Department for Banking and Finance
Center for Microfinance

Summary Report

The Level of Indebtedness of MSME Credit Customers and the Quality of Finance in Bosnia and Herzegovina

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1 OBJECTIVES OF THE STUDY

This report analyses the level of indebtedness of MSME credit customers and the quality of finance in Bosnia and Herzegovina (BiH). The EFSE Development Facility (DF) commissioned this study in February 2013, following a first study by the EFSE DF on the subject in 2009. The first study (Maurer/Pytkowska, 2010) confirmed the presence of over-indebtedness as defined by the authors, among microcredit borrowers in BiH. More than half of the borrowers had more than one active credit contract and 28 per cent of the borrowers were seriously indebted or over-indebted.

The objectives of the present study are to (i) assess the current level of indebtedness and repayment performance of micro, small and medium enterprises (MSMEs) and retail borrowers in BiH, (ii) to examine the factors – on both the demand and supply side – that drive high levels of indebtedness, (iii) to assess the quality of finance for these clients of financial institutions, and (iv) to propose recommendations for financial institutions in BiH. Whilst the 2009 study focused solely on the microcredit market, the present study captures MSME clients of banks and microcredit organisations (MCO) because it was indicated by the 2009 study that commercial banks and MCOs show growing customer overlaps in these market segments. Moreover, this study also covers the quality of finance aspect, since it is assumed that, whilst ready access to credit is a reality in BiH, it is not clear whether customers are satisfied with the services provided. Where possible, we compare the situation of microcredit borrowers of MCOs to the situation as assessed in 2009.

2 METHODOLOGY

Definitions

With regard to the quality of finance, the study investigates those areas of the Client Protection Principles that are particularly relevant in the context of the study, namely

- The impact of portfolio and delinquency management on preventing client over-indebtedness,
- The financial literacy of loan customers and the price transparency of suppliers,
- Customer satisfaction with products and delivery channels,
- Fair and respectful treatment by the supplier, and
- Knowledge and use of complaint mechanisms.

MSMEs are defined in this present study based on a combination of several definitions applied by different stakeholders in BiH. The definitions used are as follows:

- Microenterprises – turnover up to KM 80,000 (about Euro 40,000)[i]
- Small enterprises – turnover from KM 80,000 to KM 400,000 (about Euro 200,000)
- Medium enterprises: turnover from KM 400,000 to KM 5 million (about Euro 2.56 million)

With regard to the market segments examined, we limit the analysis to three credit market segments on the basis of credit contract size. This classification is not standardised in MSME or credit market definitions used in BiH or elsewhere. However, it seems the most meaningful when comparing practices of different financial institutions in BiH as discussed in initial meetings with stakeholders.

- Segment 1 – clients with credit contracts up to KM 20,000 (roughly Euro 10,000) at approval
- Segment 2 – clients with credit contracts from KM 20,000 to KM 50,000 (roughly Euro 25,000) at approval
- Segment 3 – clients with credit contracts from KM 50,000 to KM 200,000 (roughly Euro 100,000) at approval

With regard to indebtedness, we use two indebtedness indices – following the approach first developed in the 2009 study (Maurer/Pytkowska, 2010) and applied in subsequent studies – to measure the level of indebtedness:

- Individual net indebtedness index = total monthly debt repayment/total net monthly income of the borrower[ii]
- Business net indebtedness index = total monthly debt repayment/total monthly net business profits.[iii]

Even though using cash flow rather than net income data would be more appropriate for assessing the repayment capacity of businesses, business data on net income is better available than cash flow information.

Based on the calculation of the net indebtedness indices, borrowers are classified into four groups:

- Not over-indebted – if the loan holder spends less than 50% of household net income/business net profits on debt servicing – indebtedness index (net) below 50%
- At risk of over-indebtedness – if the loan holder spends between 50% and 75% of household net income/business net profits on debt servicing – indebtedness index (net) between 50% and 75%
- Critical – if the loan holder spends between 75% and 100% of household net income/business net profits on debt servicing – indebtedness index (net) between 75% and 100%
- Insolvent – if the loan holder spends all household net income /all business net profits on debt servicing – indebtedness index (net) equal to or exceeding 100%.[iv]

A summary of the client data collection methods and sources can be seen in table 1.

Table 1 Client data sources and collection methods

Data collection method	Data source
Supply Side Client Data: Anonymous and coded sample credit-related data on individual borrowers and legal entities (supply side client data), in the following called the supply side client data.	Randomly drawn MIS Data from 10 FIs (5 banks, 5 MCOs) as at end December 2012. Anonymised data from the Central Bank of BiH (CBBH) (extracted at the end of April 2013).[v] Matching dataset of anonymous and coded client records from both MIS sample and CBBH sample.
Supply Side Data: Interviews with financial sector stakeholders, management and staff of FIs on factors in loan approvals, portfolio quality and quality of finance (supply side data).	10 interviews with financial sector stakeholders and 35 interviews with management and staff members of 10 FIs.
Demand Side Client Data: Interviews with loan customers (retail and MSME) regarding loans, other financial services and quality received (demand side client data).	i) a general household survey of 509 randomly drawn MCO and bank customers (retail (household) and informal enterprises); ii) a business survey of 200 randomly drawn registered MSMEs (either bank or MCO borrowers); iii) an in-depth survey of 120 MCO customers contacted by the MCOs All demand-side samples have been compiled between June and October 2013.

Data caveats

It is important to note several caveats with regard to the data collection.

Firstly, we have a random data sample of ten financial institutions which is representative for around 50% of the market but not for the entire BiH market.

Secondly, the results from the different datasets are not perfectly consistent, which is to be expected in a financial landscape study that combines data from different sources and not all of them are statistically representative of the entire market. We have found no major contradictions between the various analyses, however.

Thirdly, demand side surveys sample data rely on recall data and may suffer from recall or response biases. Hence, although the household survey and the business survey form random and representative samples of the borrower populations in the entire credit market in BiH, the samples must be seen as less accurate than the institutional data sample.

Comparison to the 2009 study

The 2009 study focused on microcredit borrowers only, whereas the current study examines retail and MSME customers of MCOs and/or banks. A panel study of clients observed in 2009 would have been desirable;

however, due to privacy protection legislation it was not possible.[vi] Instead, the study comprised three random large-scale surveys between June and October 2013.[vii]

3 KEY FINDINGS

The key findings were as follows:

The vast majority of borrowers are retail customers with outstanding credit of KM 20,000 or below and on average two credit products. Just 3% of borrowers are borrowing more than KM 50,000 and/or are registered MSMEs.

The majority of borrowers have more than one credit product outstanding (67% of all active borrowers), with almost a quarter (23%) having four or more contracts. Higher loan size is closely linked to higher number of contracts, so that customers taking loans in segment 3 (more than KM 50,000) have an average of 4.5 loan contracts, compared with an average of 2 loan contracts across all borrowers.

Multiple and cross-borrowing are still prevalent albeit to a lower degree compared to the 2009 microcredit data sample. Results from different samples are not fully consistent when it comes to the influence of multiple borrowing and cross-borrowing on levels of indebtedness. Multiple and cross-borrowing are positively associated with higher indebtedness based on data collected in the surveys. Supply side client data sample do only confirm this association in segment 1.

High levels of indebtedness seem to prevail in certain market segments, with 49% of all businesses within the data sample of the 10 participating FIs meeting criteria for insolvency as defined in this study, while the same holds for 23% of all individual borrowers within the same sample. It needs to be pointed out that indebtedness index for businesses is based on net income and not on cash flow, which has a significant impact as 80% of the businesses have timely debt repayments.

Indebtedness in the sampled microcredit market segment of five FIs that participated in both studies has declined since 2009 in all categories (share of clients being at risk, critical, and insolvent).

Repayment problems are more pertinent for MSMEs compared with retail borrowers and in neither case are overtly linked with higher levels of indebtedness.

Repayment performance in the microcredit market segment sampled in 2009 and 2013 has improved compared to 2009, as the share of borrowers with overdue payments of more than 30 days in the five FIs that participated in both studies decreased from 15% to 8%.

Cross-borrowing negatively affects repayment performance, particularly in credit market segments 2 and 3.

Quality of finance as currently provided receives good scores from borrowers. On average, MCOs score slightly better than banks in most quality aspects, with the exception of loan price. The study points to a positive association between the quality of financial products and repayment performance.

Improving debt literacy on the part of borrowers helps to maintain sound levels of indebtedness and repayment performance.

Good credit history seems to be an indication for timeliness of repayment of next credits.

Being a guarantor whilst repaying a loan does not seem to affect repayment performance per se. However, customers guaranteeing overdue loans show a higher risk of falling behind with payments on their own loan.

Competitive pressure in the financial sector in BiH is high and institutions are pushing loans at both MSMEs and consumers but there is limited appetite for such loans.

4 ANALYSIS

4.1 Borrowing Patterns

Who are the borrowers?

According to the MIS data, the vast majority of all borrowers (97%) are physical persons taking loans of KM 20,000 or below (98%), whilst legal entities constitute 3% of credit clients in the supply side client data sample (Table 2). Mapping supply side client records against population data shows that roughly 29% of the adult population of BiH uses credit.

Table 2 Number of all borrowers and credit contracts in 2013

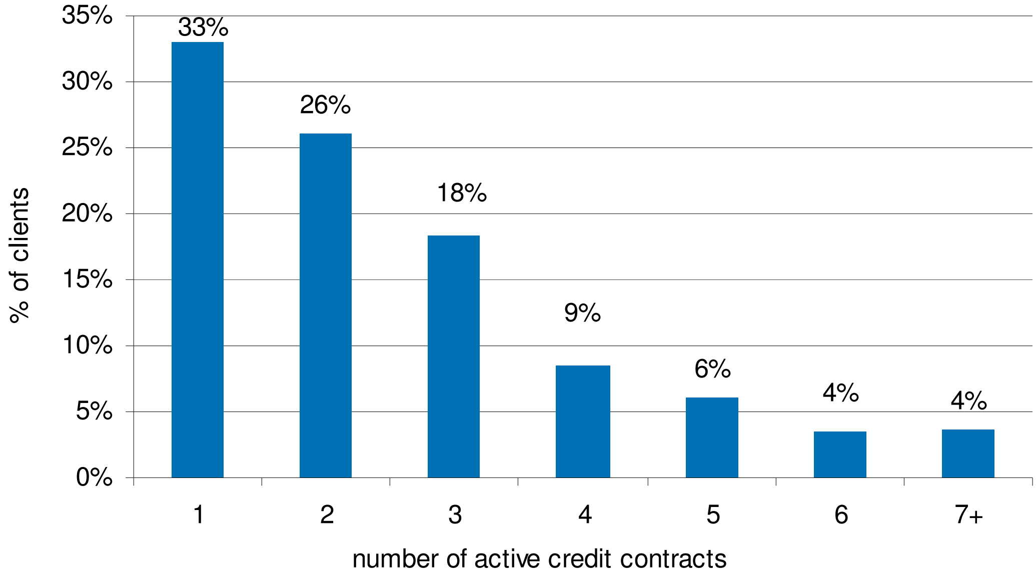
	Number of active borrowers	% of active borrowers	Number of active credit contracts	% of active credit contracts
Segment 1: up to KM 20,000	973,713	98%	1,866,810	93.74%
Segment 2: above KM 20,000 to KM 50,000	84,334	8%	93,243	4.68%
Segment 3: above KM 50,000 to KM 200,000	25,242	3%	31,312	1.57%
All segments[viii]	994,304		1,991,365	100%

Source: Anonymised supply side client data, compiled by Pytkowska (2013).

How many credit contracts per borrower?

The supply side client data sample also shows that the majority of borrowers (67%) has more than one credit contract (see figure 1), in line with the pattern found among micro clients in the 2009 study. The average in the supply side client data representing the total borrower population (n=1,991,365) is two active credit contracts (see Table 3). Almost a quarter of all clients (23%) have four or more contracts at the same time and increased loan size correlates with increased number of credit contracts, with segment 3 borrowers taking the most credit contracts and segment 1 the fewest. The various samples point to a different intensity in multiple borrowing, however. While we see consistent tendencies of multiple borrowing across the four samples within the different credit market segments, we find a difference between the average number of active credit contracts within the supply side client data sample and the other three samples. The supply side client data sample provided for 10 participating financial institutions suggest that borrowers in segment 3 hold on average 4.56 active loans compared to considerable lower numbers of the remaining three borrower surveys.

Figure 1 **Multiple borrowing: number of active credit contracts as % of clients**



n = 1,575.
Source: Supply side client data, compiled by Pytkowska (2013).

Table 3 **Average number of active loans per borrower**

	Data for total borrower population	Supply-side client data	Household survey	MCO client survey	Business survey
Segment 1	n/a	2.54	1.10	1.47	n/a
Segment 2	n/a	3.34	1.37	1.68	n/a
Segment 3	n/a	4.56	1.61	2.2	n/a
All segments	2.0	2.61	1.15	1.8	1.77

Note: We report mean values. Source: supply side client data and own surveys.

One explanation for the gap between the supply side client data analysis and the borrower survey results lies in the difficulty of accurately recalling financial details for an entire household in one interview. It is likely that demand-side survey results understate the extent of multiple borrowing.[ix] Another reason could be that some of the loans were repaid between the supply side client data extraction and the period asked about in the interviews (summer 2013). As stated in the data inconsistencies section above, the supply side client data can be taken as more accurate.

It should be noted that higher number of active loan contracts in segment 3 must not be seen necessarily problematic since larger businesses and those with multiple activities typically need to have a portfolio of debt financing instruments; they often also combine short-term working capital loans with overdraft agreements and long-term investment loans. The larger the business, the less useful it is to consider "multiple borrowing" as a problem per se unless it affects repayment performance.

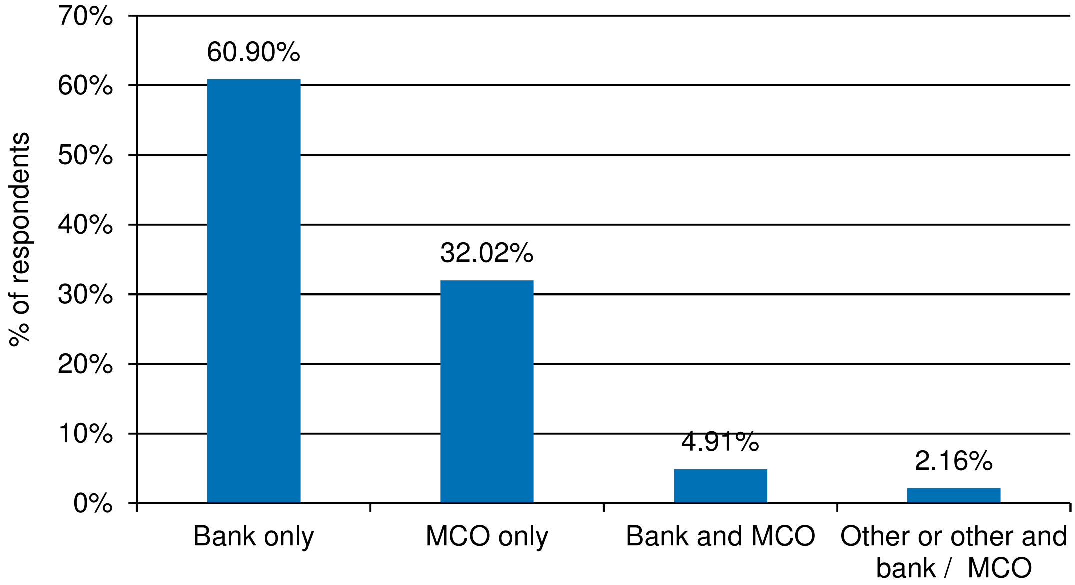
Multiple borrowing has decreased slightly since 2009. Compared to the situation in 2009 - using to the extent possible the same sample used in

2009[x] - we find that the share of multiple borrowing has decreased from 58% in 2009 to 47% in 2013. Moreover, the average number of active credit contracts one borrower holds declined from 2.2 contracts to 1.8 contracts per borrower.

Cross-borrowing, a second pattern found frequently among microcredit clients in the 2009 study, also decreased slightly in this sample. The 2009 study indicated a high share of cross-borrowing, i.e. taking loans with more than one lender at the same time. In the current study, we find that the share of cross-borrowers decreased from 38% in 2009 to 29% in 2013 overall.[xi]

Current data of the supply side client data sample, which reflects all active borrowers holding an active credit contract below KM 200,000, suggest that 41% of all active borrowers cross-borrow from different financial institutions. This share of clients that cross-borrow is higher in the market segments 2 and 3 (segment 1 = 41%; segment 2 = 55%; segment 3 = 53%).

Figure 2 Lenders used by household survey respondents



n = 509.
Source: own household survey (2013).

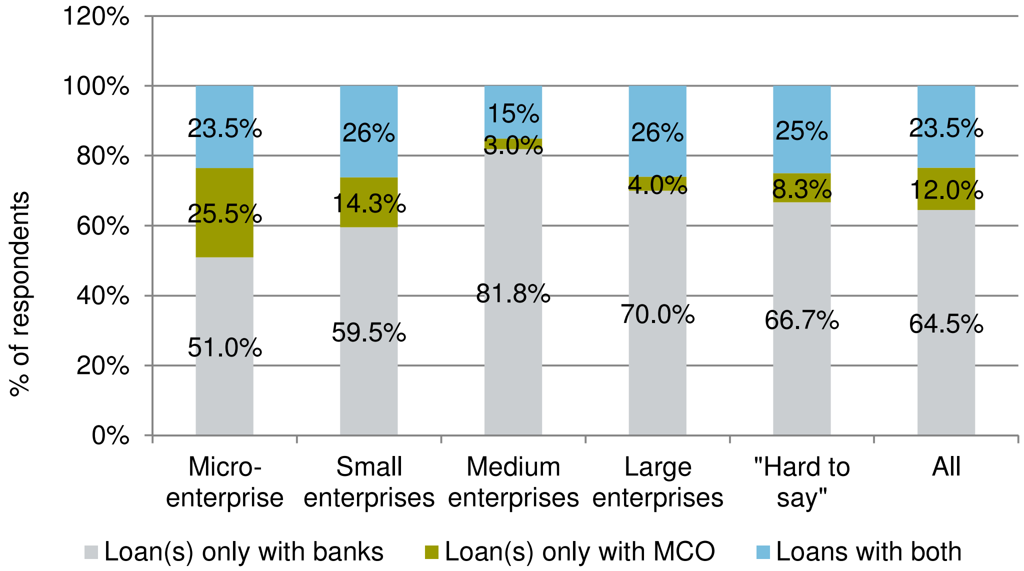
Household survey: Banks and MCOs show small market overlap.

Figure 2 shows which types of lenders are used by the borrowers interviewed in the general household survey. Households borrow to more than 60% from banks. Less than 5% of household survey respondents borrow from banks and MCOs at the same time. Both household and MCO client surveys show that a significantly higher share of households that borrow from MCOs only derive income from self-employment or business activities (including agriculture).

Business survey: Majority of registered businesses prefers banks.

Figure 3 shows the distribution of type of lender across business size. With regard to the type of lender used, the vast majority of the registered businesses sampled (82.5%) turned to banks. Overall, 16.5% obtained their most recent loan from an MCO, and 1% from another type of institution.

Figure 3 **Type of lenders used by business survey respondents (most recent loan)**



n = 200.
Source: own business survey (2013).

Banks predominate over MCOs. Following on from the results above, taking all internal and external financing sources during the last year into account, banks predominate over MCOs for the financing needs of registered MSMEs (table 4). However, there is a high degree of diversification by funding source. For example, medium sized businesses were more likely to turn to leasing/factoring or debt securities issuance than to MCOs, and small businesses were just as likely to turn to trade credits or debt securities issuance as they were to turn to MCOs.

Table 4 MSME sources of financing according to business survey respondents

Source of financing (with translation as used in the survey)	Share of survey respondents who used this source in the last 12 months among			
	all survey respondents	micro enterprise respondents	small enterprise respondents	medium enterprise respondents
Bank (credit line, credit card) overdraft	30.5%	14.5%	23.3%	41.9%
Bank loan	69%	56.5%	69.8%	44.2%
MCO loan	25.5%	36.2%	23.3%	9.3%
Other loan (including commission loan, revolving loan)	13.0%	17.4%	11.6%	9.3%
Trade credit	12.0%	8.7%	23.3%	4.7%
Leasing, hire-purchase, factoring	12.0%	4.3%	14.0%	14.0%
Debt securities issued	16%	5.8%	27.9%	16.3%
Subordinated loans, participation loans or similar	15%	18.8%	20.9%	11.6%
Equity issued, equity investors	7.5%	1.4%	14.0%	11.6%
Grants or subsidised loan	3%	1.4%	7.0%	0.0%
Internal funds	14.0%	15.9%	18.6%	11.6%
Other	2.5%	2.9%	4.7%	0.0%

Multiple answers possible, n = 200. Source: own business survey (2013).

4.2 Level of Indebtedness

High levels of indebtedness seem to prevail in certain market segments. The analysis of the level of indebtedness based on individuals and businesses in the supply side client data sample shows that 49% of all businesses within the data sample of the 10 participating FIs meets the criteria for insolvency as defined in this study. The same holds for 23% of all individual borrowers within the same sample. As mentioned above, the indebtedness index for businesses is based on net income and not on cash flow, which has a significant impact as 80% of the businesses have timely debt repayments. The household survey data (individuals and their households as well as informal enterprises) show that around 35% of households can be classified as insolvent, whilst 37% of households are not over-indebted (Table 5).

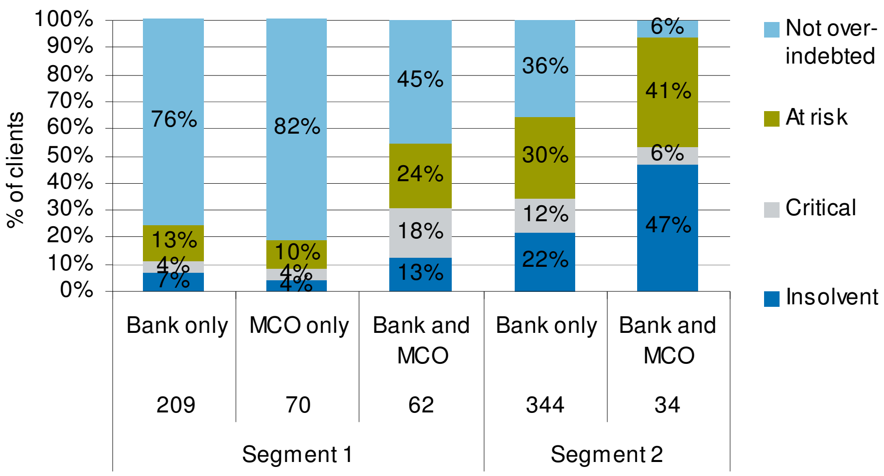
Table 5 Comparison of indebtedness levels in different data samples

	Supply side client data		Surveys		
	Individuals	Businesses	Households	MCO clients	Businesses
Not over-indebted	40%	33%	37%	31%	64%
At risk	26%	13%	18%	20%	9%
Critical	11%	5%	10%	8%	2%
Insolvent	23%	49%	35%	41%	25%

Source: Anonymised supply side client data, compiled by Pytkowska (2013), own household, MCO client and business surveys (2013).

Levels of indebtedness of borrowers vary among the institutions in the MIS data sample. There are large differences among the borrowers of the ten different financial institutions. Results suggest that individuals in segment 1 experience the lowest levels of indebtedness. Indebtedness of individuals in segment 2 is considerably higher, in particular for those clients that cross-borrow from banks and MCOs (Figure 4).

Figure 4 Supply side client data sample: Net indebtedness index and type of lender for individuals

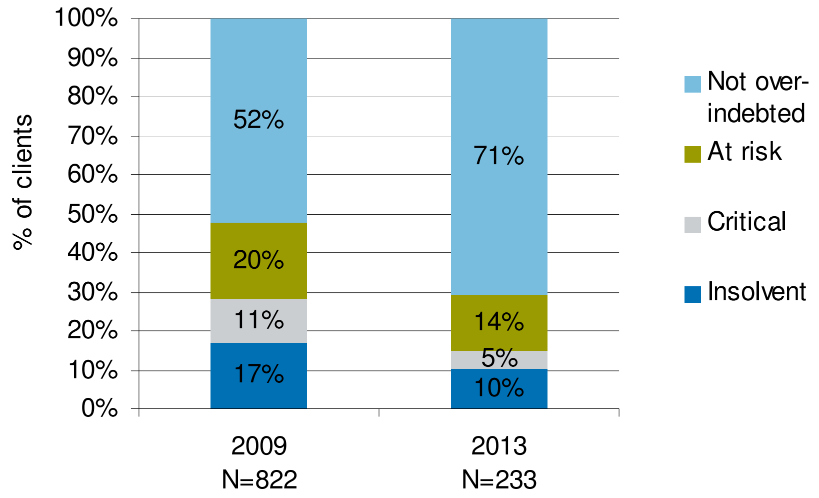


Source: Anonymised supply side client data sample, compiled by Pytkowska (2013).

The net indebtedness index for businesses seems to be higher than the index for individuals, in particular in segment 3. However, the very small number of MCO and MCO/bank clients for whom the business indebtedness index is calculated is cause for caution in interpreting these results.[xii] Moreover, the indebtedness index for businesses is based on net income and not on cash flow, which has a significant impact, as 80% of the businesses have timely debt repayments.

Indebtedness in the sampled microcredit market segment has declined since 2009. In Figure 5, we compare the indebtedness levels of 2013 with the results of the 2009 study for the subsample of clients of five institutions that participated in both studies. Within the sampled FIs, the level of indebtedness has gone down substantially in all categories (share of clients being at risk, critical, and insolvent).

Figure 5 Trends in indebtedness of a subsample of clients



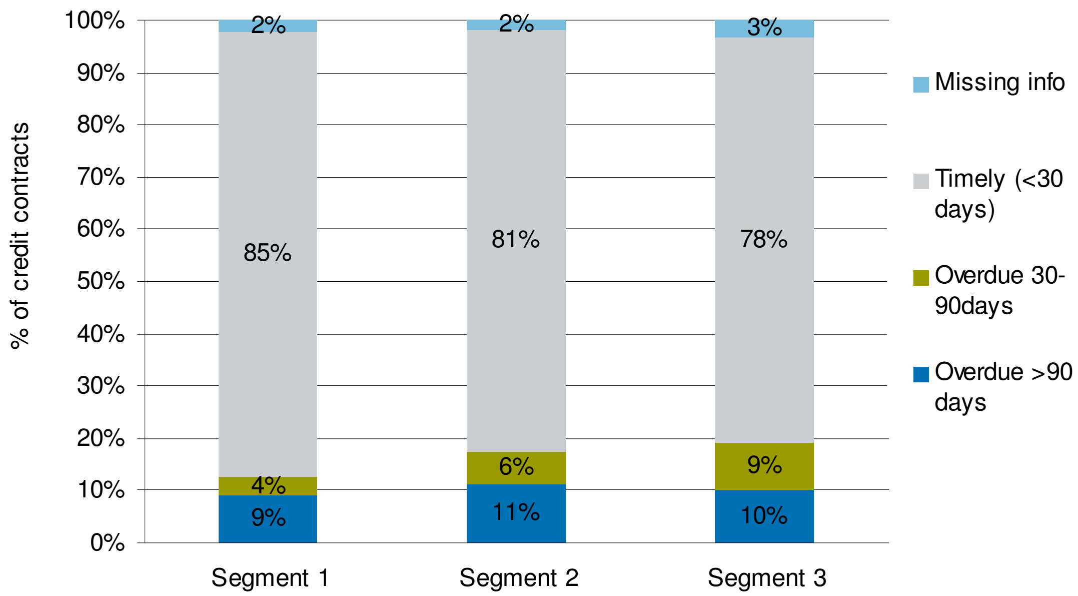
Random samples of five FIs participating in both studies.
Source: Supply side client data sample, compiled by Pytkowska (2013).

Results from different samples are not fully consistent when it comes to the influence of multiple borrowing and cross-borrowing on levels of indebtedness. Multiple and Cross-borrowing are positively associated with higher indebtedness based on data collected in the surveys. Supply side client data do only confirm this association in segment 1.

4.3 Repayment Performance

Repayment problems seem not to be a pressing issue for all lenders. Repayment performance differs widely among the financial institutions in the sample. Despite the fairly high levels of indebtedness that have been identified, repayment performance seems to be on an upward trend since 2009. The share of borrowers with overdue payments of more than 30 days in the five institutions that participated in both studies decreased from 15% to 8%. Repayment problems are also not necessarily linked with a higher level of indebtedness, though they mirror each other - according to the supply side client data sample. They grow in step with the average loan size: repayments seem to be less timely in the higher segments 2 and 3, with 17% and 19% loans overdue more than 30 days (Figure 6).

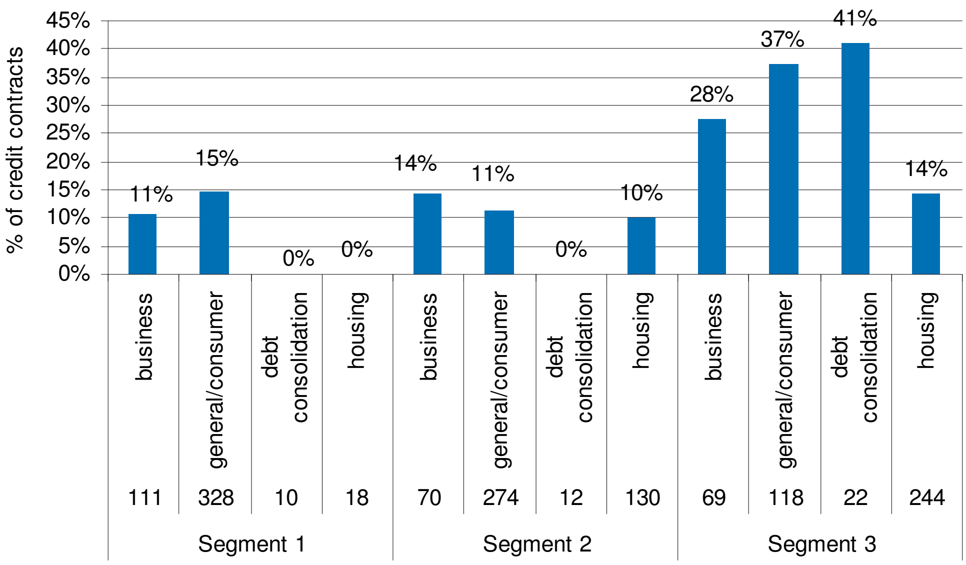
Figure 6 Active loans by repayment performance (% of supply side client data)



Note: n= 5,424.
Source: Anonymized supply side client data compiled by Pytkowska (2013).

Repayment performance for consumption loans is not worse than for other loans. The association between credit usage and repayment performance is not clear. Interestingly, in the household survey, participants with consumption loans admitted less often to having repayment problems and delays than did participants with business loans. The supply side client data analysis yields similar results (Figure 7).

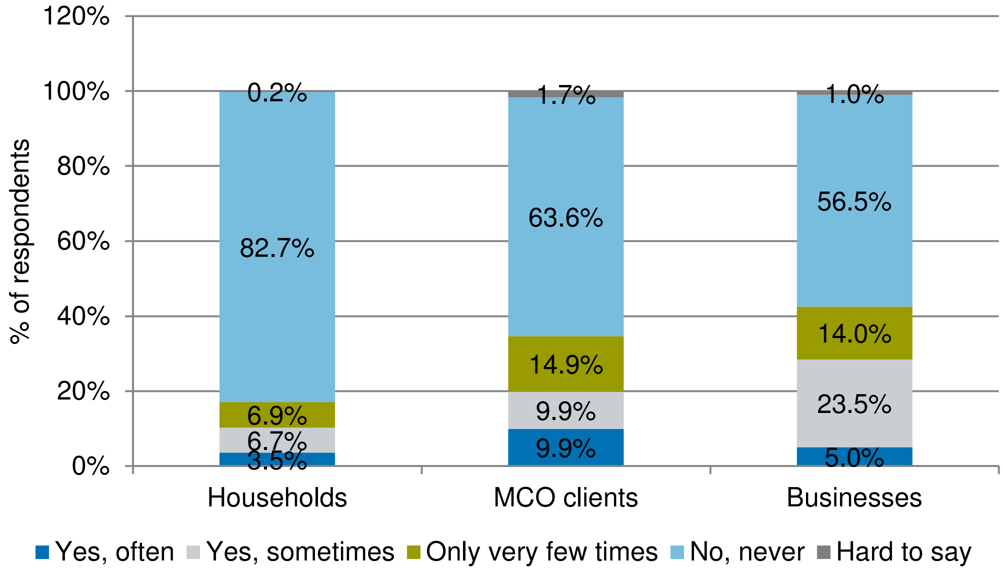
Figure 7 Share of overdue loans by purpose in the supply side client data sample



The number of observations is given for each segment and purpose.
Source: Supply side client data, compiled by Pytkowska (2013).

Borrower surveys show repayments to be timelier than do supply side client data. Figure 8 shows the extent to which respondents from all three surveys admit to missing repayment deadlines. 82.7% (421 respondents) of all household survey participants say that they never pay after the due date. The share of business survey respondents denying ever paying past the due date is much lower at 56.6%. As for MCO clients surveyed, 63.6% claim to never be late in their payments. The lower share of borrowers admitting to late payments can be partially explained by the desire of survey respondents to provide an answer they consider socially acceptable.

Figure 8 Late payments of respondents in borrower surveys

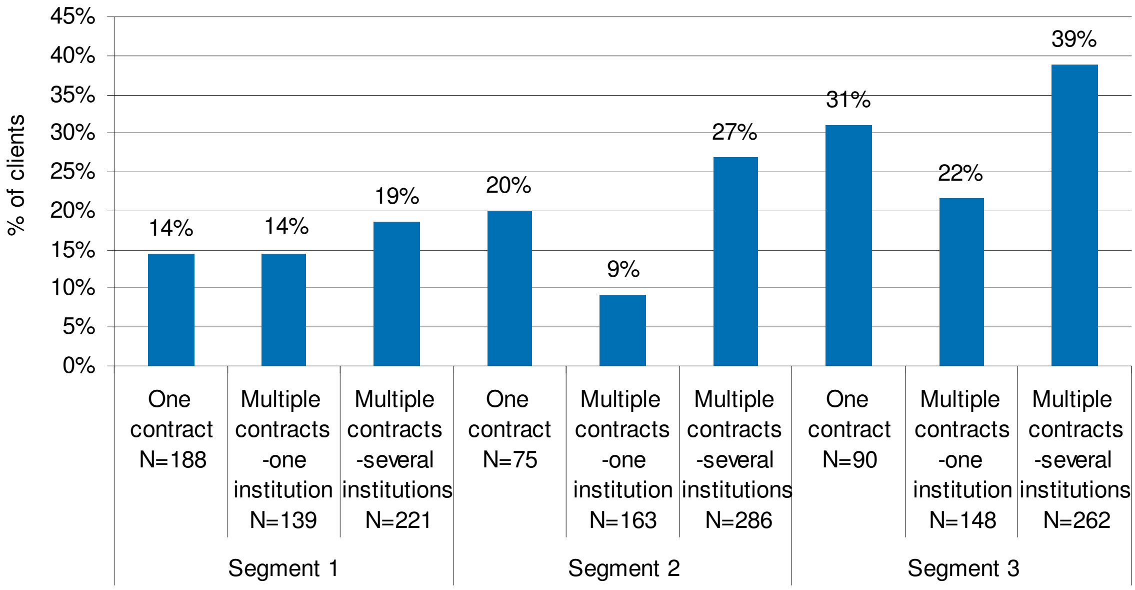


Answers to the question "Do you sometimes make a loan payment after the due date?". Households: n = 509; MCO clients: n = 121; Businesses: n = 200.
Source: own household, business and MCO client surveys (2013).

Reasons for repayment difficulties differ among types of borrowers. It is possible that borrowers are late in making loan payments although they technically can afford them. Therefore, the survey also asks about difficulties with making loan payments. Findings suggest that households, MCO clients, and businesses face repayment problems in particular due to an instable and worsening economic situation in BiH. For example increased cost of living (households), loss of an income source (MCO clients), or loss of revenues (businesses) are the reasons most frequently cited within the respective survey.

Cross-borrowing negatively affects repayment performance, particularly in credit market segments 2 and 3. For both households and businesses, the fact of holding more than one loan significantly influences repayment performance. In the business survey, the more loans the company is servicing, the higher the probability that the company will admit to being sometimes late with payments and to occasionally having difficulties with making payments (significant at the 1%-level). The household survey also shows that late payments, difficulties making payments and/or the level of indebtedness increase significantly (in the single-digit per cent range) amongst survey respondents with multiple loans compared to those with only one active loan. Conversely, the supply side client data indicate that multiple borrowing as such does not affect repayment performance significantly (Figure 9).

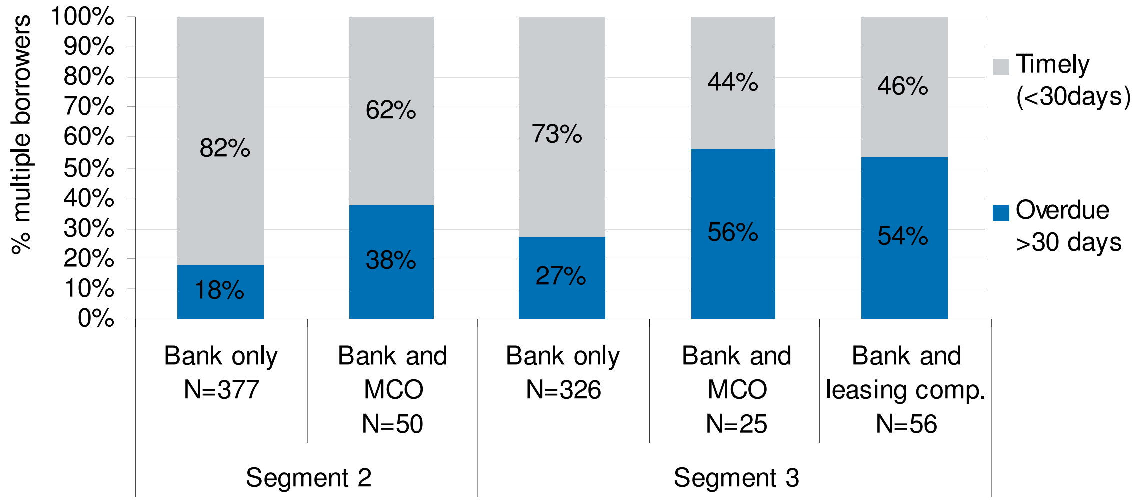
Figure 9 **Share of borrowers in supply side client data sample who are overdue more than 30 days by engagement in multiple and cross-borrowing**



Source: Anonymized supply side client data, compiled by Pytkowska (2013).

Cross-borrowing affects repayment and indebtedness more than does multiple borrowing. In the household survey, the repayment performance and indebtedness situation of households with cross-borrowing is more problematic than of those households that hold multiple loans from only one institution. The supply side client data analysis (Figure 10) also shows that cross-borrowing has a significantly adverse effect on on-time repayment performance in segments 2 and 3. In these two segments, borrowers holding multiple credit contracts from one institution actually perform better than those holding just one loan. However, borrowers holding multiple credit contracts from several financial institutions perform considerably worse.

Figure 10 **Share of borrowers in the supply side client data sample who are more than 30 days overdue by type of source institution (% multiple borrowers)**



Source: Anonymized supply side client data, compiled by Pytkowska (2013).

5 LINKAGES BETWEEN QUALITY OF FINANCE, REPAYMENT PERFORMANCE, AND INDEBTEDNESS

Quality of finance as currently provided receives good scores from borrowers. According to the surveys, borrowers seem to be satisfied with the quality of financial services, particularly with the treatment by the staff during the loan application and loan approval processes, and even when being late with an instalment. On average, MCOs score slightly better than banks in most quality aspects with the exception of the cost of the loan (Table 6). The study points to a positive association between the quality of financial products and repayment performance.

Table 6 **Quality of finance: satisfaction with loan features**

	Rated on a scale from 1 to 5 (5 = highest, 1 = lowest satisfaction)				
	Household survey			MCO survey	Business survey
Loan Feature	Average for households	Average for bank-only clients	Average for MCO-only clients	Average for MCO client survey	Average for business survey
Loan Size	3.93	3.87	4.01	4.17	4.06
Term	3.97	3.94	4.01	4.11	4.14
Instalment	3.71	3.70	3.70	4.02	n/a
Total cost of loan	2.92	3.02	2.69	3.24	3.70
Treatment: application and approval	4.24	4.15	4.39	4.31	4.32

	Rated on a scale from 1 to 5 (5 = highest, 1 = lowest satisfaction)				
	Household survey			MCO survey	Business survey
Loan Feature	Average for households	Average for bank-only clients	Average for MCO-only clients	Average for MCO client survey	Average for business survey
Distance to credit institution	3.98	4.01	3.87	4.12	4.37
Frequency of contacts with loan officer	4.06	4.01	4.14	4.07	4.10
Opening hours of location	4.22	4.16	4.29	4.04	n/a
Treatment if instalment was late	4.07	4.01	4.19	4.21	4.60

Rating applies to first loan(s) listed by survey respondents. Source: Own household, MCO clients and business surveys (2013).

Improving debt literacy on the part of borrowers helps to maintain sound levels of indebtedness and repayment performance. Results of the household and MCO surveys show that it is important that institutions keep their clients well-informed with regard to loan terms and conditions. Debt literacy is significantly associated (single-digit per cent range) with late payments, trouble repaying, multiple borrowing and indebtedness. It would seem that the institutions' efforts to ensure clients understand loan terms and conditions have a positive impact on repayment performance.

Bad credit history signals future repayment delays. The supply side client data sample shows that customers' credit history can be used as an indicator for timeliness of credit repayment in the future. Clients who did not make loan payments on time in the past are more likely to be late in making payments on current loans.

Guarantees are still common practice for securing both bank and MCO loans. Recommendations in the 2009 study suggest discouraging clients from guaranteeing too many other loans during the term of their own loans. Compared to 2009, the use of guarantors seems to have decreased slightly in the microcredit borrower samples of financial institutions that participated in both studies. In 2009, 34% of borrowers extended guarantees while in 2013 this number dropped to 29%. The average number of guarantees per guarantor dropped from 2.1 to 1.5. Still, more 30% borrowers in the supply side client data sample of 2013 are also guarantors. Somewhat surprisingly, the supply-side data and the surveys both show that being a guarantor whilst repaying a loan does not seem to affect repayment performance per se. However, customers guaranteeing overdue loans show a higher risk of falling behind with payments on their own loan.

Income sources and levels affect repayment performance only occasionally and do not affect indebtedness. According to the supply side client data, the type of income sources of borrowers (individuals with or without informal business income, or registered businesses) is an indicator of repayment performance. Repayment performance is also associated with the legal form of the businesses: registered MSMEs are more often behind payments than informal businesses. In contrast, all these factors do not correlate significantly with indebtedness levels.

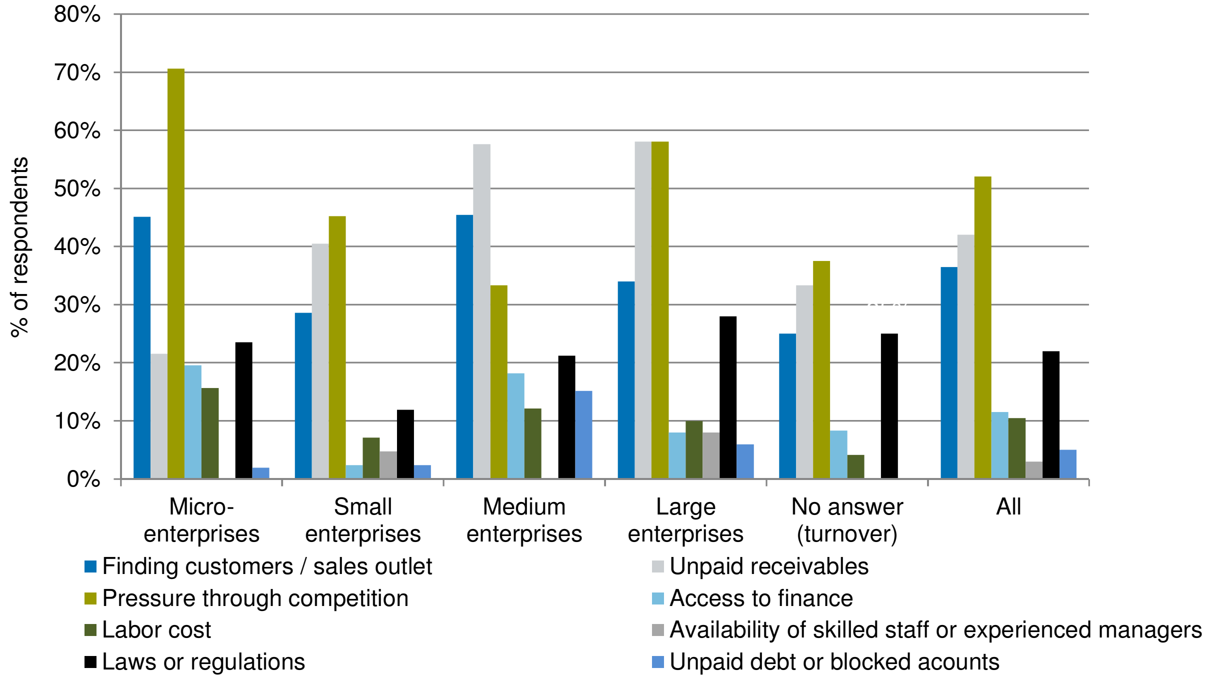
Based on the survey results, however, we find no significant relation between income sources of physical borrowers and repayment performance. At the same time, for individuals, higher income has a positive effect on repayment performance. There is also no significant association between company size and repayment performance in the business survey.

Indebtedness and poor repayment performance are not necessarily linked. To reconcile the somewhat inconsistent results between income, repayment performance and indebtedness, we analysed the relationship between indebtedness level and repayment performance. We found that the level of indebtedness is not related to the repayment problems and late repayments of the households, MCO clients, and businesses surveyed. Among the possible explanations, besides data measurement problems are: borrowers apply coping strategies in the short term, such as reducing other expenditures; and repayment delays can be caused by other factors such as cash flow problems, forgetfulness, etc.

Although access to finance is not an issue, the weak economy affects loan demand. Household borrowing has not slowed down since 2009. At the time of the survey, the majority of respondents did not consider the general economic outlook to be very bad. The business survey shows that access to finance is not considered a major pressing issue by most registered MSMEs surveyed, although it is slightly more pressing for microenterprises (Figure 11).

At the same time, future demand for new loans, both from households and businesses, is expected to be very low, at least in the short run: 80% of the companies surveyed do not expect to take out a new loan within the next 12 months. Besides different types of general loan products, other financial services, such as deposits with banks and housing loans, do not seem to be commonly used by the borrowers surveyed.

Figure 11 **Most pressing current problems for interviewed businesses**



Multiple answers possible.
Source: own business survey (2013).

Competitive pressure in the financial sector in BiH is high. In this situation, institutions try to retain well-performing clients and avoid (further) shrinkage of their loan portfolios. Still, credit risk and non-performing loans (which include large corporate and public sector loans) are growing continuously, making lenders even more cautious so that overall, the liquidity of banks and MCOs is expected to further increase in the coming period.

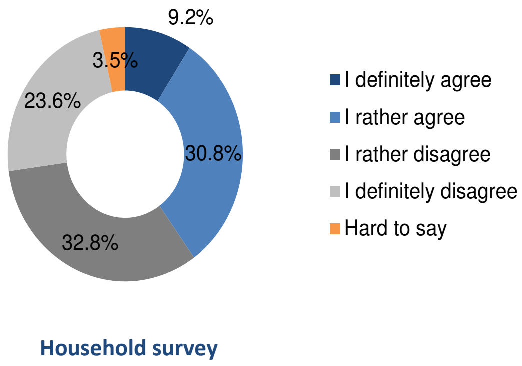
Loan approval processes and credit risk management have become more conservative since 2009. Financial institutions, MCOs in particular, state that they have strengthened their credit risk strategies and, generally, tightened loan approval procedures in the last few years. At the same time, surveyed borrowers find that loan application processes have become less demanding compared to 2009.

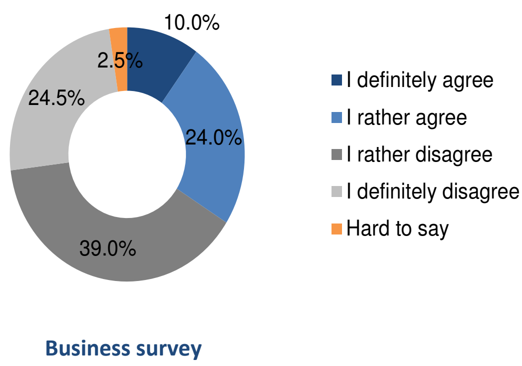
Incentive systems still drive portfolio growth, but to a lesser degree. Most banks and MCOs still pay loan officers based on performance. Overall, however, it seems that bonus systems at MCOs are no longer pushing for constantly increasing portfolio, as it had been the case until 2009. Furthermore, most institutions emphasise the importance of staff training relating to portfolio quality at different levels.

Still, 40% of the surveyed households and 34% of the surveyed businesses interviewed agree or rather agree that their MCO or bank tried to give them a loan even though they did not want it (Figure 12).

This result suggests that some institutions might push their growth strategy too hard by trying to sell products to existing clients.

Figure 12 Client perception of institution aggressively selling loans





Answers to the question "My bank or MCO tried to sell me a loan even though I didn't want it" (Households, n=509; Businesses, n = 200).
Source: own household survey (2013).

Market context has changed since 2009. Besides these client characteristics and market conditions with a potential influence on repayment performance and indebtedness level, the macroeconomic situation in BiH has a significant impact on the financial sector. The context in which banks and MCOs in BiH operate has changed substantially since 2009. The currently weak economy affects both demand and financing needs of households and businesses alike, and puts lenders in a difficult situation. Consolidation processes in the banking and MCOs sectors seem unavoidable. Against this backdrop, recommendations on how to deal with indebtedness and offer quality services to MSME and retail borrowers are only a small piece of the puzzle.

6 RECOMMENDATIONS

The following recommendations were developed based on the results of the study. They are limited to those aspects that are likely to reduce indebtedness and/or repayment problems and contribute to improving the quality of finance in the samples of clients that were examined directly.

Banks and MCOs:

- Continue to specialise in their distinctive target market segments, avoid overlap and further reduce cross borrowing whenever possible.
- Continue to strengthen loan appraisal analysis based on more conservative cash flow projections, and reduce reliance on collateral and guarantors.
- Continue to avoid reprogramming of past due loans as it does not necessarily lead to long-term solutions.
- Increase weight of portfolio quality targets in loan officer incentives and assessments, whenever applicable.
- Maintain high quality of services and continue to improve customer debt literacy.
- Clarify role of guarantors: continue to limit the eligibility of guarantors with respect to the number of loans they hold and other guarantees they provide; further continue to clarify the responsibility of guarantors in each loan approval process directly with the potential guarantor.
- Improve follow up on complaints and advice mechanisms for borrowers: further improve, formalise, communicate and simplify ways in which clients can complain independently from the loan officer or relationship manager with whom they usually communicate; introduce clearer

responsibilities for following up on complaints received whenever applicable.

- Inform borrowers more proactively about the independent debt advice centre “U Plusu” because it not only counsels and negotiates on behalf of borrowers with repayment problems, but also offers financial and debt literacy education.

Credit Registry:

- Insurance companies and utility companies, and other companies that accumulate customer debt can supply data to the CRK on a mandatory basis, which would make CRK records more relevant to lenders.
- Conduct regular in-depth trend analysis of aggregate CRK data as recommended in 2009.

Clarify Image, Mission and Transparency of MCOs:

- MCOs should further join forces and communicate more actively the mission, target markets, cost structures related to serving these markets, and the improvements made and further envisaged within the MCO community as such. These communication efforts should also address the degree to which MCOs need to operate with stricter loan approval and delinquency management practices than has previously been the case.

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[i] The exchange rate is fixed at Euro 1 = KM 1.95583 under the current Currency Board arrangement.

[ii] Net monthly individual income = total monthly gross income – total monthly expenditures (not including debt repayment charges).

[iii] Monthly net business profits = gross monthly revenues – cost of goods sold – total monthly business expenses (without debt repayment charges). Also referred to as monthly net business income in this study.

[iv] It is important to note that the terminology "insolvent" in this study differs from the terminology in BiH laws but follows the Maurer/Pytkowska (2010) approach to include all those whose debt-related periodic payments exactly equal or exceed net income in the one single period of the observation. The definition of "insolvency" (as a reason for opening a bankruptcy proceeding) in BiH laws requires, for instance, that the debtor is unable to pay its outstanding payment liabilities for a period of 30 days in the Federation of Bosnia and Herzegovina (the Federation), respectively of 60 days in Republika Srpska (RS) (Law of Bankruptcy Proceedings).

[v] The new privacy protection legislation prohibits retrieval of the lists of MCO clients sampled in 2009. Data therefore represents only a snapshot of the situation at the time of data extraction.

[vi] Due to the privacy protection legislation, financial institutions are not allowed to provide contact details for the same set of clients as sampled for the supply side client data analysis, despite the proposed coding and anonymised treatment of the sample. Thus, client interviews could not be conducted with the clients whose records were known, but instead with random samples of clients.

[vii] The market research company Prism, headquartered in Sarajevo, was commissioned to conduct these surveys from June through October 2013 in BiH. For the first two surveys, random samples were drawn based on population and company statistics that were available through Prism.

[viii] The total number of active borrowers does not add up to 100% because it is adjusted for double-counting of borrowers who are classified in more than one segment in the supply side client dataset, whereas numbers of borrowers in each segment are not adjusted.

[ix] It should be kept in mind that the samples drawn from the ten participating institutions do not claim to be representative of the total borrower population. The supply side client data, which samples around 50% of the total borrower population, is strongly influenced in particular by high average numbers of loans of three FIs within the sample.

[x] Results rely on random client data of five FIs that participated in both the 2009 and 2013 study. This sample is not representative of all microcredit borrowers. It also needs to be viewed with caution as several differences in sampling procedures between 2009 and 2013 limit comparability.

[xi] Results rely on random client data of five FIs that participated in both the 2009 and 2013 study.

[xii] The individual indebtedness index is presented for the entire sample of MCO-only and MCO/bank clients in the supply side client dataset because personal income data are available for them. In contrast, the business indebtedness index is shown only for those clients for whom only business income is available and not personal income. It may, thus, underestimate income of businesses with personal sole ownership.