

## Indebtedness of Microcredit Clients in Bosnia and Herzegovina

### *Results from a comprehensive field study*

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Klaus Maurer, European Fund for Southeast Europe (EFSE)

Justyna Pytkowska, Microfinance Centre (MFC) of CEE and NIS

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### OBJECTIVES OF THE STUDY

The European Fund for Southeast Europe (EFSE) commissioned a study<sup>1</sup> to analyze the situation indebtedness of microcredit clients in Bosnia and Herzegovina which has been the leading microfinance market in Central and Eastern Europe. The objectives of the study were (i) to gain an understanding of the level of indebtedness and underlying borrowing patterns of microcredit clients, (ii) to establish evidence on the scope of over-indebtedness, (iii) to shed light - on both the demand and supply side - to the factors that led to over-indebtedness, and (iv) to provide solutions and recommendations for overcoming the situation of increased over-indebtedness.

### METHODOLOGY

**Sample.** The study was conducted from July to November 2009 on a sample of 887 microcredit borrowers of six leading microcredit organizations and one microfinance bank. The sample was drawn proportionally reflecting the market share of each institution. Clients of the participating institutions were randomly selected to assure the validity and representativeness of the data. Given the scale of outreach of the participating institutions the results

stand for 56% of the microcredit market in terms of number of borrowers.

**Approach in two stages.** In a first stage, a quantitative analysis was conducted based on the secondary data of 887 clients from two sources: (i) data on borrowings and guarantees (status 30 June 2009) as reported to the credit registry (CRK) administered by the Central Bank and (ii) data on household income from the client files of the respective MFI. The analysis resulted in a fair picture of the borrowing patterns and the (over)indebtedness of the sample clients. 367 clients or 41% of the sample were identified as problem clients, i.e. having repayment problems and/or being overindebted.

The second stage of the study focused on factors that led to overindebtedness. On the supply side, interviews were conducted with 22 credit managers and loan officers of the participating institutions. On the demand side, a survey among 367 problem clients identified in the first stage was initiated. At a response rate of 65%, 239 interviews were finally conducted in fall 2009. The remaining 122 clients refused to participate in the survey and 5 clients were deceased.

The main findings of the study are presented in the following.

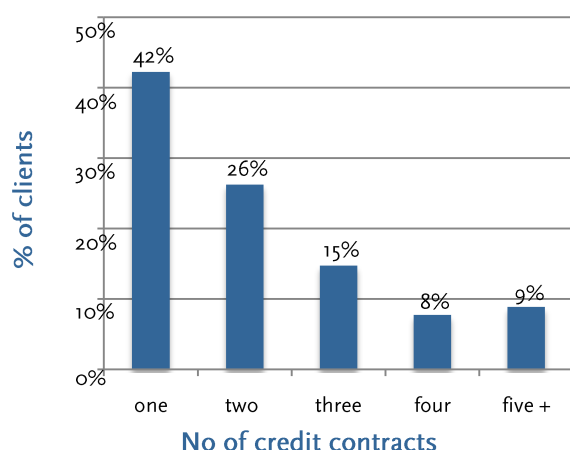
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<sup>1</sup> The study team comprised Klaus Maurer (lead), Justyna Pytkowska from the Microfinance Center in Warsaw, Poland, Milena Bertram and Nikolas Karambadzakis from the EFSE Development Facility team. The field interviews in Bosnia were conducted by Prism Research.

## BORROWING PATTERNS

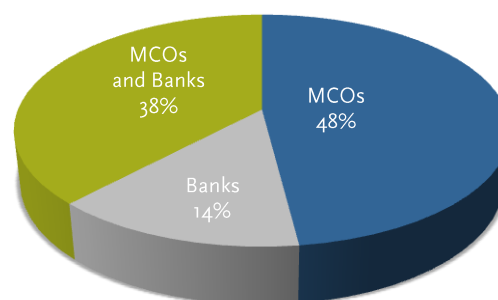
The majority of borrowers have multiple loans. After compiling credit registry data for each client, it was found that 887 clients in the sample had a total of 2,021 active credit contracts, or an average of 2.3 contracts per client. 58% of microcredit clients had more than one active credit contract (Chart 1). A considerable share of clients (17%) had four contracts and more at the same time, with the maximum of 14 contracts. Regular term loans from MCOs and/or banks are the most common product. The use of credit cards and debit cards is still low with 5.5% resp. 3% of the clients.

Chart 1: Multiple Borrowings



Cross-borrowing from different institutions is common. From the original sample of 887 clients 81% were drawn from MCOs and 19% from a bank. This initial picture changed considerably when complete borrowing data became available from the credit registry. It turned out that many clients (38%) simultaneously borrow from MCOs and commercial banks (Chart 2). This shows that there is an increasing overlap and integration of the microcredit and the banking sectors.

Chart 2: Source of Credit (% of Clients)



Cross-borrowing from different types of institutions increases with the number of active credit contracts. On average, clients use loans from 1.9 different institutions concurrently; at the extreme, one client had loans with 9 institutions. Even among clients with only two active credit contracts, the vast majority (86%) borrowed from two different institutions.

Some overdue borrowers even received fresh loans. 6% of the clients received a fresh loan when they were already overdue on an existing loan. Such loans were issued both by MCOs (56%) and banks (44%).

## REPAYMENT PERFORMANCE

27% of clients are overdue on their loan repayments. While the majority of clients (73%) manage to make their monthly repayments on time, 11% have at least one contract with short term arrears of up to 30 days and 16% of clients are overdue on at least one contract by more than 30 days (Table 1). The total value of the outstanding portfolio with overdue amounts for over 30 days is 13%. Among the overdue clients, the majority are late on just one credit contract.

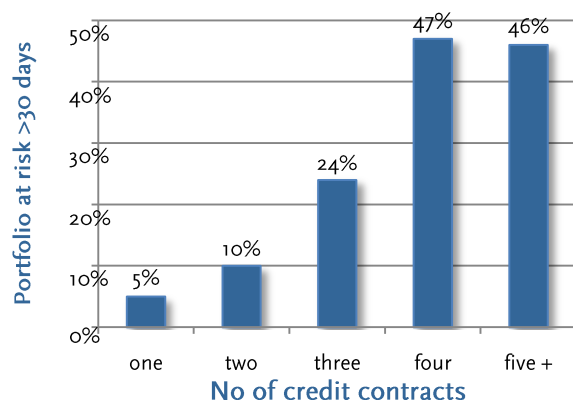
Table 1: Repayment performance

Repayment	% clients	% portfolio
Current	73	75
Overdue 1-30 days	11	12
Overdue > 30 days	16	13
Total	100	100

The study identified a number of factors that influence the repayment performance:

**Repayment problems are more frequent among clients with multiple loans.** The depth of repayment problems increases with the number of loans. There is a correlation between the number of active credit contracts and the number of days late or the amount overdue. Among clients with a single loan, only 5% are overdue by more than 30 days. This figure increases to 10% with borrowers having two loans and approaches almost 50% when clients take four or more loans (Chart 3).

**Chart 3: Multiple Borrowings and Repayment Performance**



**Granting new loans to clients that are already overdue on existing loans.** Clients who were granted loans while they were late on repayments in their previous credit contracts (6% of clients) show far worse repayment performance. As much as 75% of this client group is 30 days overdue on its repayments compared to 16% of the total clients.

**Repayment performance on bank loans is worse than loans from MCOs.** Twice as many bank contracts (16%) were overdue by more than 30 days compared to those of MCOs (8%).

**Loan contracts with larger amounts and longer terms are more often overdue.** Loan contracts that were overdue by more than 30 days amounted to KM 7,016 on average, compared to KM 4,487 for non-problem loans. The average term also differed: 45 months for overdue loans versus 35 months for current loans.

**The overindebtedness of some clients was found to be a major cause of repayment problems.** The ontake of excessive debt in relation to income has brought many clients into a situation of overindebtedness and repayment difficulties. The next section sheds more light on this relationship.

## OVERINDEBTEDNESS

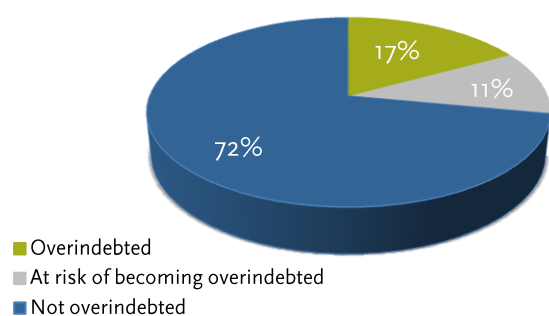
**Definition.** The level of indebtedness is measured by the debt service payments in relation to net income. A *Net Indebtedness Index* was constructed using the following formula: *total monthly instalments on household debt/net monthly household income*<sup>2</sup>. Based on the calculation of the Net Indebtedness Index clients were classified into three groups:

- Overindebted – if 100% of the client's household net income was used on debt servicing, the Net Indebtedness Index was equal to or exceeded 100%
- At risk of becoming overindebted – if the client used over 75% of the net household income on debt servicing – Net Indebtedness Index between 75% and 100%
- Not overindebted - if the client spent less than 75% of the household net income on debt servicing – Net Indebtedness Index below 75%

The thresholds for the above categories were developed by the research team, tested in a pilot study and finalized after consultations with microcredit providers.

<sup>2</sup> net monthly household income = total monthly gross income of the household – total monthly expenses of the household

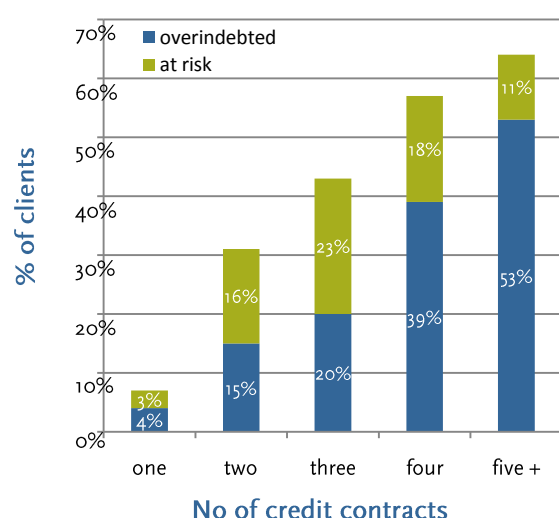
Chart 4: Level of Indebtedness



28% of the microcredit clients are seriously indebted or overindebted. 17% of clients are overindebted as the sum of monthly repayments exceeds the disposable income of the household and 11% are regarded as being at risk of becoming overindebted, as the amount spent on debt servicing every month exceeds 75% of their net household income.

**Multiple borrowing and overindebtedness go hand in hand.** The level of indebtedness increases with the number of active loan contracts. Among clients with a single loan only 4% are overindebted compared to 53% of those who have five or more loans (Chart 5).

Chart 5: Multiple Borrowing and Overindebtedness



Multiple borrowing during the same month also increases indebtedness. Almost 5% of clients entered several loans during the same month. When granting a new loan, financial institutions did not have updated information about the client as the information from the latest contract was not yet available on the credit registry.

**Overindebtedness is a function of a household's net income.** The average monthly income of overindebted clients is less than half the income level of client who is not over-indebted (Table 2) Clients with a higher level of net income are indebted to a much lower degree.

Table 2: Average net income by indebtedness class

Indebtedness category	Average net monthly household income (KM)
not over-indebted	885
at risk	520
over-indebted	427

**Gender-related differences in over-indebtedness are not very significant.** 31% of all men tend to be overindebted or at risk compared to only 24% of women.

**Not only MCOs but also commercial banks are affected by overindebtedness of clients.** As shown in Chart 2 above, 52% of the sample clients also borrow from commercial banks, and among the problem clients (seriously indebted or overindebted) the share of clients who have loans from commercial banks is even higher at 61%.

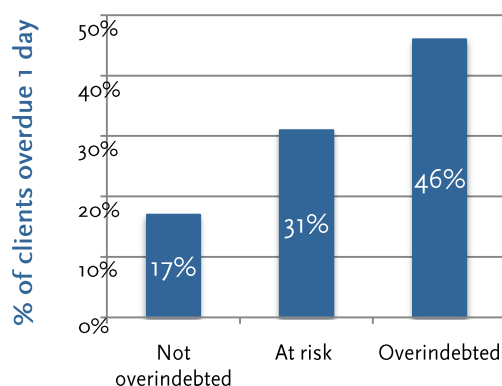
**Overindebtedness has likely further increased in recent months.** First, there is a time lag in the effects of the global crisis on employment and income in Bosnia. These effects are not fully captured by early data used in the study. Second, actual indebtedness at the household level may be

greater than indicated by the credit registry data based in individual clients. Third, some microcredit institutions did not start reporting to the credit registry until late 2009; therefore, the scale of indebtedness was underestimated until recently. As a conclusion, it is plausible to assume that approximately 25% to 30% of clients are overindebted.<sup>3</sup>

## INDEBTEDNESS LEVEL AND REPAYMENT PERFORMANCE

Repayment performance is correlated with the level of client's indebtedness. However, this relationship is an indirect result of the effect of the number of credit contracts on indebtedness level and repayment performance. Indebtedness deepens with the increase in the number of credit contracts, which drives down repayment performance.

**Chart 6: Repayment Performance and Overindebtedness**



Clients with repayment problems have larger debt relative to income. Overdue clients have debt at 12 times the monthly household income as shown in Table 3. Borrowers with good repayment performance have a much lower debt exposure, on average equivalent to approximately 5 times monthly

<sup>3</sup> Findings from the field survey suggest that clients who were initially categorized "at risk of becoming overindebted" have indeed become overindebted in the course of the crisis year 2009. In a small and non-representative sub-sample of clients the percentage of overindebted clients grew from 31% to 59% for the same sample between the first and second stage of the study.

income. These findings should serve MCOs and banks for defining "healthy" and maximum debt exposure levels for microfinance clients.

**Table 3: Debt and Income Levels**

	Current	overdue >30 days
Average gross monthly household income (KM)	1,645	1,912
Original loan amount - all contracts (KM)	8,430	23,516
Average Debt to Income Ratio	5.1	12.3

However, the causality between over-indebtedness and repayment problems is neither strict nor exclusive. A differentiated relationship between the level of indebtedness (over-indebted versus not over-indebted) and repayment performance (timely versus overdue) is shown in the matrix below. As one would expect, clients who are over-indebted or seriously at risk of becoming over-indebted often do not repay their loans on time (Group D).

**Chart 7: Delinquency and Indebtedness Matrix**

	Past due	Timely	Total
Over-indebted	D 12%	C 16%	28%
Not over-indebted	B 14%	A 58%	72%
Total	26%	74%	100%

However, surprisingly, there are a number of clients (16%) who, despite being overindebted, manage to repay on time (Group C). An explanation may be that these clients have employed coping mechanisms such as finding an additional job or

drawing on support from family and friends. Conversely, there is a group of clients (Group B) that are not overindebted but are overdue on their debt service. This indicates that despite sufficient income other factors hinder their ability to make timely repayments. To some extent, this might be explained by behavioral factors, i.e. an erosion of repayment discipline or unwillingness to repay. Another explanation might be delayed income payments (salary, pension or business receivables) which have become a common phenomenon in crisis-prone Bosnia. Finally, it is also possible that due to methodological imperfections (time lag of income data versus debt data) the actual indebtedness level of some clients was underestimated.

## GUARANTEES

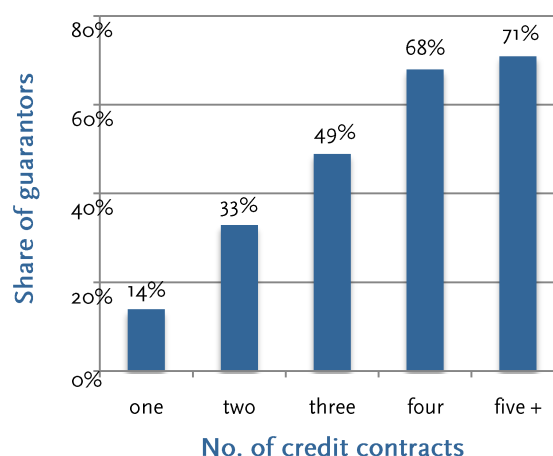
**More than one third of the borrowers are guarantors for others.** Quite a significant share of clients (34%) act as guarantors and are registered as such in the CRK database. In fact, even more people are liable for other people's credit. Those who guarantee debt in solidarity group lending schemes are not reported to the credit registry as guarantors but are co-responsible for the loan and may be asked to contribute to its repayment.

**Guarantees have become a common feature in lending by MCOs.** In fact, the majority of guarantees are provided for MCO loans. As a general rule, credit institutions require guarantors to have permanent employment or regular, certified income from other sources (pension, social benefit). This indicates a certain shift in the lending methodology of MCOs of cash flow based lending to microenterprises.

**Taking multiple loans is correlated with providing guarantees for others.** The more loans people take for themselves, the more guarantees they provide for others. Among clients with single loans, only 14% provide a guarantee for other people (Chart 8).

The guarantor share rises to 70% for clients who have taken four or more loans for themselves. On average, a guarantor provides 2.1 guarantees, with the maximum of 11 guarantees.

**Chart 8: Multiple Borrowing and Guaranteeing Others**



**Guarantees are ruled by reciprocity.** Providing guarantees for each other appears to be a common practice among frequent and multiple borrowers. In order to receive a loan the client needs to find a guarantor and the more loans he takes the more guarantors he needs to find. In return for the favor the client becomes a guarantor for people who earlier guaranteed for him. Reciprocity has become the rule of the game: *I guarantee you, you guarantee me.*

**Guarantors are not aware of the risk they engage in.** Clients explained during interviews that acting as a guarantor was a risk-free favor to other borrowers who would in turn become a guarantor of one's own loans. It was seen as a pure formality and, since loan defaults were very rare, being a guarantor did not entail any consequences. As a result, guarantors often did not care to know the level of indebtedness of the person they guaranteed. A third of guarantors only knew how the amount of the loan the person was taking, but did not know about the other debts of that borrower.

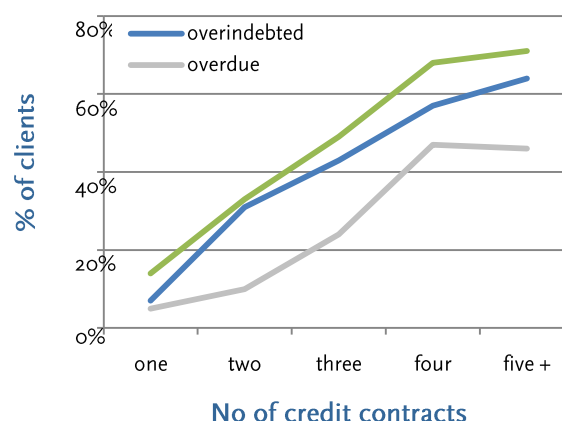
Clients who are guarantors more often experience repayment problems with their own loans. 27% of borrowers who guarantee for others are overdue more than 30 days on their repayment compared to only 11% among non-guarantors. The observed phenomenon is a consequence of a specific borrowing pattern – clients who borrow more are more likely to become guarantors in order to secure access to a pool of potential guarantors of their future loans.

### PUTTING THE PIECES TOGETHER: MULTIPLE CORRELATION AND COMPLEX INTERDEPENDENCE

**12% of clients are seriously in trouble.** This group of clients has maneuvered itself into a most difficult situation. These clients have taken multiple loans (average of 3.7), they are overindebted and face problems in repaying their loans. In addition, they provide a considerable number of guarantees (average of 2.9) to others. Most guaranteed loans have also become overdue, thus increasing the likelihood of the guarantees being called. These cases illustrate the complexity of the problems involving a multiple correlation of factors and a serious accumulation of risks.

The result is a complex interdependence of multiple borrowers and guarantors and a serious accumulation of risks through overindebtedness and low repayment performance. Combining the results from the different parts of the study shows that four factors are correlated and interdependent: (i) multiple borrowing, (ii) providing multiple guarantees to others, (iii) the level of overdue, and (iv) the degree of overindebtedness. The correlation is clearly visible in Chart 9 where the four factors are plotted.

Chart 9: Interdependence and Multiple Correlation



The chart shows that risk levels significantly increase when people take three or more loans at the same time: they tend to provide more guarantees to others, the level of indebtedness increases and repayment problems are on the rise. Based on the data available, the group facing these risks is estimated in the range of 25% to 30% of the clients. The challenge is to disentangle the complex interdependence of multiple borrowing coupled with guaranteeing others, overindebtedness and low repayment performance.

### FACTORS THAT CONTRIBUTED TO OVER-INDEBTEDNESS

On the **demand side**, looking at the microcredit clients, two main factors were found that contributed to the overindebtedness of microcredit clients: (i) deterioration of economic conditions, and (ii) evolution of an easy credit culture.

**Deterioration of the economic conditions.** For the majority – 73% of interviewed clients – their financial situation has worsened since the time they took out their last loan causing difficulties in repayments. Most often lower income, delays in salary/pension payments and higher cost of living led to the decrease of income available for debt repayment.



**Evolution of an easy credit culture.** Due to the easy availability of credit in the past years, a credit culture has evolved which made people borrow not only for income generating activities but increasingly for consumption purposes and for raising their standard of living. Often borrowers overestimated their repayment capacity. 21% of interviewed clients admitted to being overly optimistic about their future capacity to repay their debt. At the same time, the culture and attitude towards savings is not well developed and surprisingly few people have a savings account.

On the **supply side**, i.e. the credit providers, a number of factors have contributed to the situation: (i) fierce competition among credit providers, (ii) riskier lending, (iii) fast institutional growth, (iv) lack of industry code of conduct, (v) lack of full information on the indebtedness of clients, and (vi) high capital inflow to the financial sector.

**Fierce competition among credit providers.** Since mid-2007 competition intensified as banks started offering credit to microentrepreneurs and MCOs started serving salaried workers and pensioners. On the one hand, commercial banks started entering microcredit market by offering business, consumer and housing loans to microentrepreneurs. As reported above, 38% of MCO clients also take loans from commercial banks, often cheaper and in larger amounts. In some cases, commercial banks offered debt refinancing – to repay loans with other financial institutions. On the other hand, the increasing saturation of the microenterprise market motivated MCOs to open up to new types of clients such as salaried people, pensioners who started taking consumer and housing loans. 33% of all MCO clients received income from a permanent job or pension.

**Riskier lending.** Competition between so many financial institutions led to the employment of more persuasive sales techniques, quicker disbursements

after more shallow assessment of the repayment capacity, over-reliance on personal guarantees, lending to riskier clients. In fact, 60% of the problem clients interviewed were of the opinion that their current situation is attributable to intensified sales behavior of the financial institutions. Interviews with problem clients uncovered that 30% had not been visited at the time of loan appraisal.

**Fast institutional growth.** The drive towards higher market coverage coupled with the availability of funds for market expansion led to fast institutional growth – new, less experienced field staff started working with clients, capacity-building of middle management on the branch level did not keep up with the growth of portfolios under their management, sometimes contributing to lax lending standards and indirectly increased over-indebtedness.

**Lack of the industry standards for code of conduct.** High competition for clients sometimes provoked irresponsible lending that could not be curbed due to the lack of code of conduct or standards of responsible finance. In such cases, clients remained unprotected from unfair treatment and malpractice.

**Lack of transparency on client indebtedness.** Although a credit registry (CRK) has been functioning since 2003, microcredit organizations did not rigorously use CRK information until the last quarter of 2008. Until recently, only a few institutions checked the CRK records of other household members of the loan applicant. However, client interviews revealed that in a third of surveyed households more than one person in a household was a borrower.

**Capital inflow to banking and microfinance sectors.** High demand for funds, combined with high profitability of Bosnian MCOs, the size of their operations, maturity and experience of MCO top



managers allowed microfinance investors to place large sums and position Bosnia and Herzegovina as the largest recipient of external funding for non-bank microcredit institutions in the whole region of Eastern Europe and Central Asia.<sup>4</sup> At the same time bank privatizations and reforms in the financial sector, along with improved growth prospects, attracted large capital inflows to the banking system as foreign direct investment and long-term borrowing by foreign bank subsidiaries.

## POSSIBLE SOLUTIONS AND RECOMMENDATIONS

Recognizing the seriousness of the situation financial institutions have already taken up measures to manage current indebtedness. These include loan rescheduling, extension of a grace period, close monitoring of client's performance and joint client visits and workouts. Preventive measures include a return to basic lending methodologies and the original target market, higher eligibility criteria for new loan applicants, more thorough assessment of repayment capacity, and closer loan monitoring.

Based on the results of the study, the following recommendations for key groups of industry stakeholders were developed:

**Microcredit providers.** The recommendations comprise the following: (i) Limit credit exposure per client, either by imposing a limit on the number of concurrent credits that a client can have or by limiting maximum debt levels in relation to income, (ii) Reduce incentives for cross-borrowing from multiple institutions, (iii) Strengthen loan appraisal through obligatory client visits and systematic cash flow analysis, and reduce reliance on guarantees,

(iv) Disentangle the interdependence of borrowers and guarantors, e.g. by limiting the number of guarantees that one person can provide.

**Association of MFIs – AMFI.** The recommendations comprise the following: (i) Develop industry-wide standards of conduct with clearly defined indicators on maximum number of loans or level of debt per client, (ii) Introduce compliance monitoring, by creating an auditor or arbiter function and by strictly applying sanctioning procedures, (iii) Coordinate and cooperate with the Banking Association as many MCO clients are also borrowing from banks.

**Investors and creditors.** The recommendations comprise the following: (i) Support microfinance industry in the development of standards of the code of conduct, (ii) Include the assessment of the compliance with the standards of the code of conduct into due diligence.

**Credit registry CRK.** The recommendations comprise the following: (i) Harmonize and define risk classification methodology (risk categories A to E), (ii) Harmonize the reporting method for the number of days in arrears, as institutions currently report the number of days late in two different ways – for the last month only or cumulatively since the disbursement, (iii) Clearly mark restructured loans, (iv) Introduce real time data uploads by financial institutions, (iv) Create more user-friendly output for financial institutions, e.g. a format for data transfer to enable electronic management of all client information, (v) Conduct trend analysis of comprehensive CRK data.

**Consolidation of the microfinance sector.** There is a broad consensus on the need for a consolidation and reform of the microfinance sector. This includes (i) resolving the status of ownership and introducing good governance, (ii) adopting the same high standards in credit management and financial

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<sup>4</sup> At the end 2008 the value of liabilities of Bosnian MCOs to international investors and local banks increased by 37% to reach USD 621 million which constituted 39% of the total volume of debt of non-bank microfinance institutions in 27 countries of Eastern Europe and Central Asia ("Microfinance in ECA on the Eve of Financial Crisis. 2009 Edition", J. Pytkowska, A. Mach, Microfinance Centre(MFC) for CEE and NIS, November 2009)

discipline as applied to the commercial banks by the Banking Agencies, (iii) ensuring full compliance with the Agencies' standards. These and other measures will contribute to an integration of microfinance into the mainstream financial sector.

Contact: EFSE Development Facility, Milena Bertram at Finance in Motion, Frankfurt, Germany [m.bertram@finance-in-motion.com](mailto:m.bertram@finance-in-motion.com). Finance in Motion is the Fund advisor to the European Fund for Southeast Europe (EFSE)