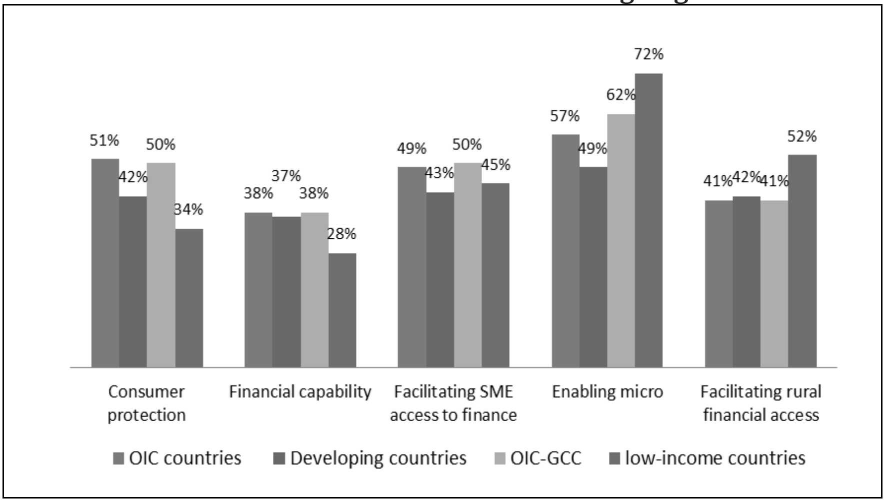
Figure-11
Disputes resolution: provisions in existing laws and regulations to restrict unfair treatment



Source: CGAP (2010)

However, the statistics also shows that OIC countries have been aware of the issue and taking actions more actively than other developing countries. According to the CGAP survey, OIC governments have been more actively promoting reforms in all aspects of financial inclusion, especially in fields of financial consumer protection and microfinance expansion. The proportions of countries taking reforms on financial capability (38%) and SME financial access (49%) are also higher than those of developing countries (37% and 43%), much higher than low-income countries (28% and 45%). What is surprising is that non-GCC governments are even more active in financial inclusion reforms than GCC governments, especially in microfinance development (62% for OIC-GCC vs. 57% for OIC) (See Figure-12).

Figure-12
Financial inclusion reform undergoing

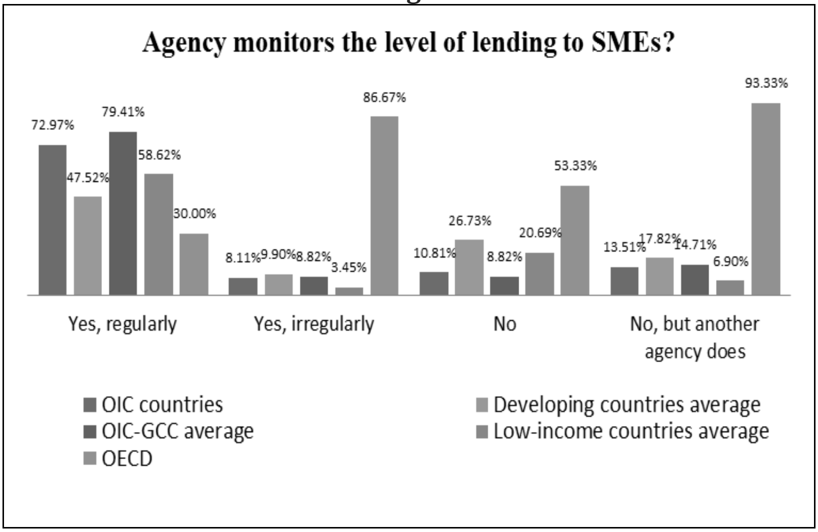


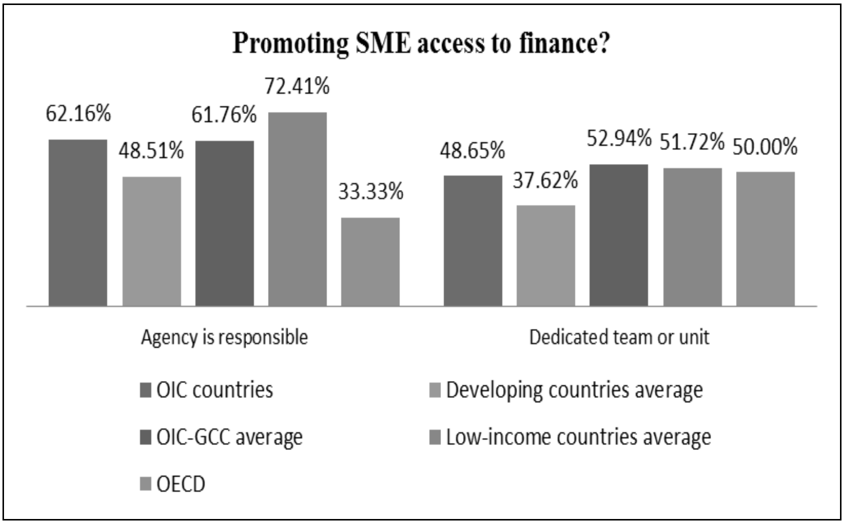
Source: CGAP (2010)

Financial inclusion gap in OIC countries can also be reflected by governments' heavy investment in SME policy reforms. According to the CGAP financial access database (

Table), OIC countries are more likely to monitor the level of lending to SMEs through specific dedicated agencies than developing countries (73% vs. 48%). Also, 62% of OIC countries designated an agency to promote SME access to finance specifically, compared to the figure of 49% in developing countries. However, the SME lending as proportion of GDP in OIC countries is still far behind the OECD level (7.43% vs. 24.47%), which indicates that there is a huge gap in terms of SME funding between the two groups (See Figure-13).

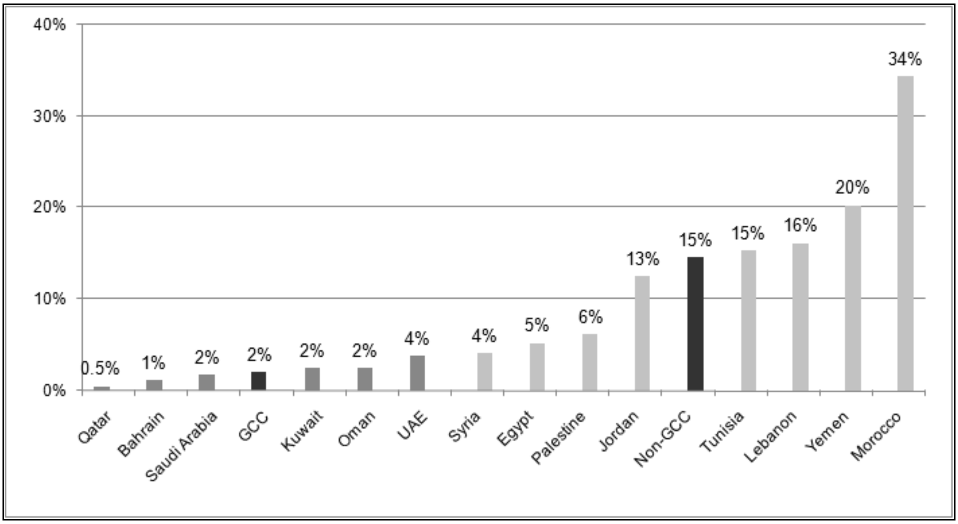
Figure-13
SME regulation





Despite all the reform efforts exerted so far, the SME loans are still small in their sizes in OIC countries suggests that OIC the total value of SME lending in OIC countries is only 7.43% on average, much lower the benchmark of Malaysia (17.43%) and OECD (24.47%), and the severity of the issue is similar in both GCC and non-GCC countries. The argument is also supported by the Figure-14, which provides the SME loans as percentage of total loans in MENA region on country level.

Figure-14
SME Loans/Total Loans (%): MENA Countries



Source: (Rocha, et.al., 2011)

4.3. Gap – Micro-Takāful

Despite its large potent in poverty reduction, Micro-*Takāful* institutions are still significantly underdeveloped in OIC countries. UNDP study in 2006 reveals that the low income people in Indonesia still rely heavily on informal risk management strategies. Sharīʿah-conform insurance that was available to the low income households were reluctant to enter the market. Similar to low-income individuals, SMEs are also less covered by insurance services in poorer OIC countries. In MEAN region, 34% of SMEs in GCC countries have the access to insurance services, while the figure fells sharply to 19% if the SMEs in Non-GCC countries in the same region are consider. [30]

[30] (Rocha, et al. 2011)

Two reasons may have contributed to the lack of momentum of the market expansion. First, the slow expansion of Micro-*Takāful* may be linked to the fact that microfinance institutions in Muslim populous countries are less likely to offer insurance services. [31]Second, some form of *Takāful* model require policy premium to be reimbursed to policy holders if they do not file a claim. The AAOIFI's ruling in 2006 claims that policyholders have the exclusive rights to the surplus has held back the penetration of *Takāful*. This may have played a role in discouraged the entrance of new firms.

Section V
Policy Recommendations and Concluding Remarks

Financial inclusion is becoming an increasing priority for policy makers around the world and there is growing realization that measures should be undertaken to i) stimulate private sector investment in favor of low income individuals and SMEs, ii) remove institution and infrastructure barriers to help financial service providers to sustainably expand services, and iii) encourage product diversification and improved risk management.[32] Box 4 lists key guiding principles drafted by G20 for innovative financial inclusion. These principles are good starting point for the policy formulation for designing a comprehensive framework to address the issue of financial inclusion.

In this section, we propose five dimensions of policy recommendations that could be considered for the enhancement of financial inclusion for countries interested in developing Islamic financial system led development in OIC countries.

[31] (Kwon 2010)
[32] (Pearce 2010)

Box 4 - G20 Principles for Innovative Financial Inclusion

Innovative financial inclusion means improving access to financial services for poor people through the safe and sound spread of new approaches. The following principles aim to help create an enabling policy and regulatory environment for innovative financial inclusion. The enabling environment will critically determine the speed at which the financial services access gap will close for the more than two billion people currently excluded. These principles for innovative financial inclusion derive from the experiences and lessons learned from policymakers throughout the world, especially leaders from developing countries.

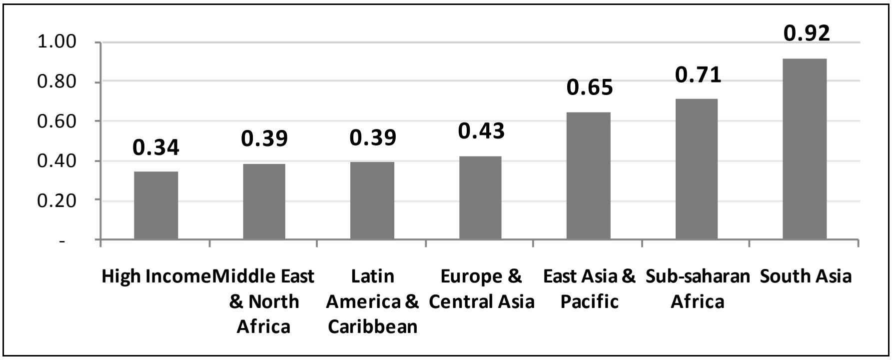
1. **Leadership**: Cultivate a broad-based government commitment to financial inclusion to help alleviate poverty.
2. **Diversity**: Implement policy approaches that promote competition and provide market-based incentives for delivery of sustainable financial access and usage of a broad range of affordable services (savings, credit, payments and transfers, insurance) as well as a diversity of service providers.
3. **Innovation**: Promote technological and institutional innovation as a means to expand financial system access and usage, including by addressing infrastructure weaknesses.
4. **Protection**: Encourage a comprehensive approach to consumer protection that recognizes the roles of government, providers and consumers.
5. **Empowerment**: Develop financial literacy and financial capability.
6. **Cooperation**: Create an institutional environment with clear lines of accountability and co-ordination within government; and also encourage partnerships and direct consultation across government, business and other stakeholders.
7. **Knowledge**: Utilize improved data to make evidence based policy, measure progress, and consider an incremental “test and learn” approach acceptable to both regulator and service provider.
8. **Proportionality**: Build a policy and regulatory framework that is proportionate with the risks and benefits involved in such innovative products and services and is based on an understanding of the gaps and barriers in existing regulation.
9. **Framework**: Consider the following in the regulatory framework, reflecting international standards, national circumstances and support for a competitive landscape: an appropriate, flexible, risk-based Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) regime; conditions for the use of agents as a customer interface; a clear regulatory regime for electronically stored value; and market-based incentives to achieve the long-term goal of broad interoperability and interconnection.

Source: Pearce (2010)

5.1. Policy Recommendation I - Need for Developing Supportive Regulatory and Supervisory Framework

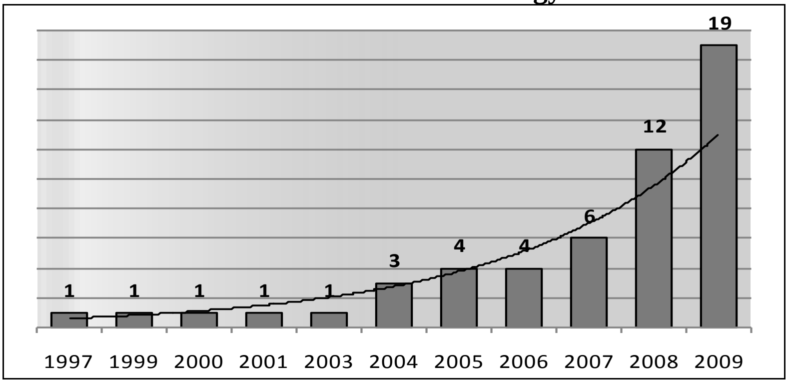
Improved access to finance in many developing countries is constrained by inappropriate regulations, a lack of specialist supervisory capacity, and inadequate institutional models in general for financial inclusion and particularly for Islamic finance in OIC countries. Despite the significance of financial inclusion, it is observed that financial inclusion is still not a priority for financial regulators in most of OIC countries. For example, financial regulators in MENA have the second lowest degree of involvement in promoting financial inclusion, ahead only of high income countries where financial exclusion is at much lower levels (Figure-15). Almost half of all the countries covered by the CGAP and World Bank Financial Access 2010 report (48 percent) have a strategy document for the promotion of financial inclusion, with 90 percent of those introduced within the last 6 years. (Figure-16).

Figure-15
Index of Regulator's involvement in Financial Inclusion



Source: CGAP and World Bank Financial Access 2010

Figure-16
Countries with a Financial Inclusion Strategy Document



Source: CGAP and World Bank Financial Access 2010

OIC countries need to develop a regulatory and supervisory framework that supports wide financial inclusion based on sound risk management and with sufficient consumer protections. During this process, governments and regulators need to take the lead in supporting improvements in access to finance, especially through Sharīʿah-compliant financial tools, displaying the *Leadership* called for in the G20 Principles (See Box 4). Financial inclusion, especially Islamic financial inclusion, should be considered as a goal alongside prudential regulation and financial system stability. The CGAP and World Bank Financial Access survey (2010) of financial regulators worldwide found that regions that include financial access in their strategies and mandate their financial regulators to carry such agendas are also the countries that reform the most. Regulators with a financial inclusion strategy are more likely to have more financial inclusion topics under their purview and more resources and staff dedicated to working on these matters.[33]

Practical measures that can be taken by regulators (as has been the case in Indonesia and Pakistan) include: licensing Islamic banks, supporting centers for training and certification on Islamic financial operations to staff and managers of financial service providers, and developing guidelines setting out requirements for licensing and appointment of Sharīʿah advisers to rule on Sharīʿah compliance. The political climate for Islamic finance also affects investor and lender decisions about whether to offer Sharīʿah-compliant products, and acts as an incentive or disincentive to its growth.

[33] (Pearce 2010)

In addition, consumer protection is also increasingly important as access increases, so that new customers, and existing customers with access to new services, can take well informed decisions about how best to manage and use Islamic financial services. In some countries, customers stay away from Sharīʿah-compliant services because of lack of education about authenticity and credibility of products. Consumer protection can help remove such perceptions and can lead to enhanced inclusion. Therefore, it is essential that consumer laws and regulations are developed and put in place: i) to protect against unfair or deceptive practices ii) to improve transparency through disclosure and plain language requirements for products and pricing, in a way that allows consumers to easily access to Sharīʿah-compliant products and services, and iii) to establish a low cost, efficient, and fair mechanism for resolving customer complaints and disputes.

5.2. Policy Recommendation II - Strengthen Financial Infrastructure for Financial Inclusion[34]

Improving financial infrastructure, especially the improvement of current credit informational system, should be the priority item in the policy agenda of OIC countries. Deficiencies in financial infrastructure are one of the major obstacles for further SME lending in MENA region, as confirms by the survey result in Figure-7 Percentage (%) of Banks responding that Obstacle is Very Important or Important for SME Financing: GCC vs. Non-GCC.

Improving financial infrastructure will entail expanding the range of collateral, improving registries for movables, and improving enforcement and sales procedures for both fixed and movable assets. It also entails upgrading public credit registries, and more importantly, introducing private credit bureaus capable of significantly expanding coverage and the depth of credit information.[35] Financial infrastructure improvements will reduce the information asymmetry that constrains access to credit and raises the costs and risk of financial intermediation.

Core components of the financial infrastructure such as credit information, investors' rights, insolvency regimes, etc. are essential irrespective of type of financing, i.e. conventional or Islamic. For this purpose, it is suggested that, first, regulated financial entities should be required to share credit information, ideally

[34] For more details, please refer to (Pearce 2010)
[35] (Rocha, et al. 2011)

through national credit registries. Sharing borrower information is essential to lowering costs and overcoming information constraints. As mentioned earlier, lack of access to credit information and low coverage ratio of credit history of individuals are two main features that contribute to the financial exclusion in OIC countries especially for SME financing. By integrating Sharīʿah-compliant products and customers information into credit bureaus, the coverage and utility of data in the credit bureaus can be improved. Financial institutions of all types can extend access to new customers, while managing risks and costs more effectively. This will also help Sharīʿah-compliant financial institutions to expand their funding source and enhance their risk-sharing mechanism, as institution with its clients' credit information available to the public can establish its reputation much easier than those with an informal credit history system.

Second, data on financial inclusion and unbanked markets/customers (especially those due to religious reason) is also needed to improve to underpin a sustainable expansion in access to finance, as emphasized by the G20 Principle for Financial Inclusion. Household and enterprise-level survey questions can provide governments and regulators with the data they need for designing reforms and then monitoring the effectiveness of those reform measures. For example, OIC governments can encourage Islamic banks to launch financially inclusive accounts, shifting G2P payments (increased transaction volume) through such accounts to enhance their viability.

5.3. Policy Recommendation III - Ensure a Level Playing Field for Islamic Microfinance, SME, and Micro Takāful

The lack of Sharīʿah-compliant micro-finance services is constraining financial inclusion to a proportion of the population. The growth of Islamic microfinance will depend to a large degree on whether financial institutions can develop sufficiently attractive financial products and services, which are competitive with conventional products in terms of pricing, transparency, processing time, and burden on the client. This will be determined in part by their capacity and systems, but regulators can also provide a more level playing field for Islamic microfinance. This extends beyond financial sector regulation to the tax code, as Islamic financing that involves additional transactions such as passing on a property title, may have tax implications such as capital gains tax, which are not applicable in conventional deals. OIC governments should also extend access to a broader range of financial services through existing branch networks of Islamic banks, which can offer a unique network of existing outlets as a delivery mechanism for Sharīʿah-compliant financial services.

When designing the financial inclusion reform plan, OIC governments should take three points into their consideration specifically i) allowing banks to expand access through agents and use of technology (e.g. mobile phones), ii) providing a Sharīʿah-compliant finance company model for microfinance and microinsurance, and iii) removing interest rate caps for microcredit and strengthen customer protection laws.

Competition policy can also contribute to further SME lending. (Rocha, et al. 2011) suggests that private banks are more efficient in lending technologies and are able to generate and manage a significant SME portfolio, even within weak enabling environments. The entry of these banks into OIC countries could contribute to more SME lending, both directly and through spillover effects. Therefore, the policy implication is to ensure that entry requirements for Islamic financial institutions are not overly restrictive and that Islamic banking markets remain contestable.[36] In addition, the impact of the entry of foreign banks on Sharīʿah-compliant SME lending can be magnified if these new foreign banks have access to substantive credit information on potential SME borrowers.

Governments should play a critical role in promoting an enabling environment in which private banks can fulfill their SME finance targets prudently and responsibly. In the case of non-GCC countries, there is huge potential for expanding SME finance, with large numbers of smaller enterprises underserved and low levels of bank competition to serve them. In the case of GCC countries, the size of the SME sector may remain more constrained by the nature of oil economies, but there is also scope for further SME finance, especially if access to finance is also expanded for resident non-nationals. [37]

5.4. Policy Recommendation IV - Institutionalization of Islamic Redistributive Instruments

Islamic finance advocates risk sharing and equity finance, while prohibiting debt financing and leveraging. Given the emphasis on social and economic justice and the eradication of poverty, we would expect Islamic instruments that targeted to address inequity, such as *Zakāh*, *khairat*, *Waqf*, and *Qarḍ-al-Ḥasan*, to play an important role if the required institutional structures are developed. Therefore,

[36] (Rocha, et al. 2011) show that there is a higher rejection of banking licenses in MENA than in other regions.
[37] Maddedu provides a review of credit reporting systems in MENA (2010). (Rocha, et al. 2011)

there is need to formalize or institutionalize Islamic redistributive mechanisms designed to empower the economically weak segments of the society.[38]

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

The objective of institutionalization of redistributive instruments is to formalize and standardize the operations to facilitate each instrument. For example, for *Zakāh*, *Khairat*, and *Qarḍ-al-Ḥasan*, a formal network of institutions needs to be developed to collect, distributed, and recycle the funds in most efficient and the most transparent fashion. In some countries, point of sale such as Automatic Teller Machines (ATM) or cash dispensing machines are used to give choice to the customers to make donations or contribution at the spot to make it easy for the customer to make such contributions. The financial institution can collect and aggregate funds and then disburse to needy through selected channels.

Several scholars have put forth ideas of formalizing and institutionalizing Islamic modes of redistributions through an integrated approach by combining different modes. For example, Elgari (2004) proposes establishing a nonprofit financial intermediary, the *Qarḍ-al-Ḥasan* bank that gives interest free loan (*Qarḍ al-Ḥasan*) to finance consumer lending for the poor. The capital of the bank would come from monetary (cash) *Waqf* donated by wealthy Muslims. Kahf (2004) and

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

Ahmed (2003) propose establishing a microfinance institutions based on *Zakāh*, *Awqāf*, and *Ṣadaqat*.

Developing a hybrid model or an integrated one is practical and has several advantages. Taking micro-finance example, one can envision developing Universal Islamic Micro-Finance Structure to construct a portfolio of three basic and traditional Sharīʿah compliant financial products, *Awqāf*, *Zakāh* and micro-*Takāful* in order to support and foster Islamic Micro-finance under a unified framework. Islamic microfinance can be more effective in diverting borrowers' propensity to consume through providing a micro-*Takāful* mandatory component to the micro lending service as the main mitigate for moral hazard. Besides this, charging no interest would help mitigate credit rationing, redlining and adverse selection (Stiglitz and Weiss 1992).

Although creating such a unified institution may be premature given the present context, in this paper we attempt to outline the basic concept of such a singular Islamic MFI by using funds from the *Zakāh* and *Awqāf*, in addition to complementing this with providing micro-*Takāful* to micro enterprises. The IMFIs may use the *Zakāh* fund in disbursing funds to fulfill basic consumption needs for the hard-core poor target group in the first place, as on principle no return can be realized from *Zakāh* fund and *Zakāh* fund should be disbursed within one financial year. *Zakāh* funds may alternatively be directed towards funding small businesses, and support theor initiation at no funding cost.

However, the *Awqāf* funds may be used as investable fund in providing capital investment and working capital financing for the micro-businesses. Such an integrated model may reduce the chances of loan default because the basic inherent tendency of the poor to use the loan fund for consumption purpose will be met. As their basic consumption needs are covered, the poor micro-entrepreneurs may be in better position to focus on their business alone. Moreover, the IMFI may initiate financing through different Islamic Sharīʿah compliant modes.

a) Mitigating Credit Risk: As mentioned above, the innovative operational format of MFIs suits the poor, whose lack of physical collateral disqualify them to borrow from traditional commercial banks. *Waqf*-based Islamic MFIs will retain the innovative format of operation of conventional MFIs and oriented the program towards Islamic principles and values. Thus, like their conventional counterparts, Islamic MFIs have largely resolved the credit risks through social collateral of groups and weekly repayments.

b) Resolving Moral Hazard Problem: Islamic MFIs have some inherent characteristics that can resolve the moral hazard problem faced by conventional MFIs pointed above. The main mode of financing used by the Islamic MFIs is *murābaḥah*/ *Bayʿ Mu'ajjal* or *ijārah* (leasing). These instruments involve real transaction and instead of cash being given out, asset/good is exchanged. As a result, the opportunity of diverting funds for non-productive uses other than that requested for is reduced, if not eliminated. This increases the profitability of the MFI by decreasing the default rate.

c) Economic Viability: In cases where Islamic MFIs get funds from traditional interest-based outlets, the financing costs appear to be high. For example, the financing costs of two small Islamic MFIs, Noble and Rescue in Bangladesh, were 35.8 percent and 12.5 percent of the total expenditures respectively (Ahmed 2002). As the bulk of the *Waqf*-based Islamic MFIs funds will come from *Waqf* endowment, the financing costs of these institutions will be significantly lower than their conventional counterparts. Given the philanthropic nature of these funds, no returns are expected by contributors. While Islamic MFIs will pay returns on funds coming from external sources like deposits and beneficiary savings, the *Waqf* component of funds will significantly reduce the financial costs and improve financial viability of the institution.

In short, above-mentioned structure is one of several innovative ways to revive Islamic institutions of redistribution which has great potential to overcome the problem of financial exclusion and to contribute to alleviation of poverty in OIC countries.

5.5. Policy Recommendation V - Financial Engineering

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

While sustainability of funding represents a major challenge for *Awqāf*, researchers proposed a hybrid structure that targets integrating *Zakāh* and *Awqāf* to promote microfinance. Sadeq (1995) presents an integrated approach on how traditional institutions of *Awqāfs* may be revitalized through proposing innovative Sharīʿah compliant structures. *Awqāf* certificates of different denominations could be issued to raise sustainable funding for *Awqāf*. Special funds are then to be raised for financing economic development. As *Awqāfs* are generally applied on fixed assets, such assets are often under-utilized. On the other hand, if cash *Awqāfs* are raised by issuing *Awqāf* certificates, they could be used more efficiently in a wide range of development projects. This structure relies on the fact of encouraging the flow if cost-less funding of *Zakāh*, that can be directed to underwritings and subscriptions in the pooled funds as a potential tool for Islamic microfinance (Hassan 2010). Yet still, inadequacy of governance and Sharīʿah compliant accounting principles to support such structures are the main challenges for widespread implementation.

Annex – Supporting Data for Charts

Table-5
Microfinance Regulation and Supervision by Region[39]

	MENA (%)	Developing Countries (%)	All (%)
Not regulated	50.0	37.9	47.7
Supervised only by a bank regulator	30.0	42.7	35.4
Supervised only by other regulator	20.0	7.8	7.7
Supervised by both	0.0	11.7	9.2
Number of countries	10	103	130

Source: M Khaled, CGAP, 2010

Table-6
Microfinance indicators from CGAP financial access database

	Financial inclusion: Promoting access in rural areas		Deposits: Accounts per thousand adults			Deposits: Value as percentage of GDP			Loans: Accounts per thousand adults			Loans: Value as percentage of GDP		
	Agency is responsible (Yes/No)	Dedicated team or unit (Yes/No)	Coope-ratives	SSFIs	MFIs	Cooperatives	SSFIs	MFIs	Cooperatives	SSFIs	MFIs	Cooperatives	SSFIs	MFIs
Malaysia	√	√	2.78	1,146.06	n.a.	0.04	13.71	n.a.	87.26	113.07	19.03	0.63	12.09	0.22
OIC countries average	68%	57%	30.86	224.11	68.14	3.98	5.33	0.61	24.94	31.00	34.68	2.59	3.62	0.79
Developing countries average	47%	36%	100.53	216.71	48.93	1.99	4.27	0.78	27.54	25.01	30.14	1.71	3.35	0.97
Low-income countries average	79%	62%	32.65	18.17	62.44	0.68	1.74	0.92	16.42	8.46	43.87	0.69	1.70	1.19

Source: CGAP financial access report data 2010

[39] (Pearce 2010)

Note: The CGAP Financial Access Database covers questionnaires sent to 151 economies: 13 in East Asia and the Pacific, 27 in Europe and Central Asia, 20 in Latin America and the Caribbean, 14 in the Middle East and North Africa, 6 in South Asia, 40 in Sub- Saharan Africa, and 23 in the high-income OECD countries. Among them, 37 OIC countries are covered. For practical purposes, most small islands and economies at war were not included. The sample covers more than 94 percent of the world's population and nearly 98 percent of global GDP.

Selected questions are presented in the first and second rows of the table. The row for OIC countries means the percentage of OIC countries that replied yes to the questions (for Yes/No questions), or means the average value for OIC countries. The same calculation applied to the groups of developing countries, OIC-GCC, and low incoming countries. OIC-GCC means OIC countries excluding the GCC countries covered by the CGAP database.

Table-7a
Doing Business Indicators Comparison

	Ease of Doing Business Rank	Starting a Business				
		Rank	Procedures (number)	Time (days)	Cost (% of income per capita)	Paid-in Min. Capital (% of income per capita)
OIC	118	107	8	40	58	122
GCC	43	78	8	15	5	121
OPEC	110	114	10	43	41	25
OECD	30	56	6	14	5	15
OIC-GCC	128	110	8	44	65	123
Low income	140	119	8	41	108	149
MENA	96	97	8	20	38	104
Developing countries	100	98	8	39	32	42

Source: Doing Business Report 2011, The World Bank

Ease of doing business rank: World Bank index that measures business regulations and their enforcement across countries Index.
Starting a business: all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business. Procedure is defined as any interaction of the company founders with external parties (for example, government agencies, lawyers, auditors or notaries). Time is recorded in calendar days. The measure captures the median duration that incorporation lawyers indicate is necessary to complete a procedure with minimum follow-up with government agencies and

no extra payments. Cost is recorded as a percentage of the economy's income per capita. It includes all official fees and fees for legal or professional services if such services are required by law. The paid-in minimum capital requirement reflects the amount that the entrepreneur needs to deposit in a bank or with a notary before registration and up to 3 months following incorporation and is recorded as a percentage of the economy's income per capita.

Table-7b

Doing Business Indicators Comparison (continued)

	Getting Credit					Enforcing Contracts			
	Rank	Strength of legal rights index (0-10)	Depth of credit information index (0-6)	Public registry coverage (% of adults)	Private bureau coverage (% of adults)	Rank	Procedures (number)	Time (days)	Cost (% of claim)
OIC	117	4	2	5	6	116	42	667	39
GCC	94	4	4	5	17	117	47	590	20
OPEC	110	4	3	6	10	114	43	594	28
OECD	38	7	5	8	61	37	31	518	19
OIC-GCC	120	4	2	5	5	116	41	677	41
Low income	120	5	1	1	1	117	39	613	58
MENA	116	3	3	5	7	115	44	664	24
Developing countries	89	5	3	10	18	99	39	638	33

Source: Doing Business Report 2011, The World Bank

Getting Credit: the legal rights of borrowers and lenders with respect to secured transactions through one set of indicators and the sharing of credit information through another. The strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The depth of credit information index measures rules and practices affecting the coverage, scope and accessibility of credit information available through either a public credit registry or a private credit bureau. The public credit registry coverage indicator reports the number of individuals and firms listed in a public credit registry with information on their borrowing history from the past 5 years. The private credit bureau coverage indicator reports the number of individuals and firms listed by a private credit bureau with information on their borrowing history from the past 5 years.

Enforcing contracts: the efficiency of the judicial system in resolving a commercial dispute. The list of procedural steps compiled for each economy traces the chronology of a commercial dispute before the relevant court. Time is recorded in calendar days, counted from the moment the plaintiff decides to file the lawsuit in court until payment. Cost is recorded as a percentage of the claim, assumed to be equivalent to 200% of income per capita.

Table-8
CGAP indicators for financial inclusion – regulation, disputes, and financial inclusion reforms

	Under regulation agency's supervision? (Yes/No)			Disputes resolution: provisions in existing laws and regulations to restrict unfair treatment? (Yes/No)					Financial inclusion reform undergoing (Yes/No)					Financial inclusion: Consumer protection (Yes/No)	
	Cooperatives	MFIs	SSFIs[40]	Deceptive advertising	Unfair or high-pressure selling practices	Abusive collection practices	Breach of client confidentiality	No fair treatment provisions	Consumer protection	Financial capability	Facilitating SME access to finance	Enabling micro finance	Facilitating rural financial access	Agency is responsible	Dedicated team or unit
Malaysia		√		√	√	√	√		√	√	√	√	√	√	√
OIC countries	35%	59%	65%	51%	35%	27%	68%	24%	51%	38%	49%	57%	41%	76%	65%
Developing countries	44%	59%	57%	70%	38%	42%	78%	16%	42%	37%	43%	49%	42%	64%	51%
OIC-GCC	35%	59%	71%	50%	32%	26%	71%	24%	50%	38%	50%	62%	41%	79%	71%
low-income countries	41%	72%	86%	52%	21%	31%	76%	21%	34%	28%	45%	72%	52%	79%	55%

Source: CGAP Financial Access Report Data 2010

Note: The CGAP Financial Access Database covers questionnaires sent to 151 economies: 13 in East Asia and the Pacific, 27 in Europe and Central Asia, 20 in Latin America and the Caribbean, 14 in the Middle East and North Africa, 6 in South Asia, 40 in

[40] Specialized state owned financial institutions

Sub- Saharan Africa, and 23 in the high-income OECD countries. Among them, 37 OIC countries are covered. For practical purposes, most small islands and economies at war were not included. The sample covers more than 94 percent of the world's population and nearly 98 percent of global GDP.

Selected questions are presented in the first and second rows of the table. The row for OIC countries means the percentage of OIC countries that replied yes to the questions. The same calculation applied to the groups of developing countries, OIC-GCC, and low incoming countries. OIC-GCC means OIC countries excluding the GCC countries covered by the CGAP database.

Table-9
SME data from CGAP financial access database

	Agency monitors the level of lending to SMEs				Promoting SME access to finance		SME definition			SME lending
	Yes, regularly (Yes/No)	Yes, irregularly (Yes/No)	No (Yes/No)	No, but another agency does (Yes/No)	Agency is responsible (Yes/No)	Dedicated team or unit (Yes/No)	Number of employees (max.)	Sales	Loan size	Loan value (% of GDP)
Malaysia	√				√	√	150.00	7,093,199.00	..	17.43
OIC countries average	72.97%	8.11%	10.81%	13.51%	62.16%	48.65%	151.00	4,008,095.95	284,592.68	7.43
Developing countries average	47.52%	9.90%	26.73%	17.82%	48.51%	37.62%	141.19	9,150,287.27	168,779.94	7.44
OIC-GCC average	79.41%	8.82%	8.82%	14.71%	61.76%	52.94%	155.33	3,837,600.94	138,565.15	7.43
Low-income countries average	58.62%	3.45%	20.69%	6.90%	72.41%	51.72%	66.43	1,018,377.27	72,356.47	5.58
OECD	30.00%	86.67%	53.33%	93.33%	33.33%	50.00%	274.00	56,203,661.64	2,080,697.75	24.47

Source: CGAP financial access report data 2010

Note: The CGAP Financial Access Database covers questionnaires sent to 151 economies: 13 in East Asia and the Pacific, 27 in Europe and Central Asia, 20 in Latin America and the Caribbean, 14 in the Middle East and North Africa, 6 in South Asia, 40 in Sub- Saharan Africa, and 23 in the high-income OECD countries. Among them, 37 OIC countries are covered.

Selected questions are presented in the first and second rows of the table. The row for OIC countries means the percentage of OIC countries that replied yes to the questions (for Y/N questions), or means the average value for OIC countries. The same calculation applied to the groups of developing countries, OIC-GCC, and low incoming countries. OIC-GCC means OIC countries excluding the GCC countries covered by the CGAP database.

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RESOLUTIONS OF OIC
FIQH ACADEMY

Islamic Economic Studies
Vol. 20, No. 2, December 2012

Resolution of OIC Fiqh Academy
(related to Islamic Economic and Finance)

بسم الله الرحمن الرحيم

Resolution No. 170 (8/18) on: Time Sharing Contracts

The Board of the International Fiqh Academy (of the Organization of the Islamic Conference), in its 18th Session, held in Putrajaya (Malaysia), on 24-29 Jumada Al-Akhirah 1428H corresponding to July 9-14, 2007.

Having reviewed the research papers submitted to the Academy on **"Time Sharing Contracts"**, and listened to the discussions on it,

Resolves the following:

Firstly: Definition of Timesharing

Timesharing refers to Joint ownership or lease of a certain property by several people who take turns occupying the premises for fixed periods.

Secondly: Types of Timesharing

Timesharing includes the following two types:

(1) Full ownership (of the asset and the usufruct) by purchasing, through a sale contract, a common share of the property so as to utilize it in succession with the other owners during specific periods.

(2) Incomplete ownership (of usufruct only) by hiring, through a lease contract, a common share of the usufruct of the property so as to utilize it, in succession with the other owners, during a specific period.

Thirdly: Sharīʿah Ruling on the Principle of Timesharing

(a) It is permissible in Sharīʿah to purchase or rent a common share in a specific property and to agree with the other owners, directly or through a managing agent, to use the purchased or rented property in successive terms to be collectively agreed upon. The purchased or rented share can also be disposed of through sale, donation, bequeathal, mortgaging or any other Sharīʿah -accepted form for disposal of owned property.

(b) Application of the principle of timesharing should satisfy the conditions stipulated by Islamic Sharīʿah for sale and lease contracts.

(c) In case of leasing the lessor should bear the costs of the basic maintenance without which the property cannot be utilized, whereas costs of operating and periodic maintenance may be assigned to the lessee in the contract. If the lessor performed operating and periodic maintenance he should charge the lessee only the costs that are normally incurred for similar work, or the amount they mutually agreed upon.

In case of sale, maintenance costs have to be borne by the owners of the property subject to their respective shares in the property.

(d) It is permissible for the owners to exchange their shares among themselves, whether directly or through a specialized company.

بسم الله الرحمن الرحيم

Resolution No. 171 (9/18) on: The Principle of Easement Rights and Its Contemporary Applications in Common Property

The Board of the International Fiqh Academy (of the Organization of the Islamic Conference), in its 18th Session, held in Putrajaya (Malaysia), on 24 – 29 Jumada Al-Akhirah 1428H corresponding to July 9 – 14, 2007,

Having reviewed the research papers submitted to the Academy on **“The Principle of Easement Rights and its Contemporary Application in Common Property”**, and listened to the discussions on it,

Resolves the following:

Firstly: Definition of Easement Rights

Easement rights include any right of common benefit that a property proves to be entitled to in another property.

Secondly: Types of Easement Rights

Easement rights are diverse and continuously changing, however, in old times the *fuqahā’* had tackled some of them including the following:

(1) Drinking Right: It refers to the right of having a turn to use water for irrigation or animal drinking, or to channel water from one property to the other.

(2) Draining Right: This refers to the right of draining waste or excess water from one property to the other, or across it to a public ditch.

(3) Passage Right: It refers to the right to access one property by passing through another neighboring property.

(4) Right of Topping: It refers to the right of the different parts of a multistory building, which belong to different owners, to rise above and rest on the top of each other.

Thirdly: Existence of Easement Rights depends on the following factors:

(1) Permission of the owner in case of private property, against compensation or free of charge.

(2) Necessity.

(3) Reclamation of Wasteful Land.

(4) Neighborhood and Joint Property.

(5) Any other Sharīʿah-acceptable factors that could emerge in our present times, such as extending electricity wires or water and drainage pipelines.

Fourthly: Rulings

(1) The general Sharīʿah rule applicable to easement rights is that: in principle, any act which leads to benefit is permissible, while any act that leads to harm is prohibited.

(2) Easement right is guaranteed for access to drinking water or channeling water for real estate and irrigation purposes. This includes water extensions for factories and laboratories, as well as drainage systems, provided that using such rights does not turn to be harmful to others.

As regards privately owned and stored water, easement right is applicable only in case of necessity; and subject to fair compensation.

(3) Right of Topping is also guaranteed with or without compensation as per the governing rules and regulations.

Fifthly: Contemporary Forms of Easement Rights

As per contemporary norms and traditions easement rights include extension of service devices such as communications, electricity, water, gas, sanitary and central cooling extensions.

Sixthly: Rulings on Some Modern Forms of Easement Rights

Private parking lots in buildings, market areas and commercial stores are considered to be part of the property which the customers head for.

Allah Knows Best

EVENTS AND REPORTS

Islamic Economic Studies
Vol. 20, No. 2, December 2012

International Conference on Islamic Capital Markets
Towards a Reselinet, Robust and Competitive Islamic Capital Market
Jakarta, Indonesia 19-20 June 2012

The Islamic Capital Markets Conference themed “Towards a Reselinet, Robust and Competitive Islamic Capital Market” was held during 19-20 June 2012 in Jakarta, Indonesia. Its purpose was to deliberate on the ways and means to further develop Islamic capital markets at local and global levels. The conference was jointly organized by the Indonesian Capital Market and Financial Institutions Supervisory Agency (Bapepam-LK) and Islamic Research and Training Institute IRTI-IDB.

Her Excellency Ibu Any Ratnawati, Vice Minister of Finance, Republic of Indonesia inaugurated the conference which was attended by over 250 national and international participants. The conference program was organized around four main themes:

1. Islamic Capital Market Development and Prospects;
2. Market Reform and Infrastructure Development;
3. Regulatory Aspects;
4. Strategy for Developing Capital Market Products for Public Sector Financing.

In these four sessions 15 research papers were presented and four panel discussions were held. Individual scholars, regulatory organizations from various countries and international financial infrastructure organizations participated.

Given the current turmoil in the global financial system and global imbalances the conference was very stimulating in its purpose and theme. The sustainability of finance has become an important issue besides increasing the market capitalization and enhancing market growth. The conference discussed these issues from both the practitioners’ and the academician’s views. The interaction between academics, practitioners, regulators and policy makers was the unique dimension of the conference that provided new perspectives and practicable approaches to the issues faced in development of Islamic Capital Markets.

A communique making five important recommendations was issued at the end of the conference.

Conference Communique and Recommendations

Based on the presentations and panel discussions during the conference, the participants issued a communique making five recommendations:

1. Though Islamic capital markets are much stable due to avoidance of interest based instruments and moral values in its trading principles, these markets are not immune from possible financial disturbances which may be transmitted through slightly different channels. This vulnerability increases as markets expand and get integrated with global markets and become more exposed to the global financial shocks. Therefore, in addition to relying on operational peculiarities of Islamic finance, the Islamic capital market should also impose good corporate governance. The higher the quality of the implementation of good corporate governance, the higher the public confidence will be achieved, hence the market would be more resilient and robust. This calls for applying well designed regulatory framework and allowing the market participants to get right incentives for performance. Since the transparency and good performance are mutually reinforcing, the capital market regulators should give particular attention to this dimension.
2. Risk assessment of products and markets are also important for regulators, issuers and investors in Islamic capital markets. Appropriate techniques should be developed for risk assessment of Islamic products, regulatory bodies should build this internal capacity, and methods should be created to educate investors on the returns and risks involved in Islamic capital market products.
3. In the area of product and market development, some papers analysed the comparability of the Islamic capital market products to other conventional capital market products such as socially responsible investment and the possibility of developing the ETF compatible to Sharia principles. The challenge is, how we can enrich the market with capital market products that maintain the strong tie with projects and real economy and improve

the liquidity of the market while keeping compliance with the Sharīʿah principles.

4. Besides the product development, the expansion of the Islamic capital market also depends upon efforts of the industry in educating the public. Misperception on the Islamic capital market products does exist which may lead to reluctancy in investment decision. The Islamic capital market needs a well-designed marketing program capable of introducing the Islamic products to the public in a more friendly way. The introduction of retail sukuk in Indonesia is one of the examples on how the Islamic market products can be popular and become a success story for public sector financing. The fact shows that the retail government sukuk has become an effective tools for public fund mobilization particularly in strengthening the fiscal policy of the government.

5. A proper and strong legal foundation for Islamic capital market is very important to achieve market efficiency since it could minimize the uncertainty and subsequently improve the public confidence. An important aspect discussed was the possible revision of the governing law clause in sukuk issuance. The adoption of asset-backed or asset-based instruments could bring different legal consequences that should be clearly reflected in the governing law.

6. The potential for growth of Islamic capital markets is very high, but this will not be realized by private demand and good wishes alone, active regulatory support and political will is mandatory.

In short

The development of the Islamic capital market requires comprehensive support covering human capital development, improved legal environment, supporting infrastructure, well-developed risk management, and finally market expansion. Despite the successes achieved so far, much still remains for us to do. Researchers, academic institutions, regulators, bankers, financial institutions, lawyers, capital market players and policy makers should all work towards these at their respective levels.

In Indonesia, the development of the Islamic capital market could serve as an important gateway for the international investors to participate in the Indonesian economic development in a mutually benefitting manner.

Further, the contents of this conference should be broadcasted to the capital market community to bring their attention upon the importance of continuous development of the market.

(Summarized by Salman Syed Ali and Dadang Muljawan)

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IRTI Lectures by Eminent Scholars during the year 1433H (2012)

IRTI organized two lectures by eminent scholars during the year 1433H (2012). One was given by an IDB Prize Laureate, Prof. Khurshid Ahmad on behalf of the Islamic Foundation, UK, the winner of IDB Prize in Islamic Economics for 1432H. The other was given by a Sharīʿah Scholar, Sheikh Yousuf Al-Shubaily. These lectures were attended by a large number of participants from across the various entities and departments within the IDB Group and from other institutions such as the Islamic Economics Institute, King Abdul Aziz University, Jeddah, Umm-Al-Qura University, Makkah Al-Mukarramah, Organization of Islamic Cooperation and Dallah Al-Barakah, Jeddah. Below are brief summaries of these lectures.

Global Financial Crisis and the Role of Islamic Economics

PROF. KHURSHID AHMAD
(Chairman of the Islamic Foundation, Markfield, UK)

IDB Prize Laureate delivered this lecture on 29/05/1433H (21/04/2012). Professor Khurshid Ahmad started his lecture by presenting the most important contributions of the Islamic Foundation UK in the field of Islamic economics for which it was awarded the IDB Prize in Islamic economics. Then he spoke of the economic and political scenarios that characterized the economic and social changes of the 57 Muslim countries during the 19th and 20th centuries, paying particular attention to the endogenous and exogenous factors that have delayed their development. This was followed by an analysis of the excesses of the capitalist system that has been the cause of the recent global financial crisis that resulted in an increase in bankruptcy, mass unemployment, inequality, and poverty.

According to him, there have been five major delinks that have given modern capitalist economy and the mainstream science of economics their distinct character, identity and ethos. They lie at the root of the crisis, which can be identified as follows:

1. A delink between religion, ethics, the moral and spiritual dimensions of life and the economy, society and state.
2. A delink between economics and other social disciplines and aspects of human thought and life.
3. A delink between economy and society was not the end of the story. What happened to the economy itself is no less devastating. It was reduced to what is called market-mechanism, which was assigned the task of decision-making in respect of all matters relating to production, exchange and consumption. It is this tragic transformation that has been rightly described by some of the leading economists, like Nobel Laureate Joseph Stiglitz and the financial wizard, George Soros, as "Market Fundamentalism".
4. The above delinks have led to a fourth delink, both in the economic science and in the economy and all areas of economic policy-making - the delink between efficiency and equity.
5. A delink between money and production activity. This has led to the emergence of two parallel economies, a money economy and other the real physical economy.

Finally he proposed the development of a new paradigm based on Islamic economics that is not a reform of capitalism, socialism or welfare state but as an alternative to them.

(Summarized by Abdelkader Chachi)

Financial Intermediation in the Light of *Maqāṣid* Al-Sharīʿah

SHEIKH YOUSUF ABDULLAH EL SHUBAILY

(Professor of Shari'ah, Higher Institute of Justice, Riyadh, Saudi Arabia.)

The lecture was delivered by Sheikh Yousuf bin Abdullah al-Shubaily on 21/06/1433H (12/05/2012) at IDB, Jeddah. He discussed some of the modern applications of financial intermediation by contemporary Islamic banks and financial institutions from an Islamic perspective of *Maqāṣid* al-Sharīʿah. The conventional banks as well as Islamic banks are financial intermediaries in the sense that they link depositors (who provide money) with investors (entrepreneurs who employ the money). However, the main difference between them is that the conventional banks use debt contracts to borrow from depositors and lend to the seekers of funds and make their own earnings from the difference between the borrowing rate and the lending rate. Whereas Islamic banks mobilize money through *muḍārabah* or *shirākah* or *wakālah* contracts and provide finances through *murābaḥah*, *ijārah*, and *istiṣnāʿ*. There are also investment banks which are different only in that they intermediate between investors as agents without taking ownership of the money raised.

The lecture focused on clarifying the objectives of the rules and laws of Sharīʿah pertaining to regulating financial intermediation. Five key aspects of the law were highlighted that Sharīʿah distinguishes between:

1. (*Himayah*) protection and (*ḍamān*) guarantee.
2. Social needs that necessitate particular contracts and the needs that do not require those contracts.
3. Mediation intended for economic investment and the mediation for speculative purposes.
4. Legitimate risk and the prohibited risk.
5. Commutative contracts and non-commutative (or gratuitous) contracts as well as cooperation.

These distinctions have clear implications in defining permissible and prohibited kinds of financial intermediation.

1. The objective of the rules to keep a distinction between (himayah) protection and (daman) guarantee

Protection of wealth or money means to safeguard against losses or destruction of the capital through care and prudential behavior, this is desired by Sharīʿah. While, 'guarantee' is a binding commitment that puts the liability of making good any losses or capital destruction on the guarantor.

The legal implication of the objective of protection is that it is not permissible for the bank (or the *muḍārib*) to risk the money of the depositors (or the fund provider) without authorization, nor to borrow against this money without authorization; neither to buy and sell using the commodities that people usually do not trade, nor to buy and sell for itself, and not to indulge in acts that will lead to damage or bring harm to the capital. If it does, then the bank is liable for the damages.

The Sharīʿah position on liability of loss is also very clear. As long as there is no breach of fiduciary responsibility of protection and care in investment contracts, whether it is *muḍārabah*, or commission based agency, the loss from capital depletion is to be borne by the capital provider alone, whereas the loss of the worker is unrewarded efforts.

In the current practices of investment and financial intermediation institutions the concept of fiduciary responsibility of 'protection' and the concept of 'guarantee' as liability are often been mixed and confused. Some examples of the misapplication of these concepts are: (i) Imposing of a condition on the asset management company or on the *ṣukūk* issuer to guarantee the expected return, as if a shortfall in attaining the expected returns is a kind of transgression. (ii) Putting in a binding promise from the asset management company that at the time of dissolution they will buy the merchandise from the capital provider at a price covering the cost and profit equivalent to the expected profit. (iii) Making it binding to buy back *ṣukūk* assets at their original price. Effectively, this guarantees the principal in investment.

2. *Distinction between social needs that necessitate particular contracts and the needs that do not require those contracts*

There are many instances of contracts and mutual dealings in which the law giver has provided leniency due to the real human needs and others where a strict stance has been taken due to non-essential nature of the need. Examples include prohibition of sale of yet to born camel and sale of to be planted crop but allowing of *salam*. Similarly, prohibition of sale of debt with debt (*bayʿ al-kāli bil kāli*) but allowing of *istiṣnāʿ* which itself initiates a debt while the price is not fully paid. The permissibility here is due to existence of genuine needs. In light of this the lecture discusses and evaluates permissibility and non-permissibility of many modern day practices in currency exchange, stock exchange trades, trading on margin etc.

3. *Distinction between intermediation intended for economic investment and the mediation for speculative purposes.*

Looking at the legal provisions one notices that the law giver has directed the traders and brokers towards value creating investment and away from speculative undertaking. For example, the insistence of Sharīʿah on acquisition and ownership (*qabz*) of goods before their trade and re-trade. Imposition of *zakāh* on all goods kept in inventory for trade to get speculative gains, while these goods are not originally *zakātable* items. All these point to the above mentioned purpose.

4. Distinction between legitimate risk and the prohibited risk

It is known that any investment whether it is mediation or financing or insurance or any other type is not without risk. All kinds of investments, despite all the measures undertaken to protect them, are subject to varying degrees of risk depending upon the type of contract used, its duration, nature of the investment, location, time and other factors. In general, the risk in debt contracts is higher than risks in spot contracts; and risk in partnership contracts are higher than the risk in debt contracts. Sharīʿah's position is that not all risks are prohibited nor all are permitted. According to the classification of Ibn Taimiyyah risks are of two types: Permitted risks such as the entrepreneurial risk undertaken by a producer or trader. And prohibited risks such as that originate from lack of information and uncertainty about the commodity or time or wording of the contract etc. Such risks are called *gharar*. The extreme form of this risk is gambling where the motive is to gain at the loss of the other.

Some kind of *gharar* or uncertainty is tolerated in contracts as exception to the rule due to (i) its unavoidability or (ii) its smallness or (iii) it being not an objective of the contract. However, in the current practices of financial intermediaries we find many wrong applications of the above mentioned exception. Financial derivatives like options, futures and swaps all fall under prohibited types due to their speculative use. Similarly, promise and counter promise arrangements and trading of promises all fall under the same category.

(Summarized by Salman Syed Ali)

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Ninth International Conference on Islamic Economics and Finance (ICIEF)
Growth, Equity and Stability: An Islamic Perspective

The Conference will be held for three days on 9-11 September 2013, in Istanbul, Turkey, under the theme "Growth, Equity and Stability: An Islamic Perspective".

The Ninth ICIEF at a Glance

Recovery from the global financial crisis and subsequent economic downturn remains fragile. Persistent risks to financial and economic development include sluggish growth in developed countries – which is now spilling over into developing economies as well; increasing income and wealth inequalities; and still-unrestored financial, economic and political stability in many regions. High poverty and unemployment rates, large macroeconomic imbalances, deteriorations in sovereign credibility, increasing food price volatility and food shortages, and lack of access to basic infrastructure further intensify and magnify these risks – particularly for the underprivileged segments of the world population. As a result, for many countries it has become even more challenging to achieve the Millennium Development Goals (MDGs) set by the United Nations.

The existing structure of the economic and financial system is also continuing to be questioned at the highest level of intellectual and political discourse. The growing emphasis on ethics and morality in economic and financial transactions highlights the structural problems undermining the confidence in the current system and, in turn, the pressing need for more durable alternatives.

To highlight some and more of these issues, the Ninth ICIEF is being jointly organized by the Statistical, Economic & Social Research and Training Centre for Islamic Countries (SESRIC), a subsidiary organ of the Organization of Islamic Cooperation (OIC), the Islamic Development Bank (IDB) Group through its Islamic Research and Training Institute (IRTI), the International Association for Islamic Economics (IAIE), and the Qatar Foundation's Hamad Bin Khalifa University through its Qatar Faculty of Islamic Studies (QFIS), with the support of other stakeholders.

Focus Areas

The Ninth Conference will provide a platform for dialogue and discussions between policy-makers, academics, researchers, graduate students, and practitioners to address the problems of poverty alleviation, inclusive economic growth, and macroeconomic stability from the perspective of the Islamic economics and finance discipline.

ANNOTATED LIST OF IRTI'S RECENT PUBLICATIONS

Islamic Economic Studies
Vol. 20, No.2, December 2012

ISLAMIC BANKING STRUCTURES: IMPLICATIONS FOR RISK AND FINANCIAL STABILITY

Author: Abd Elrahman Elzahi Saaid Ali

Published by
Islamic Research and Training Institute (IRTI)
A Member of Islamic Development Bank Group (IDB)
ISBN: 978-9960-32-194-3
1432H (2011), pp.50

The recent persistence of global economic imbalances has further highlighted the importance of financial stability. This research tested the implication of Islamic banks' structure on risk and financial stability using bank-level data from 39 full-fledged Islamic banks in 17 selected countries. The tested model used pooled least squares with white cross-section standard errors and fixed effects. After allowing for non-linear relationship between financial stability and market structure, three regression equations were estimated for three dependent variables used as proxies for the Islamic banks' financing portfolio risk, overall risk and capitalization level. The ratio of non-performing financing, Z-index, and capitalization ratio respectively were used. In all regressions, the Lerner Index, HHI-deposit Index and HHI-financing Index were used as measures of competition and concentration. Across these regressions, the higher value of these indexes implied a degree of market power and therefore, a less competitive environment. In addition, the paper also included the log value of the GDP per capita, inflation and Exchange rate in all regressions to control for the variations in business and economic development.

The first estimated equation relates to the ratio of non-performing financings (NPFs). The results of this equation shows that there was a positive relationship between bank market power (LI, LIs) and financing risk portfolio in the investigated banks. These results were consistent with the competitive-stability view which claims more bank market power is associated with riskier loan portfolio. The negative sign in HHI-Financing suggested that concentration in these Islamic banks brings about a decline in credit risk, which supported the franchise value paradigm. This means the charter value which is associated with market power reduces competition and promotes banking stability in the investigated Islamic banks.

The paper also examined the impact of the Islamic banks market structure on the overall bank risk, using Z-index. The results showed high overall Islamic bank stability. Consistent with the NPFs, the Z-index results indicated that Islamic banks enjoy higher franchise value and greater stability. Hence, results of Z-index imply that the investigated Islamic banks might use their market power to increase their financing rates which in turn increases their credit risk, but at the same time protects their charter value by rule of risk sharing and high capitalization level.

Thirdly, the study investigated whether the Islamic banks' higher market power as it appeared in the above results also means such banks hold more equity capital as a prudential behavior to meet any unexpected losses resulting from their financing portfolio. The results showed that the equity capital in these Islamic banks was positively related to their stability. This implies that, although Islamic banks are associated with higher credit risk, the lower overall risk most likely resulted from their higher level of charter value as implied in their higher equity level. The estimated contemporaneous GDP per capita, inflation and Exchange rate indicated that the business cycle did influence the investigated Islamic banks and hence Islamic banks might take more risks in connection with the more variations in economic development.

To sum up, one can conclude that the Islamic banks are found financially stable in this research as indicated by the result of their concentration structure, which is supported by their built-in prudential regulations extracted from Sharīʿah. This makes them more conservative in lending and selecting their investment portfolio.

Lessons learned:

1. Islamic banks are not immune to the financial crisis if their market discipline does not coincide with the Sharīʿah based values. That is to say although Islamic banks are found to be stable based on structure, they could be affected by the indirect causes of the financial crisis

related to the real sectors such as stocks and real estate prices unless care is taken.

2. The nature and practice of Islamic banking that is based on "no pain, no gain" might help more in averaging the high risk as reflected in the results of the research.
3. Equity finance (asset side) plays a major role in Islamic banking stability as shown in this study.
4. To curb down unfavorable competition, banking regulators are advised not to allow Islamic banking windows and encourage the growth of full-fledged banks.
5. Islamic banks should not imitate the conventional banks blindly in new banking innovations such as financial derivatives.
6. The role of Sharīʿah advisors should be strengthened to detect any deviation from the Islamic values.
7. New research is encouraged to investigate the impact of the credit risk transfer on the behavior of Islamic banks' financing in a connection with the current financial crisis.

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ADVANCES IN ISLAMIC ECONOMICS AND FINANCE (Volume.2)

Edited by
Munawar Iqbal, Salman Syed Ali & Dadang Muljawan

Published by
Islamic Research and Training Institute (IRTI)
A Member of Islamic Development Bank Group (IDB)
ISBN: 978-9960-32-209-4
1432H (2011), pp.522

Islamic Economics and Finance are the two fields that are very promising for attaining economic growth with equity and for sound development of financial sector globally. Muslim societies that believe in the teachings of Islam and hence in the capacity of such system have the added responsibility to create and offer this to the world. However, multi-dimensional efforts and fulfilling of some pre-requisites are required in achieving the paradigm shift from the entrenched economic and financial system to an Islamic one.

Meeting these challenges require development of basic theory of Islamic economics and finance as well as active efforts for its practical implementation, such that both the theory and the practice feed into each other for their mutual development.

The volume-2 of the book *Advances in Islamic Economics and Finance* has been edited with the above consideration.[1] It comprises of selected papers and comments from the Sixth International Conference on Islamic Economics and Finance. The introductory chapter specially written for the volume brings out the key issues facing the development of Islamic economics and finance and also places the selected papers in the context of those issues.

The present volume is divided into six themes each presented in a separate part covering: (i) fundamental issues, (ii) legal development and contractual forms, (iii) *ṣukūk* products, (iv) regulation and supervision, (v) consumer behaviour, and (vi) financial stability and institutions.

Fundamental Issues:

The collection of papers opens with the paper by Waleed El-Ansary entitled "The Qunatum Enigma and Islamic Sciences of Nature: Implications for Islamic Economic Theory". El-Ansary discusses a methodological question on the nature of Islamic economics. The question is whether the neoclassical framework is sufficient and hence appropriate for Islamic sciences.

Legal Development and Contractual Forms:

Legal system plays a vital role in economic and financial development of a society in multiple ways. Firstly, a legal system has important role in delineation of contractual rights, and most often also in enforcement of these contracts. Ex-ante, this decreases legal uncertainty, and ex-post, it helps in conflict resolution. It may be noted that the prohibition of '*gharar*' in Islam aims exactly at that. Secondly, in this way, a legal system also has bearing on types of financial (and other) contracts that will evolve in the system. A large literature has emerged explaining how a legal system that adapts efficiently to the contractual needs of the economy can foster financial sector development. This ability, however, depends on the nature of the particular legal system. This nature is defined by many factors such as the relative importance of life, property, progeny, intellect, and faith and other human

[1] Volume-1 of *Advances in Islamic Economics and Finance* has been published in 2010 by IRTI.

rights in a legal system; the centralized versus decentralized nature of law and its procedure of interpretation and judgment; and the extent of its unchanging core and the evolving periphery, etc. Similarly, a large literature has emerged on security design and financial innovation stemming from the risk appetite of investors, the information asymmetry between the contracting parties, and the legal system's ability to define and enforce property rights. Islamic literature on *gharar* can play an important role in this respect.

Depending on the nature and enforceability of the legal system, the financial innovations can be evolutionary and beneficial to the society or such innovations can also be in negative direction leading to social degradation and adaptation of law in the wrong direction, i.e., undermining the rights of some for the sake of some more influential segments.

Three papers in Part-II of this volume address these important issues of adaptability of Islamic law, examination of the legal nature of shares or stocks, and role of risk aversion in determination of sharing ratio in sharing contracts.

Habib Ahmed "Islamic Law, Adaptability and Financial Development".

Faizal Manjoo "Reviewing the Concept of Shares: Towards a Dynamic Legal Perspective".

Sief el Din Tag el Din "Income Ratio and the Risk-Sharing Structure of Optimal Contracts: The Breakeven Theory of *Muḍārabah*".

Ṣukūk Products:

Ṣukūk products are relatively new among Islamic financial products. They are a class of structured finance products that can be used for financing projects as well as meeting the needs of the corporate and government sectors. Most of them can be structured to allow their tradability in the secondary market and can generate fixed or variable rates for their holders. Hence *ṣukūk* can contribute to the development of a market for fixed income instruments within Islamic framework. Like any other instrument, Sharīʿah non-compliant features can creep into legitimate *ṣukūk* structures if proper safeguards are not observed. Two papers in this Part-III provide a very good survey of the issues, existing and possible structures, as well as the economic and financial opportunities afforded by *ṣukūk* for Islamic finance.

Muhammad Ayub "Securitization, *Ṣukūk* and Fund Management Potential to be Realized by Islamic Financial Institutions".

Nathif Jama Adam "*Ṣukūk*: A Panacea for Convergence and Capital Market Development in OIC Countries".

Regulation and Supervision:

In the wake of various episodes of financial instabilities and banking crises, which the world has experienced over the years, a number of efforts have been made at the international level to streamline and standardize the regulation and supervision methods for the banking industry. The principles and standards developed by the Basel Committee are one example. Although major differences exist between Islamic and conventional banks in regard to the banking theory, practices and the contracts used for raising funds and their investments, however being a small part of the international financial system, Islamic banks are likely to be judged and regulated by the same rules. This is likely to create problems for the workings of Islamic banks and may create regulatory and supervisory hurdles for them.

A set of three papers and comments by three discussants on this set of papers constitute the contents of Part-IV of this collection. These evaluate the implications of Basel-II for Islamic banks and try to suggest alternate requirements of capital adequacy.

Kabir Hassan and Mehmet F. Dicle, "Basel-II and Capital Requirements of Islamic Banks".

Abdul Ghaffar Ismail and Ahmed Azam Sulaiman, "Cyclical Patterns in Profit, Provisioning and Lending of Islamic Banks and Procyclicality of the New Basel Requirements".

Monzer Kahf, "Basel-II: Implications for Islamic Banking".

Customer Behaviour:

Part-V of this collection deals with customer behaviour. The importance of customer behaviour for Islamic economics as well as for Islamic finance cannot be over emphasised. Firstly, this knowledge is important for individual Islamic banks in their marketing strategies. Secondly, it is also of high significance for various governments in deciding about their policy stance towards acceptance of Islamic finance. Thirdly, customer behaviour and their Islamic financial literacy also have implications for the sound growth of Islamic financial industry in the correct direction.

Although, a large number of studies on customer and client behaviour may have been done internally by various Islamic banks for their marketing purposes they are either not available to public or not of academic nature.

Academic studies in this area exist but are few and mostly country and time specific. The three papers collected in this volume on customer behaviour are also not exception to this limitation. However, they are value adding in the sense that one of them deals with Indonesia using qualitative approach, the other deals with Malaysia using quantitative approach, and another deals with the demand for Islamic finance in China. To the best of our knowledge this may be the first such study focusing on China.

Adiwarman A. Karim and Adi Zakaria Affif, "Islamic Banking Consumer Behaviour in Indonesia: A Qualitative Approach".

Sudin Haron and Wan Nursofiza Wan Azmi, "Measuring Depositors' Behaviour of Malaysian Islamic Banking System: A Co-integration Approach".

Tianming Liu, "Islamic Financial Thought and Chinese Muslims' Financial Behaviour".

Financial Stability and Institutions:

Success of a financial system lies in provision of its services in a manner relevant to the broader society and in most stable way. The first criterion calls for a very inclusive financial sector that would contribute to broad-based economic growth, while the second criterion calls for avoidance of breakdown of its services and avoidance of abrupt fluctuations in valuation of assets. An Islamic financial system can achieve both these objectives. Firstly, by providing finance free from interest, it aligns the finance with the religious and moral values of the society which helps in increasing the participation of the broader society in formal financial system. Secondly, by tying finance to real economic activity it ensures stability. This is achieved through Islam's complete system of beliefs, rules, and moral ethics that help in internalization of appropriate behaviour as well as through external regulation. In this context two papers are included here in Part-VI: the first one addressing ways to improve stability through reduced speculative trade, the second one proposing the use of already existing mosque institution to increase the outreach of Islamic finance and hence enhance its inclusiveness.

Yousef Khalifa Al-Yousef, "Speculative Capital: An Islamic View".

Asry Yusoff and Abdullah Sudin Ab. Rahman, "A Study on the Possibility of Mosque Institution Running a Micro-Credit Programme Based on the Grameen Bank Group Lending Model: The Case of Mosque Institution in Kelantan, Malaysia".

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ABSTRACTS OF ARTICLES PUBLISHED IN *DARASAT IQTISADIAH ISLAMIAH* IN VOL. 18 No. 2

Islamic Economic Studies
Vol. 20, No.2, December 2012

مُشَارَكَةُ المُسَاهِمين في الفائِضِ التَّأميني بَيْنَ المَنْعِ والجَوازِ

السَّيِّد حامد حسن محمَّد[1]

المستخلص

في هذه السُّطور أُلخص الموضوعات الَّتي شملها البحث من خلال مقدِّمة وفصلين. أمَّا المقدِّمة فقد ضمَّنتها خطَّة البحث. والفصل الأوَّل عنوانه: "التَّعريف بالفائض التَّأميني والممارسة الحاليَّة لمشاركة المساهمين في الفائض التَّأميني"، ويحتوي على ستة مباحث تناولت في المبحث الأوَّل الأموال في التَّأمين مصادرها وأوجه صرفها، و في المبحث الثَّاني شرحت طبيعة نتائج الأعمال الماليَّة لشركات التَّأمين، أمَّا المبحث الثَّالث فقد خصَّصته لأنواع الفائض التَّأميني، ومن يستحقه، وأُسس توزيعه وطرق، حساب أنصبة المؤمَّن لهم في الفائض التَّأميني بالإضافة إلى كيفية تحديد الفائض التَّأميني القابل للتَّوزيع والمعادلات المحاسبيَّة المستخدمة لحساب أنصبة المؤمَّن لهم من الفائض التَّأميني، وختمت الفصل الأوَّل بتناول أثر توزيع الفائض التَّأميني و تقييم الممارسة الحاليَّة لمشاركة المساهمين في الفائض التَّأميني.

أمَّا الفصل الثَّاني فعنوانه: "التَّصوُّر المقترح لمشاركة المساهمين في الفائض التَّأميني"، وابتدرته بالمقدِّمة ثُمَّ المبحث الأوَّل وجعلته للإطار الَّذي بنيت عليه تصوُّري لمقترح مشاركة المساهمين في الفائض التَّأميني وشروطه، وقد اشترطت عدداً من الشُّروط الَّتي يُبْنَى عليها المعيار المقترح لمشاركة المساهمين في الفائض التَأميني، وقد شملت هذه الشُّروط: الصِّيغة، المقتضى الشَّرعي، ألَّا يكون للمساهمين يدٌ في وضع شروط المعيار بمعنى أن تضعه جهة محايدة واقترحت أن تكون هذه الجهة هيئة الرَّقابة على التَّأمين، وأن تتمَّ مشاركة المساهمين في الفائض التَّأميني برضى المؤمَّن لهم، وأن تؤدِّي هذه المشاركة

[1] المدير العام للشركة التعاونية للتأمين - السودان.

إلى سدِّ ذريعة استغلال أموال التَّأمين الإسلامي دون وجه حق، كذلك أن تحقِّق هذه المشاركة المصلحة العامَّة، وأن يَغْلُب جانب المصلحة على جانب المفسدة، وأن ينتج من هذه المشاركة مصالح للأطراف ذات الصَّلة بصناعة التَّأمين الإسلامي، كذلك أن تؤدِّي هذه المشاركة إلى وقف شكوى المساهمين من عدم وجود منفعة من وراء إنشائهم لشركات التَّأمين الإسلامي وبذا يتحقَّق لهم الرِّضى. وأن تمكن هذه المشاركة من بسط سلطان الرَّقابة والتَّنظيم لصناعة التَّأمين بما يحقق السَّلامة والشَّفافية. والمبحث الثَّاني خصَّصته لشرح صيغة الجُعالة والأحكام المتعلِّقة بها واختتمه بالمقارنة بين الجُعالة وصيغة الإجارة. والمبحث الثَّالث وضَّحت فيه المعيار المقترح لمشاركة المساهمين في الفائض التَّأميني وشروطه، أمَّا المبحث الرَّابع فقد ضمنته النَّموذج المحاسبي الَّذي اقترحه لتوضيح كيفية تطبيق شروط المعيار الخاص بمشاركة المساهمين في الفائض التَّأميني على النَّحو الَّذي يوضح كيفيَّة تطبيق شروط المعيار المقترح. أمَّا المبحث الخامس فقد خصَّصته لتقييم مشاركة المساهمين في الفائض التَّأميني وَفْقاً لصيغة الجُعالة وتوضيح أثر هذه المشاركة على المساهمين والمؤمَّن لهم والجهة المنظِّمة للتَّأمين وأخيراً على المستوى القومي. أمَّا المبحث السَّادس فقد أجبت فيه على التساؤلات الَّتي يمكن أن يثيرها مقترح مشاركة المساهمين في الفائض التَّأميني وّفْقاً لصيغة الجُعالة.

وأخيرًا زيلَّت هذه الدِّراسة المتواضعة بخاتمة ضمَّنتها الاستنتاجات الَّتي توصَّلت إليها وتوصياتي. وألحقت بالدِّراسة ملحقاً يحتوي على أمثلة رقميَّة توضح كيفية تطبيق شروط المعيار باستخدام النَّموذج المحاسبي لحساب الجُعل الَّذي سيمنح للمساهمين.

Permissibility and Impermissibility of Shareholders' Participation in the Insurance Surplus

Al Sayed Hamed Hassan Muhammed[2]

In this passage, I would like to summarise topics discussed in the research in an introduction and two chapters. The introduction includes the research plan. Chapter

[2] . General Manager, Ta'wuniya Insurance Company, Sudan.

one is titled “Definition of Insurance Surplus and Current Practice of Shareholders’ participation in the Insurance Surplus”. This chapter includes six sections; the First Section deals with sources and disbursements of funds in the insurance context. The Second Section explains the nature financial business of insurance companies. The Third Section covers all forms of insurance surplus, recipients of this insurance, basis and means of its distribution in accordance with shares of the insured in the surplus. It also entails details on identification of the distributable surplus and applicable accounting equations for calculation of shares of the insured off the insurance surplus. The First Chapter concludes with studying the impact of surplus and assessing current practice of shareholders’ participation in the surplus.

Chapter Two is titled “Proposed Solution for Shareholders’ Participation in Insurance Surplus”. The chapter begins with an introduction and first section which focuses on the framework of my proposal for shareholders’ participation in the surplus and conditions thereof. I have entailed a number of conditions upon which the proposed criterion shall be built for such participation. These conditions include inter alia; the formula, the legal rationale, and shareholders shall play no part in stipulating conditions for the criterion; i.e. conditions shall be adopted by a neutral body. I propose that this body shall be an authority responsible for supervision of insurance. I have also added conditions such as; shareholders’ participation in the surplus shall be based on the insured’s consent, participation shall not be used as a pretext for undue exploitation of Islamic insurance funds, participation shall serve the public interest; public interest and benefit shall prevail over harm (*mafsadah)*, participation shall result in realizing benefits for the relevant parties in the Islamic insurance industry, participation shall eventually lead to ending prospective complaints by the shareholders for not benefiting from establishing Islamic insurance companies; hence their satisfaction will be guaranteed. This participation will enable law and order to prevail in the insurance industry and this will lead to entrenchment of safety and transparency.

The Second Section dwells on commission (*juʿālah*) formula and provisions pertaining to the formula. It concludes by offering comparison between commission (*juʿālah*) and *ijārah* (hire-purchase). The Third Section explains the proposed criterion for participation of shareholders in the surplus and its conditions. The Fourth Section sheds light on the accounting standard that I am proposing to elucidate methods of application for this proposed criterion. The Fifth Section is dedicated to assess shareholders’ participation in the insurance surplus pursuant to *juʿālah* formula and explain effect of this *juʿālah* on shareholders, the insured, authority organizing the insurance and national level. The Sixth Section captures answers for the questions that could be raised by in terms of the proposal of shareholders' participation in the surplus in accordance with *juʿālah* formula.

The conclusion sums up the outcomes of the study and recommendations. The study is also attached with an appendix that contains examples of figures explaining the method of applying conditions of the criterion using the accounting standard for calculating the commission fees which will be given to shareholders.

قياس تغيرات الإنتاجية باستعمال مؤشر مالمكويست: دراسة حالة البنوك الإسلامية خلال الفترة 2003-2009.

فيصل شياد[3]

ملخص

في الآونة الأخيرة، عرفت البنوك الإسلامية تطورا ملحوظا من خلال نمو أصولها وتزايد فروعها وانتشارها في العديد من الدول.لذا كان لزاما قياس هذا التطور من خلال معرفة تغيرات الإنتاجية البنكية وتحليل تطوراتها عبر الزمن.
لذلك تمت دراسة إنتاجية البنوك الإسلامية العاملة في مجموعة من الدول الإسلامية ،حيث شملت العينة 11 بنكاً إسلامياً خلال الفترة الممتدة من 2003 إلى 2009 ، باستعمال طريقة تحليل مغلف البيانات لتقدير مؤشر مالمكويست للإنتاجية الكلية من جهة،وتجزئته إلى مكوناته الرئيسية التغير التقني والكفاءة التقنية من جهة أخرى لمعرفة المصدر الرئيسي لتغيرات الإنتاجية.

نتائج البحث بينت أن البنوك الإسلامية حققت معدلات مرتفعة نسبياً في إنتاجيتها الكلية عبر سنوات الدراسة حيث يقدر المعدل النمو المتوسط الإجمالي بـ 1,7 ٪ .ويرجع السبب في ذلك إلى نمو وتطور التغير التقني

[1] أستاذ بجامعة سطيف، تفرغ علمي بالجامعة العالمية للمالية الإسلامية INCEIF

وليس إلى تزايد تغيرات الكفاءة.ما عدا الانخفاض المسجل بين سنة 2008 و2009.وتتفاوت بنوك العينة عن بعضها البعض من حيث قيم كفاءتها وإنتاجيتها لكنها متقاربة إلى حد كبير. فلقد بينت النتائج أن البنك العربي الإسلامي الدولي تحصل على أفضل نمو في الإنتاجية، يتبعه بنك قطر الإسلامي، بينما شهد بنك دبي الإسلامي أقل معدل في الإنتاجية ويتطلب تحسين إنتاجيته بنسبة 9,6٪ حتى يصل درجة الاستقرار.

الكلمات المفتاحية:البنوك الإسلامية، تغيرات الإنتاجية ،مؤشر مالمكويست.

JEL classification: C61, D24, G21,

Measuring Productivity Changes by Using Malmquist Indicator Studying the Case of Islamic Banks from 2003 – 2009

Faisal Chiad[4]

Summary

The Islamic banks witnessed lately significant development through growth of assets, increase in number of branches and its spread in various countries. Therefore, it is necessary to measure this development through identification of banking productivity and analysis of their developments throughout history.

Henceforth, productivity of Islamic banks that are working in a number of Muslim countries was studied, as samples include 11 Islamic banks from 2003 – 2009 by using the method of analysis of database to assess the Malmquist Total Productivity Indicator and studying its main fractured components to measure technical change and technical capacity to identify the main source of productivity changes.

Research conclusions prove that Islamic banks achieved relative high rates in their total productivity in the years of the study as the total medium growth rate is

[4] . Lecturer at Sétif University on a sabbatical leave with the International Islamic University of Malaysia.

estimated at 1.7%. The rationale behind that is attributed to the spread of technological change. However, it was not related to rapidity in capacity changes, with exception of the registered decrease between 2008 and 2009. The selected banks in the samples differ in terms of values of capacity and productivity despite proximity. Research outcomes prove that the International Islamic Arab Bank has achieved the best growth in productivity followed by Qatar Islamic Bank, while Dubai Islamic Bank has achieved less productivity rate as it needs to improve its productivity by 9.6 % to reach a point of stability.

Key terms: Islamic banks, productivity changes and Malmquist Indicator.
JEL classification: C61, D24, G21,

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- ☐ **LESSONS IN ISLAMIC ECONOMICS (1998),** pp.757 (two volumes) — **Price $ 20.0**
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  It presents a broad overview of the issues of Islamic economics.
- ☐ **ISLAMIC FINANCIAL ARCHITECTURE: RISK MANAGEMENT AND FINANCIAL STABILITY (2006),** pp.561 — **Price $ 20.0**
  Tariqullah Khan and *Dadang Muljawan*
  Financial architecture refers to a broad set of financial infrastructures that are essential for establishing and sustaining sound financial institutions and markets. The volume covers themes that constitute financial architecture needed for financial stability.

☐ **ISLAMIC BANKING AND FINANCE: FUNDAMENTALS AND CONTEMPORARY ISSUES (2006),** pp. 306 — **Price $ 5.0**
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The seminar proceedings consist of papers dealing with theoretical and practical issues in Islamic banking.

☐ **ADVANCES IN ISLAMIC ECONOMICS AND FINANCE, (2007),** Vol. 1, pp. 532. — **Price $ 20.0**
Munawar Iqbal, Salman Syed Ali and *Dadang Muljawan* (ed).,
Islamic economics and finance are probably the two fields that have provided important new ideas and applications in the recent past than any of the other social sciences. The present book provides current thinking and recent developments in these two fields. The academics and practitioners in economics and finance will find the book useful and stimulating.

☐ **ISLAMIC CAPITAL MARKETS: PRODUCTS, REGULATION & DEVELOPMENT, (2008),** pp.451. — **Price $ 20.0**
Salman Syed Ali (ed.),
This book brings together studies that analyze the issues in product innovation, regulation and current practices in the context of Islamic capital markets. It is done with a view to further develop these markets and shape them for enhancing their contribution in economic and social development. The book covers *ṣukūk*, derivative products and stocks in Part-I, market development issues in Part-II, and comparative development of these markets across various countries in Part-III.

☐ **ISLAMIC FINANCE FOR MICRO AND MEDIUM ENTERPRISES, (1432, 2011),** pp 264 — **Price $ 30.0**
Mohammed Obaidullah & Hajah Salma Haji Abdul Latiff
This book is the outcome of First International Conference on "Inclusive Islamic Financial Sector Development: Enhancing Islamic Financial Services for Micro and Medium Sized Enterprises" organized by Islamic Research and Training Institute of the Islamic Development Bank and the Centre for Islamic Banking, Finance and Management of Universiti Brunei Darussalam. The papers included in this volume seek to deal with major issues of theoretical and practical significance and provide useful insights from experiences of real-life experiments in Sharīʿah -compliant MME finance.

Research Papers

☐ **ECONOMIC COOPERATION AND INTEGRATION AMONG ISLAMIC COUNTRIES: INTERNATIONAL FRAMEWORK AND ECONOMIC PROBLEMS (1987),** pp.163 — **Price $ 5.0**
Volker Nienhaus
A model of self-reliant system of trade relations based on a set of rules and incentives to produce a balanced structure of the intra-group trade to prevent the polarization and concentration of costs and benefits of integration.

☐ **PROSPECTS FOR COOPERATION THROUGH TRADE AMONG OIC MEMBER COUNTRIES (A COMMODITY ANALYSIS) (1985),** pp.100 **Price $ 5.0**
Kazim R. Awan
The paper is an attempt to specify particular commodities in which intra OIC member country trade could be increased.

☐ **EFFECTS OF ISLAMIC LAWS AND INSTITUTIONS ON LAND TENURE WITH SPECIAL REFERENCE TO SOME MUSLIM COUNTRIES (1990),** pp.59 **Price $ 5.0**
Mahmoud A. Gulaid
The book traces distributive and proprietary functions of the Islamic law of inheritance and assesses the effects of this law on the structure of land ownership and on the tenure modalities in some Muslim countries.

☐ **THE ECONOMIC IMPACT OF TEMPORARY MANPOWER MIGRATION IN SELECTED OIC MEMBER COUNTRIES (BANGLADESH, PAKISTAN AND TURKEY) (1987),** pp.90 **Price $ 5.0**
Emin Carikci
The book explains the economic impact of the International labor migration and reviews recent trends in temporary labor migration.

☐ **THE THEORY OF ECONOMIC INTEGRATION AND ITS RELEVANCE TO OIC MEMBER COUNTRIES (1987),** pp.82 **Price $ 5.0**
Kadir D. Satiroglu
It presents concepts, principles and theories of regional economic integration and points out their relevance for OIC member countries.

☐ **ECONOMIC COOPERATION AMONG THE MEMBERS OF THE LEAGUE OF ARAB STATES (1985),** pp.110 **Price $5.0**
Mahmoud A. Gulaid
It attempts to assess the magnitude of inter Arab trade and capital flows and to find out achievements and problems in these areas.

☐ **CEREAL DEFICIT MANAGEMENT IN SOMALIA WITH POLICY IMPLICATIONS FOR REGIONAL COOPERATION (1991)**, pp.62 **Price $ 5.0**
Mahmoud A. Gulaid
The study assesses cereal food supply and demand conditions characteristic of Somalia.

☐ **COMPARATIVE ECONOMICS OF SOME ISLAMIC FINANCING TECHNIQUES (1992),** pp.48 **Price $ 5.0**
M. Fahim Khan
It is an attempt to present some economic dimensions of the major Islamic financing techniques in a comparative perspective.

☐ **CONTEMPORARY PRACTICES OF ISLAMIC FINANCING TECHNIQUES (1993),** pp.75 **Price $ 5.0**
Ausaf Ahmad
It describes Islamic financing techniques used by various Islamic banks and explores differences, if any, in the use of these techniques by the banks.

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It surveys the historical evolution of Islamic principles of financing.

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Mohammed Obaidullah
The book proposes a two-pronged strategy to poverty alleviation through micro-enterprise development based on the dichotomy between livelihood and growth enterprises. With a focus on provision of Sharīʿah-compliant financial services for micro-enterprises, it reviews thematic issues and draws valuable lessons in the light of case studies from three IsDB member countries – Bangladesh, Indonesia, and Turkey.

☐ **ISLAMIC ECONOMICS IN A COMPLEX WORLD: AN EXTRAPOLATION OF AGENT-BASED SIMULATION, (2008), pp. 149**
Sami Ibrahim al-Suwailem
This research paper (book/occasional paper) discusses the possible use of recent advances in complexity theory and agent-based simulation for research in Islamic economics and finance

☐ **ISLAMIC MICROFINANCE DEVELOPMENT: INITIATIVES AND CHALLENGES (Dialogue Paper No. 2), (2008), pp. 81.**
Mohammed Obaidullah and Tariqullah Khan
This paper highlights the importance of microfinance as a tool to fight poverty. It presents the "best practices" models of microfinance and the consensus principles of microfinance industry.

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M. Umer Chapra
This paper asserts that comprehensive vision of human well-being cannot be realised by just a rise in income and wealth through development that is necessary for the fulfilment of basic needs or by the realization of equitable distribution of income and wealth. It is also necessary to satisfy spiritual as well as non-material needs, not only to ensure true well-being but also to sustain economic development over the longer term.

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Mohammed Saleh Ayyash
This book attempts to analyse the essential aspects of social responsibility of Islamic Banks and the means to achieving them. Apart from encapsulating the Sharīʿah formulation of the social responsibility and its relation to the objectives of Sharīʿah, the book also addresses the linkage between social responsibility and the economic and social development of Muslim communities. Furthermore, it demonstrates the impact of the nature of social and developmental role which should be undertaken by Islamic banks, not only for achieving socio-economic development but also for making the earth inhabitable and prosperous.

☐ **ISLAMIC BANKING STRUCTURES: IMPLICATIONS FOR RISK AND FINANCIAL STABILITY, (1432, 2011),** pp 50 **Price $ 10.0**
Abd Elrahman Elzahi Saaid Ali
The results of this research are expected to be valuable to the management of Islamic banks and to those who are engaged in the fields of Islamic banking and finance.

☐ **HANDBOOK OF ISLAMIC ECONOMICS, Vol. 1, Exploring the Essence of Islamic Economics, (1432, 2011),** pp.348 **Price $ 30.0**
Habib Ahmed & Muhammad Sirajul Hoque
This "Handbook of Islamic Economics" is part of the project to make important writings on Islamic economics accessible by organizing them according to various themes and making them available in one place. The first volume of this Handbook subtitled "Exploring the Essence of Islamic Economics" collects together the eighteen important articles contributed by the pioneers of the subject and presents them under four broad themes: (i) Nature and Significance of Islamic Economics, (ii) History and Methodology, (iii) Sharīʿah and *Fiqh* Foundations, (iv) Islamic Economic System.

☐ **BUILD OPERATE AND TRANSFER (BOT) METHOD OF FINANCING FROM SHARĪʿAH PERSPECTIVE, (1433, 2012),** pp.115 **Price $ 10.0**
Ahmed Al-Islambouli
Literature on BOT techniques from Sharīʿah perspectives are few and far between. This book surveys and reviews the previous studies as well as experiences of BOT financing by individuals and institutions and concludes with a Sharīʿah opinion. It finds BOT to be a combination of *istiṣnāʿ* and other contracts. The BOT would be a valid method after appropriate modifications

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Nasim Shah Shirazi, Muhammad Zulkhibri Salman Syed Ali & SHAPE Financial Corp.
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Justice (Retd.) Tanzilur Rahman
The lecture deals with *muḍārabah* characteristics and its applications in accordance with Sharīʿah and the Pakistan perspective.

☐ **SUSTAINABLE DEVELOPMENT IN THE MUSLIM COUNTRIES (2003),** pp.104 **Price $ 5.0**
Monzer Kahf
IDB Prize Lectures analyses the concept of sustainable development from an Islamic perspective and surveys the state of development in Muslim countries.

Others

☐ **TRADE PROMOTION ORGANIZATIONS IN OIC MEMBER COUNTRIES (1994),** pp.40 **Price $ 5.0**
A directory of trade promotion organizations. A reference for those interested in trade promotion in OIC member states.

☐ **A BIBLIOGRAPHY OF ISLAMIC ECONOMICS (1993),** pp.840 **Price $ 14.5**
A very significant bibliography of Islamic economics organized according to (1) Call Number Index, (2) Descriptor Index, (3) Subject Term Index for Call Numbers, (4) Author Index (5) Corporate Author Index.

☐ **PETROCHEMICAL INDUSTRY IN OIC MEMBER COUNTRIES (1994),** pp.89 **Price $ 5.0**
Useful and up-to-date information on Petrochemical Industry in OIC member States are brought together in this study to promote trade among them in this area.

☐ **FERTILIZER INDUSTRY AND TRADE IN OIC MEMBER COUNTRIES (1995),** pp.603 — **Price $ 10.0**
It serves as a useful and up-to-date guide to fertilizer industry, technology and trade in OIC member countries.

☐ **CEMENT INDUSTRY IN OIC MEMEBR COUTNIRES – (SECOND EDITION) (1993),** pp.560 — **Price $ 10.0**
It is a guide to the Cement industry in the OIC member countries to promote trade among them in the area of cement and to enhance the quality and productivity of cement.

☐ **FINANCIAL DEVELOPMENT IN ARAB COUNTRIES (BOOK OF READINGS, No.4) (2005)**, pp.298 — **Price $ 10.0**
This book of readings provides fruitful policy recommendations on various financial development issues in the Arab World such as operational efficiency and service quality in banking. It also examines different aspects related to stock markets development such as efficiency, volatility, hedging, and returns

Actes de Séminaires

☐ **L'ORGANISATION ET LE FONCTIONNEMENT DU CONSEIL MALAIS DE DIRECTION DES PELERINS ET DU FONDS DU PELERINAGE (1987),** 109 pages — **Prix $ 5.0**
Comme institution consacrée à l'organisation du pèlerinage, TABUNG HAJI (Conseil de Direction des Pèlerins) a servi comme modèle type à cette journée d'étude.

☐ **L'ADMINISTRATION PUBLIQUE DANS UN CONTEXTE ISLAMIQUE (1995),** 150 pages — **Prix $ 5.0**
Yassine Essid and *Tahar Mimm,(éd.)*
Outre l'histoire de l'administration en Islam, cet ouvrage traite de nombreux aspects tant théoriques que pratiques de l'administration d'un point de vue islamique et qui touchent à l'actualité du monde islamique.

☐ **LA ZAKAT: ASPECTS JURIDIQUES, ECONOMIQUES ET SOCIAUX (1995),** 248 pages — **Prix $ 10.0**
Boualem Bendjilali and *Mohamed Alami (éd.)*
Actes de séminaire sur LA ZAKAT dont l'objectif est d' ouvrir de nouvelles voies à la reflexion et de faire connaître les concepts, la méthodologie et les principes de base de la collecte et de la répartition de la Zakat.

☐ **DEVELOPPEMENT D'UN SYSTEME D'INSTRUMENTS FINANCIERS ISLAMIQUES (1995),** 328 pages — **Prix $ 10.0**
Mohamed Ariff and *M.A. Mannan* (éd.)
Actes de séminaire dont l'objectif principal était d'identifier les voies et moyens pour l'émission d'instruments financiers islamiques viables qui pourraient préparer le terrain à une mobilisation efficace des ressources financières dans les pays membres de la BID.

☐ **INTRODUCTION AUX TECHNIQUES ISLAMIQUES DE FINANCEMENT (1997),** 210 pages — **Prix $ 10.0**
Actes de séminaire don't l'objectif principal était d'offrir aux cadres supérieurs des pays francophones membres de la BID une introduction d'ordre théorique et pratique sur les modes de financement islamiques utilisés par les banques et les institutions financières islamiques.

☐ **CONFERENCES EN ECONOMIE ISLAMIQUE (1996),** 555 pages **Prix $ 10.0**
Ausaf Ahmed and *Kazim Awan*
Actes de séminaire dont l'objectif principal est de servir comme outil de base pour les étudiants et aux enseignants en économie islamique.

☐ **LE DEVELOPPEMENT DURABLE, (1997),** 256 pages **Prix $ 10.0**
Taher Memmi (éd.)
Actes d'un séminaire sur le développement durable qui présente, entre autres, la stratégie en cette matière de quelques pays membres de la BID.

☐ **PROMOTION ET FINANCEMENT DES MICRO-ENTREPRISES (1997),** 187 pages **Prix $ 5.0**
Taher Memmi (éd.)
Actes de séminaire sur la promotion et financement des micro-entreprises qui peuvent être utiles à tous ceux, décideurs, hommes et femmes du terrain, soucieux de faire de la micro-entreprise un outil efficace et durable de lutte contre la pauvreté.

☐ **LA ZAKAT ET LE WAQF : ASPECTS HISTORIQUES, JURIDIQUES, INSTITUTIONNELS ET ECONOMIQUES (1998),** 387 pages **Prix $ 10.0**
Boualem Bendjilali (éd.)
Actes de séminaire qui visent à faciliter l'accès des lecteurs francophones à la littérature sur l'économie islamique en général et la Zakat et le Waqf en particulier.

☐ **LES MODES DE FINANACEMENT ISLAMIQUES (1993)**, 48 pages **Prix $ 5.0**
Boualem Bendjlali (éd.)
Rapport d'un séminaire sur les modes de financement islamiques tenu en Mauritanie en 1413H (1992).

☐ **LES SCIENCES DE LA CHARI'A POUR LES ECONOMISTES: LES SOURCES DU FIQH, SES PRINCIPES ET SES THEORIES; LE FIQH DES TRANSACTIONS FINANCIERES ET DES SOCIETES; ET SON APPLICATION CONTEMPORAINE (2001),** 572 pages **Prix $ 15.0**
Boualem Bendjilali (éd.)
Actes de séminaire sur les sciences de la Chari'a pour les économistes dont l'objectif principal est de servir comme outil de base aux chercheurs, étudiants et enseignants en économie islamique sur les sources du *Fiqh.*

Recherches

☐ **LA COOPERATION ECONOMIQUE ENTRE LES PAYS DU MAGHREB (1985),** 138 pages **Prix $ 5.0**
Ridha Saadallah
Cet ouvrage traite de nombreux thèmes dont les ressources naturelles et humaines au Maghreb, le potentiel de coopération agricole et industrielle au Maghreb, etc.

☐ **PROFITS ET INTERETS BANCAIRES ENTRE L'ANALYSE ECONOMIQUE ET LA CHARI'A (1994),** 150 pages **Prix $ 5.0**
Abdelhamid El-Ghazali
Cet opuscule traite de l'intérêt bancaire face au profit en tant que mécanismes de gestion de l'activité économique. Une analyse de deux points de vue différents, celui de l'économie conventionnelle et celui de la Chari'a.

☐ **LA MOUDHARABA SELON LA CHARI'A ET SES APPLICATIONS CONTEMPORAINES (1994),** 83 pages **Prix $ 5.0**
Hassan El-Amin
Cette étude traite de nombreux aspects pratiques: légal, économique et bancaire.

☐ ***JOUALA* ET *ISTISNA,*** **Prix $ 5.0**
***Analyse juridique et économique* (1994) ,** 65 pages
Chaouki Ahmed Donia
L'intérêt de cette recherche réside dans le fait qu'elle aborde un nouveau domaine d'application des transactions économiques islamiques se basant sur deux contrats, à savoir "La Jouala et L'Istisna".

☐ **LA PROPRIETE FONCIERE EN ISLAM (1994) *(Enquête),*** 52 pages **Prix $ 5.0**
Mahmoud A. Guilaid
Le but de cette étude est d'examiner les questions les plus importantes concernant le droit de propriété foncière en Islam.

☐ **LES RELATIONS COMMERCIALES ENTRE LE CONSEIL DE COOPERATION DU GOLFE ET LA COMMUNAUTE EUROPEENNE (1995),** 152 pages, **Prix $ 5.0**
Du Passé Récent au Lendemain de 1992
Ridha Mohamed Saadallah
Cette étude procède à une analyse minutieuse des statistiques passées, des échanges commerciaux entre les pays du CCG et ceux de la Communauté Européenne en vue de dégager les tendances profondes et les caractéristiques structurelles du commerce Euro-Golfe.

☐ **ERADICATION DE LA PAUVRETE ET DEVELOPPMENT DANS UNE PERSPECTIVE ISLAMIQUE (1995),** 180 pages **Prix $ 5.0**
Abdelhamid Brahimi
Cette recherche, divisée en deux parties, traite dans la première des facteurs internes et externes de blocage et de l'impasse. La seconde est consacrée à la conception et à la mise en oeuvre de politiques économiques dans une perspective islamique.

☐ **JUGEMENT DU TRIBUNAL FEDERALISLAMIQUE DU PAKISTAN RELATIF A L'INTERET *(RIBĀ)* (1995),** 478 pages **Prix $ 15.0**
Ce document constitue un outil de travail et une référence indispensables à tous ceux, parmi les décideurs politiques et chercheurs dans les pays membres de la Banque, qui sont désireux de voir se développer l'alternative d'un système financier exempt d'intérêt.

Eminents Spécialistes

☐ **LES CONDITIONS MONETAIRES D'UNE ECONOMIE DE MARCHES DES ENSEIGNEMENTS DU PASSE AUX REFORMES DE DEMAIN (1993),** 64 pages **Prix $ 5.0**
Maurice Allais (Prix Nobel d'Economie - 1988)
L'auteur, dans son examen, critique du système monétaire international, appelle à des réformes tant économiques que morales.

☐ **JURISPRUDENCE DE LA *MASLAHA* ET SES APPLICATIONS CONTEMPORAINES (1995),** 92 pages — **Prix $ 5.0**
Hussein Hamed Hassan
L'étude, présente le point de vue islamique se rapportant à la question de l'intérêt publique, son lien avec la législation, ses conditions et ses dimensions juridiques; avec un certain nombre d'applications contemporaines.

☐ **JURISPRUDENCE DE LA NECESSITE (*FIQH* DE LA *DHARURA*) ET SON APPLICATION DANS LA VIE CONTEMPORAINE : PERSPECTIVE ET PORTEE (1996),** 259 pages — **Prix $ 10.0**
Abd al-Wahab I. Abu Sulayman
Cette recherche sur le *Fiqh de la Dharura* aborde le point de vue de la Chari'a islamique par rapport à la notion de *Dharura* (nécessité), ses conditions et ses perspectives juridiques.

☐ **COOPERATION ECONOMIQUE POUR UNE STABILITE REGIONALE (1996),** 37 pages — **Prix $ 5.0**
Bacharuddin Jusuf Habibie
Cet ouvrage porte sur l'importance coopération économique entre les pays en développement en général et entre les pays islamiques en particulier.

☐ **LE QIYAS ET SES APPLICATIONS CONTEMPORAINES (1996),** 139 pages — **Prix $ 5.0**
Mohamed Mokhtar Sellami
Uni conférence qui traite de l'une des sources de la jurisprudence, reconnue dans la science des fondements du droit sous le nom d'analogie (Qiyâs) et reconnue par l'ensemble des écoles juridiques comme preuve légale et méthode d'extraction des jugements.

Prix de la BID

☐ **LE SYSTEME BANCAIRE ISLAMIQUE : LE BILAN, (1996),** 65 pages — **Prix $ 5.0**
Ziauddin Ahmed
Le but de ce papier est d'examiner et d'évaluer la situation actuelle dans le domaine des banques islamiques aussi bien du point de vue théorique que pratique.

☐ **QU'EST-CE QUE L'ÉCONOMIE ISLAMIQUE? (1996),** 81 pages — **Prix $ 5.0**
Mohammad Umer Chapra
Conférence donnée par Dr. Chapra lauréat du Prix de l'économique islamique 1409H (1989) sur : l'économie conventionnelle et l'économie islamique.

☐ **EVOLUTION DES ACTIVITES BANCAIRES ISLAMIQUES: PROBLEMES ET PERSPECTIVES (1998),** 30 pages — **Prix $ 5.0**
Saleh Kamel
Conférence donnée par Cheikh Saleh Kamel lauréat du Prix de la BID en système bancaire islamique pour l'année 1416H (1995/96). Elle constitue une grande contribution à la compréhension de l'économie et du système bancaire islamiques et à leur évolution.

Traductions

☐	**VERS UN SYSTÈME MONÉTAIRE JUSTE, (1997),** 352 pages *Mohammad Umer Chapra* Ce livre développe avec habilité la logique islamique de la prohibition du *Ribā*, et démontre avec rigueur la viabilité et la supériorité du système de financement basé sur la participation au capital.	**Prix $ 10.0**

Documents occasionnels

☐	**DEFIS AU SYSTEME BANCAIRE ISLAMIQUE, (1998),** 90 pages *Munawar Iqbal, Ausaf Ahmad et Tariquallah Khan* Le but de ce document occasionnel est que les théoriciens et praticiens dans le domaine bancaire islamique doivent explorer les voies et moyens permettant au système bancaire islamique de soutenir son rythme de progrès au moment où il entre dans le 21ème siècle.	**Prix $ 5.0**

TRANSLITERATION TABLE

Arabic Consonants

- Initial, unexpressed medial and final:

ء	’	د	d	ض	ḍ	ك	k
ب	b	ذ	dh	ط	ṭ	ل	l
ت	t	ر	r	ظ	ẓ	م	m
ث	th	ز	z	ع	‘	ن	n
ج	j	س	s	غ	gh	هـ	h
ح	ḥ	ش	sh	ف	f	و	w
خ	kh	ص	ṣ	ق	q	ي	y

- Vowels, diphthongs, etc.

Short	َ	a	ِ	i	وِ	u
Long	أ	ā	ي	ī	و	ū
Diphthongs	ؤ	aw	ئ	ay		

Notes To Contributors

1. The papers submitted to *IES* should make some noticeable contribution to Islamic economics, either theoretical or applied, or discuss an economic issue from an Islamic perspective.
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7. Detailed derivations of the main mathematical results reported in the text should be submitted separately. These will not be published.
8. References should be listed at the end of the text in the following style:
9. Articles: Al-Qari, Mohamed Ali (1993), "Towards an Islamic Stock Market", *Islamic Economic Studies*, Vol. 1, No. 1; Books: Khan, A. R. (1993), *Financial Intermediation*, New York: Springer Publishers. Page references to works referred to in the text should take the following form: Al-Qari (1993:17). Citations within the text should follow Harvard APA style.
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11. Complete reference to the source of ahādith quoted should be given.
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Islamic Development Bank (IDB)

Establishment

The Islamic Development Bank is an international financial institution established in pursuance of the Declaration of Intent issued by the Conference of Finance Ministers of Muslim Countries held in Jeddah in Dhul Qa'dah 1393H (December, 1973). The inaugural Meeting of the Board of Governors took place in Rajab 1395H (July 1975) and the Bank was formally opened on 15 Shawwal 1395H (20 October, 1975).

Vision

By the year 1440H Hijrah, IDB shall have become a world-class development bank, inspired by Islamic principles that have helped significantly transform the landscape of comprehensive human development in the Muslim world and help restore its dignity.

Mission

The mission of IDB is to promote comprehensive human development, with a focus on the priority areas of alleviating poverty, improving health, promoting education, improving governance and prospering the people.

Membership

The present membership of the Bank consists of 56 countries. The basic condition for membership is that the prospective member country should be a member of the Organization of Islamic Cooperation (OIC), pay its contribution to the capital of the Bank and be willing to accept such terms and conditions as may be decided upon by the IDB Board of Governors.

Capital

As of the month of Rajab 1431H, the Authorized Capital of the Bank was ID 30 Billion, and the Issued Capital was ID 18 Billion, of which ID 17.474 Billion was subscribed with ID 4.031 Billion Paid-Up.

Group

At present the IDB Group is made up of Islamic Research and Training Institute (IRTI), International Islamic Trade Finance Corporation (ITFC), The Islamic Corporation for Insurance of Investments and Export Credit (ICIEC) and The Islamic Corporation for the Development of the Private Sector (ICD).

Headquarters and Regional Offices

The Bank's headquarters is in Jeddah in the Kingdom of Saudi Arabia. Four regional offices were opened in Rabat, Morocco (1994), Kuala Lumpur, Malaysia (1994), Almaty, Kazakhstan (1997) and Dakar, Senegal (2008).

Financial Year

The Bank's financial year is the lunar Hijra year.

Accounting Unit

The accounting unit of the IDB is the Islamic Dinar (ID), which is equivalent to one SDR – Special Drawing Right of the International Monetary Fund.

Languages

The official language of the Bank is Arabic, but English and French are also used as working languages.