INTERNATIONAL CATHOLIC MIGRATION COMMISSION

PROJECT ENTERPRISE

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IMPACT SURVEY

ICMC AND PROJECT ENTERPRISE
BOSNIA AND HERZEGOVINA

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TABLE OF CONTENTS

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ACKNOWLEDGEMENTS

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ABBREVIATIONS AND DEFINITIONS

ABBREVIATIONS

ICMC	International Catholic Migration Commission
PE	Project Enterprise.
MC/SEA	Mercy Corps/Scottish European Aid
BiH	Bosnia and Herzegovina

DEFINITIONS - CLARIFICATIONS

COMPARISON GROUP: in this paper, the group of non-clients.

NEW OR NEWER CLIENTS: individuals who have had a loan with ICMC for a period of 6 to 12 months. They have received a loan before October 98.

REPEAT, OLDER OR FOLLOW-ON CLIENTS: individuals who have had a loan with ICMC for over 12 months. These clients have received a loan from Project Enterprise in the period between October 98 and April 99

MEAN AND AVERAGE: used synonymously in this paper.

STATISTICAL TESTING: the three tests used in this paper were the independent sample t-test, the chi-square analysis and the Mann-Whitney test. If a test is statistically significant, it means that the result is not by chance. When the data to be analyzed was interval (allowing for calculation of means), independent sample t-tests were used to determine whether the difference in means was statistically significant. Chi-square tests were used when the data was nominal (categorical), in which case they allow to verify whether or not observed frequencies and differences between them are statistically significant. Finally, Mann-Whitney tests were used when it was determined that the variables were not following a normal distribution, i.e. that their pattern was not to have a large frequency around the mean and a similar dispersion on each side of the mean. The Mann-Whitney test is a non-parametric test.

ICMC and PROJECT ENTERPRISE: Project Enterprise is the microcredit arm of ICMC in Bosnia. It is expected to become an independent entity from ICMC in the near future. Participation in this impact initiative was an ICMC endeavor, therefore this organization is mentioned more frequently by name throughout the report than Project Enterprise. However, results and findings naturally apply to both Project Enterprise and ICMC, as suggested in the conclusion section of the report.

EXECUTIVE SUMMARY

BACKGROUND

ICMC is one of the four microcredit practitioners that have volunteered to test the AIMS impact methodology in Central, Eastern Europe and the NIS. This methodology is meant to enable NGOS to design and administer their own impact studies. This initiative has been carried out in other parts of the world such as Africa and this pilot project is an attempt to examine programs in Central and Eastern Europe more closely. A series of threeworkshops were held on the matter: the first one in Warsaw in 1998 was an introduction to the program objectives and approaches to impact assessments. The second one in May of 1999 in Krakow focused on the tools of the AIMS methodology; at that time, participants decided to focus on carrying out an impact survey. The goal of the third session was to learn how to analyze the data gathered from the interviews and entered into the SPSS program (Statistical Package for Social Sciences) prior to this workshop. ICMC and Mercy Corps/Scottish European Aid, both working in Bosnia and Herzegovina, designed the questionnaire and trained the interviewers together. Data analysis was conducted in close consultation so as to ensure coherence in terms of selection of tests to be run and presentation of findings.

PURPOSE OF THE IMPACT SURVEY

1. To demonstrate that the program is having the expected impact (as measured by the hypotheses);
2. To improve the program

Hypotheses selected by ICMC and MC/SEA were the following:

1. The program strategy is effective in reaching its target group;
2. There is an increase in household wellbeing (as measured by fixed assets, expenditures and savings);
3. There is an improvement in the business (demonstrated through income and fixed assets).

SURVEY METHODOLOGY AND SAMPLING

Project Enterprise's program in the Una-Sana Canton (northwest corner of Bosnia and Herzegovina) was the focus of this study. It is here that the microlending program began in 1997. In October 1999, when the sample was taken, there were a total of 1049 active clients in this canton and approximately 700 of them had been in the program for over six months. From a list of the latter, 120 individuals were randomly selected to participate in the survey. Of the 120 clients surveyed, 40% or 48 clients, called newer or new clients, had received a loan from Project Enterprise in the period between October 1998 and April 1999 and therefore had been in the program for 6 to 12 months; 60% or 72 clients had joined the program over 12 months ago (repeat or older clients), having received a loan before October 1998. The findings refer specifically to the program in the Una-Sana Canton but may suggest findings for the program at large.

The comparison group (alternatively called "non-clients") consisted of individuals on the waiting list for the ICMC training[1]. Out of 300 women listed, eighty of these individuals were randomly selected to take part in the assessment.

[1] ICMC conducts compulsory training sessions before giving out the loans (non-clients are potential and hopeful clients).

The questionnaire contains 62 questions (5 of which are only for clients) and consists of a background section (with questions on gender, age, education, household size, dependents, etc.), a household section (property, expenditures, savings, income, loan use) and a business section (income, employees, profit, sales, business improvement). Questions for clients only cover clients' likes and dislikes with the program and difficulties repaying the loan.

Among concerns raised by the process and the survey[2] are the length of the questionnaire and the sequence of tasks. The data analysis plan was developed after questionnaire design and data entry. Better understanding of the data analysis process from the start would have indeed facilitated the preparation of a more suited and more simple questionnaire.

FINDINGS

Program perception

- Twenty-three percent of clients mention a reliable source of working capital as the one aspect they like most about ICMC's program. An additional 15% like simple guarantees best and 12.5% identify professionalism of credit officers as well as efficiency in relation to banks and other sources of credit as their main preference in the program. In terms of what clients do not like about the program, 25% of the respondents mention high interest rates as the number one factor. This is followed 13% of the respondents mentioning the small loan size. In terms of time spent in the program, repeat clients appreciate access to microloans ("efficient compared with banks") more so than newer clients. Newer clients value solidarity group lending more so because it is their only option.

Descriptor information

- Clients and non-clients are similar in terms of age, education, number of dependents, number of household members, marital status, prime sector, other credit and other source of credit. In other words, the comparison group was well selected. The majority of clients and non-clients have a secondary degree, are married, live in a household made of 3 to 4 individuals, support at least 4 dependents, work either in trade or for the state sector and do not have any other loan. A majority of people make an income from state sector activities, therefore one can conclude that in many cases, ICMC program offers only a supplementary income. However, clients also have family businesses, more so than non-clients. More repeat clients have family businesses (43.1%), as compared to new clients (14.6%) and non-clients (13.8%). This difference is statistically significant.

- There are more returnees amongst clients than non-clients due to programmatic priorities (focus on returnees by donors). The percentage of returnees in the program has declined overtime and a significantly greater percentage of repeat client respondents compared to new client respondents are returnees.

- Clients reported a higher number of business activities than non-clients and this difference was statistically significant. In addition, the mean number reported for non-clients (comparison group) was below one. In other words, some of the non-clients do not have a business and want to start one. These individuals probably signed up to join the program in order to get funds to start a business.

- Clients reported using their loan for the following business-related uses: 45% of clients purchased more supplies, materials or raw materials, 30% purchased new equipment or machines, 10.8% of clients started a new business. Some clients reported having used a

[2] See Annex III.

portion or all of their loan monies on the following: 22.5% of clients used the loan for contingencies or to repay a loan, 14.2% of clients used the loan for household improvements and 13.3% for food.

- Sixty percent of non-clients and 65% of clients would like more business training. Many newer clients and follow-on clients are interested in business training, 66.7% and 63.9% of them respectively. 40.5% of respondents would like marketing training, with 10.3% of respondents expressing an interest in bookkeeping. Many survey respondents would like all sorts of other general training, such as computer science and English, as well as sector-related training, such as hair-salon or sewing. Responses given to this question seem to indicate a need to better explain what each type of training implies. It shows that many people want business training but that they don't know what kind would be most useful to their business.

Impact results

- A larger proportion of clients than non-clients saw an increase in savings, but a larger proportion of newer clients than repeat clients have increased their savings. These results were not statistically significant. One possible explanation for this result is that new clients, not quite used to their business planning, put aside some funds to repay the loan, whereas older clients are more informed of their business sales pattern. Another related explanation could be that repeat clients reinvest more of their income in their business while newer clients tend to either buy more for their household or save.

- A larger percentage of clients also saw their household income increase or increase significantly in the last 12 months (40% of clients versus 23.8% of non-clients). This was found to be statistically significant at the 0.05 level. A larger percentage of repeat clients than newer clients saw their household income both increase and decrease: the net difference between those with increased and those with decreased household income levels was 14% for repeat clients compared to 21% for newer clients. Perhaps overtime, repeat clients either do increasingly well with their business, or they lack training/guidance and their business starts declining. It might also be due to increasing competition. This result was not statistically significant. As mentioned in later sections of the report, income information should be analyzed with great care anyway. Tests on income change taking into account the sector of activity are not very conclusive due to the small number of respondents in some sectors; nevertheless, production seems to gather the largest number of clients with a household income increase, followed by services.

- Older clients tend to buy more household items than new clients after they have received the loan. This result was statistically significant. Purchasing items is a strong impact indicator in Bosnia because people used to have washing machines and TVs before the war. Therefore, this is interpreted as a positive result of the program.

- A greater proportion of client than non-client respondents reported a greater increase in expenditure in 1999 than non-clients as compared to 1998 for the following items: rent, utilities, food, school, recreation, holiday, taxes and insurance. Considering the similar profile in the two samples, this can be interpreted to mean that clients had more access to disposable income than non-clients and are therefore "better-off". However, the same test run on newer clients and repeat clients is not conclusive.

- To determine if the program has had a positive impact on household well-being, three composite indices were created, each being a variant of the other two. These indices centered on changes in parts or all of the following variables: rent, food, utilities, recreation, holidays, insurance, small items, big items, taxes, school, clothes and income change, savings change and household expenses on home repair. In all three cases, the clients were found to be significantly better-off than the comparison group, hence revealing positive program impact. The same indices run on newer clients and older clients showed the opposite result, albeit the fact that these results were not statistically significant.

- No statistically significant differences were found between clients and non-clients in terms of business sales and business profit and clients did not necessarily report higher results on these two variables. This may be due to different ways of reporting profit among the survey respondents and not really reflect the actual situation. In spite of lack of identifying a significant increase in business sales and profits among client respondents, a positive impact of the program at the household level can still be explained by the likely use of parts of the loan for a purpose other than the one initially stated or by different ways of reporting profit among survey respondents.

- Clients tended to rank higher than non-clients on a combined variable called "new business development", which includes expansion of physical plant, introduction of new products, employment, quality improvement, decrease in expenses and market expansion, showed that the mean for clients was higher than for non-clients. However, this difference was not statistically significant. The same result was found for the number of assets acquired, which identified possible acquisitions for the business such as small tools, equipment or machines, vehicles, storage facilities, chairs, desks or closets, kiosks or shops.

- The business variables above were combined to calculate a business index, which was tested for overall impact of the program on clients' businesses. The new index represented the sum of positive changes on the business. The higher the number, the more positive the impact on business. The results of a non-parametric test showed that clients rated significantly higher than non-clients, and hence indicate positive program impact.

- Following the process above, the results show that repeat clients rate higher on the business index than new clients. This confirms the assumption that repeat clients tend to use more of the benefits of the loan to reinvest in their business than newer clients who focus more exclusively on household expenses and personal savings.

- In conclusion, the results of this study suggest that ICMC is successfully reaching its target group as per client descriptor section, training needs and use of loan. ICMC purposefully does not use quantitative indicators in its selection policy (such as income caps), which makes it hard to provide quantitative evidence to prove that it is actually reaching its appropriate target group. However, one should wonder whether respondents' stated income level is accurate and to what extent reported income is a good indicator of poverty level anyway. Second, there is an increase in household wellbeing (as measured by fixed assets, expenditures and savings) among client respondents: the tests were run on the variables "increase in expenditures, savings and fixed assets", all included in the household composite index. Clients were found to have a significantly higher mean than non-clients. Last, the survey results show that there is an improvement in the business demonstrated through income and fixed assets. Tests run on a composite index of new business development, assets acquisition, sales and profit increase showed that clients report higher results than non-clients. These variables imply increases in fixed assets and increase in investment. Overtime, clients are better off in terms of the composite index of sales, profit, business development and assets acquisition, which also points out to the positive impact of the program on clients in Una-Sana Canton. The results also suggest that clients in Project Enteprise's other branch offices are positively effected by the program.

- Some factors need to be further examined and tested, in particular change in business sales, change in business profit, savings change, both between clients and non-clients and between newer clients and repeat clients. The program is now more mature with some clients having gone through 3 to 4 cycles. Therefore, it would be interesting to replicate this analysis at a later stage to determine whether the pattern of a larger proportion of newer clients reporting positive changes, more so than older clients, is confirmed. ICMC should also explore the potential implications of its program having a greater impact on household than on business in terms of clients' livelihoods as well as the type of products it currently offers. Fungibility seems to be a given and rather than be forbidden or dismissed, it should be used to better know ICMC's clientele and their needs.

- Clients' likes and dislikes justify ICMC-PE's introduction of the individual lending product larger loan sizes. Again, close monitoring should take place to allow for further tailoring of this new product.

- Project Enterprise should closely examine the extent to which the results found in the Una Sana Canton can be generalized to its entire program in Bosnia by including other areas in a future survey, particularly now that that other branch offices are serving an increasing number of clients.

I. INTRODUCTION

THE CONTEXT OF BOSNIA AND HERZEGOVINA

Bosnia and Herzegovina is a very unique country due to its post-conflict setting. The Dayton Accords of 1995 separated the country into two semi-autonomous entities, a Bosnian-Croat Federation and a Serb Republic. The international community set the policy agenda, with a priority given to returning people to their pre-war homes and rebuilding communities. Initially, some cities were awarded "Open Cities" status based on a political will at the local level to promote return. However, after a few years, the focus was switched to minority return. A group of people might have lived as a majority in a community but have become the minority due to the reorganization of the ethnic map after the war. The international community has been promoting minority return for the past 2 years.

Funding has followed this trend, first linked to the pursuance of the Open Cities initiative, then to minority return. In BiH, microcredit takes on a special shape in that it is not only driven by a poverty alleviation goal but also viewed as a tool for sustainable return. From the outset, ICMC's Project Enterprise has strived to find a balance between programmatic/financial best practices and compliance with the mandate of the international community.

The return process overall has been rather slow. Some of the major obstacles include damaged or destroyed property, double occupancy, unemployment and political obstructionism. However, return has intensified during the last year. In general, the elderly population is coming back. Younger people have started new lives elsewhere and do not want to come back to half-destroyed areas with grim economic prospects. Many of them are still trying to resettle to third countries. In this respect, the situation in the Una-Sana Canton, in the Federation, where the survey was carried out, reflects well the general situation in Bosnia. The only exception to this is the municipality of Bosanski Petrovac where the return process has taken place faster than anywhere else in the Canton. The municipality of Velika Kladusa is also quite different to others in that a very large number of people are resettling to the US and other countries.

METHODOLOGY FOR THE IMPACT SURVEY

The survey was conducted in the Una-Sana Canton in the northwest corner of Bosnia and Herzegovina. Una Sana is the site of Project Enterprise's original branch office and its largest number of clients (both new and repeat). The survey took place over 7 municipalities with 4 interviewers randomly selecting clients from the total number of active clients in the entire canton between October and November 1999. The total number of clients interviewed in each municipality is very close to being proportional to the total number of clients in each municipality. This branch office gathered 67% of the total number of program clients in October and 63% in November[3].

In October 1999, when the sample was taken, there were a total of 1049 active clients in this canton and approximately 700 of them had been in the program for over six months. From a list of the latter, 120 individuals were randomly selected to participate in the survey. Of the 120 clients surveyed, 40% or 48 clients, called newer or new clients, had received a loan from Project Enterprise in the period between October 1998 and April 1999 and therefore had been

[3] This proportion is expected to continue to decrease overtime as newer branches offer more loans.

in the program for 6 to 12 months; 60% or 72 clients had joined the program over 12 months ago (repeat or older clients), having received a loan before October 1998. The findings refer specifically to the program in the Una-Sana Canton but may suggest findings for the program at large.

The comparison group (alternatively called "non-clients") consisted of individuals on the waiting list for the ICMC training[4]. Out of 300 women listed, eighty of these individuals were randomly selected to take part in the assessment.

The interviewing process followed the calendar below[5]:

- July 1999 - questionnaire design, translation;
- August 1999 - pre-testing of the questionnaire and preparation of documents to guide the interviewing process;
- September 29-30, 1999 - selection of survey respondents;
- September 30 and October 1, 1999 - training for interviewers in Tuzla organized by MC/SEA;
- October – November 7, 1999 - actual interviewing process;
- November, 1999 - data entry;
- December 13-17, 1999 - data analysis seminar in Dubrovnik;
- December 1999 - January 2000 - data cleaning by two loan officers;
- February- April 2000- further data cleaning, data analysis and final report writing.

[4] ICMC conducts compulsory training sessions before giving out the loans (non-clients are potential and hopeful clients).
[5] Please refer to Annex II for more information on impact survey process.

II. INSTITUTIONAL DESCRIPTION

History

Project Enterprise (PE) was created by the International Catholic Migration Commission (ICMC) in the summer of 1997 with financial support from the United States Bureau of Population, Refugees and Migration (PRM). The initial intent was to improve the economic viability of war-torn communities in Bosnia to promote the return of refugees and displaced people. By focusing on the economically active poor, Project Enterprise was able to provide the minimum inputs to allow people to re-establish their lives while creating a solid, long-term institutional structure that could continue to serve the financing needs of businesses well after the post-war recovery period. Women were identified as the target clients for the program because they represented the majority of the adult population in post-war Bosnia, and yet had very limited opportunities for formal employment and business development.

Target population

Project Enterprise's target population is low-income women living in Una-Sana, Zenica-Doboj, Central Bosnia and Herzegovina-Neretva Cantons. Although the program's initial intent was to support the refugee return process, women are approved or rejected based on their need and capacity to operate an economically viable business.

Lending methodology

Project Enterprise provides two primary services: credit and training.

Credit is available for both working capital and fixed assets. Project Enterprise currently offers two loan products, group loans and individual loans. The parameters for each product along with their respective selection criteria are highlighted in the tables below. Project Enterprise first introduced group lending in 1997 and is pilot testing the individual lending product.

GROUP LOANS	
LOAN PARAMETERS	**SELECTION CRITERIA**
• Average initial loan size: 1,500 DM • Maximum loan size: 4,500 DM[6] • Average loan term: 7 months • Interest rate: 1.67% per month (flat rate) • Processing fee: 3% first time borrowers, 2% repeat borrowers • Repeat loan up to 50% larger than first loan with repayment up to 12 months.	• Self-selecting group members • No household members in the same group • Only two people with same business in same group • No more than two business partners in same group • Loan strictly for individual's own business or family business

INDIVIDUAL LOANS	
LOAN PARAMETERS	**SELECTION CRITERIA**
• Average loan size: 5,000 DM • Average loan term: 10 months • Interest rate: 1.25% per month (flat)	• Graduated group loan clients • Registered business • Loan strictly for business • 1-2 co-guarantor(s)

[6] A maximum loan size was in place on fist loans at the time of this survey but was subsequently dropped from program requirements.

Training: PE requires mandatory participation in a business planning course prior to application for a loan. This two-day course focuses on feasibility studies and business analysis. The training enables entrepreneurs to complete a business plan that is submitted along with a loan application to Project Enterprise. The training program also provides Project Enterprise staff an opportunity to judge applicants' character and business potential.

In addition to its mandatory curriculum, PE provides training in marketing and is currently investigating demand for more advanced business training in record-keeping, financial planning, costing and buying.

Loan portfolio data as of March 31, 2000

Project Enterprise maintains strong portfolio and financial track records over the course of the past 3 years. Its current highlights include:

- Disbursement of 4,736 loans to-date with on-time repayment of 98.74%;
- Active clients total 2,159. Of these, 46% are first time borrowers and 54% are repeat borrowers;
- Total disbursements of 8.1 million DM;
- Loans outstanding of approximately 2.35 million DM.

Future directions for Project Enterprise

Project Enterprise has recently consolidated its four branch offices under a national structure and is currently streamlining its organizational structure to function more effectively as a strong national entity. This new structure will enable an executive team to standardize Project Enterprise's lending, finance and management procedures and policies, while providing clearer monitoring and reporting procedures. Project Enterprise is now focused on becoming a fully independent, locally managed Bosnian microfinance institution[7].

Clients' likes and dislikes

One of the goals of the survey was to determine client satisfaction with the ICMC microcredit program in order to improve it accordingly. Based on responses to the survey, 22.5% of clients mentioned a reliable source of working capital as the program's aspect they liked most, while 15% liked the program's simple guarantee best. Finally, 12.5% identified the professionalism of credit officers as well as efficiency in relation to banks and other sources of credit, as their main preference. These results come as no surprise as ICMC's outreach campaign and fund-raising strategy build on these comparative advantages.

In terms of what clients do not like about the program, 25% of the respondents mentioned high interest rate as the number one factor. This was followed by small loan size for 12.5% of the respondents. This response is expected given the history of Bosnia and Herzegovina, where subsidized credit was common and the main business activities were large state factories. It is also to be reminded here that ICMC's Project Enterprise sets a cap of 4,500 DM to its loan size and that in addition, its average loan size approved and disbursed is much lower (at 1,500 DM).

39.2% of respondents mentioned that they had nothing bad to mention about the program. This is to be expected, considering that many respondents do not want to provide negative feedback to loan officers who may judge their application for follow-on loans.

[7] Official transformation into a Bosnian MFI pending progress of legal reform in Bosnia.

Further disaggregation based on the time spent in the program (new clients versus repeat clients) provides the following information in percentages. Only the important changes in perceptions have been mentioned below:

Primary aspects clients like about ICMC program – Breakdown by time spent in the program							
	Lower interest rate	Reliable source of capital	Supportive and dynamic group	Efficient compared with banks	Simple guarantees	Professional	Number of responses
Loan for 6-12 months (newer clients)	2.2	32.6	6.5	6.5	28.3	4.3	37
Loan for more than 12 months (repeat clients)	8.8	17.6	11.8	17.6	7.4	19.1	56

Repeat clients in the program tend to appreciate access to this form of credit ("efficient compared with banks"). New clients value solidarity group lending more than repeat clients because it is their only means of accessing credit. However, several studies have shown that after some time, solidarity groups tend to wear out on individuals, which is what might be happening here. This bodes well for ICMC's strategy of developing a new individual lending program for clients who have borrowed at least through 2 loan cycles. On the other hand, group dynamics are considered more important for repeat clients than newer clients, which is somewhat contradictory. One explanation could be that of the groups that remain cohesive through several cycles, one can assume that they have been good clients and that a bond has been created among group members. Professionalism of the staff is the most frequent response for repeat clients; this can be explained by tighter links between the credit staff and older clients. 30.6% of repeat clients view higher interest rate as one of the things they like the least about the program, and yet they have chosen to take a loan again. This figure suggests that this interest rate is still the best they can get (money lenders charge much more and banks are not offering anything).

Aspects clients like the least about the ICMC program				
	Higher interest rate	Nothing	Loan too small	Number of responses
Newer clients	23.4	51.1	12.8	41
Repeat clients	30.6	37.1	14.5	51

Of the 120 clients interviewed for this study, only 1 reported having repayment problems. One could imagine that people who were having a hard time repaying the money but managed to do it on time would not report having difficulty.

III. DESCRIPTOR INFORMATION

PROFILE OF CLIENTS AND NON CLIENTS: HOUSEHOLD AND BUSINESS INFORMATION

Assumptions

The questionnaire includes many descriptor variables that provide insight on the typical profile of the respondents, and on the program's actual client base. They are useful in determining whether the program has actually reached its ideal target clients. They also allow one to assess the extent to which the two sample populations – clients and non-clients- are similar on key characteristics. Finally, they permit comparison with the general population on key variables.

Type of Interviewee	Number
New clients	48
Repeat clients	72
Non-clients	80
TOTAL	**200**

Similarities between client group and comparison group

1. Age

AGE			
	Average	Standard Deviation	Statistical significance
Non-Clients	33.8	9.3	t-test @ 0.05
Clients	37.6	8.9	
Newer clients	35.68	10.08	Not statistically significant
Repeat clients	38.9	8.73	

For the purpose of the comparison group, it does not appear that a 4-year age difference between clients and non-clients is very large, particularly with a standard deviation of 8.9 years and 9.3 years. Therefore, this result is interpreted to mean that clients and non-clients are comparable in age-range[8].

2. Education

EDUCATION					
	None	**Elementary**	**Secondary**	Associate	BA
Clients	0	**19.2%**	**68.3%**	10.8%	1.7%
Non-clients	2.4%	**32.5%**	**53.8%**	10%	1.3%
Level of statistical significance	Not statistically significant				

The profile of clients and non-clients is quite similar in terms of levels of education, i.e. statistically significant results were not found to confirm that clients have a higher educational

[8] The explanation to the 4-year difference (which is statistically significant) could stem from the fact that more mature people could be more interested and willing to run a microenterprise.

level than non-clients. One important consideration for this project is that in BiH, people have a relatively high educational level overall, much more so than in many countries where microfinance programs operate. This is why these results might seem quite high to colleagues working in Africa or Latin America. It is also in a post-conflict situation, characterized by stagnant economy indeed that many people who used to be professors or engineers with no particular desire to start their own business have taken up this activity.

3. Number of household members

On average, clients' households are composed of 3.87 individuals versus 3.91 in non client households. In other words, clients and non clients have a similar household size.

4. Number of dependents

Number of dependents	
Client group	4.0375
Comparison group	4.1750
Statistical significance	Not statistically significant at 0.05 level

The average number of dependents in clients' households is very close to the average number of dependents in non-clients' households. This result draws attention to the fact that in both cases, these numbers in absolute value are slightly higher than the number of household residents. This implies that many people are supporting someone that does not live with them, representing an added economic burden.

5. Marital status

Marital status				
	Single	Married	Widowed	Divorced
Client group	13.3%	73.3%	10.8%	2.5%
Comparison group	11.3%	68.8%	12.5%	7.5%
Level of statistical significance	No statistical significance			

A statistical test comparing percentages of respondents regarding their marital status showed no statistically significant difference between clients and non-clients, with the largest proportion of respondents from both categories being married.

6. Prime sector

Clients were asked in which sector the main activity for which they took the loan belonged, while non-clients were asked about their main business activity. The survey found very similar frequency of responses between clients and non-clients, with more than half of the respondents in trade, and between 27 and 30% in services for clients and non-clients, respectively. No statistically significant difference was found at a 0.05 level.

Breakdown of activity for all respondents							
	Trade	Production	Services	Animal Husbandry	Other Agriculture	Mixed	Number of responses
Client group	60 51.3 %	8 6.8%	35 29.9%	11 9.4%	1 0.9%	2 1.7%	117
Comparison group	22 cases 61.1 %	1 2.8%	10 27.8%	2 5.6%	0	1 2.8%	36
Level of statistical significance	None at 0.05 level.						

7. Other source of credit

Interviewees were asked if they or anyone else in the household had taken out a loan from another source in the previous 12 months. The majority of both clients and non-clients (the comparison group) have not taken out other loans, with 90% of non clients and 83.3% of clients not having any other loan. **One can conclude that if any impact is found either on the household or on the business, it will be largely due to ICMC's program.**

Other Source of Credit			
	No other loan	Other loan	Number of responses
Client group	83.3%	16.7%	120
Comparison group	90%	10%	80

Source of other credit[9] among people with another loan						
	Banks		Family		NGO	
	%	Number	%	Number	%	Number
Client group	60	12	5	1	20	4
Comparison group	62.5	5	25	2	12.5	1

The largest source of another loan for clients is banks, followed by family and NGOS.

[9] Percentages here represent proportion of respondents only among the ones who have taken out another loan, i.e. only 10% of non-clients and 16.7% of clients.

Differences between clients and non-clients

8. Household Income

Breakdown of household income level		
	Mean	Standard Deviation
Entire population	1,030 DM	586.45
Client group	1,182.25 DM	584.43.
Comparison group	801.72 DM	513.705
New clients (6-12 months)	1185,7292 DM	560,673
Repeat clients (+12 months)	1179,9306 DM	603,619
Level of statistical significance	None at 0.05	

These findings show that:

a) Clients on average are better off than non-clients, but in both cases, the standard deviation (the dispersion of results around the mean) is very high. Therefore, in both cases, there is heterogeneity in income levels. Higher income level for non-clients might be due to the impact of the loan program if one assumes that income is a reliable indicator. Another explanation is that non-clients have been selected from a waiting list; because they are aware of ICMC's mission to target the poor, they might report underestimated figures for income in order to be selected for a loan.

b) Newer clients report a higher income level than older clients, but this result is not statistically significant. This may be explained by the fact that one of the credit providers in the Una-Sana canton was undergoing financial difficulties at the time of this study and many of its clients were coming to Project Enterprise for credit. These clients generally had more established businesses and in turn higher incomes.

9. Main Source of Family Income

The Chi-square test run on this variable showed the origin of family primary income. Survey respondents chose from the following options: state sector, family business, other registered private company, non formal sector and other. The purpose was to see whether or not there would be a difference, not only between clients and non-clients, but also between repeat clients and new clients. It is important to note here that this does not indicated whether or not the loan was taken from the activity listed below.
The findings were as follows:

Respondents' stated sector for primary source of income (120 clients and 80 non-clients)					
	State Sector	Family[10] business	Other private business[11]	Non formal sector (non registered)	Other
Client group	41.7%	31.7%	7.5%	15.0%	4.2%
Comparison group	42.5%	13.8%	16.3%	21.3%	6.3%
Level of statistical significance	Not statistically significant				

[10] Registered and owned by someone in the family.
[11] Registered and owned by someone outside the family.

Approximately 42% of people make an income from state sector activities. Therefore, one can conclude that in many cases, ICMC's program offers only a supplementary income. These results are also linked to a few country-specific factors: people commonly share a fear of running unregistered businesses often perceived as "illegal" and therefore riskier. Therefore, a large proportion of clients used the first loan to register a business. The fact that a larger percentage of clients run family businesses confirms the idea that the entire household works on the business, not just the client, and that this is their main source of income. Another reason might be that non-clients want to start a business, but at the time of the survey they depend on their salary or someone else's. Support to informal businesses was one of the important considerations for ICMC at the time of program start-up so as to ensure that the income bracket would not be too high.

Clients' stated primary sector, breakdown by time spent in ICMC program					
	State Sector	Family business	Other private company	Non formal sector (non registered)	Other
Newer clients	58.3%	14.6%	14.6%	8.3%	8.3%
Older (repeat) clients	30.6%	43.1%	6.9%	18.1%	1.4%
Level of statistical significance	Chi^2 @ < .005 (p=.00015)				

Running a statistical test between repeat clients and newer clients shows that 30.6% of repeat clients depend on the state sector versus 58.3% of new clients as their primary source of income. A larger proportion of repeat clients runs a family business, as compared to new clients and non-clients. Because the survey did not ask about a change in the primary sector of employment in the past 12 months, one cannot conclude from this information that older clients are relying more heavily on family business due to the loan.

10. Training

Survey respondents were asked if they had received any training in the past 12 months. In general, a larger segment of ICMC clients have received training than non-clients.

Respondents' attendance at business training in the past 12 months			
	No training	Training	Level of statistical significance
Clients	45%	55%	Chi^2 @ <.005
Non-clients	93.8%	6.2%	
Newer clients	4.2% (2 cases)	95.8% (46 cases)	Chi^2 @ <.005
Repeat clients	72.2% (52 cases)	27.8% (20 cases)	

93.8% of non clients have had no training (only 6.2% of non-clients have attended business training). For clients, the proportions are respectively 45% without training and 55% with training. Project Enterprise's training is compulsory for the 40% of newer clients in the sample. Business training is no longer compulsory for repeat clients, which, coupled with the fact that clients at this stage have more business experience, explains why business training attendance drops dramatically over-time (from 95.8% to 27.8%). However, the fact that more than 40% of all clients have received training is most likely linked to the possibility that older clients have participated in a) another training offered by Project Enterprise not tied to the loan; b) other training programs in the area.

11. Residency status[12]

A particularly important and sensitive variable in the context of Bosnia and Herzegovina is residency status. This type of information would most likely not apply to programs elsewhere. It is also a variable that ICMC donors have tried to monitor closely.

A transformed variable of the residency status variable was created and allowed to report in a simple manner whether the survey respondents were returnees or not. This variable indicated that of all people interviewed, 40.1% were returnees and the rest were not (domiciled, internally displaced, other). In addition, other tests run show that more clients tend to be returnees (with a total of 49.2%) while more non clients are domiciled (67.5% of non clients are domiciled versus 46.7% of clients). The difference is statistically significant. This result was expected and is not random, since one of the program's funding conditions was to actively focus on returnees.

Residency status						
	Returnee to pre-war residence	Returnee to pre-war municipality	Displaced person	Domiciled	Other	Number of cases
Client group	31.7%	17.5%	3.3%	46.7%	.8%	120
Comparison group	20%	7.5%	5%	67.5%	0	80
Level of statistical significance	Chi^2 @ <.005 (p=.02936)					

Because of the importance of this issue in the Bosnian context, a whole series of tests were run on residency status. These were linked to the following variables: household income, number of household members, number of dependents, number of big and small items owned[13], amount spent on home repairs, increase in spending on rent, school, taxes, utilities, insurance and recreation[14].

[12] Returnee to pre-war permanent residence: a person who was forced to leave his/her place of residence during the war and has since returned to his/her pre-war place of residence.
Returnee to pre-war municipality: a person who was forced to leave his/her place of residence during the war and has since returned to his/her pre-war municipality of permanent residence, but has not returned to the house/apartment where he/she lived prior to the war.
Domiciled: a person who has not changed his/her place of residence due to the war
Displaced person: a person who was forcefully displaced due to the war and who is not currently residing in his/her pre-war permanent residence.

[13] Small items: electric stove, washing machine, refrigerator, stereo, video-player, dishwasher, other valuables)
Big items: propeerty not used for business, vehicle/motorcycle, house/apartment, land, valuables (livestock)
[14] These tests are available upon request.

These results showed that although returnees had slightly smaller households than non-returnees and more returnees seemed to report an increase in spending in the past 12 months on most items except rent, these differences were very small and were not reported to be statistically significant. Therefore, one cannot say that there is any particular difference in characteristics of returnees or on their spending pattern compared to domiciled persons or internally displaced persons. Isolating clients, tests were run on purchase of big items and small items since taking the loan. Again, results showed no statistical significance.

Hence, when participation in the microcredit program leads to positive impact, one may conclude that the impact occurs among returnees the same as it does for other groups of clients.

	Not returnees	Returnees
Newer clients	66.7%	33.3%
Repeat clients	40.3%	72.9%
Level of statistical significance	Chi^2 @ <.005 (p=.00461)	

The percentage of returnees in the program has gone down overtime and this result is statistically significant. At the earlier stage of the project, ICMC was concentrating more on Bosanska Krupa where most people are returnees. In addition, although the return process has picked up in the past year in Bosnia overall, it has been slower in most of the areas where ICMC operates, with the exception of a few municipalities.

12. Number of Business Activities[15]

A t-test run on the number of business activities showed that clients reported a higher number than non-clients and that this difference was significant. In addition, the mean reported for non-clients (comparison group) was below 1. In other words, some non-clients do not have a business and want to start one.

Number of Business Activities			
	Number of cases	Mean	Standard Deviation
Clients	120	1.09	.41
Non-clients	80	.8	.537
Levene's Test for Equality of Variances: F= 17,266 P= ,000			
Level of statistical significance	t-test @ 0.05 (p=.000)		

[15] The term "number of business activities" here is used to mean the number of discreet businesses.

CONCLUSIONS

1. A comparison of clients and non-clients suggests that the two groups share similar profiles, tested on the following variables: number of households, number of dependents, marital status, education, prime sector. This similarity allows one to use the non-client group as a comparison group to assess the impact of the loan program on household and business.

2. Differences appear in terms of residency status and training due to programmatic priorities, as well as with prime sector of activity and number of business activities. However, differences for prime sector of activity are not statistically significant. In addition, the higher number of activities might be due to the impact of the loan rather than being simply a description of the population.

A typical ICMC client is 37 years-old, holds a secondary degree, is married, lives in a household comprised of 3 to 4 individuals, maintains 4 dependents, works in trade, for the state sector or in a family business (particularly for a repeat client) and does not have any other loan.

A typical non client is 33 years-old, also holds a secondary degree, is married, lives in a household comprised of 3 to 4 individuals with 4 dependents, works in trade, for the state sector and does not have any other loan.

CLIENT INFORMATION ONLY

1. Loan use

Survey respondents were asked to rank the top three uses of the loan, focusing in particular on household and business use. Main findings follow:

<u>Loan used for the business</u>

a) The responses below were non-exclusive (clients can fit in several of the categories).

With the last loan:
1. 45% of clients purchased more supplies, materials or raw materials;
2. 30% purchased new equipment or machines;
3. 10.8% of clients started a new business;
4. 5% of clients adapted their existing business space;
5. Only 0.8% covered other costs of operation, improved the company or paid off business debts;
6. Finally, none of the clients either saved or increased the number of employees.

These results suggest that ICMC clients represent entrepreneurs who take loans for working capital or fixed assets. They usually operate small microenterprises with a limited number of employees. They cannot afford to modernize their company.

b) On supplies, new businesses and equipment, a disaggregation by type of clients shows the following:

Main uses of the loan – Breakdown by time spent in ICMC program			
	Newer clients	Repeat clients	Level of statistical significance
Started a new business	20.8%	4.2%	Chi^2 @ <.005 (p= .00400)
Purchased supplies or raw materials	27.1%	56.9%	Chi^2 @ <.005 (p=.00128)
Purchased equipment or machines	27.1%	31.9%	Not statistically significant

Using a chi-square analysis, a statistically significant difference at the 0.05 level was found between new clients and repeat clients when the variable " starting a new business" was analyzed. Repeat clients have apparently started a new business with a second or third loan for one of the following reasons: a) the first loan was used to register the business before starting (see section on prime sector); b) the business at the time was stopped and a new one was started; c) the individual has several businesses (see section on number of business activities); d) the individual built up the asset and then started her business.

56.9% of repeat clients versus 27.1% of new clients have used the loan to buy supplies or materials. This difference was also found to be statistically significant. On the other hand, the difference in terms of purchasing equipment is small: 27.1% of new clients used the loan to purchase machines or equipment versus 31.9% of repeat clients. The issue here is that the response on starting a business can include others, such as buying equipment or materials, and most certainly does. Since the category "other" may include already given responses, it is difficult to make a conclusive statement about the use of the loan. However, one can say that a majority of repeat clients bought equipment or materials with the loan and that at least 20% of new clients started a new business with the loan.

Loan used for the Household

Tests on the use of the loan for household purposes show very interesting results.
A part of the loan was used in the following ways:

1. 22.5% of clients for contingencies or to repay a loan
2. 14.2% of clients for household improvements
3. 13.3% of clients for food
4. 8.3% of clients for clothes
5. 5.8% for school tuition
6. 5% to repay household debts
7. 4.2% of clients to lend money to spouse or other person

It is important to note again that these questions were not asked in an exclusive manner. In the instance where survey respondents were asked about "repaying household debt" and "repaying a loan", they can lead to multiple responses and inflated results. One should also bear in mind that because the training program stresses the importance of using the loan for the business, clients might not have responded freely (please see discussion of fungibility in impact and conclusion sections).

Frequencies run on uses of the loan offer similar results between newer clients and repeat clients, except for saving and repaying a loan, which is the most frequent answer given.

Loan used to save or repay a loan - Breakdown by time spent in the program			
	Newer Clients	Repeat clients	Level of statistical significance
Saved or repaid a loan	14.6%	27.8%	No statistical significance

Because this result is not statistically significant, the fact that clients who have had a loan for a longer amount of time seem better able to either reimburse debt, or to save is a random one and cannot be attributed to the program. In addition, doubts remain here as to whether or not the mentioned debt corresponds to the same ICMC loan or another loan. Even double-checking with the variable "other credit" might not provide a full picture since the latter question was restricted to other credit taken in the past 12 months. A client could have taken out a loan before this period of time and used their loan from ICMC to reimburse it, but this would not show in the response to the questionnaire.

When running a test for clients with the variable "another source of credit", the result showed that of the clients who used the ICMC loan to repay a loan or to save, 18.5 % of them had a loan from another source. This is not a very high number; therefore, likely explanations are that most ICMC clients are not taking an ICMC loan to pay off another loan. ICMC clients might be saving or paying off items bought on credit, such as furniture.

2. Client training desires

Findings show that there is little difference between clients and non-clients in terms of their interest in training and that a majority of people would like to get more business training. 60% of non clients would like more business training versus 65% of clients. This seems to confirm ICMC's next move to open up training courses to both clients and non clients.

Many newer clients and follow-on clients are interested in business training, 66.7% and 63.9% of them respectively. 40.5% of respondents would like marketing training, with 10.3% expressing an interest in bookkeeping.

What kind of business training are you interested in?		
Training type	**Frequency**	**Valid Percent**
Bookkeeping	13	10.3
Marketing	51	40.5
Management	8	6.35
Agriculture	8	6.35
Other	46	36.5
Total	126	100

The frequency in the "other" category is quite high. In this category, two types of training needs can be identified: one is linked to general skills with computer science getting the highest number of responses (22), followed by English (3), non-specified language courses (5), economics (1), law (1), finance (1), management (5) and business (5). It is unclear what some of these responses mean, in particular for business or finance, and if those could have not been lumped with marketing or bookkeeping at the time of data entry. Therefore this question would need further exploration. The second type of response is linked to sector-oriented training, such as hair salon (5 responses), pharmaceutical (1), sewing (1), customs officer (1). Overall, this set of questions on training indicates that people want business training but that they either don't know what kind, or they don't exactly know what is meant by finance, economics, etc.

IV. IMPACT RESULTS

Several of the key variables for household and business impact were tested separately in order to determine whether or not the program had a positive impact. Based on the results found, composite indices for household and business were created and also tested for impact and statistical significance. The results found are explained and analyzed below.

HOUSEHOLD IMPACT

1. Savings

Survey respondents were asked how much change in their savings they had seen in the past 12 months. Using a chi-square test on the change in savings showed that a larger proportion of clients saw an increase in savings than non-clients, but also that a larger percentage of newer clients have seen an increase in savings than repeat clients. These results were not statistically significant.

Change in family savings amount in the past 12 months				
	Decreased	Remained the same	Increased	Number of cases
New clients	14.9%	63.8%	21.3%	47
Repeat clients	29.2%	56.9%	13.9%	72
Comparison group	24.1%	68.4%	7.6%	79
Level of statistical significance	Not statistically significant			

One possible reason for this result is that new clients want to ensure that they can pay back the loan and put aside some money, whereas older clients are more informed of their business sales pattern and are better at planning. Another reason could be that newer clients tend to buy more and to save, whereas repeat clients are more likely to reinvest in their business. This is discussed in later sections of the report.

2. Household Income Change

Survey respondents were asked if their household income had increased, decreased or remained the same over the previous 12 months. Using a chi-square analysis, results were found to be statistically significant. On the one hand, more clients than non-clients saw their income decrease. This result may be due to the higher volatility of clients' income or to a different way of reporting income (based on the training session they have attended). At any rate, the difference in decrease between both groups is not very large (23.3 versus 17.5%). Nevertheless, more clients also saw their household income increase or increase significantly in the last 12 months (40% of clients versus 23.7% of non-clients).

Household income change				
	Decreased	Remained the same	Increased	Don't know
Clients (120)	23.3%	35.8%	40%	0.9%
Non-clients (80)	17.5%	58.8%	23.7%	0
Level of statistical significance	Chi^2 @ <.05 (p=.01268)			

Of the respondents who saw their income decrease, 42.9% of them mentioned business difficulties as the main reason for this drop versus 21.4% of non-clients. However, this result is not statistically significant. 42.6% of clients reported that the main reason for an income increase is the expansion of an existing business while non-clients mention someone in the household securing a job as the main explanation. The result on income increase is statistically significant.

The same test run only on clients shows the following:

Household income change for clients of the ICMC program- Breakdown by time in program.				
	Decreased	Remained the same	Increased	Don't know
Newer clients (48)	16.7%	45.8%	37.5%	0
Repeat clients (72)	27.8%	29.2%	41.7%	1.4%
Level of statistical significance	Not statistically significant			

A larger percentage of repeat clients than newer clients saw their income increase or decrease. One possible explanation is that over-time, repeat clients either do increasingly well with their business, or they lack training or more guidance and their business starts declining. It might also be due to increasing competition. This result was not statistically significant. It is paired with the reasons provided for a decrease in income, which is business difficulties for 40.9% of repeat clients and 37.5% of new clients. Explanations for an income increase coincide with the expected differences in business maturity between repeat clients and newer clients: 48.3% of repeat clients mention business expansion as the main source of income increase while 44.4% of newer clients (and the largest proportion given) mention starting a new activity as the main reason.

This result was compared to clients' main sector of activity, as seen below:

Change in household income based on sector of activity, clients only				
	Decreased	Remained the same	Increased	Don't know
Trade	19 cases 31.7%	18 cases 30%	22 cases 36.7%	1 case 1.7%
Production	1 case 12.5%	2 cases 25%	5 cases 62.5%	No cases
Services	6 cases 17.1%	14 cases 40%	15 cases 42.9%	No cases
Husbandry	No cases	7 cases 63.6%	4 cases 36.4%	No cases
Agriculture	No cases	No cases	Only 1 case 100%	No cases
Mixed	1 case 50%	1 case 50%	No cases	No cases
Level of statistical significance	Not statistically significant			

Because there were very few responses in many of the categories, this result is not significant. What it does point out however is that results are very spread out, even within the same sector of activity. Production is the sector that seems to gather the largest number of clients with a household income increase, followed by services.

3. Purchase of items, new versus repeat clients

Using an Independent Sample t-test, a statistically significant difference was found at the 0.05 level between new clients and follow-on clients when the variable "number of items purchased after the loan" was analyzed. This indicates that older clients tend to purchase more items than new clients after they have received the loan. In Bosnia and Herzegovina, it is very important for people to possess household equipment such as refrigerators and TVs. From hypothesis number 2, expenditure is used as a proxy for positive impact because ICMC clients are relatively low income and therefore tend to spend most of their income on purchasing household items. Because purchasing items is culturally important in Bosnia and both newer clients and older clients were answering from the same list of items, the fact that newer clients purchased more items than older clients is interpreted as a good result.

Number of items purchased after the loan		
	Number of cases	Mean
Newer clients	48	.1250
Repeat clients	72	.4306
Level of statistical significance	t-test @ .05 (p=.036)	

4. Increase in spending pattern

The tests run showed a larger increase in expenditures on rent, utilities, recreation, food, taxes, insurance, school and holiday for clients than non clients over the past 12 months, with a statistically significant higher mean for clients than non-clients. **Clients overall have increased their typical household expenses in the past 12 months, significantly more so than non-clients. Considering the similar profile in the two samples, this can be interpreted to mean that clients had more access to disposable income than non-clients and are therefore "better-off".** The same test run between newer clients and repeat clients is not conclusive.

Increase in spending pattern (index)			
	Number of cases	**Mean**	**Standard deviation**
Client group	80	2.18	1.91
Comparison group	120	1.50	1.75
Level of statistical significance		t-test @ .005 (p=0.011)	
Newer clients	80	2.22	2.11
Repeat clients	120	2.15	1.78
Level of statistical significance		Not statistically significant	

5. First Household Composite Index

One of the three hypotheses used for this study was that the program would lead to an increase in household wellbeing, as measured by fixed assets, expenditures and savings. In addition, the client descriptor section showed that on most variables, clients and non-clients had a similar profile. **Therefore, to test for the overall measure of household wellbeing, a**

composite index measuring change in several variables was created. A statistical test was run comparing the means of this index between the client group and the comparison group. The variables included in the index were increase in household income, increase in household savings, increase in household expenses (rent, food, utilities, recreation, holidays, insurance, taxes, school, clothes), and increase in household expenses on home repair[16].

These variables were transformed to allow for simple analysis and weighted to better reflect their relative importance. The variable increase in household expenses was included in the equation based on the belief that an increase in household expenses indicates that more money is available for spending. Since every change in spending pattern was equated to one variable, this variable would have had a much stronger weight in the overall index than the variables "increase in income" or "increase in savings". Therefore, increase in savings and income were given respective weights of 3 and 4 to level off this effect. Increase in savings was given a smaller weight than income because the assumption at the time was that overall, few people want to save in this country and that therefore this variable is less relevant as a measure of overall change [17]. **The difference between household impact in clients and the comparison group was statistically significant at the 0.05 level.**

HOUSEHOLD INDEX 1			
	Number of cases	**Mean**	**Standard deviation**
Client group	80	6.8911	5.490
Comparison group	119	4.6737	3.427
Level of statistical significance		t-test @ .005 (p=0.02)	

One very interesting finding is that the same test run on clients overtime was not conclusive. In fact, newer clients report a higher household index than older clients, however the difference is not statistically significant. This could be paired with the much better results found for the business index for older clients, as explained in the business section.

6. Second Composite Household Index

In the first composite index, the assumption was that an increase in home repair was linked to taking a loan. However, when looking at the transformed variable "household repairs" (see question 12 of the questionnaire), amounts spent on home expenses appeared extremely high considering the income level of the population for this survey (between 10,000 to 80,000 DM). Double-checking with other questions showed that some people interpreted the question as meaning repairs made on their houses by a third party (reconstruction by the international community) and some viewed it as the value of their home or land. Because of this confusion, the variable was taken out of the second composite index as it might skew results.

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[16] Every variable used in the index was created based on the variables of the questionnaire. Each new transformed variable was either dichotomous with the option "1" for "increased" and "0" for "decreased or stayed the same", or a number which was obtained by dividing the number given by the respondent by the average response.

[17] The household index reads as the following equation:
Hhindex1 = increase in spending pattern for (rent + clothers + food + home repairs + taxes + recreation + insurance+ school + utilities + holiday) + increase in number of small items bought + 4*income increase+ 3*savings increase.

HOUSEHOLD INDEX 2			
	Number of cases	**Mean**	**Standard deviation**
Client group	80	6.8911	5.490
Comparison group	119	4.6737	3.427
Level of statistical significance		t-test @ .05 (p=.002)	

Using a t-test analysis, a statistically significant difference at the 0.05 level was found again between clients and the comparison group when the variable "second composite index" was analyzed. In other words, the increase in clients' household expenditures (except home repair), increase in savings and income is higher than for non-clients of the program and this difference is statistically significant.

7. Third Composite Household Index

This third variant included household repairs again and purchases of big items (which was defined in the questionnaire as property, vehicle, house, land and valuable such as livestock). Household repair was included since it had not modified the result of the previous index. In addition, big items was taken into account because this variable measures change in number of items bought, not an absolute value (amounts recorded are often unreal whereas number of items bought is usually a more accurate and realistic measure).

HOUSEHOLD INDEX 3			
	Number of cases	**Mean**	**Standard deviation**
Client group	80	7.9253	6.176
Comparison group	119	5.6352	4.303
Level of statistical significance		t-test @ .05 (p=.004)	

Once more, the t-test run on this third composite index gave a statistically significant result at the 0.05 level between the difference in means for clients and the comparison group.

Conclusion: the statistical tests run show a positive impact of the program on clients, as measured by three difference indexes. Theses indexes are made of the variables "increase in expenditures, increase in income and increase in savings", and are modified based on the inclusion or exclusion of expenses on home repairs and purchase of big items. In all the cases, there was a positive impact found which is statistically validated. From the isolated tests run, it appears that the composite variable measuring an increase in spending pattern is the one that shows significantly higher results for clients of the program as compared to non-clients.

THE PROGRAM IS IMPACTING POSITIVELY ON HOUSEHOLD WELLBEING.

BUSINESS IMPACT

The same process was used with business impact. The variables assumed as proxies for positive development on business were analyzed individually. Then, a business index was calculated and tested for overall impact of the program on clients' businesses.

1. Business Profits

Sales

A statistical test comparing the means of business sales showed no statistically significant difference between clients and non-clients at the 0.05 level (statistically, clients do not have higher business sales than non clients). In fact, a larger proportion of clients saw an income decrease and a smaller proportion of clients saw an income decrease than non-clients.

Change in Business sales				
	Decreased	Remained the same	Increased	Number of responses
Clients	24%	44%	32%	100
Non-clients	22.7%	27.3%	50%	22
Level of statistical significance	Not statistically significant			

The same holds true for business sales overtime, as illustrated in the following table:

Change in Business sales – Breakdown by time in the program				
	Decreased	Remained the same	Increased	Number of responses
Newer Clients	10%	60%	30%	30
Older Clients	30%	37.1%	32.9%	70
Level of statistical significance	Not statistically significant			

Costs

This variable was dismissed from any analysis because it is unclear whether or not an increase in business costs is an indication of a positive development of the business. Some companies might be incurring higher costs due to business expansion and growth, but others might be decreasing their productivity. Therefore, the question asked about business profit is more relevant to this study.

Business Profit

A larger percentage of non-clients experience an increase in business profit (45.5%) more so than clients (33%). However, no statistical significant difference was found between clients and the comparison group (non clients) at the 0.05 level.

Change in Business profit				
	Decreased	Remained the same	Increased	Number of responses
Clients	28%	39%	33%	100
Non-clients	27.3%	27.3%	45.5%	22
Level of statistical significance	Not statistically significant			

Referring to the positive impact suggested earlier on household wellbeing, one may ask how a positive impact at the household level can be found if based on business profits, a larger proportion of clients seem worse-off than non-clients. In other words, how could the program have led to positive impact on household income if it had no impact on business profits? Several explanations can be provided to validate this scenario. Fungibility is one; fungibility can be defined as the use of the loan for a purpose other than the one stated initially by the client. While loans to small and medium-sized enterprises are generally easier to track and monitor, loans to microentrepreneurs are likely to be mixed with household cash flow and less differentiated from business sales and profit. Therefore, it is hard to determine to what extent the loan is used for the stated purpose. Although ICMC's compulsory training for first-time borrowers stresses use of the loan for business, monitoring on how the loan is used is less strict or enforced, which makes it harder for ICMC staff to determine the importance of fungibility. Second, it is ICMC's experience that there is a difference in the way in which clients and non-clients understand and report some business concepts, in particular business profit. The fact that some respondents do not report a profit may be due to their understanding of profit to be money they have AFTER paying rent and other household expenses; another common scenario in the region is a confusion between sales income and profit. Clients going through the training are exposed to these concepts and no longer confuse them, which might explain why they report smaller amounts. Non-clients were chosen from a waiting list for a training, which means that none of them participated in the training prior to the survey. It is logical to expect them to be more confused. Finally, as discussed in Annex III, the overall feeling of the survey team was that the questionnaire, and in particular the business questions, were quite complicated for all survey respondents. Therefore the accuracy of responses can be questioned.

The same test run on clients shows more volatile results for older clients (a larger proportion of older clients have seen an increase and a decrease in business profit) than newer clients.

Change in Business profit – Breakdown by time in the program				
	Decreased	Remained the same	Increased	Number of responses
Newer Clients	20%	56.7%	23.3%	30
Older Clients	31.4%	31.4%	37.1%	70
Level of statistical significance	Not statistically significant			

2. Total Number of Workers in the Business

A new variable was created which measured the change in total number of workers hired in the past year. Using a statistical test, again no statistical significance was found when comparing clients to non-clients. Most people have had to reduce the number of workers (90% to 96% of all people interviewed) in the past year. This result confirmed client descriptor information, whereby none of the clients interviewed had used the loan to hire new staff, and where it was determined that many respondents work in family businesses, particularly among the client group (31.7% versus 13.8%). The target group does not have the means to hire workers because their margin is very small. The businesses they run are extremely small and often involve only family labor. The fact that no increase in labor was found could also be interpreted as a reflection of the poor economic climate that mitigates the benefits of the loan (anecdotaly, people say that the economic situation is getting worse).

Change in total number of workers in the past 12 months			
	No increase	Increase	Number of responses
Clients	95.6%	4.4%	114
Non-clients	90.3%	9.7%	71
Level of statistical significance	Not statistically significant		

The same variable measured for newer clients versus repeat clients showed that 7% of new clients hire someone in their businesses versus 2.8% of repeat clients, i.e. there is a decrease. However, this result was not found to be statistically significant. This might be explained by the fact that new clients hire someone at the beginning to help them but then do not hire more because the business is very small and the margin increase does not justify increased labor costs. Alternatively, the business may be stable and not require additional labor.

Change in total number of workers in the past 12 months			
	No increase	Increase	Number of responses
Newer Clients	93%	7%	43
Repeat clients	97.2%	2.8%	71
Level of statistical significance	Not statistically significant		

3. Family Workers

Because of the family-oriented profile of many businesses, it was assumed that looking at family workers separately might be more revealing than all or part-time non-family workers. Results showed that only 1.7% of clients increased the number of unpaid/family workers while none of the non clients increased the number of unpaid/family workers. This confirms the fact that a larger proportion of clients tends to have family businesses than non-clients.

Change in number of family workers in the past 12 months			
	No increase	Increase	Number of responses
Clients	98.3%	1.7%	115
Non-clients	100%	0%	32
Level of statistical significance	Not statistically significant		

The same test run on new versus old clients showed similar results (1.4% of new clients versus 2.3% of repeat clients) with no statistical significance. These results again confirm client profile. More importantly here, they also indicate that the number of workers, whether total or unpaid, is not a significant variable for the analysis of business impact for this particular program. This is in part due to the fact that survey respondents found the question on whether or not they employed family workers somewhat confusing and strange. In addition, the variable "new business development" already includes the option of employment of more workers". Therefore, the variables "family workers" and "total number of workers" were not taken into account in the overall business index.

4. New Business Development

Interviewees were asked if they had made any of the following changes: expansion of physical plant, introduction of new products, employment, quality improvement, decrease in expenses, new business development, and market expansion. The Business Development Index created combined these individual variables into one to facilitate testing. It did not apply to livestock or agriculture.

An Independent Samples t-test run on this new composite index showed that the mean for clients was higher than for non clients (3.4 business development efforts versus 2.8), however this difference was not statistically significant at a 0.05 level.

Number of business development improvements			
	Number of responses	Mean	Standard deviation
Clients	116	3.4138	1.632
Non-clients	37	2.8108	1.883
Level of statistical significance	Not statistically significant		

5. Total Assets Acquired

Survey respondents were asked if they acquired or invested in the following business assets in the previous 12 months: small tools, equipment/machines, vehicles/personal means of transportation, storage facilities, chairs/desks/closets, or kiosks/shops. As with the Business Development Index, a new index of total assets acquired was created and used to test changes in assets acquired. The mean for clients was slightly higher than for the comparison group (1.47 versus 1.19 of items) but was not statistically significant.

Number of total assets acquired			
	Number of responses	Mean	Standard deviation
Clients	117	1.4786	1.284
Non-clients	36	1.1944	1.451
Level of statistical significance	Not statistically significant		

6. Business Index

The business index used for this study included increase in business sales, in business profit, business development and assets acquisition. A decision was made not to retain any of the variables relating to number of employees for two reasons: 1) such a variable was not relevant to the profile of the population interviewed, and 2) business development includes the option of increasing employment. Therefore, employment would be counted more than once if any of these variables were included in the index. As with household indices, weights were attached to variables to allow for more balanced measures. The two indices "business development" and "business assets" were indeed a composite of several variables and would lead to larger numbers. In order to offset this difference, the variables "increase in business sales" and "increase in business profits" were given more weight, with 5 and 5 respectively (same weight to reflect equal importance in explaining a change in business situation)[18].

Since the new index would represent the sum of positive changes on business, the higher the number, the more positive the impact on business.

Business Composite Index Mann-Whitney Test		
	Mean rank	Number of responses
Client group	120.96	120
Comparison group	68.16	79
2-tailed P = .000		

The client group had a higher mean rank than the non-client group and, as shown in the table above, this result was statistically significant.

A non-parametric test on business index showed a statistically significant higher value for clients than for non clients. The positive change on business for clients was larger than for the comparison group, and this was statistically significant.

The loan program is having a positive impact on business.

7. Business Index based on time in program

The same test run on the business index above but differentiating between newer and repeat clients showed that repeat clients performed better on the business index than newer clients. This result is statistically significant. This suggests that repeat clients tend to use more of the benefits of the loan for their businesses rather than for their household. Newer clients tend to buy more for the household and save rather than reinvest in their business. This would justify the results found in the household impact section whereby household impact is greater on newer clients. A distinctive pattern seems to appear overtime among ICMC's clients.

Business index- Breakdown by time in program	
	Mean rank
New clients	48
Repeat clients	72
2-tailed P = 0.0173	

[18] The equation used was the following:
Business index = 5* increase in business sales + 5* increase in business profit + number of business developments made + total number of assets aquired.

V. CONCLUSIONS

HYPOTHESES AND FINDINGS: DOES THIS PROGRAM FULFILL ITS GOALS?

The hypotheses being tested by ICMC were the following:
1. The program strategy is effective in reaching its target audience;
2. There is an increase in household wellbeing (as measured by fixed assets, expenditures and savings);
3. There is an improvement in the business (demonstrated through income and fixed assets).

Hypothesis 1: Target Clientele

ICMC selected its target group based on the assumption that a combination of support to a majority of informal businesses for women with training and group lending as a methodology would attract clients with lower income. The challenge was that in an environment with hardly any source of credit, everyone is interested in credit regardless of their income level. Another challenge was to appropriately turn down people at the time when another microcredit provider serving higher income brackets in the same area was closing down and clients from this organization were coming to ICMC for loans.

In spite of these constraints, the results of this study suggest that ICMC is successfully reaching its target group. The tests point out that a typical ICMC client is relatively young (mid to late thirties), has a secondary degree, is married, lives in a household made of 3 to 4 individuals, has over 4 dependents, works in trade, in a family business (particularly for a repeat client) or in the state sector, and does not have any other loan. In addition, a majority of existing clients like the option of getting a guarantee through a solidarity group, because they would not otherwise be eligible for a loan. New clients seem to re-channel more of their profit into their household and less into their business than repeat clients. In addition, 65% of the clients would like to attend more training. A majority of repeat clients bought equipment or materials with the loan and at least 20% of new clients started a new business with the loan. In terms of re-channeling the loan to the household, most clients used parts of it for contingencies, or to repay a loan, for household improvements and for food. The picture that surfaces corresponds to what ICMC was expecting to find. A large investment in household expenditures was foreseen mostly because ICMC clients are women and economically vulnerable. In this regard, fungibility does not seem surprising. Lack of information on the type of training desired is also linked to a lack of knowledge on what some of these training courses cover.

Clients have reported a higher average income than non-clients, which could be caused by a different way of reporting income by survey respondents during the interviews. However, this aspect should be further explored and an explanation should be sought. In most countries, poverty and income levels are extremely hard to set and survey respondents can provide any information they wish in terms of their income. Bosnia does not escape this situation and basing an evaluation of correct targeting on income figures does not seem wise nor realistic. As regards to this hypothesis, ICMC's targeting which is deliberately based on methodology rather than means testing makes it somewhat harder to fit in a quantitative instrument such as this impact survey tool.

Hypothesis 2: Increase in Household Wellbeing (as measured by fixed assets, expenditures and savings)

The variables used included increase in expenditures, savings and fixed assets (included in "small and big items"). All items were covered in the household composite index 3. The difference between clients and non-clients was found statistically significant. In addition, tests run only for the variables "household income increase", "increase in spending pattern" and "purchase of items" showed, with a statistical significance, that a larger proportion of clients saw their income increase, saw an increase in their typical expenditures in 1999 compared to 1998 and that older clients tend to purchase more items than newer clients after they have received the loan (which means an improvement overtime). All of these elements indicate a positive increase in household wellbeing due to the ICMC program. However, the household indices computed tend to show lower results for older clients in the program as compared to newer clients. This difference could be due to a change in spending and investment pattern overtime and seems to be validated by the business findings.

Hypothesis 3: Improvement in the business demonstrated through income and fixed assets.

Tests run on change in business profit and business sales show better results for non-clients than clients, although not statistically significant. However, tests run on new business development, assets acquisition and on a composite index of business development, assets acquisition, business profit and sales showed that clients report higher results. These variables imply increase in fixed assets and increase in investment. Overtime, clients are better off in terms of the composite index of sales, profit, business development and assets acquisition.

The positive impact found in the household level without a positive increase in profits is explained by distorsion of the use of the loan towards household expenses as well as by the difference in the way survey respondents understand and report their business profits. The data suggest that this phenomenon is particularly relevant to newer clients.

RECOMMENDATIONS ON HOW TO IMPROVE THE PROGRAM

From the conclusions drawn, some sketchy recommendations can be made:

1. As Project Enterprise sets out to become fully independent from ICMC, both organizations will hopefully find the data from this survey useful. ICMC may want to focus on replicability of the survey to other ICMC microcredit programs (Croatia, Kosovo, etc.), while PE would certainly review in more-depth some of the implications of the results in terms of target group and loan parameters, as suggested below.

2. Because ICMC does not use specific income levels or other quantitative benchmarks to select clients (but rather its methodology), it is somewhat hard to use this survey tool to prove that the appropriate target group is being reached. Project Enterprise might want to re-examine its outreach and parameters and determine whether it could add other parameters to its selection or if that would only complicate the process without changing the outcome (or even be misleading). Other options such as including a larger proportion of rural clients might be discussed at the same time. In addition, ICMC might want to consider pairing such a survey with a more qualitative tool.

3. Fungibility is an important aspect of ICMC's results and needs to be acknowledged. A recent focus group organized in Bihac has shown that there is a tremendous need for capital for household use (clothing, food, etc.). Two recommendations emerge from this: 1) ICMC should consider reinforcing its monitoring of loan use after loan disbursement and for follow-on loans in order to better understand what clients do

with the capital. This in no way implies forbidding fungibility of capital (it is well-known that this would be a fruitless and irrelevant task anyway), but it would allow ICMC-Project Enterprise to better know its clientele. This in turn would make it easier to ensure that the program is serving who it is supposed to as per ICMC-PE strategic vision and with the best product(s). Further loan officer training on monitoring could be considered in a near future; 2) ICMC-PE should explore fungibility in more depth, which might lead to the development of other products or services.

4. Results have found differences between newer and older clients, in particular in terms of investment in the business versus household consumption. These differences should be further explored to determine what might cause them. Now that the project is more mature with some clients having gone through 3 to 4 cycles, this analysis would be particularly interesting to see if the pattern is confirmed.

5. Clients' likes and dislikes have warranted Project Enterprise's introduction of the individual lending product with larger loan sizes. Again, close monitoring should take place to allow for further tailoring.

6. Training desires have pointed out to a widespread demand for more training, also in-line with ICMC's plans, and for more training in computer and English classes. Although ICMC's Project Enterprise might determine that computer and English training courses do not fit into its mission, it should be aware of this demand and might attempt to connect clients and some training organizations, if any, which provide these services.

7. At the time of the survey, ICMC's credit institution had only been operating for 2.5 years. A future survey at a later stage seems welcome, particularly in order to re-test business impact, business profit and larger impact of the loan on business.

8. Anecdotal evidence from other branch offices suggests that results found in Bihac would be similar elsewhere. However, Project Enterprise should still closely examine the extent to which this is true by including other areas in a future survey, particularly now that that the other branch offices are serving an increasing number of clients. Although loan parameters and criteria are identical, economic and political differences might indeed lead to a diversity of results.

ANNEXES

ANNEX I
QUESTIONNAIRE

Survey Identification number: [_______________]

Survey Reviewed by: ____________________ Data entered on computer by: ____________________

Impact Survey–MFC/AIMS Project
BOSNIA QUESTIONNAIRE

Name of interviewer:________________________ Date of interview: ____________

Name of interviewee:________________________ Community: ____________

[___] 1. Client of 6-12 months [___] 2. Client of more than 1 year [___] 3. Non-client or in-training

***Client information only**: (Complete from program records when possible or by asking client.)*

Date of first credit: ___________ (day/mo./yr.) Date last credit issued: [__________]

N° of program credits respondent has taken: [___] Is borrower behind in repayments? (*circle*): Y N

Amount of 1st program credit: [______________] Amount of current credit: [__________________]

INTRODUCTION: Good day. My name is … and I work for MC/SEA (ICMC). Thank you for agreeing to participate in this survey. This survey is conducted by [list name of agency] and representatives of other micro-credit programs in Europe. The purpose of the survey is to better understand the market in which small entrepreneurs works as well as the influence of micro-loans on your business activities.

We want to assure you that the information you give us will be completely confidential and will be used exclusively for our statistical research to help us improve our services. The information you give us will not be associated with your business specifically and will not affect your cooperation with [name of organization] and your ability to get loans in the future.

The survey asks several questions about your household and your business. We are trying to understand the changes that have taken place over the past year. The survey will take about 30 to 40 minutes to complete.

Is this ok? May we continue? Thank you.

Individual Level: Basic Information

1. Have you ever taken a loan from ICMC?
   1. Yes (if yes, go to question 2) 0. No (if no, go to question 3)

2. If yes, how long ago did you first get a loan?
   (*Check that information matches expected client status*.)
   1. 6-12 months ago 2. More than 1 year ago

3. Gender of respondent 1. Male 2. Female

4. What is your birth date (day/month/year)?

5. Currently, are you? (*Read answers. Enter only one.*)

   1. Married
   2. Separated/divorced
   3. Widowed
   4. Single/never married

6. What is the highest level of education you completed?
   1. None
   2. Primary School
   3. Secondary School
   4. Associate's Degree
   5. BA
   6. Higher than BA

Interviewer: For the next question, please define each of the categories for the respondent before giving him/her the categories to choose from:

- **Returnee to pre-war permanent residence: a person who was forced to leave his/her place of residence during the war and has since returned to his/her pre-war place of residence.**
- **Returnee to pre-war municipality: a person who was forced to leave his/her place of residence during the war and has since returned to his/her pre-war municipality, but still does not live in the house/apartment where he/she lived prior to the war.**
- **Domiciled resident: a person who did not change his/her place of residence due to the war.**
- **Displaced Person: a person who was forced to move because of the war and currently does not reside in his/her pre-war residence.**

7. Are you a:
   1. Returnee to pre-war residence
   2. Returnee to pre-war municipality
   3. Displaced person
   4. Domiciled resident
   5. Other

Household: Background Information

8. Who are the persons in your "household" —those that live and eat together and share income – and what is their average contribution to the household (HH) income? [Interviewer, explore the last 2 items: remittances and other contributions – excluding non-cash items]

Members of household	Place check Mark ✓	Contribution to monthly household income
Self		
Spouse		
Child		
Child		
Child		
Parent		
Relative		
Other (________________)		
Other (________________)		
Other (________________)		
Other (________________)		
Money sent by mail (Remittances)		
Other Contribution		
TOTAL		

9. In which sector does the primary income contributor to the household income work? ☐

1. State sector
2. Registered private family business
3. Other registered private business
4. Informal sector (non-registered business)
5. Other

10. How many people are dependent on joint household contributions (both living within the household and those outside of the household)? ☐☐

HOUSEHOLD: PROPERTY (BASIC ASSETS)

11. Now I have some questions about items that your household might own. I will read a list of items and I would like you to indicate if you or anyone in your household owns any of these items:

Item	a. Do any of your household members own this item? (*Read and check box if "yes."*)	b. Estimated current value?	c. Was this item (or more of this item) acquired during the past year? (*Mark with an "X."*)		d. (***For clients***) Did you buy this item (or more of this item) after you started borrowing from ICMC?	
			1.Yes	0. No	1. Yes	0. No
TV						
Stove						
Washing machine						
Refrigerator						
HiFi Stereo						
Video player						
Dishwasher						
Other Valuables						
ASSETS NOT USED FOR BUSINESS						
Vehicle /motorcycle						
House/apartment						
Land						
Livestock						
TOTAL						

FINANCIAL SITUATION OF THE Household

12. I would like to ask you to make an estimate of how much your household spent on repairs, improvements or additions to your housing space over the last year? ____________ DEM

13. Have your expenses increased, remained the same, or decreased in the following categories during this calendar year (1999) compared to the last year (1998)?

	Increased	Remained the Same	Decreased
Rent			
Education			
Taxes (not on inc.)			
Insurance			
Clothing			
Entertainment			
Vacation			
Food			
Other (_________)			

14. Did you spend any of your household income on your business?

1. Yes 2. No 99. N/A

15. Over the last 12 months, has your household income...? (*Read answers and enter response.*)

----------1	--------2	--------3-	------------4 --	-----------------5	--------------------99
Significantly Decreased (go to #16)	Decreased (go to #16)	Remained the Same (go to #18)	Increased (go to #17)	Significantly Increased (go to #17)	Don't Know (go to #18)

16. ***(If decreased)*** Why has your income decreased?
(*Do not read. Multiple answers possible.*)

1. I or household member have been sick
2. Problems with my business
3. Someone in the HH lost a job
4. Family emergency
5. Other (specify) _____________
99. Don't know

17. ***(If increased)*** Why has your income increased?
(*Do not read. Multiple answers possible.*)

1. Expanded existing business
2. Started new business
3. Someone got a job
4. Received money from remittances
5. Received ZPP-issued certificates
6. Other (specify)________________
99. Don't know

18. Do you currently have any family savings in cash?
1. Yes 0. No 99. Don't know

19. Approximately how much HH cash savings do you have? *(Read Choices)*
1. 0-500 DM 2. 501-1,000 DM 3. 1,001-3,000 DM
4. >3,001 DM 99. Don't know

20. During the past 12 months, has your family's cash savings?
(*Read answers and enter response.*)

----------1	--------2	--------3-	------------4 --	-----------------5	--------------------99
Significantly Decreased	Decreased	Remained the Same	Increased	Significantly Increased	Don't Know

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Use of Loan

21. ***(Clients only)*** How did you use the last loan you took from the ICMC program?
(*Do not read. Multiple answers possible.*)
(a) Started a new business
(b) Bought more stock, materials or supplies
(c) Paid other business operating expenses
(d) Bought equipment, machines or tools
(e) Improved business site
(f) Added business space
(g) Hired more workers
(h) Savings
(i) Paid debts related to the business
(j) Other _________________
(k) Other _________________

22. ***(Clients Only)*** Did you use any portion of your last loan to…? (*Read each statement. Fill-in appropriate box*)

k)	Buy food for your family	1. Yes	2. No	99. Don't know
l)	Buy clothes or other household items	1. Yes	2. No	99. Don't know
m)	Give or loan money to your spouse or someone else	1. Yes	2. No	99. Don't know
n)	Keep money on hand in case of an emergency or to repay the loan	1. Yes	2. No	99. Don't know
o)	Pay for education for your children	1. Yes	2. No	99. Don't know
p)	Pay for household improvements	1. Yes	2. No	99. Don't know
q)	Pay for household debts	1. Yes	2. No	99. Don't know

23. Rank top three uses of the loan, in order (Use codes from quest. 21 and 22)

Largest amount was spent for __________
Second largest amount was spent for __________
Third largest amount was spent for __________

(Clients and non-clients)

24. Has anyone in your household taken a loan in the past year from any other source?
1. Yes (if yes, go to #25 and 26) 2. No (if no, go to #27)

25. If someone in your household has taken a loan in the past year, what was the source of this loan?

1. NGO
2. Bank
3. Family/friend
4. Suppliers
5. Other (_________)

26. If yes, what was:
The amount of your loan ……………………_______ DEM.
The term of your loan……………………….________months or open term_____

27. If you have not applied for a loan from any other source, please give the reasons *(Do not read. Multiple answers possible.)*
1. Procedure too complicated
2. Loan too expensive
3. Inadequate loan term
4. Loan size not big enough
5. Need a grace period
6. Do not need a loan
7. Did not have guarantee or collateral
8. Other (specify)_____________________________________

28. If you applied for a loan from some other source, but were rejected, please give the reason *(Do not read. Multiple answers possible.)*
1. Collateral not adequate

2. Business plan not adequate
3. Have loan from another source
4. Not the right client profile
5. Other___________________________________
6. Other___________________________________

BUSINESS LEVEL: INCOME, EMPLOYEES, PROPERTY AND PROFIT

Introduction: These questions relate to your or your family members' current or future business activities.

29. How many business activities do you engage in (e.g. trade, animal husbandry, …)? ☐

30. ***(Clients Only)*** For the business for which you took a loan …
(Non-Clients) For your primary business activity …
… Is this business…? (*Read choices and enter only one.*) ☐
   1. Primarily your own or your family's
   2. A business partnership with others
   3. Owned by someone else, but you are employed in it
   4. Don't have a business yet

31. In which sector is this activity? (*Read possible answers.*) ☐
   1. Trade
   2. Production
   3. Services
   4. Animal Husbandry
   5. Agriculture
   6. Mixed (define_______________)
   7. Not applicable

IF THE ANSWER ON QUESTION NO. 30 WAS "I HAVEN'T STARTED A BUSINESS YET," GO TO QUESTIONS NO. 51.

32. On average, how much time did you work in your business in the last calendar month (Sept. '99)?
(*Read possible answers*) ☐
   1. Full time or more (at least 8 hours per day)
   2. Less than 8 hours per day
   3. Less than 8 hours a week
   4. Not applicable

33. For the same month one year ago (Sept '98), was the level of your own involvement in this business:
(*Read possible answers*) ☐
   1. More than now
   2. Less than now
   3. About the same
   4. Not applicable

34. How many people, excluding yourself and possibly your partner, worked in this business during the last calendar month (Sept, '99)?

(a) Full-time paid workers	(b) Part-time paid workers	(c) Casual / Piece rate workers	(d) Unpaid family/ friends	(e) Total

(f) Not applicable

35. This month last year (Sept '98), how many people were working in this business?

(a) Full-time paid workers	(b) Part-time paid workers	(c) Casual / Piece rate workers	(d) Unpaid family/ friends	(e) Total

(f) Not applicable

36. If there is a difference in the total number of employees, please give reasons why? *(Do not read. Multiple answers possible.)*

(a) If there was an increase – mark all that apply

1. Expanded business
2. Owner working less
3. Needed new skills / specialists
4. Other (specify) ____________
5. Other (specify) _____________
6. Other (specify) ____________

(b) If there was a decrease – mark all that apply

1. Bought more efficient equipment, machines, tools
2. Changed type of services or items produced
3. Decrease in sales income/lower demand
4. Increase in number of full-time paid workers and decrease in number of employees in other categories
5. Decrease in unpaid family/friends working in business
6. Other (specify) _____________

BUSINESS LEVEL: DEVELOPMENT (PROGRESS) AND PROPERTY ASSETS

37.

During the past 12 months, did you make any of the following changes so that your business could earn more income or be more productive? (*Read list of possible changes. Mark the responses with an X*)	1. Yes	0. No	99. Don't Know
a. Expanded/renovated physical premises			
b. Added new products			
c. Hired more workers			
d. Improved quality or desirability of product/add value			
e. Reduced costs by buying inputs in greater volume or at wholesale prices			
f. Reduced costs with cheaper source of loan			
g. Developed a new business			
h. Sold in new markets/locations			
i. Other (specify:_____________________)			

38.

During the past 12 months, did you purchase or invest in any of the following assets for your business? (*Read list of possible changes. Mark the appropriate box with an X.*)	1. Yes	0. No	99. don't know
a. Purchased small tools/accessories			
b. Purchased major tools like stoves, equipment, machinery			
c. Purchased own means of transportation like a vehicle			
d. Invested in a storage structure like a granary, stock room			

During the past 12 months, did you purchase or invest in any of the following assets for your business? (*Read list of possible changes. Mark the appropriate box with an X.*)	1. Yes	0. No	99. don't know
e. Made a minor investment in your marketing site like a chair, table, shed			
f. Invested in structures for your marketing site (kiosk, shop)			
g. Other (specify:______________________)			

39. In comparison with the same month last year (Sept '98) were your costs last month: *(Read answers and enter only one.)*

1. Much lower
2. Lower
3. About the same
4. Higher
5. Much higher
6. Not applicable

40. In comparison with the same month last year (Sept '98) were your sales last month: *(Read answers and enter only one.)*

1. Much lower
2. Lower
3. About the same
4. Higher
5. Much higher
6. Not applicable

41. In comparison with the same month last year (Sept '98) were your profits last month: *(Read answers and enter only one.)*

1. Much lower (go to #45-47)
2. Lower (go to #45-47)
3. About the same (go to #48)
4. Higher (go to #42-44)
5. Much higher (go to #42-44)
6. Not applicable (go to #48)

42. ***(If profits were higher)*** Please estimate the percentage by which your profit last month (Sept '99) was higher than for the same month 12 months ago (Sept '98)?________%

43. Why was your profit higher last month (Sept '99) than for the same month last year (Sept '98)? *(Do not read answers. List all that apply.)*
   1. Larger customer base or increased demand
   2. Moved to better market location
   3. Added new products or services
   4. Able to buy inputs at cheaper price
   5. Lower rent or other operating costs
   6. Have better equipment, machines or tools
   7. Improved management
   8. Other, specify ____________
   9. Other, specify ____________

44. What were the two most important reasons profit was higher last month (Sept '99)? *(Use codes from above question.)*
   (a) __________
   (b) __________

45. ***(If profits were lower)*** Please estimate the percentage by which your profit last month (Sept '99) was lower in comparison to the same month 12 months ago (Sept '98) ________%

46. Why was your profit last month (Sept '99) lower than for the same month last year (Sept '98). *(Do not read answers. List all that apply.)*

1. Low demand or increased competition
2. Increased cost of materials
3. Unable to get input/ supplies/materials
4. Robbery or theft
5. Temporary closure of business (e.g. due to illness, breakdowns, etc)
6. Bad debts (customers not paying)
7. Other, specify ____________

47. What were the two most important reasons profits were lower last month (Sept '99)? *(Use codes from above question.)*
(a)
____
(b)
____

48. During the past 12 months, was there ever a time when you did not have enough money to conduct your business
1. Yes 0. No 98. Not applicable 99. Don't know

49. How long did this period last? [_____] Number of weeks 98. N/A 99. Don't know

50.

(a) In managing your business activity, *(Read)*	(*Mark the appropriate answer with an X.*)			50b. (***Clients only***) Is this a practice you have adopted since you took a loan?	
	1. Yes	0. No	99. DK	1. Yes	0. No
a. Do you use your business money for personal and household expenses?					
b. Do you calculate your profit based on records of your costs and earnings?					
c. Do you know which product(s) bring you the most profit?					
d. Do you pay yourself a wage for your work in your business?					
e. Do you pay family members who work for you in your business?					

51. What are your plans for your businesses for the next 12 months? *(Do not read answers. List all that apply.)*

1. Expand to new location
2. Hire more employees
3. Add new product lines
4. Improve quality of products
5. Close the business
6. Invest more in the business (money, time, …)
7. Decrease number of employees
8. Decrease number of existing product lines
9. Stay the same
10. Other (_____________________)
11. Other (_____________________)
99. Don't know

52. What are your biggest concerns for your business? *(Do not read answers. List all that apply.)*

1. Increased competition
2. High taxes
3. Rising rent
4. Lack of knowledge and skills
5. Insufficient market for goods
6. Legal or regulatory problems
7. Clients have less money to spend
8. Other (______________________)
9. Other (______________________)

53. List the two biggest concerns? (*Use codes from question #52)*
(a) ___________
(b) ___________

54. Have you attended any business training in the past 12 months? 1. Yes 2. No

55. Are you currently interested in business training? 1. Yes (go to #56) 2. No(go to #57)

56**. If yes**, what type of training are you interested in? *(Do not read. List all that apply.)*

1. Accounting
2. Marketing
3. Management
4. Agriculture
5. Other _____________
6. Other _____________ _____________

57. **If not**, why not? *(Do not read. List all that apply.)*

1. Don't need it
2. Don't have the time for it
3. Don't have money for it
4. What I want is not offered
5. Other _____________
6. Other _____________ _____________

****

END FOR NON-CLIENTS
EXPRESS APPRECIATION FOR THEIR TIME
ANSWER ANY QUESTIONS OR CLARIFY ANY ISSUES THAT THE INTERVIEWEE MAY HAVE REGARDING THIS SURVEY

****

Questions for Clients Only

58. Did you face any difficulty repaying your loan to the program in the last loan cycle?
    1.Yes (go to # 59) 0. No (go to #60)

59. (If yes,) what caused your repayment problems? (*Don't read answers. Probe. Can be multiple answers.*)
    1. Loan activity was not profitable
    2. I or others in my family had been sick
    3. I used some of the loan money for food or other items for the household
    4. Sold on loan and did not get paid back in time
    5. Financial/legal problems
    6. Other (specify) ____
    99. Don't Know

60. Name **three** things you like most about ICMC's program. (*Don't read answers).*
    1. Lower interest rate than other informal sources of loan (informal lenders)
    2. Steady source of working capital
    3. Group solidarity and/or group dynamics
    4. Training or technical assistance
    5. Efficiency as compared to banks or other sources
    6. Easier guarantees than loan alternatives
    7. Professionalism of credit officers or other program staff
    8. Other (specify:______________________________)
    98. No answer given.
    99. Don't know.

    1st
    2nd
    3rd

61. Name **three** things you like least about the program. (*Don't read answers.)*
    1. High interest rates or commission
    2. Size of initial or subsequent loans too small
    3. Loan cycle too long or too short
    4. Problematic group dynamics (with leaders or at meetings)
    5. Repayment policies (frequency, amount)
    6. Guarantee policies
    7. Transaction costs for client (slow disbursement, have to cash checks, etc.)
    8. Dislike behavior/attitude of loan officer or other program personnel
    9. Lack of grace period
    10. Other (specify) ____
    11.Nothing
    98. No answer given.
    99. Don't know

    1st
    2nd
    3rd

62. If you could change something about the ICMC program to make it better, what would you change?

____

____

****

END FOR CLIENTS. EXPRESS APPRECIATION FOR THEIR TIME. ANSWER ANY QUESTIONS OR RESOLVE UNCLEAR ISSUES.

COMMENTS :

____

____

____

ANNEX II
SURVEY METHODOLOGY

The survey took place in Bihac. The interviewing process followed the calendar below:

- July – questionnaire design, translation (by Mercy Corps with checking by ICMC)

- August - pre-testing of the questionnaire - each organization (Mercy Corps and ICMC) filled in 20 questionnaires as a pre-test (inside the office and with clients) and made final corrections.

- August 24, 1999: meeting with Mercy Corps in Banja Luka. Final changes to the questionnaire were agreed upon, as well as the need to prepare additional documents such as a script for setting up interviews, possible questions and answers, confidentiality agreement (for individuals conducting the interviews) and list of comments/questions to avoid.

- September 29, 30 – selection of survey respondents. Two groups of clients were selected, those who had been in the program for 6 to 12 months (called newer or new clients) and those who had been in the program for longer than 12 months (called repeat or follow-on clients). The first group was randomly chosen amongst clients who have received a loan from Project Enterprise in the period between October 98 and April 99, and the second group amongst clients who have received a loan before October 98. The sampling gave 40% of new clients (or 48 individuals) and 60% of repeat clients (or 72 individuals). The comparison group (alternatively called "non-clients") was randomly selected from the waiting list for the training (at that time there were over 300 women on this list)[19]. Since the goal was to interview 120 clients and 80 non-clients, it was necessary to ask a large number of women to be interviewed (around 30% declined the invitation).

- September 30 and October 1, 1999: training for interviewers in Tuzla organized by MC/SEA: final review of questionnaires and practice of the interviewing process. ICMC attendance: 2 loan officers and 2 trainers who were to conduct the interviews. The office manager and two other loan officers helped set up the interviews.

- October and first week of November - actual interviewing process (each interview lasting between 40 minutes and 1 hour).

- November - data entry

- December 13 - 17, data Analysis seminar in Dubrovnik

- December 99, January 2000 - data cleaning by two loan officers

- February: further data cleaning. Data analysis and final report writing.

[19] ICMC conducts compulsory training sessions before giving out the loans (non-clients are potential and hopeful clients).

ANNEX III
Problems Encountered and Recommendations

Problems encountered with the results of the tests

The biggest problem in this respect was the lack of statistically significant results due mainly to the small sample size. Increasing the sample size is certainly one of the ways to resolve this issue. However, this could lead to increased costs when in fact the purpose of the initiative was to allow practitioners to carry out a relatively simple and feasible study.

One should not forget that very small loans are offered here and the level of expectations in terms of impact should not be over inflated.

Problems encountered with the process

Several issues emerged as the ICMC team was going through this experimental exercise.

1. It proved to be very difficult to set up interviews with individuals by phone as many of ICMC clients do not have one. Therefore, the team had to go twice, first to set up the interview and then to conduct it at an agreed time.
2. Other difficulties during the interviewing process included instances when it became obvious that respondents were providing unrealistic answers but interviewees were told not to make any comment and just report the answer.
3. The fact that the questionnaire was prepared before the training on data analysis carried out in December of 1999 could seem logical but proved to complicate matters for data entry and data analysis. If a minimum of training on data analysis had been conducted beforehand, the questionnaire would have been more suited to the needs of running statistical tests. A similar issue regarding data entry emerged: the teams had not cleaned and validated their data before attending the data analysis training. Therefore, much of the work done at that time had to be redone at a later stage.

Problems encountered with the questionnaire and recommendations

Overall, the most positive aspect of the questionnaire was its thoroughness. However, this characteristic also became the biggest obstacle to data analysis. The questionnaire turned out to be too long, too detailed and with too many nuances. This led to the following:
1) respondents' fatigue; 2) more inaccuracies in answers provided by survey respondents due to length of questionnaire, to level of details of answers and to lack of understanding of some of the questions. As an example, survey respondents did not understand questions on property value, on paying themselves a salary or on paying their family members a salary;
3) interviewer fatigue and mistakes in data entry due to complexity of questionnaire.

Recommendations include:

1. As mentioned above, to contemplate shortening the size of the questionnaire but to increase the sample size. To keep to a maximum of 15 to 20 questions but to interview approximately 300 individuals.

2. To avoid multiple-response questions such as the following one: "how did you use the last loan you received from ICMC? (a) we started a new business, (b) we purchased more supplies, materials or raw materials, (c) we covered other costs of operation, etc". Each one of these possibilities has to be recoded and transformed into a new variable. Once the tests are run, responses are still non-exclusive and therefore lose accuracy.

3. In multiple-choice questions, to avoid any answer which can be contained in another one, such as:" we started a new business" and "we purchased more supplies". The respondent might consider that buying more supplies is included in starting a new business, therefore he/she might respond only once to this question. Frequencies are therefore skewed.

4. To avoid all "Why" questions, except for important topics such as income and savings. Answers to "Why" questions are difficult to analyze because many respondents prefer to report a specific reason rather than to choose from the list of options.

5. To ask the simple question: do you have a business? Yes – No. This question was never asked in the questionnaire. This became complicated when survey respondents provided strange or unusual answers because it was hard to distinguish between clients not having a business or clients not understanding the questions.

6. To avoid 5 Lycard-scale questions
   An example of such questions is:
   "Over the last 12 months, has your household income
   significantly decreased
   decreased
   remained the same
   increased
   significantly increased?"

   All these questions had to be transformed and recoded because as is, there were not enough respondents in each category to allow for any significance to the tests run. This was very time-consuming. In addition, the nuance between "significantly increased" and "increased" depends on the month of year and on each individual's perception and is not very easy to capture.

7. To simplify the household assets questions, to provide fewer choices and focus on the number of assets rather than on the amounts given (too biased). In the questionnaire, survey respondents were asked if they owned any item on a pre-selected list, how much they were worth, if they had been acquired in the previous 12 months and whether they were bought after taking a loan with Project Enterprise. The estimates given to the value of assets were often very high and seemed inconsistent, in great part due to the acquisition by clients of assets prior to the war; in addition, it was impossible to assess the value of land in the context of Bosnia and Herzegovina after a long period of state-owned property and more recent but confusing attempts at land redistribution.

8. To avoid lumping questions that might be the sign of a positive or a negative impact depending on the individual or the context (such as using business money for personal expenses or asking about a change in business costs).

9. To avoid asking the question on whether the survey respondent paid herself or family members a fixed salary as this question was not understood properly and seemed very strange to interviewees.

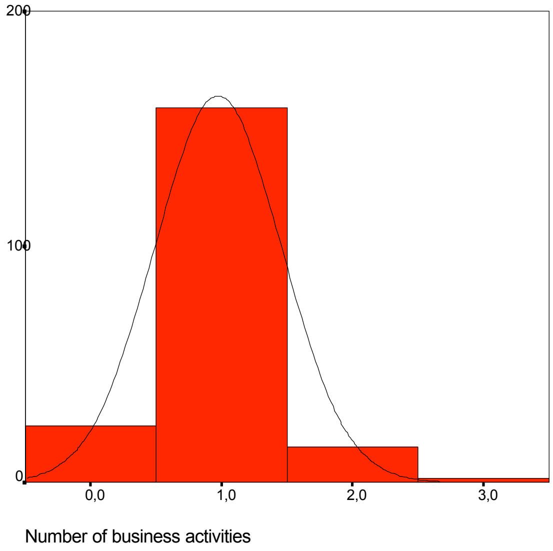
10. To carry out further pre or pilot testing of the questionnaire so as to ensure that questions developed are clearly understood by survey respondents. Also, to make sure that only a few questions require a "read instruction" category for respondents. To the extent possible, the interview should take place like any conversation.

ANNEX 4: SELECTED SUPPORTING CHARTS[20]

NUMBER OF BUSINESS ACTIVITIES

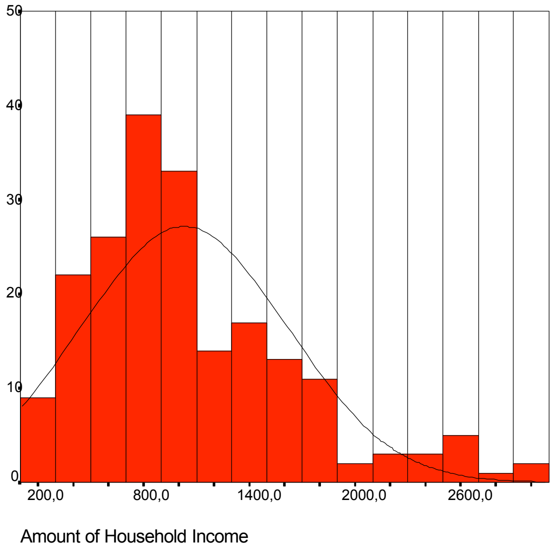
Normal distribution.

Std Dev.=.49
Mean = 1,00
N = 200,00



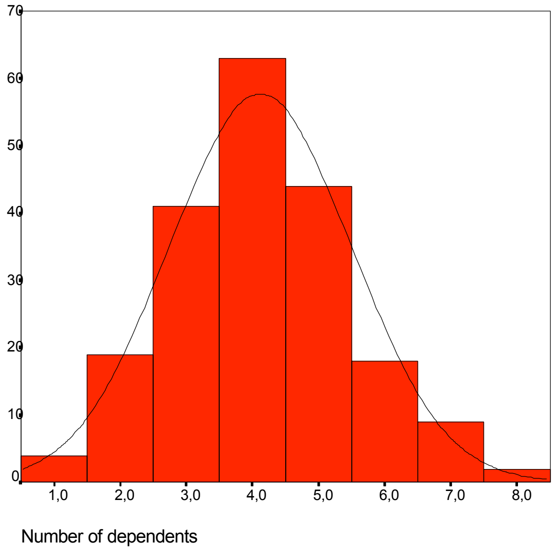
AMOUNT OF HOUSEHOLD INCOME

Std. Dev = 586,46
Mean = 1,0
N = 200,00



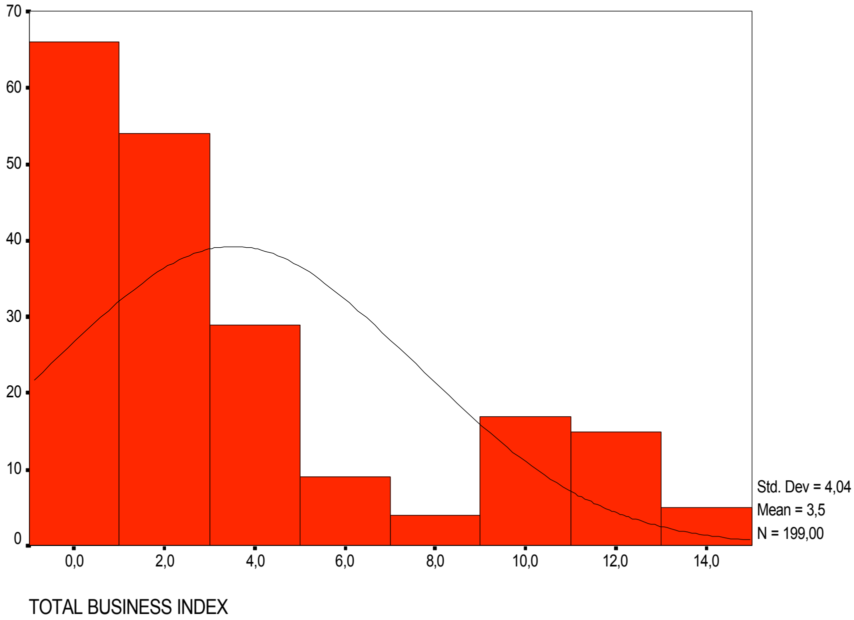
[20] Additional charts and tests run are available upon request.

NUMBER OF DEPENDENTS



Std. Dev. = 1,38
Mean = 4,1
N = 200,00

BUSINESS INDEX
Not a normal curve: see below.



- - - - - Mann-Whitney U - Wilcoxon Rank Sum W Test
BUSINDX1 TOTAL BUSINESS INDEX
by CREDIT have you received credit from this org b

Mean Rank	Cases	
68,16	79	CREDIT = 0 No
120,96	120	CREDIT = 1 Yes ---
	199	Total

Corrected for ties

U	W	Z	**2-Tailed P**
2224,5	5384,5	-6,4201	**,0000**