

# An Evaluation of Micro-Credit Programs in Bosnia and Herzegovina Using Porter's Diamond Model

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## **Abstract**

*The effective design and delivery of a microcredit program is difficult under any circumstance. Similarly, the task of microcredit institutions in Bosnia and Herzegovina that provide financial stability to its most impoverished members is very much complicated. The purpose of this paper is to explore competitive advantages that microcredit industry in Bosnia and Herzegovina has by using Porter's diamond model. The demonstration of the Diamond Model is used to explain the competitive advantage that the microcredit industry has in Bosnia and Herzegovina. To analyze the competitive advantages, secondary data were used from various institutional and governmental resources. The findings reflect that the meaningful objectives were set out by microcredit institutions in the country including objectively verifiable indicators of achievements. Among peers in Kosovo and in other Balkan regions (Albania, Croatia, Macedonia, Montenegro, Serbia), as well as peers similar in size and market outreach from Eastern Europe and Central Asia (ECA), the Bosnian microcredit institutions are some of the most highly leveraged. There is a clear upward trend in the median indicator for portfolio at risk between 2006 and 2008. The inflationary pressures that started at the end of 2007 in BH as well as the repercussions of the global 2008/2009 financial crisis have affected the repayment capacity of clients. From a policy perspective, the results suggest that in order to improve efficiency in the microcredit sector, and in the financial sector as a whole, a unified banking agency for the country must be established. Despite being hopeful for future, this doesn't seem likely to happen until the Bosnian Constitution is amended sometime in the future.*

**Keywords:** Microcredit, Bosnia and Herzegovina, Microcredit Foundations, Interest, Indicators, Loans, Repayment, Poverty, Debt.

**JEL Code Classification:** G21

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## 1. Introduction

Bosnia and Herzegovina (BH) is a country that has endured protracted ethnic cleansing war in recent history. Various financial institutions are active in Bosnia-Herzegovina providing

Micro-credit services in such a challenging environment. An evaluation of such programs is necessary to uncover strategies that may be employed for future.

The traditional best-practice paradigms of microfinance are inapplicable in conflict-affected situations because of the instability of governmental systems. Lack of communal and social trust among individuals toward large scale programs makes application of these programs harder to apply. Within these post-conflict environments, providing microfinance with a specific development strategy is then perhaps the most challenging problem facing practitioners and institutions engaged in this kind of relief and development work. As a mechanism that has a stated directive and objective of targeting the most impoverished sections of society, the adopted strategies of microfinance institutions deserve critical attention and serious exploration. By reviewing the existing literature about micro-credit industry (MCI) in BH, it becomes obvious that research is quite limited that tackled the organizational structures and the strategies of this industry.

Therefore, the purpose of this paper is to explore the competitive advantages that MCI in BH has by using the Porter's diamond model. The relevant research question is then "what are the competitive advantages that the MCI has in BH compared to the counterparts in its close environments?" To answer this question the diamond model of Porter is employed as a basis for discussion in this study.

## 2. Literature Review

### 2.1. Philosophy and Origin of Microcredit

Microcredit as a viable tool of development began in 1976 when Bangladeshi economist and social reformer Muhammad Yunus began lending small amounts of money to rural poor women of Jobra village to start or expand their businesses. That initial and modest foray into microcredit eventually culminated in the formal establishment in 1983 of the Grameen Bank based on principles of group-based lending of small-sized loans with zero collateral (Yunus, 2004). According to Legerwood (1999), microfinance institutions may also provide social intermediation services such as; group formation, development of self confidence, and training in financial literacy and management capabilities among members of a group. She asserts that "microfinance is more than simple banking; it is a development tool." (p. 1).

The most successful microfinance programs were evidenced by the reports of the top microcredit lenders which boasted repayment rates of 98 percent or higher, all achieved without securing any collateral for the loans. This success is attributed by

Cull, Demirguc-Kunt & Morduch (2008) to “new lending practices, especially “group lending” (also called “joint liability” lending). Authors described this model as such that customers were typically formed into small groups and required to guarantee each others’ loan repayments, aligning their incentives with those of the bank. There is no evidence that these groups are established within a clear organizational structure, that reflects an effective monitoring and evaluation system in MCI, or to organize these groups in a manageable structure that can protect their rights and develop their skills.

Rhyne (2001) best summarizes the common philosophies and goals driving the current microfinance movement as follows: using the clients’ character rather than collateral as the primary loan security, streamlining administrative processes to lower costs, responding rapidly to late payments, providing positive incentives for repayment, charging interest rates that approach or cover costs, and emphasizing the long-term sustainability of the lending organization (Rhyne, 2001, p. 7). In his book “The Microfinance Promise”, Morduch (1998) explained the problems confronting the microfinance. He argued that the promise of microfinance was founded on innovation, new management structures, new contracts, and new attitudes. The leading programs came about by trial and error. Once the mechanisms worked reasonably well, standardization and replication became top priorities, with continued innovation only around the edges.

Although, MCI in BH has reached a good recognition and awarded due to its high level of transparency and financial reporting, as out of 20 institutions were awarded by the Consultative Group to Assist the Poor (CGAP) Financial Transparency Awards in 2006 worldwide, five microcredit organizations come from BH, but the research and academic side couldn’t get the same attention. So far, research written about the overall goals and achievements of MCI in BH has not yet tackled adequately the strategic approaches and the competitive advantages of this industry. Therefore, this study will shed light on to the MCI on this particular matter.

## **2.2. Essential and Preferred Conditions of Microfinance in Post-Conflict Areas**

Keeping the primacy of good preparation in mind, Doyle lists several essential conditions that must be in place to institute microfinance activities in a conflict-affected area. She then goes on to list several preferred conditions which, while not entirely necessary, are still entirely desirable (Doyle, 2008, p. 7-11). Essential Conditions include; low intensity of conflict, reopening of markets and long-term displacement (of 18 months or longer). Preferred Conditions include; relatively dense population, enabling legislation for microfinance (MF) institutions, skilled, educated workforce, social capital, and trust in the local currency and financial institutions.

In light of the above mentioned conditions in a post-conflict area, designing, implementing, and evaluating a microfinance program presents an additional layer of difficulty and complexity. Bartsch (2005) outlines some of these difficulties. First, microfinance is often times founded on a notion of group solidarity to replace the conventional banking requirement of a material or monetary collateral. It is exactly this group solidarity which is most absent from refugee populations. Second, microfinance as an industry is more closely related to principles of banking than relief and will need to seriously review and also perhaps check its measures of success. Third, while the provision of relief is supposed to benefit the poorest and most affected populations, microfinance in its current form, is bound to benefit only people already endowed with business acumen and, often enough, sufficient resources to sustain themselves. Fourth, microfinance must be implemented as one strategy of an entire array of relief and development strategies such as business training and, most importantly, an enabling environment.

From the above discussed conditions, we could easily realize that in post-conflict countries like BH determining the phase that the country going through is a very crucial condition to be able to decide whether to design a relief and consumption strategy or a development one. MCI should apply and adopt a relief and consumption strategy before going further with a development one. The inability to determine the phase of the country makes it difficult to choose and determine an appropriate strategy for MCI. And, this could be considered one of the main roots causes of the ongoing crisis that facing the MCI since 2009.

### **2.3. Microcredit Foundations (MCFs) Organizational Structures**

According to Wood and Sharif (1997) and Hulme and Moseley (1996), in many MCFs, the discretionary power to grant a stay of payment does not rest with the fieldworker or the branch manager but rather with the top managers. This is important as hierarchical decision making and operational autonomy notably affects the ability of borrowers to cope with and recover from emergencies both in positive and negative terms.

### **2.4. Types of Existing MCFs in BH**

#### **2.4.1. Interest-Based and Interest-Free MCFs**

There are 25 MCFs in BH, from which 12 are members of the Association of Microfinance Institutions in BH (AMFI). All of these members have interest-based financing practices. Most of the interest based MCFs have begun their activities in 1996. According to the 2010 first quarterly report of AMFI, these MCFs have around 825 million BAM (Currency of the country - Bosnian Convertible Marks) portfolios, around 325,000 active loans, gained amount of 95,535,126 BAM net profits in 2009, while their annual interest rates differ from 15% up to 36%. The interest-free MCFs have begun their activities in 2001. According to the annual reports of interest-free MCFs (2009), they have portfolio in the amount of around

three million BAM. This amount were used for less than 1800 active loans, gaining no profits, and charging up to 7,5% as administration fees for their services.

#### **2.4.2. Microfinance and Consumer Protection in BH**

BH is composed of two largely autonomous administrative entities (Republic of Serbia "RS" and Federation of BH "FBH") which are independently responsible for most policy formulation and implementation within their respective borders. Thus, supervision of banks and non-bank financial institutions (including microcredit organizations) is at the entity-level, not at the state-level, and we must consider this distinction while analyzing the status of microfinance and consumer protection regulations. Laws and institutions regulating the banking, finance and microfinance industries in each entity do exist. There has been only limited progress toward a general law on consumer protection in either entity, much less in a specific law for consumer protection in financial services.

The initiative of establishing a Center for Financial and Credit Counseling (known by its Bosnian acronym CFKS) in 2010 in Tuzla city with aims to offer debt mediation and financial education to borrowers is a modest step toward adopting a clear development strategy that should focus on building the capacity of the borrowers (for more details refer to [smartcampaign.org](http://smartcampaign.org)). Many more efforts should be directed toward involving borrowers and other stakeholders in the process of micro credit programs starting from the project design crossing through implementing strategies and ending with the monitoring and evaluation process.

#### **2.5. Code of Business Ethics (CBE) of Microfinance Institutions in BH**

In 2005, The Association of Microfinance Institutions in BH (AMFI), the country's primary micro finance institutions' (MFIs) network covering 98% of their clients in Bosnia, has adopted a progressive Code of Business Ethics (for more details refer to CBE of AMFI). Acceptance and application of the code represents one of the basic pre-conditions for membership to the AMFI. By adopting this code, MFIs commit to the following principles. First, establishing recognizable standards of good conduct and open communication with the users of their services and towards other microfinance institutions. Second, promoting the idea of responsibility, transparency and professionalism in their operations. Third, promoting the achievements of the entire microfinance sector and enhancing its reputation. Fourth, providing complaint resolution and securing privacy of client information. The issue of over-indebtedness is, however, not addressed in this code. MFIs adopting this code must display it publicly, and clearly communicate it to all clients. Provisions of the code are strictly enforced by AMFI which levies penalties on non-compliant institutions.

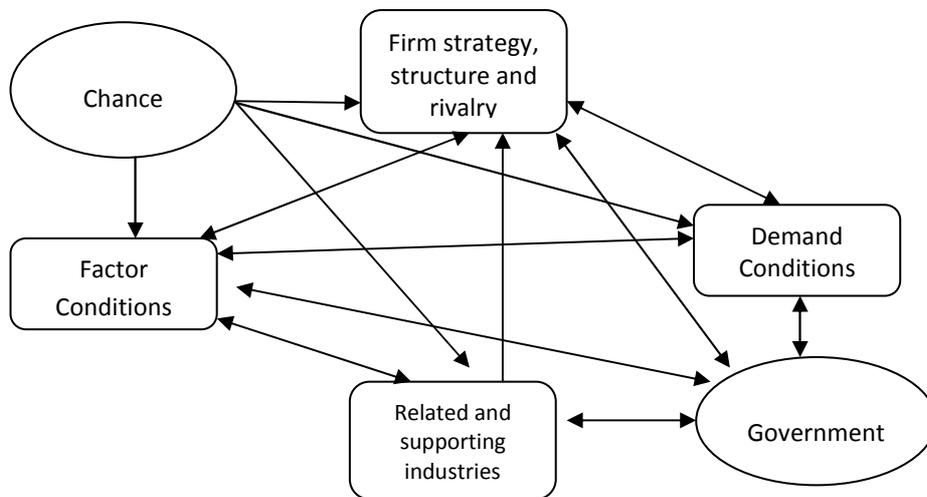
To identify the interlink between the players in and around micro finance industry, the diamond model, proposed by Porter (1990, 1998), is used in the following sections. Porter's model is useful in setting a good representative ground for

discussion to understand the role micro credit institutions play in the environment where these institutions are in contact with other firms and institutions, government bodies, considering chance, factor and demand conditions.

## 2.6. Comparative and Competitive Advantages

Traditionally, economic theory has proposed that land, location, labor, local population size, and natural resources are main factors of comparative advantage for regions and countries. In his book, *The Competitive Advantage for Nations*, Porter (1990, 1998) argued that sustained industrial growth has hardly ever built on these basic inherited factors. He introduced a concept of "clusters" or groups of interconnected firms, suppliers, related industries, and institutions that arise in particular locations.

In his model, Porter (1998) classified six broad factors incorporated into the Porter diamond to analyze competitiveness (see Figure 1).



**Figure 1: Porter's Diamond Model**

As seen in the above figure, a firm's strategy, structure and rivalry is directly influenced by related and supporting industries as well as chance events. Similarly, chance events have direct effects on factor conditions and related and supporting industries. All other links in the model show interlinks between related factors and conditions which suggest that a two-way influence between them is expected to occur in the process. In brief descriptions, factor conditions in the model are human resources, physical resources, knowledge resources, capital resources and infrastructure. Specialized resources are often specific for an industry and important for its competitiveness. Specific resources can be created to compensate for factor disadvantages. Demand conditions in the home market can help

companies create a competitive advantage, when sophisticated home market buyers pressure firms to innovate faster and to create more advanced products than those of competitors.

Related and supporting industries can produce inputs which are important for innovation and internationalization. These industries provide cost-effective inputs, but they also participate in the upgrading process, thus stimulating other companies in the chain to innovate. Firm strategy, structure and rivalry constitute the fourth determinant of competitiveness. The way in which companies are created, set goals and are managed is important for success. But the presence of intense rivalry in the home base is also important; it creates pressure to innovate in order to upgrade competitiveness.

Government also can influence each of the above four determinants of competitiveness. Clearly the government can influence the supply conditions of key production factors, demand conditions in the home market, and competition between firms. Government interventions can occur at local, regional, national or supranational level. Finally, chance events are occurrences that are outside of control of a firm. They are important because they create discontinuities in which some gain competitive positions and some lose.

Porter's overall thesis is that the factors in model interact with each other to create conditions where innovation and improved competitiveness occurs. Criticism, however, from the management school suggests that the home diamond focus of Porter does not take the attributes of the home country's largest trading partner into account (Rugman, 1992). This suggests an extension of Porter's diamond to include the attributes of the largest trading partner of the home country and that's called double-diamond or multiple-diamond.

### **3. Data and Methodology**

The research methodology of this paper involves secondary data from various sources. The demonstration of the Diamond Model is used to explain the competitive advantage that the MCI has in BH. Secondary data includes data and reports of the Association of Microfinance Institutions (AMFI) in BH, statistics from the Bureau of Statistics of the Federation of BH, websites of MCFs in BH, the annual reports of MCFs in BH, and the 2009 report of MIX and AMFI.

#### **3.1. General Outlook of MC Sector in BH**

Table 1, 2 and 3 summarizes geographical, demographic and human development statistics for the country. Although the most recent population census was completed in October 2013, the official results will not be available before October 2014. Therefore, the results from 1991 census are presented here. As seen in the tables, Federation of Bosnia and Herzegovina covers the largest area with highest population numbers. Also, the country is made up of three major ethnic groups of Bosniaks, Serbs and Croats.

**Table 1: General statistics on BH according to 1991 census**

Indicators	FBH	RS	BD	Total
Surface area in km <sup>2</sup> / %	26.110,5 (51%)	24.605 (48,0%)	493 (1,0%)	51.209,2
% of population by territory	62,1%	35,9%	2,0%	100%

Source: Statistics on BH (ISSN 1512-5106); FBH: Federation of Bosnia and Herzegovina, RS: Republic of Serbia, BD: Bircko District

**Table 2: General statistics on BH according to 1991 census**

Ethic Population	Bosniaks	Croats	Serbs	Yugoslavs	Others	Total
Population by ethnicity/%	1.902.956 (43,5%)	760.852 (17,4%)	1.366.104 (31,2%)	242.682 (5,5%)	104439 (2,4%)	4.377.03 (100%)

Source: Statistics on BH (ISSN 1512-5106)

**Table 3: Human Development Indicators of BH**

Human Development Index "HDI" (rank/rate),	76. (out of 182) / 81,2%
Life expectancy at birth (rank/year)	51. / 75,1 years
Under 5 mortality rate (per 1,000 live births)	18
Adult literacy for ages 15 and above (rank/rate)	39. / 96,7%
People not using an improved water source (rank/rate)	27. / 1%
GDP per capita (rank/PPP US\$)	92. / 7,764
% of Poverty level - definitely poor, on the edge of poverty, not definitely poor	11,3%, 7,8%, 73,9%
Population below poverty line during 2009, 2010, 2011 ( rank/rate)	88. 86. 106 (25%, 25%, 18,6%)

Source: Hamad (2012)

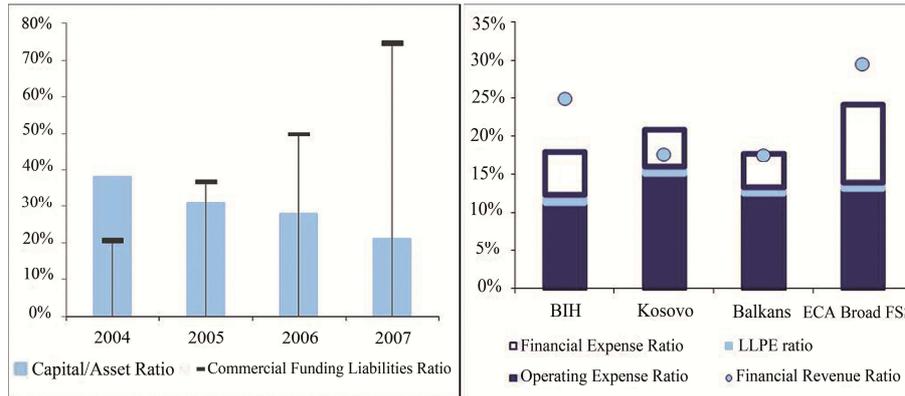
According to Hamad (2012) the human development indicators in Table 3, reflect the need for more efforts to improve the people's life quality; around 20% of the population of Bosnia and Herzegovina is definitely poor or on the edge of poverty, it is ranked as the 76th out of 177 countries in human development index, life expectancy is ranked 51st and in adult literacy is ranked 39th with rate of 96.7%.

### 3.2. Competitive Advantages of MC in BH

A review of previous literature and secondary data mainly based on January 2009 report that was prepared jointly by MIX and AMFI, the following findings reflect the main competitive advantages of microcredit industry using Porter diamond model.

### 3.3. Factor Conditions

The majority of Bosnian MFIs were established as affiliates of international networks during the post-conflict reconstruction efforts in BH. As such, they received the majority of funding from donations. As MFIs increased in size and became more efficient and profitable, they began attracting more funds from commercial sources. Their commercial funding liabilities ratio (borrowings at commercial interest rates/average GLP) increased from 21 percent in 2004 to 73 percent in 2007 (See Figure 2).



**Figure 2: Capital/Asset Structure: 2004-2007**

**Figure 3: Deconstructing Return on Assets: Peers**

Source: MicroBanking Bulletin, 2004-2007

Source: MicroBanking Bulletin, 2004-2007

As loan balances increased and MFIs became more efficient in 2007, their bottom line also improved. The adjusted return on assets (RoA) has remained at about 5 percent, while adjusted return on equity (RoE) increased from 17 percent in 2006 to 19.6 percent in 2007. Profitability was driven by a significant reduction in total expenses, which declined from 20.2 to 17.7 percent. A look at the composition of MFIs' expenses reveals that the greatest reduction was achieved in terms of operating expenses, which fell steadily since 2004 but dropped dramatically only in 2007 from 13 percent to 10 percent. On the contrary, financial expense has nearly doubled since 2004 levels from 3.6 percent to 6 percent. This is due to the increased reliance on commercial borrowings instead of on subsidized loans and donations as a source of funding.

A comparison with regional and functional peers reveals that the Bosnian MFIs have the lowest cost structure and one of the highest margins (see Figure 3). Peers from Kosovo and from Balkan countries in general have higher operating costs and lower financial revenues as a percentage of total assets. All Balkan peers have a similar financial expense at about 5 percent, which is one of the lowest in the region as evidenced by the fact that this indicator is twice higher for all financially self sufficient ECA MFIs with broad target market.

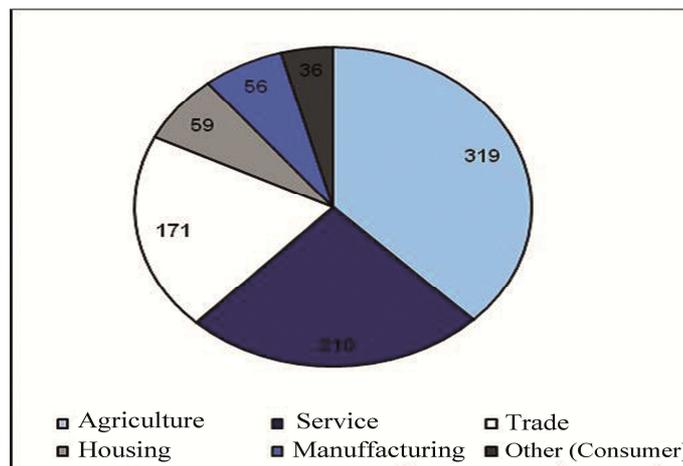
### 3.4. Demand Conditions

The Microfinance Information Exchange (MIX) estimates that at the end of 2007, the number of active borrowers from microcredit institutions in Bosnia was nearly 300,000. In 2007, most Bosnian MFIs showed high growth rates in active borrowers and especially loan portfolio. More than half of the non-bank MFIs grew by more than 50 percent in outreach despite heavy competition from commercial banks that have begun to target traditionally microfinance clients with consumer loans. Some of the growth in scale for Bosnian MFIs was driven by larger loan balances.

The median average loan balance per borrower; increased by 17 percent in local currency terms from 2,367 KM (1,184 EUR and 1,594 USD) to 2,773 KM (1,387 EUR and 2,087 USD). When compared to regional peers, Bosnian MFIs offer the lowest average loan balances (The range in Kosovo; 2000-3250 USD), but the number is slightly higher than for other sustainable MFIs in the region with similar target market. That can be explained by the fact that due to the lower level of economic development in regions like Central Asia and the Caucasus, the loan balances are also lower.

Among peers in Kosovo and in the Balkan (Albania, Croatia, Macedonia, Montenegro, Serbia) in general, as well as peers similar in size and market outreach from Eastern Europe and Central Asia (ECA), the Bosnian MFIs are some of the most highly leveraged. The median indicator for debt-to- equity more than doubled since 2004 reaching close to 4 in 2007.

In terms of sector and regional analysis of the loan portfolio of Bosnian MFIs, the following trends for 2007 emerged (see Figure 4). The majority of loans were in agriculture (37 percent), services (25 percent) and trade (20 percent). Loans for manufacturing had a relatively smaller share of 7 percent, while consumer and housing loans comprised about 11 percent of all loans. Some MFIs have started to complement their loan products with life insurance policies. Regionally, there is a slightly greater concentration of loan portfolio in the FBH, but MFIs operate in about an equal number of city centers 24 in the federation and 28 in RS.



**Figure 4: Loan Portfolio by Sectors in Millions km2**

Source: MicroBanking Bulletin, 2007

### 3.5. Related and Supporting Industries

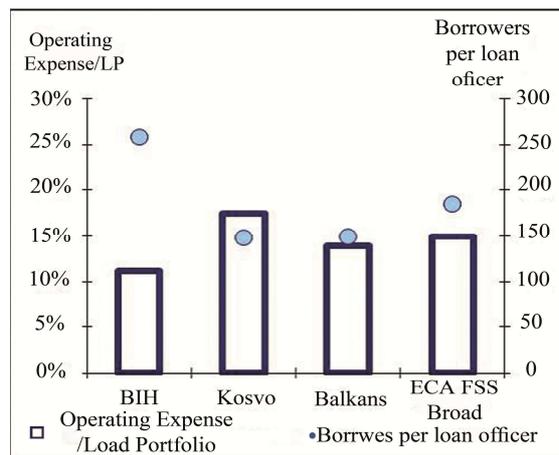
Operating in Bosnia are no fewer than 30 banks with total outstanding loans exceeding 14.5 billion KM (USD \$10.7 billion). At least 22 non-profit MFIs and four

for-profit microcredit companies are active in Bosnia with a combined lending portfolio exceeding 873 million KM (USD \$642 million) in 2007.

Since their establishment in 1996 and later on, most of MFIs in BH have been founded and funded by foreign institutions like; USAID, Mercy Corps, Care International, Islamic Relief Worldwide. However, as foreign commercial lenders moved into the market, the share of subsidized funding has decreased significantly, from 46 percent in 2004 to 12 percent in 2007.

Established in 2000, the Association of Microfinance Institutions in BH (AMFI) is the primary microfinance network operating in Bosnia. AMFI had thirteen members MFIs until 2010, but currently has only nine members, which according to the MIX, account for 98 percent of Bosnia’s microfinance portfolio. AMFI is part of the Microfinance Centre for Eastern Europe and the Newly Independent States (MFC), a regional grass-roots network of over 90 microcredit institutions in the region.

Improvements in productivity and efficiency have also contributed to the drop in expenses. Bosnian MFIs have become most productive in 2007, while the indicator for borrowers per loan officer has remained more or less at the same level from 2004-2006. This ratio increased by 14 percent in 2007 from 236 to 270. At the same time, the indicator for borrowers per staff member has remained roughly the same (156 in 2006 and 158 in 2007), indicating that MFIs are enhancing their productivity specifically in terms of their loan officers. Similarly, the sharpest drop in operating expenses as a percentage of GLP was in 2007 from 14.6 to 11.1.



**Figure 5: Efficiency and Productivity: Peers**

Source: MicroBanking Bulletin, 2007

Moreover, Bosnian MFIs are almost twice as productive in terms of borrowers per loan officers as their regional peers and are most efficient among all peers in terms of operating expenses as a percentage of the loan portfolio (see Figure 5).

### **3.6. Firm Strategy, Structure and Rivalry**

Nineteen non-profit microcredit foundations and one for-profit micro credit company were registered in the FBH, while in the RS, three microcredit companies and three microcredit foundations were registered. MCFs in BH are operating in both entities through 518 offices, and 2175 employees. The largest MFIs are expected to transform into microcredit companies (MCC) for the following reasons: 1) most have sufficient capital from capitalized donations and retained earnings; 2) the MCC status will allow the opening of the capital structure to investors; 3) the maximum loan requirements for foundations may be limiting for the bigger MFIs. MIKROFIN, which registered as a microcredit company in 2007, has already merged with another microfinance institution BENEFIT. The fastest growing MFI was LOK micro more than doubling in both outreach and scale. It was also the most highly leveraged non-bank institution (MIX and AMFI 2008 report).

In many MCFs in BH the “discretionary power” does not rest with the fieldworker or the branch manager but rather with managers higher up in the hierarchy. The overall objective of MCFs in BH is alleviating poverty by improving livelihoods of the poorest people. MCFs state that they are following objectively verifiable indicators of achievements; increase in income of borrowers; improvements in the standards of living; improvements in the housing standards; improvements in the family health; improvements in the overall quality of life and improvements in the quality of education.

MCFs in BH further state that their main purpose is to empower women and assist returnees and IDPs to return to their pre-war houses. Other objectives include reconstructing destroyed houses, starting small businesses, assisting socially disadvantaged persons, improving living conditions of the poor and assisting poor students to afford a good education.

MCFs in BH use a number of indicators to measure their achievements. These include the number of businesses started and expanded through microcredit programs, sustainability and profit level of these businesses, decline in the poverty level of beneficiaries, number of people moving into proper houses, number of returnees settled in their pre-war houses, number of returnees employed, number of jobs created, and number of children that continue their education in the communities.

### **3.7. Government**

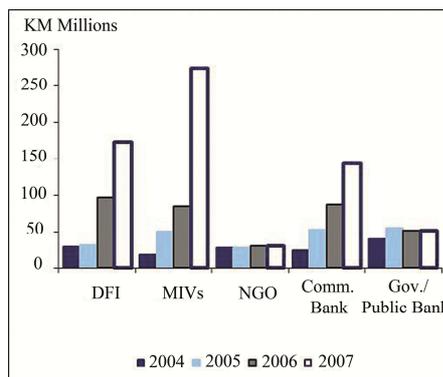
A new microfinance law was adopted by BH government in both entities in 2006 that stipulates the conditions for transformation of microcredit organizations (MCOs) into non-profit microcredit foundations (MCF) or for-profit microcredit companies (MCCs), which can take the form of Limited Liability (LLC) or a Joint Stock Company (JSC). The law has different conditions in each entity (see Law on Microcredit Organizations in FBH).

The role of the government of BH in MCI could be realized through its two main monitoring bodies; first, the Central Bank (CB) that allowed MCI to have access to its clients' data base in terms of checking the borrowers' debits and repayment capacity. Second, the Banking Agency (BA); there are two separate Banking Agencies in the FBH and RS, the thing that creates an unnecessarily burdensome bureaucracy. In order to improve efficiency in the microcredit sector, and the financial sector as a whole, a unified Banking Agency for Bosnia must be established. Efficiency in financial system has important implications for economies in developing countries (Nigmonov, 2010). This is not likely to happen, however, until the Bosnian Constitution is amended sometime in the future.

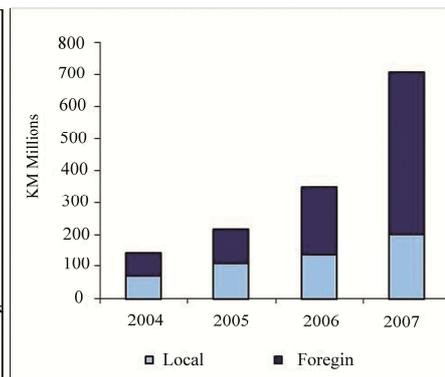
In terms of risk management, Bosnian MFIs have maintained solid portfolio quality over the last years with PAR>30 days less than 2 percent. However, in 2006-2007 years some indicators have increased, raising concerns about the future state of portfolio quality. In particular, in 2006 Bosnian MFIs registered the highest write-off ratio since 2004, while as of December 31, 2008 they had the highest PAR>30 (3.3%). There is a clear upward trend in the median indicator for portfolio at risk between 2006 and 2008. The inflationary pressures that started at the end of 2007 in BH as well as the repercussions of the global financial crisis have affected the repayment capacity of clients.

### 3.8. Chance events

The composition of the funds of MFIs has been changed since they established in 1996. While in 2004-2006, loans from foreign and local sources were split more evenly, in 2007 more than 70 percent of all funding came from foreign lenders (see Figure 7).



**Figure 6: Type of lender to MFIs in BH**



**Figure 7: Origin of borrowings of MFIs in BH**

Source: MicroBanking Bulletin, 2007

Source: MicroBanking Bulletin, 2007

Local commercial banks have been active providers of funding to Bosnian MFIs. Bank loans rose from 24 million KM in 2004 to 143 million KM in 2007, but their share of total borrowings has increased only slightly from 17 to 20 percent. Local

banks have an internal exposure limit to MFIs of 5 percent, which may affect the larger MFIs in their ability to obtain local funding in the future.

The most dramatic change in 2007 occurred in funding provided by microfinance investment vehicles (MIVs) (see Figure 6). Loans from MIVs increased by 280 percent from 72 million KM in 2006 to 275 million KM in 2007, and comprise 39 percent of total borrowings for 2007. Four of institution members of AMFI increased their borrowings from MIVs by more than 200 percent in 2007. This is a notable change (Chance) since 2007, when MIVs provided 21 percent of total borrowings. The largest investments in 2007 came from Blue Orchard, Oikocredit, DWM and Triodos. Funding from development financial institutions (DFIs) such as multilateral development organizations and bilateral agencies also increased significantly (almost doubling in amount) in 2007. In 2004 most of the loans came at subsidized rates from USAID and World Bank initiatives. This boom and the golden opportunity (chance) of external funding could be considered here as part of this model, or as an external factor as indicated by the modified model.

#### **4. Conclusion**

As a conclusion, the findings reflect; the meaningful objectives that were set out by MCFs in BH, their objectively verifiable indicators of achievements, indicators to measure their achievements and their vision and mission are clearly stated.

Among peers in Kosovo and in the Balkan (Albania, Croatia, Macedonia, Montenegro, Serbia) in general, as well as peers similar in size and market outreach from Eastern Europe and Central Asia (ECA), the Bosnian MFIs are some of the most highly leveraged.

When compared to regional peers, Bosnian MFIs offer the lowest average loan balances (The range in Kosovo; 2000-3250 USD), but the number is slightly higher than for other sustainable MFIs in the region with similar target market.

MFIs in BH are almost twice as productive in terms of borrowers per loan officers as their regional peers and are most efficient among all peers in terms of operating expenses as a percentage of the loan portfolio.

A comparison with regional and functional peers reveals that the Bosnian MFIs have the lowest cost structure and one of the highest margins. Peers from Kosovo and from Balkan countries in general have higher operating costs and lower financial revenues as a percentage of total assets.

More than 70 percent of all funding to MFIs in BH during 2007 came from foreign lenders, local commercial banks have been active providers of funding to Bosnian MFIs, and four of institutions members of AMFI increased their borrowings from MIVs by more than 200 percent in 2007.

Since their establishment in 1996 and later on, most of MFIs in BH have been founded and funded by foreign institutions like; USAID, Mercy Corps, Care

International, Islamic Relief Worldwide. However, as foreign commercial lenders moved into the market, the share of subsidized funding has decreased significantly, from 46 percent in 2004 to 12 percent in 2007.

There is a clear upward trend in the median indicator for portfolio at risk between 2006 and 2008. The inflationary pressures that started at the end of 2007 in BH as well as the repercussions of the global financial crisis have affected the repayment capacity of clients.

In order to improve efficiency in the microcredit sector, and the financial sector as a whole; a unified Banking Agency for Bosnia must be established, the thing that is not likely to happen until the Bosnian Constitution is amended sometime in the future.

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