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September 2013

Online at https://mpra.ub.uni-muenchen.de/49816/
MPRA Paper No. 49816, posted 17 Sep 2013 02:52 UTC

ENHANCING THE ENFORCEABILITY OF ISLAMIC MICROFINANCE CONTRACTS IN OIC COUNTRIES

Zeineb ZOUARI [1] & Mahmoud Sami NABI [2, 3]

Abstract

The role of Microfinance in alleviating poverty and enhancing social development is increasing. However, Microfinance Institutions (MFIs) suffer from two important problems which undermine their growth. The first one is inherent to their exposure to information asymmetry (adverse selection and moral hazard). The second one is related to the higher cost of debt enforcement especially in the developing countries where they are generally operating. The problem of costly monitoring is also faced by Islamic Microfinance Institutions (IMFIs) and becomes more important in the case of Profit and Loss Sharing contracts. This paper provides a literature survey about the best practices of the MFIs in term of monitoring, discusses their relevance to the IMFIs, and explores the development of specific regulatory and institutional mechanisms to enhance the performance of different schemes of Islamic micro lending programs. It comes up with a number of policy recommendations (for policy makers and managers of the microfinance institutions) detailing the directions of enhancing the regulatory and institutional environment for the sustainable growth of the Islamic microfinance industry in the OIC countries.

Keywords: Islamic microfinance, information asymmetry, monitoring costs, regulation and supervision.

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I. INTRODUCTION

After the global financial crisis, global unemployment has increased to record 197 million job seekers worldwide in 2011, where 74.7 million are youth unemployed. Upward trends in both the adult and youth unemployment make estimates possible to reach 202 million in 2013[4]. The MENA region has to create up to 70 million jobs by 2020 to match the global employment rate's pattern[5]. The OIC[6] member countries, with a population of 1.57 billion people, displayed important unemployment rate (9.4% in 2010)[7] which exceeds the global rate (6% in 2011). North African countries, which have strong direct trading and migration ties with the EU countries, have suffered from return migration from Southern Europe, leading to deeper stress to their labor markets. The lack of employment opportunities is the strike problems these countries are facing, due to demographic growth, skills mismatches, the rigidity of the labor markets, and the weakness of the private sector. In 2012, the female youth unemployment rate was estimated to 37%, six times more than the rate of adult men[8]. In the Middle Eastern countries, the unemployment rate varies cross-countries. In one hand, the economic growth of oil exporting economies (like Qatar, Kuwait and United Arab Emirates) exceeded 6% in 2012, and unemployment rates were low (0.5% in Qatar and 2.7% in Kuwait), except for countries where stability is not preserved such as Iraq and Iran. On the other hand, oil importing countries are struggling with low levels of economic growth, and double-digit unemployment rates[9].

Among the 192 member countries of the United Nation, over 130 of them are classified as developing countries which are in general not only facing high unemployment but also high rates of poverty. According to estimates by the World Bank, more than 1.6 billion people were classified as poor in 2009, with the majority of them live in rural areas. In Middle East, 30.2% of the total population was either poor or near poor[10] in 2011, a medium percentage compared with the global rate in developing world, 58.4%, while it reaches 61.1% in North Africa and 92% in South Asia. Following the success of the Grameen Bank in Bangladesh, microfinance has been considered to be a new financial model for poverty alleviation in developing countries. In 2006, Grameen Bank and its founder Mohamed Yunus were awarded the Nobel Peace Prize for "their efforts to create economic and social development from below"[11]. The idea was as simple: giving the poor the chance to become micro entrepreneur, and thus improve their social performance, by providing them small loans repaid after investment return generation. These loans are expected to be used for self-employment and income-generating activities.

The global microfinance industry showed, during the last decade, a remarkable growth of around 20%, coming mainly from South and East Asia, and Africa[12]. However, the current outreach of microfinance remains insufficient, especially in the rural areas of the developing countries. In OIC member countries, microfinance is predominantly urban, except in Indonesia which displays more than 105 micro and rural banks in 2007[13]. The value of global Islamic finance assets has rose from only $US80 billion in 2000 to 1.1 trillion USD in 2011[14]. Although it is growing rapidly, the overall supply of Islamic microfinance products is considered as small compared to the conventional microfinance sector. Islamic microfinance presents less than 1% of global microfinance programs. The estimated

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[4] The World Bank. "Global Unemployment Trends 2013: Recovering from a second jobs dip".

[5] The World Bank, "Middle East and North Africa Region, Economic Developments and Prospects", 2007

[6] Organization of Islamic Cooperation

[7] Statistical Economic and Social Research and Training Centre for Islamic Countries (SESRIC). "The Annual Economic Report on the OIC countries 2012".

[8] In Morocco and Egypt, statistics show that female are more present as skilled agricultural and fishery workers than men (47% (28%) are women (men) in Egypt, while 59% (32%) in Morocco)

[9] The World Bank. "Global Unemployment Trends 2013: Recovering from a second jobs dip".

[10] Workers are categorized into distinct economic classes according to their generated income per day: Extremely poor (less than US$1.25 a day), Moderately poor (between US$1.25 and US$2 a day), Near poor (between US$2 and US$4 a day), Developing middle-class (between US$4 and US$13 a day), and Developed middle-class and above (above US$13 a day).

[11] Extracted from the official web site of the Nobel prize, www.nobelprice.org.

[12] "Microfinance Market Outlook 2013".

[13] Karim, Tarazi and Reille, 2008. *Islamic microfinance: an emerging market niche*, CGAP, Focus Note. No 49.

[14] SESRIC, "Islamic Finance in OIC Member Countries", OIC outlook series, May 2012.

total number of poor clients using *Shariah*-compliant products is about 1.28 million, while there are only 255 financial service providers offering *Shariah*-compatible microfinance products and services worldwide (El-Zoghbi and Tarazi, 2013). According to Karim, Tarazi and Reille (2008) 20% to 60% of the population in various Muslim countries displayed potential demand to access Islamic finance. As 72% of people in Muslim countries do not use formal financial services[15], Islamic microfinance has great potential to contribute to alleviating poverty and enhancing development, but it faces a lot of challenges, all together.

Different factors are at the origin of the weak level of development of Islamic microfinance in the OIC countries. First, there is lack of harmonization of the institutional environment and regulations for the supply of *Shariah*-compliant products. Most central banks of OIC countries have not yet incorporated Islamic microfinance category in their regulatory and accounting framework. Except some countries in MENA region (Tunisia, Morocco, Syria, and Yemen), the rest of the OIC countries have not tailored specific legislation even for the microfinance institutions in general conventional and Islamic. Therefore, in most cases, Islamic Microfinance Institutions (IMFIs) have to comply with conventional regulations which may not be adapted to their business. In addition, the high costs of enforcement contracts discourage lenders from engaging in contractual arrangements. According to a report made by the SESRIC[16] in 2012, the average cost of enforcing contracts in the OIC countries, as a percentage of claim value was equal to 38.8% in 2011, much than the 20.2% of the Developed countries and the 34.7% at the global level. Another challenge is the lack, in the conventional microfinance institutions, of trained staff capable to master Islamic finance concepts and products. Besides, there are insufficient theoretical and policy oriented research that can be relied by potential investors in Islamic Microfinance services industry.

The primarily goal of this research is to present a comprehensive study on the challenges and opportunities of the Islamic microfinance industry. The paper provides an extensive review of the literature on the efficiency of microcredit schemes, with a focus on their institutional viability, regulatory environment and sustainability. We also examine the best practices of some Islamic Microfinance products by presenting best practices of some Islamic Microfinance Institutions, in term of monitoring their clients. The ultimate objective is to identify the best practices that can benefit for Islamic microfinance institutions development. We believe that having a good understanding of the environment of the IMFIs is perquisite to enhance the enforceability of the existing Islamic microfinance contracts and favors the development of new products that overcome inherent issues.

The remainder of the paper is as follows: The first section discusses the regulatory and supervisory environments of microfinance in OIC countries. The second section is devoted to a review of the existing literature on the monitoring mechanisms of micro lending programs. The features of Islamic Microfinance practices and the performance of different schemes of Islamic micro lending programs are examined in the third section. In the final section, we present and analyze the main challenges and opportunities of Islamic microfinance and we introduce a set of policy recommendations, forwarded to regulatory authorities and to decision makers in IMFIs, which can contribute in enhancing the development of the IMF industry. The conclusion summarizes the major findings.

II. OVERVIEW OF THE REGULATORY AND SUPERVISORY ENVIRONMENT OF MICROFINANCE SECTOR IN OIC COUNTRIES

This section provides an analysis of the institutional and regulatory environment of the Microfinance sector in some of the OIC countries based on the *Global microscope on the microfinance business environment, 2012* database. Our analyses stem from earlier study of Ahlin et al. (2010), which found that MFI performance depends largely on the country macro and micro-institutional context. The sampled 1106 MFIs (Banks, Credit and Saving Cooperatives, Non-Governmental organization (NGO) and Non-Bank Financial Institutions (NBFI)) operate in 55 different countries.

[15] Honohon, 2007. *Cross-country variations in household access to financial services*.

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

Table 1. Categorization of sampled MFIs by region

Geographical Area	# of countries	# of MFIs
Africa	11	197
East Asia	7	148
Eastern Europe and Central Asia	7	104
Latin America and the Caribbean	21	411
Middle East and North Africa	4	33
South Asia	5	213
TOTAL	**55**	**1106**

Geographically, most of the MFIs are based in Latin America and the Caribbean (37.16%), whilst the MFIs in South Asia and MENA regions represent 22.24% each of the sample. Although it includes a large number of MFIs, the sample cannot be considered fully statistically relevant as it does not include several MFIs from other countries. The data is summarized and defined is Table 2 (see Appendix 2.A). It includes three distinct categories: **Regulatory Framework and Practice**, **Supporting Institutional Environment** and **Adjustment Stability Factor**. The *Return on Assets (ROA)* is a measure of **MFIs' Performance** as it indicates how well the institution's assets are used to generate income. Besides *Portfolio size, Y-O-Y growth in number of borrowers* and *Growth on Gross Loan Portfolio* indicate **MFIs' Outreach**. **MFIs' Efficiency** is measured by *Cost per loan, Borrowers per staff members* and *Cost per borrower*.

The Global microscope on the microfinance business environment, 2012 database provides also two indicators to measure **MFIs' Risk:** *Portfolio at Risk (PAR-30)* and *Write-offs percentage*. Each category's score is calculated as the weighted sum of indicators in that category. **Overall Score** is, the weighted sum of the Regulatory and Practice and Supporting Institutional Environment, reduced by the Adjustment Factor, and it indicates the overall situation of the microfinance sector in the country, in relation to specific economic indicators and law regulations. The Regulatory Framework and Practice and Supporting Institutional Environment categories are each weighted 50%.

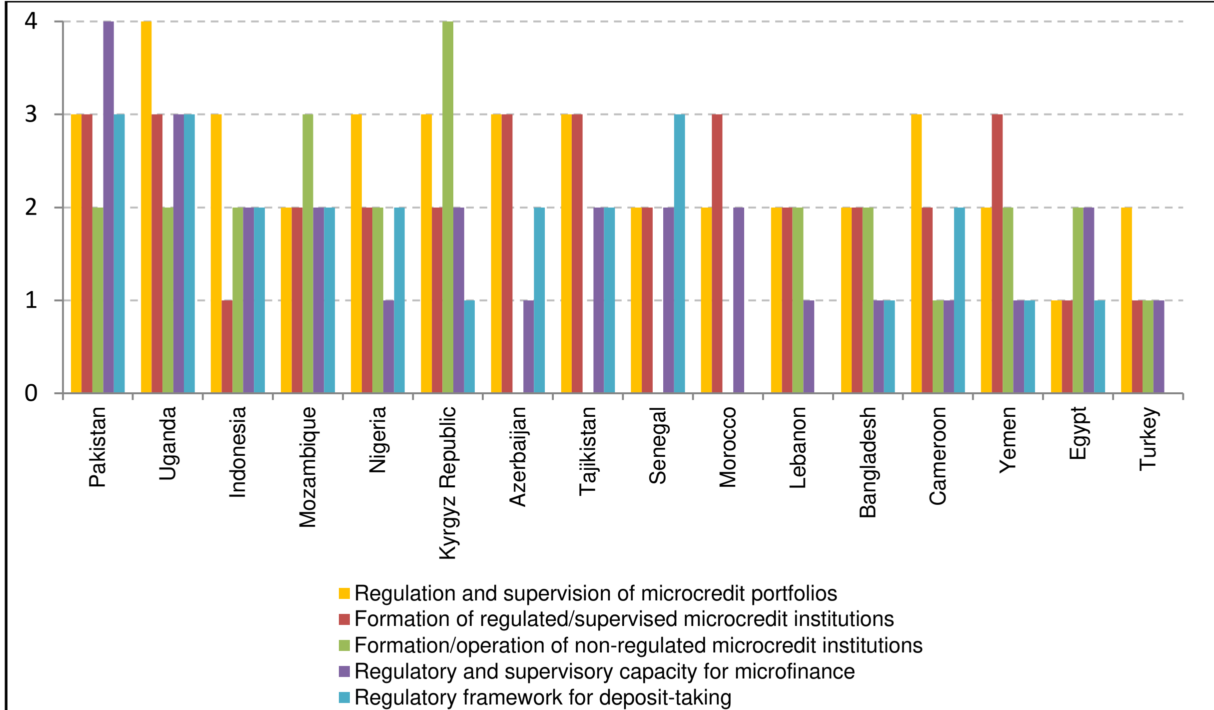
II.1. Regulatory and Institutional Environment

The issue of regulation and supervision has been one of the core interests of researchers especially during and following the crisis periods. This interest is mainly due to the well-known information asymmetry between shareholders and depositors which arise due to agency problems (Stiglitz, 1994). Insiders (managers and owners) have informational advantage over outsiders (depositors and creditors) which lead to a conflict of interests. Banks may act in favor of insiders by increasing the expected return for shareholders regardless of the interest of depositors. In addition, spillover effects often exist when an opportunistic behavior of a single institution hampers the safety and viability of all the financial institutions. To prevent these risks, government imposes prudential regulations with the objective to control interest rates and restrict opportunistic activities, and to protect depositors' rights. In developing countries, economies have dropped prudential regulations to concentrate mainly on capital requirements and supervisory control through onsite and offsite monitoring (Arun and Turner, 2002). But monitoring is hard to practice in poor institutional environment due to the lack of well qualified and trained personnel and inefficiency of legislative and accounting systems.

These issues have been also raised in the microfinance sector. Researchers who defend the importance of regulations in the microfinance sector argue that MFIs use innovative products and models that generate high operating costs and it is too risky not to regulate them. In case of default, commercial banks that fund MFIs are more likely to be affected and systematic risk may arise. Regulation and supervision are costly to implement, especially for small financial institutions. However, the benefits of regulations may overcome problems of higher costs (Theodore & Loubiere, 2002).

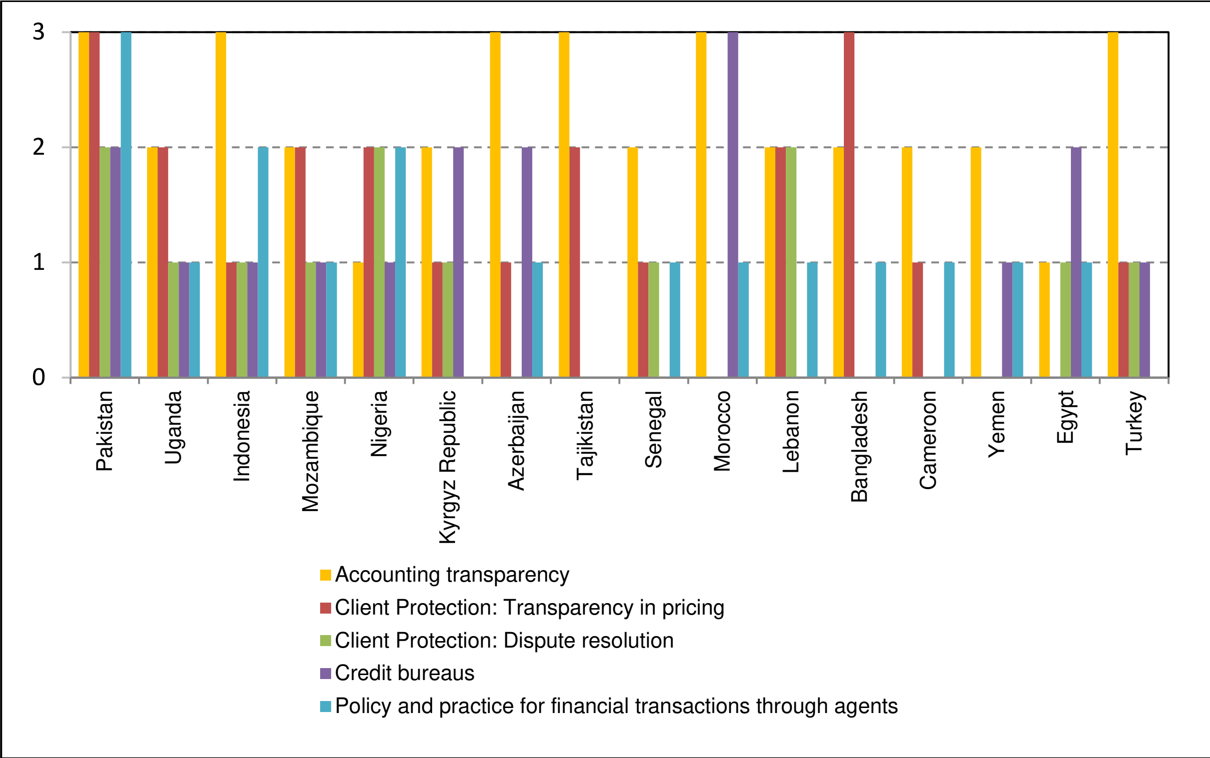
Other studies proved otherwise. For instance, Steel and Andah (2003) conduct a study in Ghana and find that the costs of regulations and supervision overcome its benefits. Their findings are consistent with a CGAP (2002) study which estimates that the cost of supervision presents 5% of total costs in the first year and 1% in the following years.

Figure 1. Regulatory environment in some OIC Countries



MFIs in different OIC-countries operate under the existing legal and regulatory framework. Most of them are registered as cooperatives and non-governmental organizations. They do not operate under a dedicated financial legal status but in the existing legislations that have been reframed to regulate microfinance banks. Cross-country regulations vary according different indicators. Figure 1 and 2 illustrate the development of the regulatory and institutional environments in some OIC-countries. Pakistan has shown to be placed in the first rank (Overall Score 67.4), followed by Uganda (51.6) and Indonesia (44.3), while Turkey came at the last (Overall Score 26.6), right after Egypt (Overall Score 27.4) and Yemen (Overall Score 30.4).

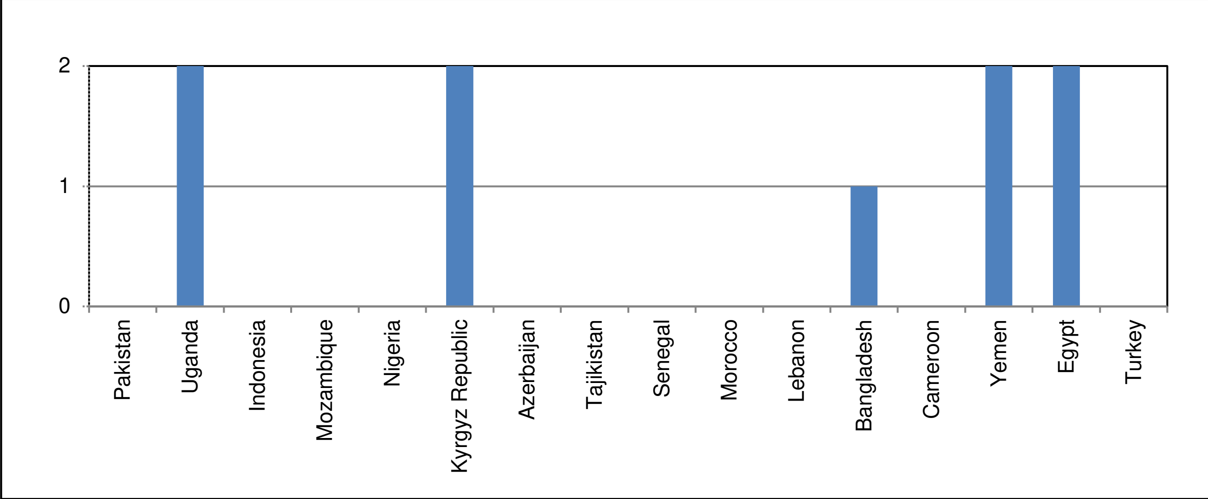
Figure 2. Institutional indicators in some OIC Countries



In **Pakistan**, the development of the microfinance sector has benefited from the government's strategy which resulted in the establishment of an appropriate legal and institutional framework, promoting transparency in prices and reports, setting framework for the compliance of MFIs' accountancy to international accounting standards (IFRS standards), requiring external audit requirement, setting an effective dispute resolution system, and establishing clients' protection mechanisms. In 2009, a Code of Conduct for Consumer Protection has been developed to protect microfinance clients where 23 Pakistani MFIs signed ever since. Its main objective is to ensure price transparency. Besides, the State Bank of Pakistan (SBP) requires that all microfinance banks should give to their potential clients all the information needed about prices, interest fees, and terms and conditions of the contracts. Consequently, the number of transactions had risen sharply to reach 20.6 million in 2012 compared to only 3.5 million in 2011.

Since 2005, the government has taken serious initiatives to promote the sustainability of microfinance growth by encouraging the market-driven formal system. The "Expanding Outreach of Microfinance" national strategy was the culmination of a process of institutional reforms which begun few years ago. It was formulated by SBP and declared a target of 3 million borrowers by the end of 2010 and 10 million by 2015. To reach the target numbers, Pakistani regulatory authorities have encouraged NGO-MFIs to expand their activities and upscale their status through transformation into MF banks. The SBP released the "Transformation Guidelines" to allow non-bank NGO-MFIs, rural support programs (RSPs) and cooperatives to transform into regular MFBs. Ever since, a lot of NGOs have up scaled and created MFBs (for exemple, Kashf Foundation, the Aga Khan's RSP). These reforms are expected to further enhance the microfinance sector in the country. As a result, weak MFIs can be merged to form strong institutions able to provide competitive microfinance services to customers.

Figure 3. Political shock to microfinance



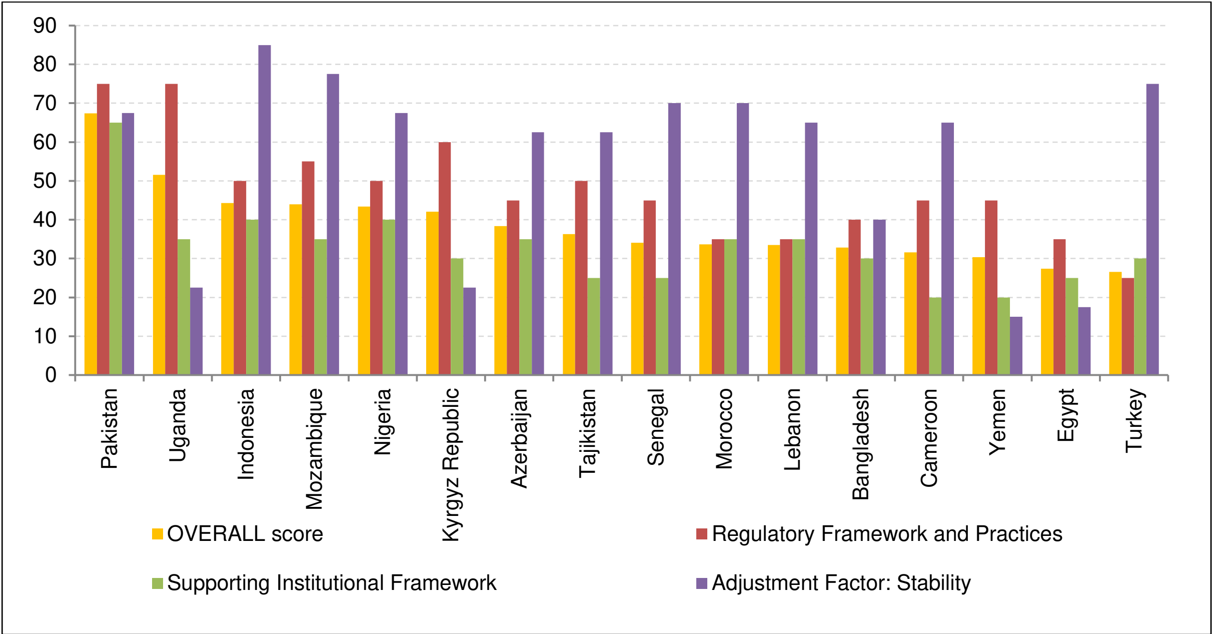
In **Yemen**, despite the political crisis in 2011 (figure 3 shows a high instability score in Yemen compared to other countries), microfinance has grown by 0.3% between the year 2011 and 2012 and its potential is promising. IFC commissioned market studies show a high demand for Islamic microfinance products. In Yemen, 40% of the poor prefer Islamic financial services[17]. According to the EIU data, Yemen fell 17 places in the world microfinance ranking, dropping from rank 25 to 45. Currently, the microfinance market operates under the "Microfinance Law", which was established in 2009. Under such law, MFI Banks are subject to direct supervision from the Central Bank of Yemen (CBY), and are required to set a minimum capital of YR500m (US$2.5 million). Besides, the law allows NGOs to upgrade to operate as commercial MFI Banks. MFIs NGOs that refuse to upgrade are neither supervised by CBY nor required to comply with the capital requirement. Instead, the Social Fund for Development (SFD) regulates most of the NGOs. Each NGO must present its monthly set of accounts to the SFD. Practically, not all NGOs fulfill this obligation. Besides, some NGOs, which are not allowed to do so, provide voluntary saving products to the public. MFIs that want to join the Yemen Microfinance Network (YMN) are obliged to provide an audited financial report for at least one year. After that, YMN members are asked to submit monthly financial updates. The progress in the regulatory process aims to assure the MFIs financial strength in term of profitability ratios, income statements, and their other financial indicators. Although it has been voluntary practiced by many Yemeni MFIs, price transparency is still not required by law. The National Microfinance Foundation, the largest MFI in the country, usually posts information on pricing in its different branches. Another concern is the implementation of effective credit bureaus for microfinance. Credit bureaus are weak and unreliable to provide necessary information on prospective depositors. Credit Information Index in Yemen has been assigned a score of 2 out of 6 by the World Bank. The latter indicates that public credit bureau coverage to 0.7% of the adult population, whereas the private registries are absent. The regional score is 9.3.[18] Recently, the central bank announced its intention to introduce a series of laws as an add-on to the 2009 Microfinance Law, which would impose requirements on transparency[19].

Egypt is characterized by a quite similar context than Yemen, except for the regulatory framework. Indeed, the two countries characterized by recent political instability, weak economic situation at the country level and poor institutional environment, small agent transaction mechanisms and weak client protection at the level of microfinance sector. In Egypt, microfinance is practiced by the national post office, Rotating Savings and Credit Associations (ROSCAs), NGOs, non-bank financial institutions (NBIs) and banks. There is no specific law that regulates microfinance institutions as 80% of microfinance service providers are NGOs in 2012. Considerable efforts are dedicated to legally frame

[17] Mohieldin, Iqbal, Rostom & Fu, 2012: The Role of Islamic Finance in Enhancing Financial Inclusion in Organization of Islamic Cooperation (OIC) Countries, Islamic Economic Studies.
[18] The World Bank, "World Bank Doing Business 2012"
[19] EIU, "Global Microscope on Microfinance Business Environment 2012".

the informal financial markets. As a result, the Egyptian Financial Supervisory Authority (EFSA) was established in 2009 under the Law for the regulation of non-banking financial markets and instruments, to regulate all microfinance activities. The critical overall situation in Egypt has affected the microfinance sector. As a result, Egypt global rank dropped from place 42th in 2011 to place 50th worldwide. Its microfinance institutional framework remains weak mainly due to under performance in accounting transparency and client protection system. Serious efforts have to be made to enforce the viability of the sector in the country. As a starting point, a plan for microfinance institution network needs to be established. Egyptian authority will have to focus on introducing acts of laws to further regulate existing MFIs and promoting the implementation of other MFIs' types, like Microfinance Bank, which can assure product diversity and provide a wide range of services to the poor in different areas (savings deposits, insurance, pension, money transfer, and other financial services). More than 400 NGOs operate in the microfinance market in Egypt. Transformation of groups of NGOs into microfinance banks and rural banks may redouble their financial resources and allowing extra sources of funding (private and governmental). According to the hypothesis of "the lifecycle" of Sousa-Shields and Miamidian (2004), MFIs, usually, start as non-profit organizations (like NGOs) which are dependent to public subsidies funds. However, these ties may ultimately weaken their financial performance (Kailley, 2007). Getting access to deposits and commercial credit funding makes MFIs progressively independent from the subsidies. Subsidized MFIs are allowed to keep their status when necessary technical assistance is provided in the form of subsidizing investments in infrastructure and management information systems for example (Ledgerwood and White, 2006).

Figure 4. Ranking of some OIC Countries by categories



Morocco is ranked first in the MENA region as it takes priority for accounting transparency and imposes a good regulatory disposition in the microfinance sector. More than 95% of total outstanding credits are provided by only four MFIs. All these institutions follow the international accounting standards (IFRS standards) in their accounting reports and financial statements, with high conformity levels[20]. Since 2007, the Moroccan Ministry of Finance has established "The Microfinance Chart of Accounts", which includes the financial statements and accounting practices that should be followed by the MFIs. However, presently, there is no specific regulatory or legislative system protecting microfinance institutions' clients. All fees and loan terms are not compulsory for MFIs to disclose, and interest rate information is not available to the public. When it comes to dispute resolution, the ineffectual judicial system makes disputes costly and lengthy to be resolved in an effective way. The

[20] For instance, Al AMANA microfinance institution, which provides 52% of total credit outstanding in the country in 2010, declared to have 87% conformity with the IFRS standards.

lack of transparency and weak judicial system are the two main obstacles facing the microfinance institutions' credibility and sustainability.

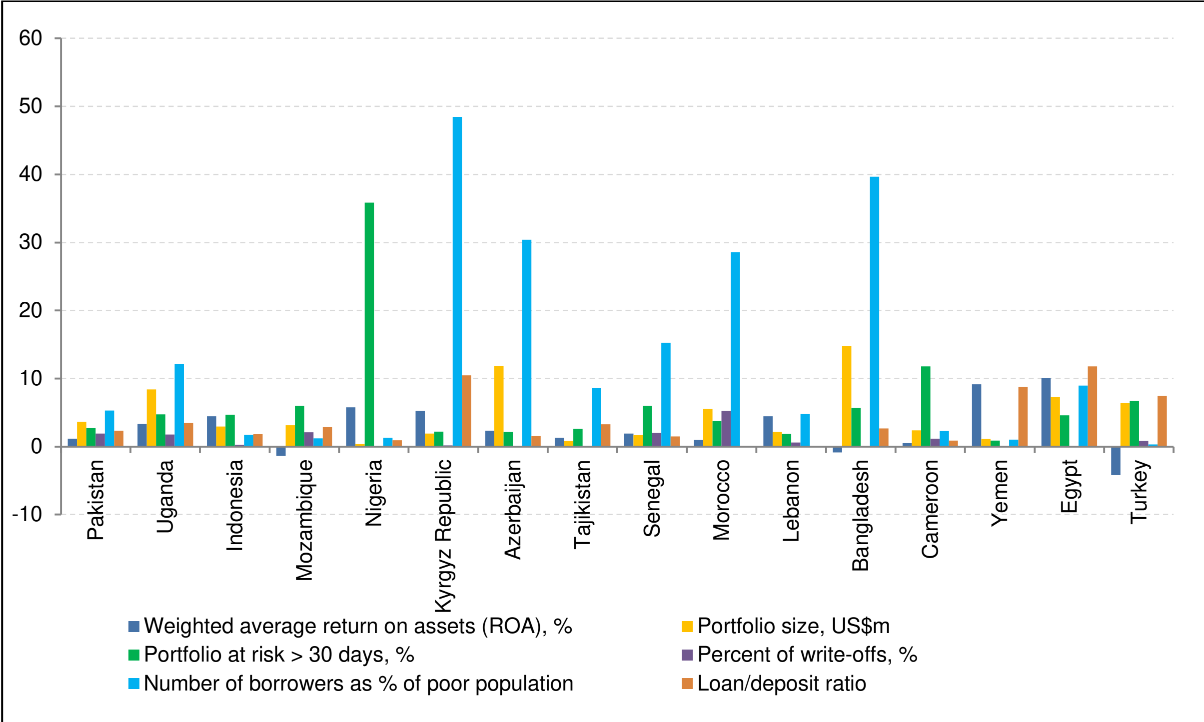
In Uganda, despite the political turbulence in the country, microfinance is quite developed compared to other African countries and considered as one of the developed microfinance sectors in the region. However, its sector showed a negative growth from 2011 and 2012 (the overall score has dropped by 2.1%). The negative effect is mainly due mainly to the exorbitant increase in inflation rate during the past years with an inflation rate was about 18.7% in 2011. In reaction to the inflation pressures, the central bank increased the main policy interest rate from 13% to 23% in just 4 months (from July to November). As a result, the microfinance demand shrank which explains the negative change in the overall score of about 2.1% between the year 2011 and 2012. Since 2003, Uganda has passed explicit legislation in order to introduce new range of regulation to cater microfinance institutions. The Ugandan Microfinance Institutions have been categorized into 4 tiers. Supervision and monitoring depends on MFIs' category. MFIs are regulated by the Bank of Uganda according to the Microfinance Deposit-taking Institutions (MDI) Act of 2003 and the Financial Institutions Act (FIA) of 2004. Each category is supervised under one of the two departments of the Bank of Uganda Supervision Unit. Tier 1, Tier 2 and Tier 3 institutions operate under strict regulatory and supervisory restrictions by the Bank of Uganda and they are subject to minimum capital adequacy requirements. However, Tier 4 institutions, which enclose the informal microfinance sector, are monitored by other parties like the National Board of Non-Governmental Organization and the Department of Cooperatives within the Ministry of Tourism, Trade and Industry.

Financial reporting and accounting restrictions in Uganda have also been developed over the recent past years. Formal MFIs are required to comply with IFRS standards in their reporting. In particular, they are asked to prepare external audited quarterly statements and present the annual audited financial reports regarding the public disclosing interest rates and performance indicators of the loans. However, NGOs and SACCOs do not have to follow these standards. The strong regulatory and supervisory system, subsequently, makes Uganda, according to the EIU data 2012, ranked three in the world microfinance ranking in term of regulatory framework and practices and number two among OIC countries.

II.2. Financial Performance

In microfinance industry, the biggest problems practitioners face are outreach and sustainability. The growth of different microfinance institutions is much related to microfinance programs and funds requirements. At some stage when they are quasi-matured, namely when outreach, cost effectiveness and portfolio quality are being relatively achieved, MFIs can leverage funds from commercial banks. Notwithstanding, these MFIs have to provide enough guarantees in case of default. Good regulatory and supervisory environment facilitate the access to this commercial funds by setting up strong legislative and regulatory systems and specific MFIs standards, including capital adequacy ratios, portfolio quality indicators and accounting transparency. Credibility of MFIs in the eye of customers, on the other hand, should be assured through credit information and secured transactions.

Figure 5. Financial and Performance Indicators in some OIC Countries



Financial indicators matter a lot in MFIs rating. Indeed, microfinance rating agencies, unlike the typical rating agencies that focus mainly on issued debt riskiness, rate MFIs overall performance indicators in terms of outreach and sustainability (Hartarska, 2005). In this study, According to EIU Data, 281 MFIs in the 16 representative OIC countries are being examined. They account for 11.92% for the total value of loan portfolios (74.4 over US$623.7 millions) and for 19.71% of the total number of deposit accounts. A brief look at figures 4 and 5 leads to obscure notes. In OIC countries, operational self sufficiency of the MFIs is relatively verified except in Nigeria and Cameroon where Portfolio At Risk (PAR) exceeds 10%. Egypt, Yemen, Nigeria and Kyrgyz Republic, which have low to average Regulatory Framework and Practices Scores, seem to have the higher rates of Weighted Average Return on Assets (10%, 9.1%, 5.8% and 5.3%, respectively). Previous empirical research on microfinance regulation has attempted to find a relationship between financial performance and regulation. Hartarska (2005) analyzes MFIs in Central and Eastern Europe, and finds that regulated MFIs perform less ROA compared to unregulated MFIs. In a following work, Hartarska and Nadolnyak (2007) find no significant relationship between regulation and financial and performance. This result is also consistent with the results of Mersland and Strøm (2009). On the other hand, Ben Soltane (2009) conducts an empirical study on 40 MFIs from Mediterranean countries, and finds that MFIs that comply with accounting practices achieve higher rates of performance. Besides, he shows that MFIs that are subject to regular financial auditing are associated with better sustainability.

III. THE ECONOMICS OF MICROFINANCE: GROUP LIABILITY, PEER MONITROING AND TRANSACTION COSTS

Microfinance is defined as “The collection of banking practices built around providing small loans (typically without collateral) and accepting tiny savings deposits” (Armendáriz and Murduch, 2005). It provides a large package of financial services to poor households. The impressive part is that the latter are not required offering collateral in order to benefit from a microfinance scheme, which is definitely not the case when dealing with the traditional banking system. Till now, there is no striking evidence of an efficient micro lending mechanism that assure high repayment rates, lower transaction costs (including cost of default), maximum pay off and a positive macroeconomic and social impacts. Some research studies find that the joint liability feature of group lending leads to an optimum contract. Whereas others researchers, based on field empirical studies, show that there is no change in

repayment rate while switching from group liability to individual liability. In the following subsection, we review these studies.

III.1. Group versus individual liability

Microfinance institutions, referred to as MFIs, have developed innovative microfinance mechanisms to guarantee their sustainability. The most common is group lending. This mechanism makes the group of borrowers, rather than the solely borrowers, responsible for the repayment of the loan made by a member of them. If the group cannot afford the repayment of the loan, than the entire group's members have to contribute to its repayment or they will be penalized, and they will be banned to ask for additional loans in the future. Usually, members within each group are either relatives or neighbors and have social ties (referred to as "social capital" in the literature) which may facilitate individuals to monitor and screen each others. Joint liability, which serves as a perfect collateral substitute, stimulates monitoring, screening and debt enforcement. Thus, repayment rates in group micro lending contracts are expected to be high.

Theoretically, group liability leads to efficient micro lending contracts (Besley and Coates, 1995; Ghatak and Guinnane, 1999; and Armendáriz and Gollier, 2000). Some of the theoretical studies focus on social ties within group lending and its role on repayment performance of the group. Besley and Coates (1995) stress that without social sanction; individual liability may overcome group liability and suggest that social collateral bolsters group liability contracts. In the same line of research, Wydick (2001), in his model, shows the threat of expulsion from the group is a credible sanction that contributes to a perfect Bayesian equilibrium punishment strategy. From another angle, others illustrate the advantage of group lending contracts on individual contracts. Armendáriz and Gollier (2000) specify that this advantage is due mainly to the innate aspect of the group lending programs which is the joint liability term of contracts. Rai and Sjöström (2004) argue that joint liability is a puzzling element to an optimal lending contract in the presence of imperfect informal arrangement. Ghatak and Guinnane (1999), using a simple economic model, show that the implementation of joint liability ameliorates enforcement of repayment problems[21].

However, field evidence proved otherwise. By implementing a field experiment conducted by the Green Bank in the Philippines over three consecutive years, Giné and Karlan (2008) find that repayment rates remain unaffected when group liability centers convert to individual liability. Earlier research of Giné and Karlan (2006), studied over one year, find similar results. Despite of the weaker peer loan monitoring, they remark higher growth in individual liability mainly due to the discharge of the new members from social constraints of the existing members. Recently, many MFIs switch to individual liability contracts rather than group liability. Even the Grameen Bank is changing his strategy, which was based on the logic that insider have the right to screen and monitor her peers, to become more "flexible" by permitting individuals to benefit from another loan in case of default, and, thus, help them to get back on the track. Lenders, still, are afraid to adopt the new "flexi-loans" program as they presume to be riskier and costly.

Sharma and Zeller (1997) provide empirical evidence that repayment problems increase when group members are relatives, arguing that the latter, in practice, resort to other alternatives for debt enforcement like repayment delay. Ahlin and Townsend (2003) also find that the presence of strong social capital in group lending in Thailand is associated with weaker repayment performance. Gómez and Santor (2003) find that the probability of repayment default is much weaker when group members know each other before joining the group and have greater trust between them.

[21] However, they indicate that social capital, all along with group size and dynamic incentives, is among the problems lenders face in joint liability contracts. The peer pressure in such context may have negative implications on group members' lives, such the case of the Bangladesh Rural Advancement Committee where group members act violently against defaulters. In the same context, Montgomery (1996) mentions a story of a woman whose house was flattened when she failed to pay her housing loan.

III.2. Information asymmetry and transaction costs

Higher interest rates drive worthy borrowers out of credit market, leading to inefficient outcome. This is a market "imperfection". Abbink et al. (2006) demonstrate, using laboratory experiments, that higher interest rates increase default rates. MFIs suffer from a major problem, information asymmetry, which is due mainly to moral hazard and adverse selection. Moral hazard[22] occurs when lenders have limited information on the effort made by borrowers once the financial contract signed while adverse selection occurs when the lender cannot differentiate between the types of borrowers according to the riskiness of their projects. Analyzing adverse selection and moral hazard is necessary to understand market imperfections. Although it is costly, effective loan monitoring can help MFIs overcome the problems resulting from these imperfections. Loan monitoring is very important to assure effective loan utilization and timely repayment.

III.2.1. Adverse selection problem

In case of adverse selection problem, when lenders risk their inability to distinguish risky borrowers from safer borrowers, group self-formation provides the needed information about each member of the group. By doing so, potential borrowers would attempt to select the safer among them, eliminate the bad credit risks to prevent projects default, and thus lower interest rates by reducing costs. Ghatak (1999) argue that this screening mechanism can help to reduce adverse selection. Another way to stretch information to the lender is through public repayment meetings, which is a strategy made by Grameen Bank and its replicators, consists in organizing public meetings when borrowers repay their loans. This enables MFIs or micro lenders to extract private information revealed from members about each others during the meetings. However, attending group meetings can be costly for borrowers, especially in rural areas where clients' houses are distant.

Efficient design of microcredit contact depends largely on the presence of informal side-contracting and a high cost of default. Rai and Sjöström (2010), by presenting theoretical models, attempt to determine the efficient microcredit contact, taking into consideration informal side-contracting. Their findings differ accordingly. When informal side-contracting is perfect, the design of the micro lending contract is, then, relatively unimportant. In other words, whatever be the micro lending contract scheme, it will be efficient i.e. the funds offered by lenders will be used efficiently by borrowers to maximize their surplus. The most important is to provide sufficient resources for clients, rather than concerning about how they are provided. In the real world, however, side-contracting is indeed imperfect, which is due to "internal contractual frictions" (informational and enforcement problems). In such world, public repayment meeting subsidizes traditional collateral, and borrowers can mutually insure each other against default. Liability doesn't matter a lot. A change from joint liability to individual liability would not shape repayment rates. However, when repayments are not made at public meetings, repayment rates deteriorate and borrowers are no longer mutually insured. Mutual Insurance arrangements are only incentive compatible if the cost of default is high enough to prevent strategic default[23]. Public repayment meetings are, otherwise, useless. Furthermore, Natarajan (2004) proves that repayment rates in joint liability contracts are very high even when households are not able to offer any traditional form of collateral. Group lending can, thus, solve the problem of adverse selection (Ghatak, 2000 and Armandáriz de Aghion and Gollier, 2000).

III.2.2. Moral hazard problems

Moral hazard was studied by, among others, Stiglitz (1990), Benerjee et al. (1994) and Laffont and Rey (2003). Moral Hazard can occur in two different cases. Customers, when they get their loans from lenders, can choose to falsely declare big loss or default, and flee with the money. This is an ex-post

[22] "Moral Hazard in lending refers to situations where lenders cannot observe either the effort made or action taken by the borrower, or the realization of project return" (Armandáriz and Morduch, 2005).

[23] Giné et al., (2011), show that strategic default occurs frequently in joint liability context. The reason behind this phenomenon is that borrowers voluntary prefer declare default when the number of defaulters within their group rises, rather they support joint liability. They find that 95% of Muslims and 89% of Hindus reveal that, although they have enough money to pay back their loan, they chose not to do.

moral hazard. In such case, the damage is certain. Lenders lose the loan total amount, and they have no choice but enforcing the loan contract, something hard to do in developing countries due to the lack of an efficient judicial systems. Even if we assume otherwise, the exorbitant costs of the process, compared to the small size of the loan, would prevent lenders to go forward. The second case arises when lenders are unable to ensure the effort made by borrowers to success their micro projects, or to verify that the money they have been lent for specific purpose[24] is indeed spent for that purpose. This is an ex-ante moral hazard. Lenders need sort of "internal" source of information to get the feedback of each borrower's project investment. Screening and monitoring by peers in group lending programs can mitigate ex-ante moral hazard issues by imposing penalties upon borrowers who have chosen high risky projects (Stiglitz, 1990). In Stiglitz's model, the sanctions are costless, and informational problems can be efficiently treated. But, typically, monitoring and enforcement are costly even in group liability contract. The difference is that, in Stiglitz's model, the risk barred by the lender is minimized, while in models where monitoring is costly, the risk is transferred from lenders to borrowers.

In presence of moral hazard, when micro entrepreneurs observe each other's efforts undertaken to run their projects, group lending contract is, then, optimal and more efficient, for the lender, than individual lending. This efficiency cuts down when they collude, but, still, remains better than when they do not observe each other's efforts, and do not use, at the same time, appropriate revelation mechanism. Information sharing is needed prevailing in group lending even when they perfectly collude. Mutual monitoring can be costly for entrepreneurs. Lenders induce the latter to monitor each other's if the cost does not exceed a specific threshold (Laffont and Rey, 2003). Cason, Gangadharan and Maitra (2012) find that, when peer monitoring is less costly to lender monitoring, sequential group lending can perform better than individual lending in term of higher take-up rates of microcredit contracts and repayment. However, when monitoring costs in group and individual lending models are equivalent, the group liability has no effect on lending, monitoring and repayment behavior.

To summarize, the puzzle of microcredit remains, so far, cloud. Group lending contracts, with lower cost of monitoring and enforcement, can be seen as the most suitable scheme that lenders may opt for. Individual based contracts perform better in term of capital return, but rising interest rate above a certain limit may affect the borrowers' portfolio quality, and thus, reduce the MFI's profitability. Information problems shape the principal-agent relationship and lead to high transaction costs, related to searching, monitoring and enforcement costs, which are reflected directly on the interest rate endured totally by the borrower. How to overcome such problems remains the core interest of researchers.

IV. ISLAMIC MICROFINANCE PRACTICES

IV.1. Review of the literature on Islamic Microfinance

Islamic microfinance is the provision of *Shariah*-compliant financial services to the low-income individuals. It is the merger of two rapidly growing industries which are Islamic finance and microfinance. According to Islamic rules, financial inclusion is assured through two main economic instruments, risk-sharing and equitable redistribution of wealth. It is inspired from the core basic of Islamic economics, which is achieving social justice i.e. providing equal opportunities for all social segments (Chapra, 1983). Islamic microfinance provides risk-sharing financing contracts, or Debt-based financing contracts, and promotes for access to finance. Market imperfections, mainly due to information asymmetry and higher transaction cost, enforce the financial exclusion. These impediments ban low income people (unbanked), or micro enterprises that lack collateral to get benefit from financial market access. Information asymmetry problems often exist in Profit and Loss Sharing-based contracts. Literature provides restrictive studies analyzing the efficiency of different mode of financing based on *Shariah* principles under asymmetry information problems. In an attempt to study the relationship between the financial capital structure and the agents' incentives under asymmetry

[24] Microfinance programs offer different range of services including microcredit for investment, consumption, and education, among others.

information, Yousfi (2012) explores the feature of two specific PLS-based contracts, which are *Mudarabah* and *Musharakah* financing modes, under moral hazard problem. Analytical analyses come up with interesting findings. In *Mudarabah*-based financing contracts, the risk assumed by the lender, under moral hazard problem, is very high[25]. The latter has no control rights and he lacks the exact information on the effort made by the entrepreneur to succeed her project. So, in order to increase the entrepreneur's incentive to exert effort, he must have the highest profit share proportion. In such case, entrepreneur would be more committed to succeed his project to assure higher returns when business success is attained. Moral hazard can be solved, hence. However, *Musharakah*[26] financing scheme cannot solve such problem. In this mode of financing, lender and entrepreneur contribute in financing and in the management, all together. Therefore, the profits are shared according to a pre-determined ratio, and losses are jointly endured by both of them according to their capital contribution. In the context of microfinance, the IMFI serves as partner or investor with the micro entrepreneur in income-generating activities, instead of mere lender. By developing a theoretical model, Yousfi (2012) finds a negative relationship between capital structure and management. By assuming the efforts made by the entrepreneur and the lender to be costly, she demonstrates that, in an optimal financial contract, the entrepreneur's financial contribution is decreasing with his share in management. Indeed, when the lender is more engaged in management, he will generate costly and non-contradictable efforts as they are unobservable. The entrepreneur will have then to provide higher amount of equity to pay the extra cost. As a result none of them would be motivated to make their best levels of efforts. Nabi (2013) introduces alternative mechanisms to increase the entrepreneur's incentive to exert the needed effort to succeed the project. He suggests that, in equity-based contracts, profits can be shared according to two different shares initially fixed but ex-post revealed and contingent on the success or failure of the project. In case of failure, the profit sharing contract stipulated that the loss shares should equal the proportions of capital participation of each party. But in case of success the entrepreneur receives a higher share of the profit. He finds that within one period this mechanism increases the proportion of the entrepreneurs who could benefit from the profit sharing contract given the higher probability of the project's success driven by the additional incentive for higher effort. In addition, Nabi (2013) shows that under certain conditions, having two subsequent profit sharing financial contracts reduces the moral hazard since the entrepreneur's higher effort during the first period increases the second-period expected profit. Indeed, he shows that the second-period expected profit of the entrepreneur is positively correlated to the first-period probability of success. Ismal (2009), on the other hand, proves that, in *Murabahah*[27] financing scheme, the price volatility of the goods being financed induces the entrepreneurs to gain easy-made profits by pretending to be default, which lead to ex-post moral hazard problem. Islamic banks' investigation and monitoring can mitigate such problem by prevent this risk to happen until the end of the contracted period.

Loan monitoring is important for each IMFI to maintain effective loan utilization and guarantee timely repayment. Repayment can be made differently depending on the Islamic Microfinance model[28]. For each model, specific monitoring system is needed. The matter of monitoring cost is widely common in PLS-based contracts. Gale and Hellwing (1985) stress that, in PLS-based contracts, lender, in order to observe the project's return of the borrower, has to bear costly state verification. *Mudarabah*-based contracts are the riskiest of all *Shariah*-compliant financial products as the capital owner (*Rab al Mal*) has no real control over the executive management, but bears total financial losses when its partner (*Mudarib*) defaults. Under such arrangement, profits are pre-determined and shared on the basis of agreed ratios, while the IMFI assumes the entire losses. The latter offers the money needed for a micro project and the micro entrepreneur contributes by his time and effort. Control and management are the responsibility of the *Mudarib*, while the capital provider can only supervise and monitor. Moral hazard problem arises when the borrower has an incentive to undertake lower effort which generates in the

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[25] In *Mudarabah* contracts, the lender, when the project succeeds, share the pay off with the entrepreneur according to a pre-determined ratio. However, in case of default, the losses are totally borne by the lender (as the capital provider), while the entrepreneur loses nothing but its time and effort.

[26] *Musharakah* is a partnership contract where two or more persons contribute by their capital and management together to share the profits and losses.

[27] *Murabahah* is a trade-based contract with a differed payment.

[28] For instance, incremental repayment, repayment in installment or small installments.

worst case the project's failure but not financial liability. However, microfinance experiences show that as "brought back" shares of *Mudarib* increase over repayment periods, he will be more induced to behave for the best of his business. Also, offering repeated loans can be considered as an effective way to manage the risk.

The second Islamic way to boost financial inclusion is the equitable redistribution of income among the society. It can be implemented, by providing funds to poor people who do not work or cannot work (like handicapped) to fulfill their minimum requirements (food, healthcare, education), or to micro enterprises, through different instruments such as *Zakah*, *Qard hasan*, *Waqf*, and *Sadakat*. In microfinance contracts which are based on such instruments, moral hazard problems are widely common. In *Qard hasan* (interest-free) loan context, poor borrowers have to repay the exact loan amount with no extra fees. By spending their loan for consumption or other purpose other than income-generating activity, borrowers may find themselves unable or unwilling to pay back the loan at the due time. In Iran, for instance, among more than 1200 *Qard Hasan* Fund institutions, repayment rate was only 60% (Kazem, 2007). *Qard Hasan* beneficiaries, there, believe that the money offered for them is a sort of *Tabaru'* (for charity) as they are forgiven, when default, and no eventual punishment is imposed on them (Karim, Tarazi and Reille, 2008). Similar to conventional microfinance, social capital can serve as the basic collateral. Usually, peer monitoring and pre-selection of the clients, based on their reputation, contribute to lessen the moral hazard problems that lenders face.

Islamic microfinance can also operate based on other instruments like *Waqf* and *Zakah*. *Zakah* funds may be used in providing necessary funds to fulfill consumption needs of poor people at the first place. However, *Zakah* funds and *Waqf* funds may both be used in providing capital investment and working capital financing for micro projects. The first priority in using *Zakah* funds is to eradicate poverty by assisting the poor and the needy. *Zakah* fund management institutions and Wa*qf* certificates of different denominations usually raise the cash funds and can be used in creating pools of funds in order to provide microcredit to the poor on the basis of Islamic *Shariah*. However, using the Waqf mode of financing, default rate are more likely to rise. Poor micro entrepreneur may misuse the granted loan by using it for consumption rather than for project investment. Implementing an integrated Islamic microfinance model incorporating the two modes of financing, the *Zakah* and the *Waqf*, may resolve fund inadequacy problem of Islamic MFIs (Hassan, 2010). Covering their basic needs of consumption, by the utilization of *Zakah* funds, micro entrepreneurs can allocate all their resources to succeed their businesses. Additionally, they will benefit from lower refundable loan, as no return can be realized from *Zakah* fund.

MFIs often face different challenges and difficulties. It is crucial for them to manage a range of risks to prevent eventual losses, and, therefore assure their financial sustainability. Effective loan monitoring enhances them to overcome some of these difficulties. In the following section, we will present practices of three specific microfinance institutions from different countries. An outlook on best practices of different microfinance institutions may help practitioners and researchers to develop innovative products and, thus, implement efficient models.

IV.2. Best practices for some MFIs (Conventional and Islamic)

IV.2.1. AL AMAL Microfinance Bank (Yemen)

Since the stormed political crisis in 2011, Yemen is facing a difficult economic situation. After The "Arab Spring", growth in Yemen fell by more than 10% in 2011, followed by a further 1.9% decrease in 2012, leading to social unrest[29]. By the end of 2011, poor people were about 12 million. Consequently, microfinance sector has been affected. Islamic Microfinance has a great potential in Yemen. 90% of MFIs offer *Shariah*-compliant products and services, yet, with a total number of active clients of about 75 000 in 2011. This number is much to rise to reach 1 million customers[30]. Many MFIs in Yemen have moved forward to achieve this goal. Al AMAL microfinance institution

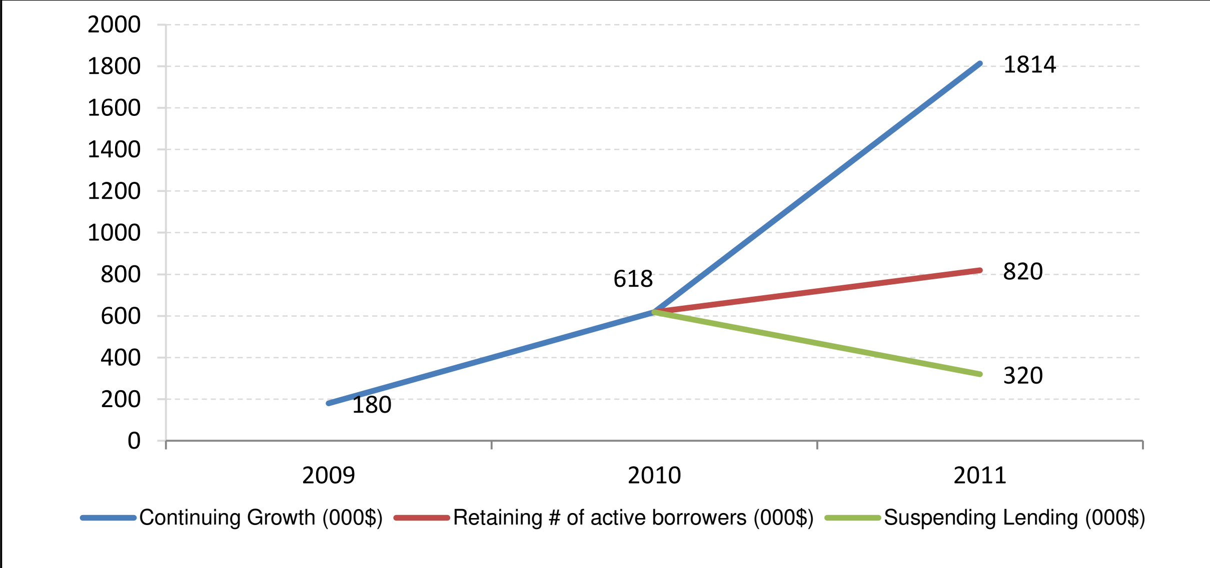
[29] The World Bank. "Global Unemployment Trends 2013: Recovering from a second jobs dip".
[30] According to Mr. Najah Al Mugahed, managing director of Yemen Microfinance Network.

(AMB), for instance, which is considered to be the leader institution, declared to a strategy to expand its clients' portfolio and use innovative types of *Shariah*-compliant products. Accordingly, in 2011 it was named as the winner of the "Islamic Microfinance Challenges Award 2010" and the winner of the "Most Innovative Microfinance Product" for offering new microfinance products compatible with *Shariah* principles which are *Ijara*, Savings[31] and *Takaful*[32].

After the crisis, AMB's senior executive management team opted for an option to assure the sustainability of the bank. They have chosen to develop a Contingency Plan by "continuing lending carefully, implementing the maximums possible of the 2011 Business plan activities and coping with the crisis according to the contingency plan of the bank"[33]. They recourse to new risk management procedures to mitigate the crisis effects on the performance of the bank, like the use of Value At Risk (VAR). The crisis had some negative impacts on the microfinance bank: decrease of the loan portfolio, an increase of average Portfolio At Risk from 1% to 2.5% in one year, and cut of funds from some international organizations. However, the contingency plan comes up with overall positive results. AMB succeed to surpass the crisis effects by making a portfolio total value of $US820, 000 and realizing a positive growth rate of 1.3% at the end of 2011. By April 2012, the Bank succeeded to decline the PAR to 1.2%.

To resolve the problem of credit risk, AMB adopted the group-based financing scheme. 65% of its loan portfolios are group-based where the group itself serves as collateral. However, the individual loans are offered mainly to employee where their wages serve as required collateral. Thus, covering non-salaried people may expand client outreach.

Figure 6. Impacts of the adoption of "Contingency Plan" on portfolio growth



AL AMAL bank uses only three distinct *Shariah*-compliant products, *Murabahah* and *Ijara* for investment fund, and *Takaful* for microinsurance. In order to reduce credit risk, it adopts a dual-core strategy based on credit portfolios' diversification; geographical and customer diversification. It has 13 credit bureaus and a total number of active borrowers of about 16 000 clients, with more than 65%

[31] The offering of voluntary saving accounts presents an outstanding opportunity for low-income people to become familiar with the saving culture, and thus benefit from its advantages. In 2011, the number of active savers in AMB bank rises to 33 047, that is about $US5.5 million saving portfolio value[31], focusing mainly on woman and children (46% are female and 27% are children). AMB is the first MFI in the MENA region to offer micro-saving product.

[32] Established in 2002 by joint contribution of the Yemeni Government, represented by SFD, Arab Gulf Program for United Nations Development Organization (AGFUND), and also of both Yemeni and Saudi private sectors. But it starts its operations in 2009. It has 25% of microfinance market share in Yemen in 2011.

[33] AL AMAL annual report 2011.

female, and only 5% of the clients coverage are living in rural areas. The average loan disbursement size is USD 239 which indicates that the bank targeted clients are mainly the extremely poor. The main challenges facing AL AMAL bank today is how to expand its services to cover rural areas under difficult social and security circumstances. Enhancing the implementation of Islamic microfinance credit bureaus amongst the rural regions can extend improve the financial access of another category of the community, which is more familiar with informal cooperative transactions. Partnership with other institutions may also offer the possibility for greater outreach and expansion. Besides, adopting an innovative Islamic microfinance model based on *Waqf* and *Zakah* may help the bank to include *Qard Hassan* investments among its products. *Waqf*-based IMFIs can compete with innovative products of conventional MFIs and enhance the practice of Islamic principles and values within microfinance industry (Ahmed, 2007).

IV.2.2. ASA (Bangladesh)

Bangladesh is the first country that formally introduced Islamic Microfinance Institutions. They have successfully implemented different *Shariah*-compliant financial products and models to finance micro enterprises and low-income people (*Murabahah*, *Bay' Mu'ajjal* and *Waqf*). The total number of clients using *Shariah*-compliant microfinance products and services rises to 445,000, where 56,000 of them use *Qard hasan* loans, with a total outstanding portfolio of about US$92 million (El-Zoghbi and Tarazi, 2013). A summary of such experiences is shown in Table 3 in Appendix 2.

According to Forbes Magazine, ASA (Association for social Advancement), the Bangladesh microfinance institution, is ranked at the top ranking of 50 MFIs all over the world, in term of sustainability, cost effectiveness and financial performance, while Jagorani Chakra Foundation and Grameen Bank came at the 16th and 17th place, respectively. Besides, it was classified as one of the 100 best NGOs of the World in 2012 by "The Global Journal". ASA is a wide-spread NGO, with more than 4,735,000 of active members and 3,025 branch offices located in 64 Bangladeshi districts. It offers a wide range of products and services to large number of poor population. In particular, it offers products like microcredit, microinsurance (mini life insurance and loan insurance), savings (mandatory, voluntary and long term savings), and foreign remittance services. Other than financial services, ASA provides non-financial services in order to improve the socio-economic condition of their clients, namely health assistance and awareness, education strengthening program, and physiotherapy and Yoga treatment to their traumatized clients.

Since its establishment in 1978, the NGO has been implicated in different social business investments. Lately, in April 2013, ASA president pronounces the 1st convocation of the establishment of "ASA University Bangladesh", with the main objective of providing access to a high educational institution to lower middle income and poor families through covering tuition fee for poor and women citizen students, and scholarships for overseas students.

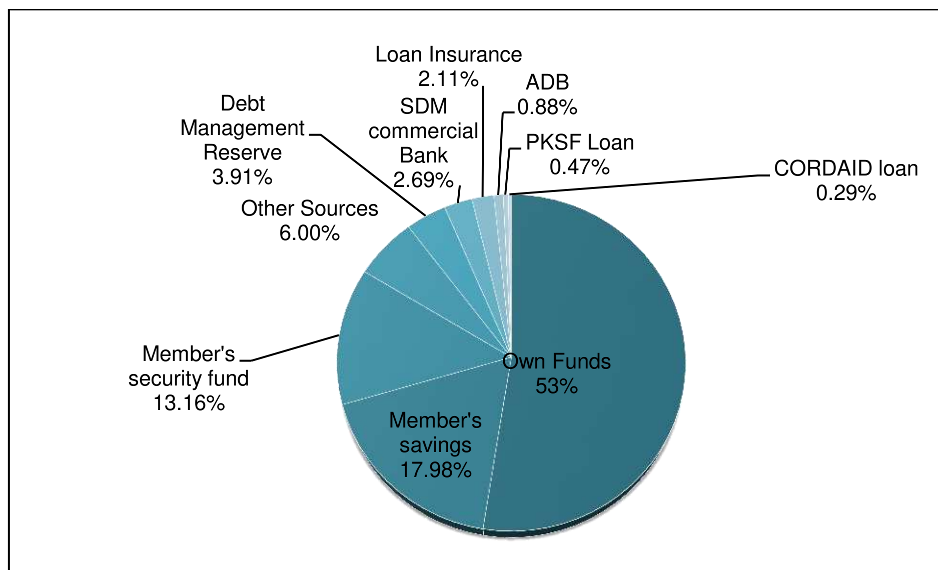
The specificity of ASA arises from its clear vision and straightforward objectives, simplicity in management and operational procedures, and its awareness of how and when to achieve them in efficient ways. Just few years after it was set up, ASA has taken several strategic decisions and been engaged in multiple-goals projects, including:

- In 1987, ASA found the "Socio Economic Credit Program" which is a leader program targeting rural organized groups, with the objective is to get them access to effective microcredit and savings products.
- It concentrated its activities on rural areas where more than 70% of total population lives.
- It evolved the "ASA Microfinance Sustainable Development Model", where the ultimate goal was to ensure cost reduction and income increase within the shortest period. Cost reduction was guaranteed through setting cost leverage for all kind of expenditure (provides minimum and simple furniture for collective use, easy and simple management system, no office assistance or even night guard in the units, avoids technical assistance). Consequently, the cost per Taka lent has downfallen from 0.092 in 1993 to 0.059 in 2012. Income increase is realized by expanding its activities into new areas, organizing weekly repayment meetings to ensure strict monitoring, insuring borrowers' life, and setting quick information and management on loan default.

- In 1993, the ASA Research Center was established to conduct studies and surveys, and present them to different field actors (ASA staff members, other NGOs, investors, donor agencies, and media). Besides, the center organizes regular field trip for management monitoring.
- In 2006, the “Catalyst Microfinance Investors” was set up.
- It spreads its activities in 8 different foreign countries, namely in Ghana, Afghanistan, Pakistan, India, Philippines, Sri Lanka, Cambodia, and Nigeria.
- ASA established “ASA-NGO Partnership Build up Program”, which is a pioneering program including 33 active financial partners (NGOs) from all over the country. Through this partnership, ASA aims to assist small and emerging NGOs (which play a role in poverty alleviation) with the technical support, skilled manpower and necessary loan funds to assure their sustainability within the shortage time.

As a result, ASA scaled up its operations after it had succeeded to achieve high repayment rates (99.65% in 2012), high portfolio quality (the PAR was about 2.90% in 2012) and cost effectiveness (operational cost/total average assets reached 9.18% in 2012). By adopting a strategy based on reducing dependency on foreign funds, ASA succeeded to establish its financial and operational self-sufficiency. Since 2001, ASA doesn’t accept any grant or donation. Instead, it uses its own funds mainly from its generating-income activities.

Figure 7. Funding sources of ASA



Despite the remarkable contribution of ASA in the development of the microfinance industry in Bangladesh, a large number of the poor population remains uncovered due to their religious commitment[34]. Islamic microfinance in Bangladesh remains far from covering that segment of population. The largest microfinance institutions that offer *shariah*-compliant products have about 100,000 active borrowers, while the largest conventional microfinance institutions (ASA, Grameen Bank and BRAC) have more than 15 million borrowers.

IV.2.3. KASHF Foundation (Pakistan)

Kashf Foundation is a leading MFI in Pakistan. It started as an action of research program in 1996 supported by Grameen Bank, and has operated as its replicator. It offers group liability based loan contracts (“general loan”) where their main objectives are to alleviate poverty through enforcing women empowerment. The selection of clients is based on strict poverty criteria, and assured by loan officers after a door to door mobilization process. Group centers of 20 to 25 female members are formed. Within each center, a credit committee that includes a manager and different group leaders is created to provide necessary information diffusion and guarantee discipline. In case of default or non-

[34] According to the “2013 CIA WORLD FACTBOOK” of the United States Central Intelligence Agency, 89.5% of the population are Muslims

payment, each member is responsible for the loan repayment of the other member. In addition to the general loan, the Foundation offers a complementary loan, so called "emergency loan", to their clients for different purposes during hard times (pay children's school fees, utility bills and urgent expenditures). This loan is easy and quick to get, and is designed to help women to be at ease and relieved during financial flux with no need to ask for traditional loan with high interest fees or solicit informal arrangements by requesting money from families or relatives.

It began with 15 clients in 1996 to reach to 76,170 active clients in 2005, covering a cumulative number of 250,000 families. For the last decade, Kashf Foundation has maintained its recovery rate at 100% while its portfolio quality has ameliorated (Portfolio at risk-1 day decreased from 0.61% to 0.32% in 2005)[35]. In order to boost its portfolio growth, the Foundation has chosen to focus on repeated clients. Clients who beneficiate from first loan are allowed to take larger size loans. In 2003, it succeeded to build a good reputation as the first specialized microfinance institution in Pakistan that achieve financial sustainability. Build upon its reputation and experience, and after 12 years since its establishment, Kashf Foundation moved forward to set up a regulated commercial microfinance bank, the Kashf Microfinance Bank Limited (KMBL). The law in Pakistan requires that any microfinance institution cannot upgrade to Microfinance Bank unless it serves for at least 3 years[36]. The act was taking to extend outreach by enlarging target clients, especially low income savers, through presenting a new model based on deposits-taking privilege, and by widening distribution network through the implementation of different branches all over the country. Actually, the bank has 31 branches in 26 cities in three provinces, and is planning to open up to 100 branches in 31 cities in the four provinces and in Azad Jammu Kashmir during the next five years. Adopting a new distribution channel strategy based on branchless banking may help accomplish the goal. In Pakistan, branchless banking services are widely offered by several microfinance institutions as they facilitate payment procedures to customers and reduce loans operating costs.

Kashf Bank maintained a Capital Adequacy Ratio of about 12.8% at the end of 2011, less than the ratio required by law. According to the "Prudential Regulations for Microfinance Banks" issued by the State Bank of Pakistan, MFBs are required to CAR of at least 15% of their risk weighted assets. By the end of 2012, the bank has to meet the required ratio in order to guarantee long term financial sustainability.

V. CHALLENGES AND OPPORTUNITIES OF THE ISLAMIC MICROFINANCE INDUSTRY

Countries where microfinance industry is developed, like Pakistan, Indonesia and Uganda, display strong regulatory and supervisory systems (Table 4 in Appendix 2 summarizes experiences of some countries). Studying successful microfinance experiences help countries with less developed microfinance sector to examine their keys of success, and to defeat the gaps attributed to problems inherent to the MFI itself and to the institutional and regulatory environment as a whole, and to implement practical acts accordingly. Specialized governmental institutions (like Central Banks) appear to play the major role in enhancing MFIs to perform better in term of client protection, risk management and innovation. They help to develop the banking infrastructure, encourage the use of good practices, and provide regulatory and supervisory mechanisms to enable MFIs to develop viable business models. As these institutions are important means to put into effect regulatory and supervisory frameworks, there is a need for a supportive legislative framework to be set at one fell swoop. Reforms have to be implemented in OIC countries with the objective to improve the regulatory framework. Parallel reforms in legislative system would enforce the process. Besides, efficient business disputes resolution ensures MFIs' credibility and enhance their reputation.

Due to their deposit-taking and payment-processing activities, formal banks typically require special regulatory treatments. They must comply with rigid regulation and are subject to the direct supervision of public authorities. Prudential regulation is set to manage systematic risks and aim to protect depositors' rights. Adopting non-prudential regulation relying on public disclosure is also required to protect both consumers and investors, ensure competition and to prevent fraud and exploitation.

[35] Annual report of 2005

[36] Section 13 of the Microfinance Institutions Ordinance 2001

Microfinance activities, including credit, saving and insurance services are similar to banking activities from financial and institutional perspectives. Financial regulation appears to be primordial for microfinance banks or institutions taking deposits from the public to ensure the stability and sustainability of the MFI. However, a rush to publicly regulate microfinance sector is inadvisable. Authorities have to set the regulation in a way to make supervision of the new licensed MFIs, including licensed special windows, easier to manage and control. It is recommended to ration the number of licenses, especially at an early stage i.e. when the market is still immature, by setting minimum capital requirement through regulation rather than legislation[37]. Gradual public/private[38] cooperation in the regulation process might be more efficient (Macchiavello, 2012).

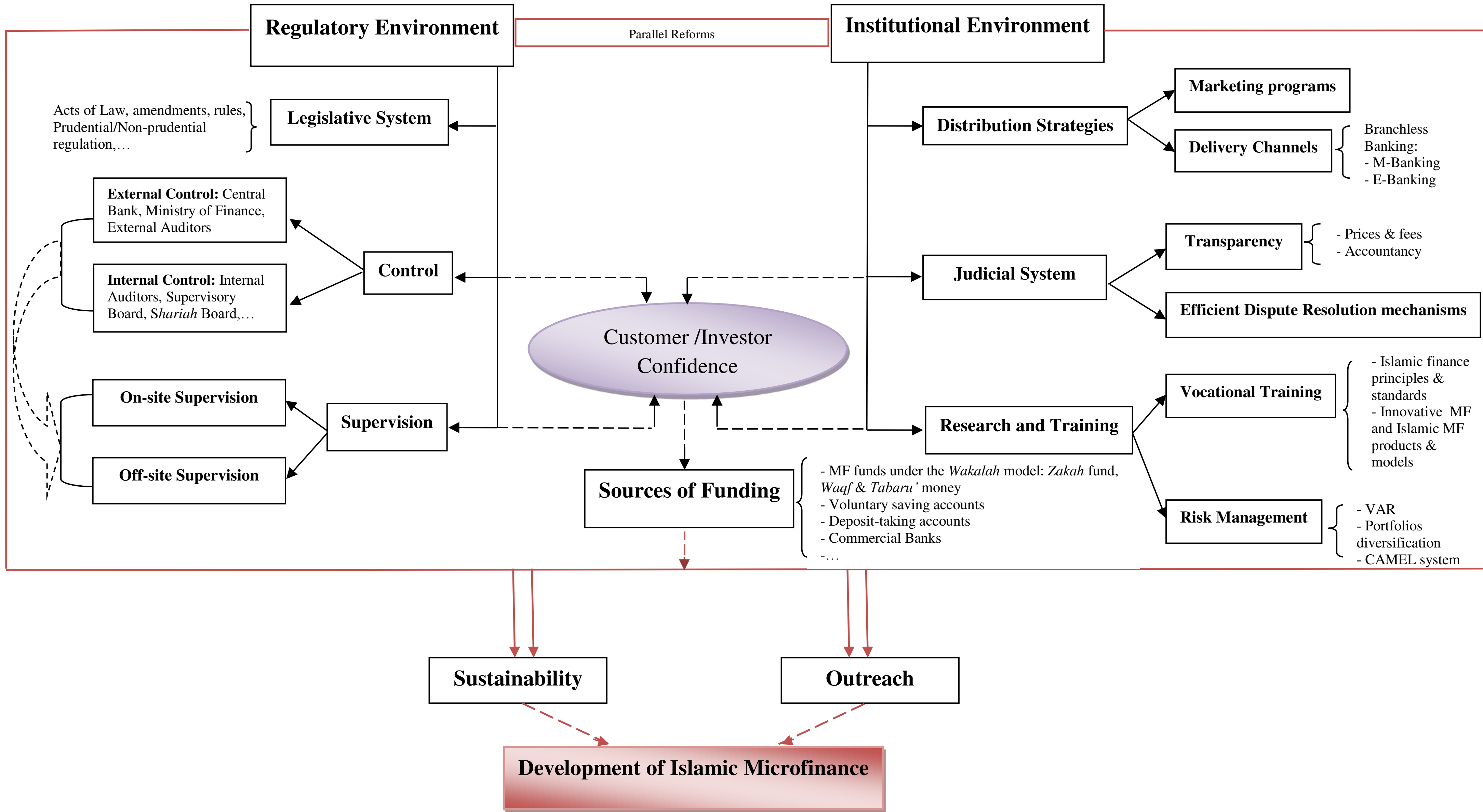
Development of Islamic microfinance cannot be achieved without consistent reforms in legislative and judicial systems. Parallel reforms are required to set a favorable environment for IMFIs to operate and expand their activities. How gaining customers and investors' confidence is considered as the main objective of each Islamic microfinance institution. This issue is illustrated in figure 8. Microfinance providers and their partners need to assure investors and donors about their social performance and the microfinance sector's financial reliability in order to receive funds and technical assistance. Customers who trust the credibility of the IMF institution would voluntary save their money in that institution. Besides, they would be relieved to offer their *Zakah*, *Waqf* or *Tabaru'* funds to IMF institutions. Low income customers often have lower education levels and have limited experience in formal financial services. They may accept to use sophisticated Islamic microfinance products without the necessity to fully understand their principals and financial mechanisms simply because they trust the adherence of the IMFIs to Islamic rules in their products and services. On the other hand, IMFIs are able to solicit for funds from commercial Islamic banks which impose as a condition a certain level of sustainability and outreach.

In this section, we propose bi-dimensional policy recommendations that could be considered for the development of Islamic microfinance industry in countries willing to achieve this goal but constrained by multifaceted problems. The first dimension of recommendations is addressed to policy makers, while the second is devoted to the heads of microfinance institutions management team.

[37] CGAP (2012). *Microfinance Consensus Guidelines*.

[38] The role of private cooperation with the international organizations, like international microfinance networks, rating agencies, social investors and CGAP which release their own guidelines and standards serving as extra informal regulatory power, may contribute to fill regulatory gaps with the public regulator experience in the microfinance field. By developing their own consumer protection codes and monitoring and enforcement mechanisms, these institutions show MFIs how to properly behave in order to obtain financing.

Figure 8. Development of Islamic Microfinance



Authorities whose objectives to develop the Islamic microfinance in their countries may focus as a starting point on enhancing the regulatory and institutional frameworks in their countries through:

A. Reinforce the legislative systems

The regulatory framework has the ultimate goal of protecting the entire financial system. It is set to license IMFI and to define the rules based on general standards to which the latter has to stick, like capital adequacy, minimum capital requirements, corporate government requirements, financial discloser, loan loss provision and reserve requirements. It consists of the prudential and non-prudential regulation. When a deposit-taking microfinance institution turn out to be insolvent, it becomes difficult for it to repay its depositors especially when it is a small institution. Consequently, clients' confidence on financial system will be undermined resulting in run on deposits. Government or the financial authority, in order to undermine inherent risks, requires microfinance institutions to comply with prudential regulation to protect their financial soundness. Such restrictions can promote microfinance sector. Specifically, they can better access to commercial and non-commercial sources of funds, improve standards of control and reporting and thus achieve growth and outreach goal (Rhyne, 2002). However, prudential regulation is costly, officious and relatively difficult to be often practiced by MFIs, contrary to non-prudential regulation which is much easier to apply as it focuses only on preserving the interests of customers and investors.

Regulation and supervision must be jointly set. Regulation without supervision and enforcement instruments is useless. Supervision is a public financial authority duty and usually based on the "Basel Committee on Banking and Supervision" recommendations which present the Basel Core Principles (known as Basel II) as the suitable framework for supervisors of deposit-taking MFIs. Supervision is assured through two instruments, the On-site and the Off-site supervision. The On-site supervision concentrates mainly on information systems of MFIs, their credit and governance systems, internal control[39] within each institution and portfolios evaluations, while the Off-site supervision focuses on providing supportive data analysis for eventual on-site inspections.

Self-supervisory solutions have been often implemented by MFIs in order to identify and manage various risks before being visible to regulators or outside stakeholders, but appeared to be ineffective in protecting the soundness of the regulated institutions especially after the recent microfinance crises (like the Moroccan microcredit crisis in 2009[40] and the crisis in Andhra Pradesh in India in 2010). Self-supervisory solutions are considered as weak form of supervision as, first, MFIs are not enough induced to impose sanctions on themselves, and second the inexistence of legal instruments to enforce compliance to regulatory rules. The reasons of their inefficiency in India are related to the extreme commercialization of the sector, fragmentation, large size, hard competition and multiple borrowings. Similar reasons behind the microcredit crisis in Morocco where it started when the second largest MFI in the country, Zakoura, declared to have credit risk of 30% (which is a higher credit risk than ever reported) and so decided to stop all disbursements. The bad situation drove many clients to default their loans. 40% of clients receive loans from multiple microfinance providers (clients had two to five loans outstanding) at once without disclosing it to the creditors. This factor help non repayment problem to stretch to imperil the whole microcredit sector. In 2009, the Moroccan sector overall credit risk was about 13.7%[41]. It has been shown, hence, that it is better to focus on prudential regulation on large and deposit-taking microfinance institutions that pose a systemic risk due to their size.

Islamic microfinance institutions have also to contribute to the development of Islamic microfinance industry by well managing their human resources, commit to the client protection principles, implement appropriate Risk management system, adopt new distribution strategies.***IMFs should enhance the management of their human resources***

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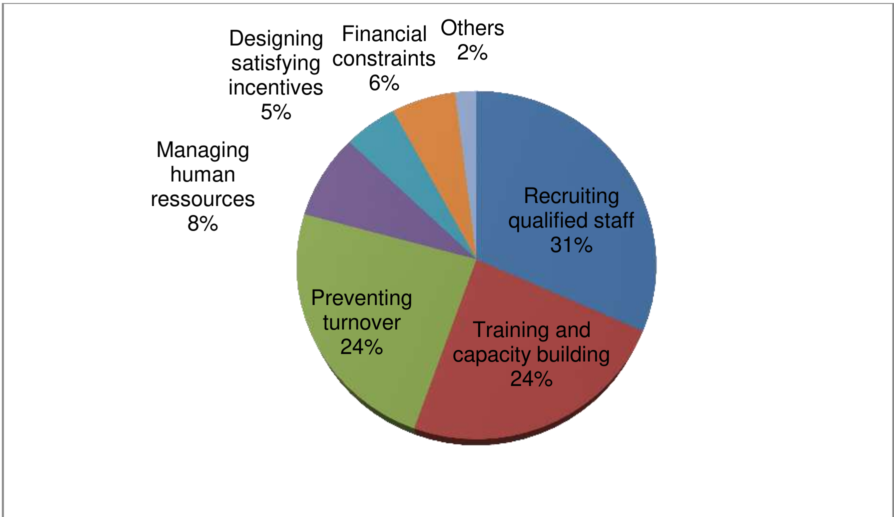
[39] According to The Basel Committee on Banking Supervision, internal control is considered as "a process, effected by an entity's board of directors/trustees, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives" including verification of the efficiency and effectiveness of operations, ensure of the reliability and completeness of financial and management information, and conformity with applicable laws and regulations.

[40] CGAP. "Brief lessons learned from the Moroccan crisis", July 2013.

[41] IFC private study and Moroccan Central Bank's 2010 Annual Report

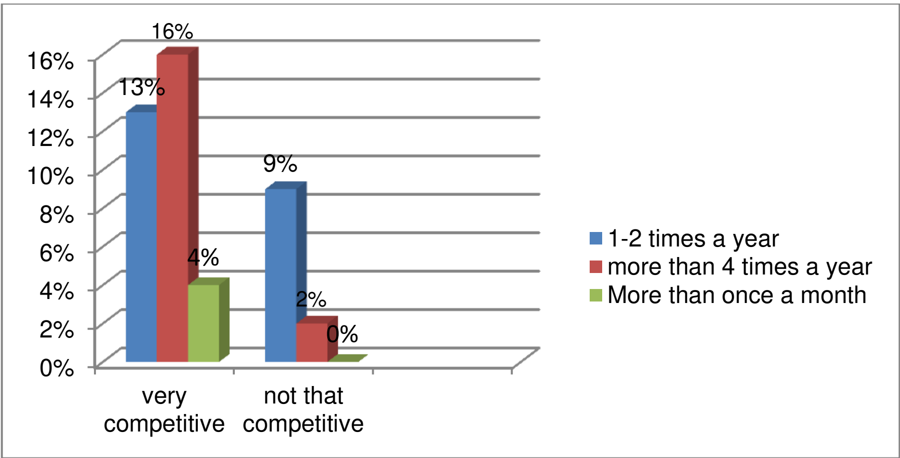
Islamic microfinance is a specialized field that combines banking activities with Islamic social goals. Clients in general lack education about Islamic finance principles and standards. Providing trained managers and staff for Islamic microfinance institutions would cast doubt on the adherence of these institutions to such rules and principles. The staff of the Islamic microfinance institutions is required to have educational knowledge and skills qualifications in both microfinance and Islamic finance related issues. Ongoing training for staff workers can be an efficient way to improve their professional skills and keep them engaged in their works. In fact, according to the survey report by Microfinance Insight in 2008, 54% of sampled MFIs offer training programs one or two times a year, while 39% of them offer it more than 4 times a year. 16% of MFIs that offer trainings more than 4 times a year consider their environment as “very competitive”. Overall, the majority of sampled MFIs indicate that human capital is the most challenging issue among others like financial and technology issues. They explain that recruiting qualified, providing relevant training and capacity building and preventing turnover are their priorities as they are the most difficult to ensure. (See Figures 9 and 10)

Figure 9. Most challenging human resources issues for MFIs



Source: Microfinance Insight (2008): “Human resources challenges and solutions in microfinance”

Figure 10. Frequency of trainings in relation to competiveness



Source: Microfinance Insight (2008): “Human resources challenges and solutions in microfinance”

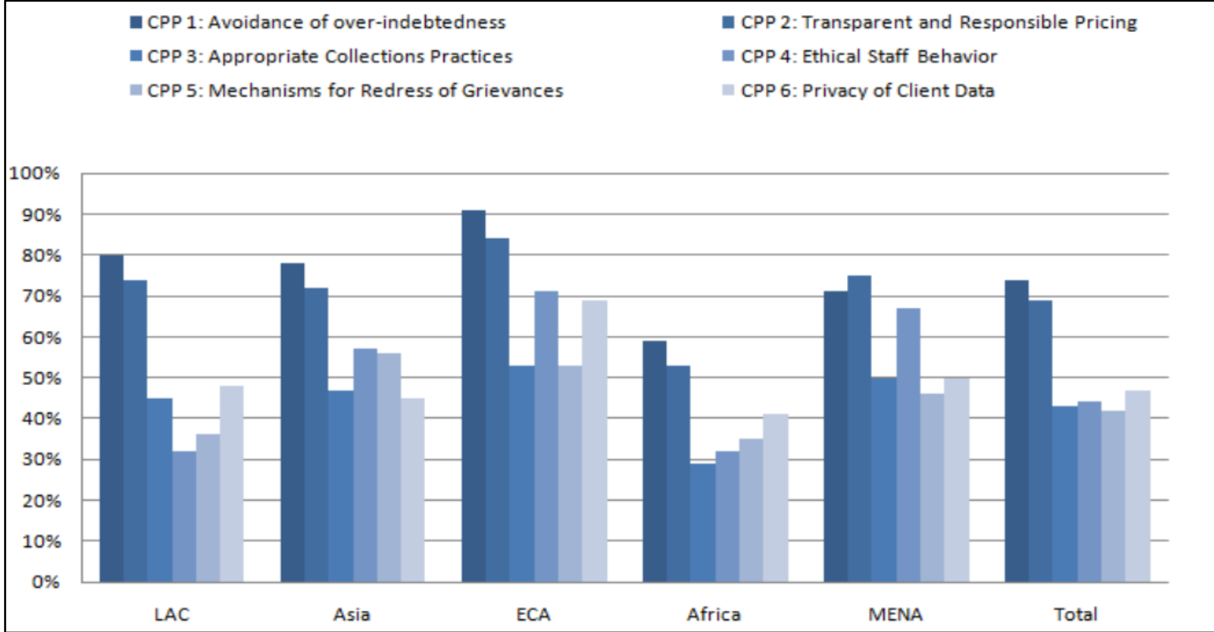
Ensure consistent staff training, advisory services and skills building are essential in building capacities services able to cope with all aspects of the sector from the regulatory and supervisory entities through information systems to public authority agents and funding providers. Training programs should be developing by time to go with modifications and changes that aim at improving IMFs’ efficiency and performance (Khan, 2008). Developing human resources functions and market

research also contribute in capacity building services for microfinance services providers whose main concern is to keep up with the fast changing financial inclusion landscape[42].

B. IMFs should commit to client protection principles

Client protection regulation is essential in any inclusive financial system. It aims not only at protecting already existing clients from eventual abuses or losses resulting from MFIs failure or other reasons, but also assure confidence in microfinance system for potential future clients. It imposes that the information and data provided to customers should be complete, clear and simple to understand and inexpensive to access. According to a study survey made by MIX Market in 2011, consumer protection has been recognized as important element for MFIs to practice good ethics and smart microfinance. However, only 15% of representatives MFIs implement all the six Smart Campaign's client protection principles[43] (see Figure 11), while 69% of them declare to fully disclose prices, terms and conditions of their products to customers prior to sale, and 44% indicated that the corporate culture and human resource system of their institutions are being judged with high standards of ethical behavior. The Smart Campaign's client protection[44] principles contains 7 principles (used to be 6) including appropriate product design and delivery, prevention of over-indebtedness, transparency, responsible pricing, fair and respectful treatment of clients, privacy of client data, and effective mechanisms for complaint resolution[45].

Figure 11. Consumer protection principles across regions



Source: MIX Market Social Performance Data for the financial year 2008-2009

IMFIs that are committed to clients' benefits and to operating profitability are expected to put the principles of responsible finance into action by implementing client protection principles. We have already mentioned in the first section the set of the Code of Conduct for Consumer Protection in Pakistan. By doing so, Pakistani regulators seek to overwhelm mistrust of clients and to guarantee the credibility of the whole microfinance sector. Signing the code means that MFIs agreed to provide the

[42] Koning, A., 2013, *Capacity Building Survey Results*, CGAP.
[43] M. Pistelli, A. Simanowitz and V. Thiel, 2011. State of practice in social performance reporting and management. *MicroBanking Bulletin*.
[44] The Smart Campaign is a global effort aims at unifying microfinance leaders worldwide around a common goal which is providing microfinance institutions with the necessary tools and resources to protect clients. It has mobilized around 1000 retail stores and a number of networks and associations.
[45] For further details look at the draft guidance of the Smart Campaign: "Putting the Principles to Work: Detailed Guidance on the Client Protection Principles", Version 2.0. September, 2011.

terms and conditions of all their financial services to clients which must be written in an understandable language, including the effective service charges, the repayment schedule, principal and mark-up, and any affiliated products and extra fees that may be applied later.

C. IMFs should implement appropriate risk management system

Risk management can be considered as one of the important factors to build sustainable MFI (Karim, Tarazi and Reille, 2008). Instruments of risk management and insurance in IMF scarcely differ from conventional MF as they are based on similar concept of mutual guarantee (*kafalah*) and collateral (d*aman*). In case of group lending, mutual guarantee are used by almost all MFIs, both conventional and Islamic, while very few IMFIs, like the Indonesia BMTs and the Lebanon based Hasan Fund, require physical assets as collateral (Obaidullah and Khan, 2008).

Table 5. Major Risk Categories of MFIs

Financial Risks	Operational Risks	Strategic Risks
Credit Risk	**Transaction Risk**	**Governance Risk**
Transaction risk	Human resources risk	Ineffective oversight
Portfolio risk	Information & technology risk	Poor governance structure
Liquidity Risk	**Fraud (Integrity) Risk**	**Reputation Risk**
Market Risk	**Legal & Compliance Risk**	**External Business Risks**
Interest rate risk		Event risk
Foreign exchange risk		
Investment portfolio risk		

Source: Microfinance Network (2000): “A Risk Management Framework for Microfinance Institutions”

The sophistication of risk management system varies with the size, the type and the complexity of the MFIs. Figure 5 lists different MFIs’ risks, which are categorized into three types, which are financial risks, operational risks and strategic risks. Financial risks are common in both MF and IMF. Nevertherless, IMFIs may face additional forms of credit risks resulting from the innate aspect of the *Shariah*-based contracts. In *Murabahah* contracts, for instance, risks may occur from the non-delivery of the items from the supplier or the non-respect of repayments schedule, or even the refuse of the client to buy the merchandise that the IMFI has already purchased. In these cases, the IMFI can neither increase the amount of mark-up, nor force the client to buy the item.

IMFIs have to assess and manage the various risks inherent to their activities. There is an increasing need to design risk management tools and approaches that meet with IMFIs clients’ specificities, lending methodologies and social and financial performance objectives. Microinsurance (or micro *takaful*) can serve as an efficient loan protection when borrowers do not repay the loan for different purposes (like death or physical disability) (Obaidullah and Khan, 2008). Social sanctions and religion ties can also prevent “committed” borrowers from misuse of their loans which may affect MFIs’ portfolios quality.

D. IMFs should adopt new distribution strategies

Similar to conventional microfinance, Islamic microfinance needs marketing strategies to achieve a financial stability, sustainable performance, enhance customer loyalty and, thus, increase profitability (Churchill and Halpern, 2001). These strategies include corporate branding, target market identification, product delivery systems and customer services approaches[46]. According to Grönroos (1990), the most visible aspect in marketing strategies of MFIs is marketing communication which

[46] “Marketing attempts to understand the needs of the client and to adapt operations in order to meet those needs and achieve greater sustainability. It addresses the issues of new product development, pricing, the location of operations and the promotion of the institution and its products. In doing so, it creates exchanges that satisfy individual and organizational goals.” Kotler, Littlefield, Morduch, and Hashemi (2003).

involves different categories, including advertizing, sales promotion, public relations and face-to-face marketing. However, the lack of infrastructure for the IMFs in rural districts plus the higher operational costs led to think about alternative ways of how to provide banking services with minimum expensive to poor unbanked citizens living away towns. Developing branchless banking (BB) was the way out. It is an innovative distribution channel which use different technologies including Internet, mobile phones, and POS (Point Of Sale) and ATM (Automated Teller Machine) networks. The sustainable growth of telecommunications and retail industries in many devolving countries was at the origin of the development of this new banking system. Issuing electronic money (E-money or E-wallet) by Non-bank Company offer the possibility to poor customers to store, pay and exchange money in their region with no need to recourse to commercial banks.

The expansion of social programs can put pressure on governments to develop branchless payment infrastructure in their countries which can assure safety and inexpensive transfer of funds to the poor. Conditional cash transfer programs have gained an immense interest by governments and international organizations. It has been adopted by over 60 middle income developing countries (World Bank, 2009) where many of them have developed their own BB business models. Table 6 shows the countries that launched the program during the last decade. However, limiting the programs on social payment will not lead to broader financial inclusion (Pickens, Porteous, and Rotman, 2009). Offering savings accounts to beneficiaries of the programs, like the case in India, South Africa and Brazil, may smooth the progress.

Table 6. Social Transfer Programs Launched (1999-2009)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China		Colombia	Argentina	Brazil	Bangladesh	Cambodia	Bolivia	Haiti	Burkina Faso	Bangladesh
		Jamaica	Bangladesh	Ecuador	Kenya	Colombia	DRC	Indonesia	Guatemala	Kenya
		Turkey	Cambodia	Mexico	Pakistan	Dominic Republic	Malawi	Swaziland	Nigeria	Pakistan
			Chile	Zambia	Peru	El Salvador	Pakistan	Yemen	Philippines	
						India	Panama			
						Peru	Paraguay			

Source: Pickens, Porteous, and Rotman (2009). "Banking the poor through G2P payments", FN CGAP and DFID

Up to now, regulations of very few countries allow Non-bank institutions to issue E-money, including Bolivia, Peru, Brazil and India, while many countries are on the process to regulate the sector like Pakistan, Bangladesh[47] and Mexico[48]. Comprehensive branchless banking regulations have been issued by the central bank of Pakistan to financial institutions for developing partnerships in order to extend financial services to their clients. The success of the first experience of branchless banking solutions, Easypaisa[49] in Pakistan and M-PESA[50] in Kenya, succeeded to draw the attention to increase the intensity of regulation on already regulated financial institutions to issue E-money accounts. Regulators have to take into consideration factors that may obstruct the process like the culture of their societies. Indeed, people who prefer cash on cards-based accounts would not accept to use the new mode of payment. The government in Singapore, for instance, has moved toward replacing cash with

[47] For further details see Chen (2013). "Comparing Branchless Banking in Bangladesh and Pakistan", CGAP.
[48] For further details see CGAP (2010), "Update on Branchless Banking Policy and Regulation in Mexico".
[49] It was launched jointly by Telenor Pakistan (a Telecommunication Company) and Tameer Microfinance Bank (MFB) in 2009 where its main objective is to provide financial inclusion to Pakistani citizen. Easypaisa shop has about 22,000 retailer shops in the country, covering 750 districts including cities and towns. It offers, for their clients, easy money transfer and bill payment solutions. Monthly, about 4 million people uses their services. Since its beginning, users have carried out 117 million transactions through Easypaisa services valued about Rs.261 billion.
[50] It is a mobile payment services provided by Safaricom in 2007. Ever since, more than 7 million customers are using the service. M-PESA succeeded to promote financial inclusion in the country. In fact, the proportion of Kenyans that are formally financially included has doubled to reach 41% only in 3 years (FSD Kenya, 2009).

an electronic money system by establishing the Singapore's Electronic Legal Tender, but seemed to be hard to carry on the project due to widespread resistance from the public who refused the alternative design of money (Pickens, Porteous, and Rotman, 2009).

VI. CONCLUSION

Islamic microfinance is still a niche segment but constitutes a promising industry, although it struggles to overcome similar difficulties and impediments of conventional peers. In many OIC countries, the microfinance sector is not operating under dedicated financial regulation legislation. Hence, understanding the regulatory and institutional environment is primordial for researchers and policy makers to enhance the implementation of innovative models and products in countries where microfinance industry is promising.

The paper tried to analyze these problems from a macroeconomic perspective. It provided a cross-country analysis of the institutional viability, regulatory environment and sustainability of different microfinance institutions followed by a presentation of the best practices of specific MFs and IMFs in term of monitoring under problems of asymmetry information. We presented an analysis of the challenges and opportunities of the Islamic microfinance industry in practice. We believe that the successful development of the industry in a country requires the development of their regulatory and institutional frameworks. Finally, we introduce a set of recommendations forwarded to financial and regulatory authorities and to Islamic microfinance institutions at once. The ultimate goal is to develop Islamic microfinance by achieving outreach and sustainability. We believe the starting point should be by setting reforms in legislative and judicial systems which may protect investors and clients and, thus, gain their confidence. By doing so we believe that IMFIs will be able to diversify their sources of funds (*Zakah* and *Waqf* funds, commercial banks, voluntary savings accounts,).

Authorities have to increase the intensity of regulation on formal IMFIs and frame informal financial market where the majority of IMFIs types (Cooperatives, ROSCAs, NGOs, and NBIs) are banned to access deposits from the public. Comparative analyses show that countries with higher business environment Overall Score (from the Global microscope) display strong regulatory and institutional environment. From an economic intuition, these results indicate the importance of regulatory and institutional framework in Islamic microfinance development. However, it remains an open question for research and experimentation, whether regulatory and institutional indicators affect IMFIs performance and through which channels. As IMFIs differ from conventional MFIs in their activities types, clients' specificities and their lending methodologies, they should use appropriate risk management instruments. Islamic micro-insurance (or micro *takaful*) can serve as an efficient loan protection when borrowers do not repay the loan for different purposes (like death or physical disability).

Besides, social sanctions and religion ties may also serve as collateral for IMFIs to prevent borrowers from misuse of their provided loans. To defeat the problems of the lack of infrastructure for Islamic microfinance banks in rural districts and the higher operational costs, IMFIs could consider implementing Branchless Banking system which allow them to provide banking services with minimum expensive to the unbanked poor citizens living in rural districts. Our conclusions are consistent with previous findings of a study made by Mohieldin et al. (2012) based on the Doing Business Report 2012 and the Financial Access Report 2010, where they analyze the financial inclusion status of 37 OIC countries compared to other group of countries, namely GCC, OPEC and OECD. They point out that Islamic microfinance industry faces different difficulties including the absence of accounting standards, the lack of qualified working staff in *Shariah* rules, the disconnection of principles of Islamic finance with real economy, and the limited efforts made to attract potential Islamic clients. They show that 59% of microfinance institutions are under regulation with an average level of 72% in low income countries, and 68% of OIC countries providing laws to impose confidentiality protection, whereas the average level reaches 78% in developing countries. They indicate that authorities in Muslim countries have to exploit the potential of Islamic instruments in order to enhance financial inclusion and to focus on improving their supervisory and regulatory systems and financial infrastructure to promote an enabling environment. Finally, we should stress that studying successful microfinance experiences does not necessarily mean to replicate the exact

experiences which are country specific a involving different factors including religious culture, clients' needs and requirements, perspectives and willingness of the authorities to enhance the microfinance sector in their countries. Besides, prior to any decision the authority would make, the latter has to identify the purpose and interests of regulation, study the costs and the benefits, distinguish the enforcement instruments, and reconsider their priorities accordingly.

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Appendix 1

In order to best understand the concept of Islamic Microfinance, pre-discuss the logic of Islamic Finance and its products is needed. The famous principal, on which the overall Islamic Finance system is based, is the prohibition of “Riba” (“usury” or “interest”). The belief behind the interdiction is that money should not be seen or dealt with as an earning asset in itself, and, therefore it cannot be created through the credit system. Money is, rather, a medium of exchange. Time value of money is not taking into consideration in regular Islamic banking transactions, unless money is used in investments (Iqbal and Mirakhor, 1997). Other principals are the prohibition of *Gharar* (“uncertainty”), *Dharar* (“harmful substance”) and *Maysir* (“gumbling”).

Islamic finance is set to serve social interests, enhance asset-based productive economic activities, and offer alternatives for “non-ethical” financial products where gambling and speculation are predominant. It distinguishes between three types of financial allocation: Equity-based financing, Debt-based financing, and Benevolent loan. Equity-based financing is a contract between two parties which aims to finance income-generating activities under *Shariah* principles. It includes *Musharakah* (“joint venture”), *Mudarabah* (“trustee partnership” or “profit sharing”), *Musaqat* (“plantation management fee based on certain portion of yield”), and *Muzara’ah* (“harvest yield profit sharing”) contracts. Debt-based financing is a contract that engages its parties to buy and sell specific goods based on *Shariah* principles. It includes different kinds of contracts such as *Murabahah* (“cost-plus” or “mark-up sale”), *Ijara* (“leasing”), *Istisna’* (“commission to manufacturer” or “manufacture sale”), *Bay’ Salam* (“forward sale” or “differed delivery sale”). Finally, Benevolent loan (*Qard hasan*) is a loan offered by lenders to those who need it, namely weak and needy people, small farmers or producers, or micro entrepreneur who cannot get access to regular banking institutions). In such loan, borrowers are expected to repay only the principle, plus the administrative costs inherent to the loan.

Murabahah is the most widely used Islamic microfinance products, with 672,000 active clients and a total asset portfolio of about US$413 million across 255 Islamic microfinance providers (El-Zoghbi and Tarazi, 2013). Both lenders and borrowers often used it because it performs lower risk compared to other financing schemes. Adopting products based on *Murabahah* and *Ijara* reduce IMFIs’ risk and enhance their profitability as these contracts involve real transactions by exchanging goods/assets rather than lending money (Ahmed, 2007).

Appendix 2.A

Table 1. MFIs Data Descriptions

Categories and Indicators	Rating	Description
Overall Score	0-100	The overall score is the weighted mean of the category scores reduced by the adjustment factor.
Regulatory Framework and Practices	0-100	It is measured as the weighted sum of indicators in the category
Regulation and supervision of microcredit portfolios	0-4 (4=best)	It measures to which extent regulations and supervisions in the country help different financial institutions provide microcredit product.
Formation of regulated/supervised microcredit institutions	0-4 (4=best)	It measures whether regulations encourage the formation of new MFIs, including Greenfield MFIs, up scaling NGOs and other type.
Formation/operation of non-regulated microcredit institutions	0-4 (4=best)	It measures whether the legislative system encourage the formation and well functioning of non- regulated MFIs
Regulatory and supervision capacity for microfinance	0-4 (4=best)	It is measured as the weighted sum of indicators in the category
Regulatory framework for deposit-taking	0-4 (4=best)	It measures whether non-regulated MFIs take deposits from public or not.
Supporting Institutional Framework	0-100	It is measured as the weighted sum of indicators in the category
Accounting transparency	0-4 (4=best)	It measures whether standards of accounting at MFIs in line with international norms, and whether institutions are required to undergo regular audits and to publish financial statements?
Transparency in pricing	0-4 (4=best)	It verifies if the regulatory system protects microfinance borrowers by requiring transparency on interest rates and whether institutions (both regulated and non-regulated) follow these practices
Dispute resolution	0-4 (4=best)	It verifies whether the regulatory environment provide timely dispute resolution at reasonable cost in the event of disagreements between microfinance lenders and borrowers
Credit bureaus	0-4 (4=best)	It verifies how effective and reliable are credit bureaus for microfinance
Policy and practice for financial transactions through agents	0-4 (4=best)	It verifies if regulations and technology in places that allow innovations in microfinance, such as mobile-phone transactions and POS options
Adjustment Factor: Stability	0-100	It is measured as the weighted sum of indicators in the category
Political shock to microfinance	0-2 (0=best)	It determines the potential impact of political shocks or weak governance on the Microfinance environment.
Political stability	0-100 (0=best)	It assesses political climate in the country, including social unrest, opposition stance, excessive authority and international tension

Appendix 2.B

Table 3. Summary of the Bangladeshi Islamic microfinance experience

Institution	Program	Activities	*Islamic mode of financing*	*Outreach*	*Performance indicators*
Islamic Bank Bangladesh Limited (IBBL)	Rural Development Scheme (RDS)	- Development microfinance in rural areas - Help poor people achieving economic self-sufficiency - Empowering rural women - Improve the standard of living - Imparting education, developing morality - Ensure healthcare and health awareness	*Bay' Mu'jjal*, *Bay' Murabahah*, *Bay' Salam*	The bank serves 67% of clients using *Shariah*-compliant microfinance products in the country	Loan recovery rate equals 99.16%
Social Investment Bank Ltd (SIB)	Family Empowerment Micro Enterprise Program (FEMEP) and SME programs	- Assist the low-income people to improve their standards of living by purchasing necessary materials commodities for their businesses - Develop social investment projects	*Waqf* and Mosque properties, cash *Waqf* certificate, joint venture projects for management of *Hajj* affairs	- For FEMEP program, the total outstanding portfolio rises to US$0.3million in 2005 - For the SME program, the total outstanding portfolio rises to US$1.1million	Loan recovery rates: 96% (FEMEP) and 94% (SME program)
Al-Fallah Aam Unnayan Sangstha (AFAUS)		- Achieve a sound and good environment for peaceful and happy livelihood - Mobilize available local resources to assist the marginalized people in rural and urban areas living below the poverty line, such as distressed, landless, and marginal farmers	*Bay' Mu'jjal* (74.4%)	The total number of beneficiaries rises to 6,793	- ROA=0.49 - Net Interest Margin (NIM)=19.5 - Operating Costs as a % of Loan Disbursed (OCL)=9.6

Sources: Mohieldin et al. (2012) and Ahmed (2002)

Appendix 2.C

Table 4. Regulatory and supervisory frameworks of countries with successful microfinance experiences

<table>
<tr><th rowspan="2">Countries</th><th rowspan="2">Legal Status of MFIs</th><th colspan="3">Regulatory and supervision System</th><th colspan="2">Transparency</th><th rowspan="2">Dispute Resolution</th></tr>
<tr><th>Acts of Law</th><th>Supervisory and Regulatory Institution</th><th>Regulatory system (Capital & Reserve)</th><th>Transparency in Prices</th><th>Accounting Transparency</th></tr>
<tr><td rowspan="3">Pakistan</td><td>Conventional Commercial Banks</td><td>Microfinance Institutions Ordinance Act , 2001; Banking Companies Ordinance, 1962, Prudential Regulations for Microfinance Banks/Institutions, 2002</td><td rowspan="3">All MF Banks operate under the direct supervision of the State Bank of Pakistan (SBP), while no supervision on other MFIs</td><td rowspan="3">The Islamic Microfinance Division of the Bank shall be required to maintain a minimum fund of Rs 10 million or 15% of the risk weighted assets of Islamic microfinance

The minimum capital requirement is defined according to the area of operation of the MFI. Pakistan distinguishes between MFIs operating in a specified district, in a specified province and nationwide, with the last category requiring the highest capital amount. In Indonesia, the distinction is not based on geographical size.

The minimum capital requirement for MF Banks operating district-wide is PKR300m, while PKR500m for MFBs operating in a province. For country-wide MFBs, the maximum capital</td><td rowspan="3">The SBP requires that all Microfinance Banks should give their potential clients all the information needed about prices, interest fees, and terms and conditions of the contracts.</td><td rowspan="3">Except small NGOs, formal and informal MFIs are required to submit to an external audit and publicly publish an annual. To supervise deposit-taking MFBs, the SBP oblige these institutions to follow prudential regulations.</td><td rowspan="3">Dealing with client complaints, the SBP issued in 2004 a new circular requires MFIs to institutionalize a procedure for MFBs must reply in a courteous manner within 10 days and must take corrective action toward issues that are recurring.</td></tr>
<tr><td>Islamic MFIs (Islamic Microfinance Banks (IMFBs); Islamic Microfinance Services by Islamic Banks; Islamic Microfinance Services by Conventional Banks; and Islamic Microfinance Services by Conventional Microfinance Banks (MFBs))</td><td>Microfinance Institutions Ordinance Act, 2001; SMED Circular N° 10/2006; SMED Circular N° 11/2006; Circular N° 05/2007; Banking Companies Ordinance, 1962, Prudential Regulations for Microfinance Banks/Institutions, 2002</td></tr>
<tr><td>Specialized Microfinance Institutions</td><td>Companies Ordinance, 1984 Section 42 (non-profit) ; Society Act 1860 ; Trust Act 1882</td></tr>
</table>

	Rural Support Programs running microfinance operation as part of multi-dimensional program	Companies Ordinance, 1984 Section 42; Society Act 1860		requirement is PKR1bn.			
	Multi-Sectoral NGOs	Society Act 1860; Social Welfare 1961 ; BCO, 1962; Companies Ordinance, 1984-NBFC					
Indonesia	Commercial Banks	Banking Act N° 7/1992 + amendment N° 10/1998	Bank Indonesia (BI)/ The Financial Services Authority (Otoritas Jasa Keuangan—OJK) (a new regulatory authority approved by parliament in October 2011)	The BI supervise Banks using a Capital, Assets quality, Management, Earnings, Liquidity (CAMEL) rating system, comprising seven ratios and 25 questions Besides, Commercial Banks are subject to Basel regulations: The capital adequacy ratio is set at a minimum of 8% of productive assets and the minimum capital requirement is Rp3trillion	The BI requires commercial banks to quarterly publish clear information to customers on interest rates and terms of loans. However, this information is not required to be published in centralized website. Banks are free to decide where they publish it.	In an attempt to get benefit from the best aspects of each system, Indonesia's accounting standards are a mixture of three accounting systems: IAS, US GAAP and Uniform Accounting Plans. All commercial banks have to comply with Basel II regulations.	Reports on settlement of clients' complaints should be submitted on quarterly basis. The judiciary system is yet inefficient. On average, enforcing a contract takes 570 days.
	Rural Banks			The capital adequacy ratio is fixed at 8% while 15% for opening new branch. The Capital Requirements vary by location: Rp5 billion in Jakarta and Rp500m in areas outside Jakarta and vicinities, and outside capital cities of provinces in Java and Bali	Rural banks and co-operatives do not face requirements on interest rate transparency. In their communication with customers cooperatives and rural banks typically state their rates on a monthly flat basis.		
	Small and Large Cooperatives	Cooperative Law N° 25/1992 and Government Regulation	All types of Cooperatives are under regulation of State Ministry of	The capital adequacy ratio is 4% of risk-weighted assets.			

		(PP) N° 9/1995	Cooperatives and SME, and are subject to supervision of district government office dealing with Cooperatives.	The capital requirement is Paid-up capital: Rp15 million for primary cooperative, while Rp50 million for secondary cooperative			
	Islamic Cooperatives/Credit Unions	Cooperative Law N° 25/1992; PP N° 9/1995, Presidential Instruction N° 18/1998					
	NGOs/MFIs	Deposit taking NGOs must adhere to Banking Act N° 7/1992 or Cooperative Law N° 25/1992. Besides, they should follow Foundation (Yayasan) Law	Ministry of Justice/Provincial Development Bank	No Capital adequacy ratio and No minimum capital requirement			
Uganda	Tier 1 institutions: Commercial Banks (Companies)	The Financial Institutions Statute, 1993; Revised Statutes, 2003; Financial Institutions Act, 2004	The Bank of Uganda (BoU)	MDIs require a minimum capital of about USh25bn for a commercial bank, UShbn for a credit institution and USh500m for MDI The capital adequacy requirement for MDI should not be less than 15% of core capital and 20% of total capital as compared to 12% for banks and credit institutions.	According to the MDI Act N°5/2003, MFIs must disclose regularly financial statements on interest rates and performance status of all their loans.	All regulated MFIs, including NGOs, are required to follow IFRS standards in their reporting. Financial statements must be audited and published annually in a Ugandan newspaper, and they must be displayed in each MDI office and branch. Besides, at least each quarter of the year, external auditors should review the MDI weekly and monthly returns.	Complaint resolution mechanisms are weak and inefficient. However, relevant steps were moving towards developing and enhancing this field. Two main institutions were actively present in Uganda to achieve that goal: The Uganda Consumer' Protection Association (UPCA) and the Consumer Education Trust (CONSENT) organization. They work to provide education and sensitization to clients and to defeat their rights.
	Tier 2 institutions: Credit institutions (Companies)						
	Tier 3 institutions: Deposit-taking institutions(Companies limited by shares)	The Uganda micro finance deposit-taking institutions (MDI) Act, 2003; Financial Institutions Act, 2004					
	Tier 4 institutions include Non deposit-taking institutions, SACCOs and NGOs	The Cooperative Societies Regulations, 1992	The National Board of Non-Governmental Organizations at the ministry of internal affairs.	No minimum capital requirements			
Morocco	Commercial Banks	Banking Law N° 34-03	Banque AL-Maghrib (BAM, the Central Bank) / Ministry of Finance	The minimum capital requirement for banks is Dh200mn (US$22.5).	To this date, there is no specific regulatory system protecting microfinance borrowers in term of prices transparency	MFIs are required to submit information on their outreach, sources of funding, and on their financial statements to BAM and to the Ministry of Finance on a quarterly basis. Indeed,	There is no efficient mechanism for complaint resolution in term of time and costs
	Cooperatives/Credit Unions	Cooperative Law N° 24-83, 1984 + amendment 1993	Federation of Microcredit Associations	Lending institutions have a minimum capital requirement ranging			

	NGOs/MFIs	Law Regulation Associations (Dahir Law, 1958) + Microcredit Law N° 18-97, 1999, 2004; N° 04-07, 2007, amendment N° 53-10, 2011 + Banking Law N° 34-03 (supervision) + Bank AL Maghrib's regulation		between Dh1mn (US$110,000) and Dh50mn (US$5.6) depending on the nature of the activity		BAM requires MFIs to report and submit an annual report on internal control. Since 2008, Moroccan banks' financial statements are prepared and audited in accordance with the IFRS standards, but are not yet fully compliant with it. In 2009, the "Direction de Supervision Bancaire"of BAM required all MFIs must comply with new non-performing loans provision standards as of Law N° 53-10	
	Bank al Barid (Postal Bank)	Law on Post N° 24-96	Banque AL-Maghrib/ Ministry of Finance				
Kyrgyz Republic	Microfinance Companies (MFCs)	Law on Microfinance Organizations N° 124/2002; 2005 and 2009 amendments to Law N°124/2002 on Microfinance Organizations	The central bank (NBKR)	MFCs are subject to prudential requirements	Since 2008, the NBKR required that banks and non-banks to publish both effective and nominal rates whenever the nominal rate is quoted.	All MFIs' types are required to conduct their operations in line with IFRS accounting standards. Specifically, at least once a quarter, an MFC must publish in local newspapers balance reporting with explanations on this reporting and its financial statements annually as confirmed by an independent external auditor.	Dispute resolution system is considered as weak. Different parties (MFI and a client) recource to peaceful resolution instead of judicial procedure
	Microcredit Companies (MCCs)			MCCs and MCAs are not subject to capital adequacy requirements			
	Microcredit Agencies (MCAs), Commercial Banks and Credit Unions						

Sources: Global Microscope on Microfinance Business Environment (2012); Prudential Regulations for Microfinance Banks/Institutions (2002), The State ate Bank of Pakistan website; BoU website; Allaire et al. 2009; Reille and Lyman (2005).