Contribution of Microsavings to Poverty Alleviation: The Case of Eastern Slovakia

Ako prispievajú mikropôžičky k zmierneniu chudoby: Prípad Východné Slovensko

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Abstract

The aim of the paper is to analyze microsavings program of ETP Slovakia. There exists a gap in the microfinance literature on microsavings as a form of microfinance and their impact savings on clients, microenterprises, households, communities, and financial institutions. Microfinance arises as a new tool in developing as well as developed countries. It is widely known since the 1970's and often connected with the name of Nobel Peace Prize laureate Prof. Muhammad Yunus. Based on sample of 112 households from three towns (Ostrovany, Stará Ľubovňa and Moldava nad Bodvou) assessing subjective perception of households we can assume that microsavings programs have positive effects on poverty and contribute to poverty alleviation.

Keywords: microfinance, microsavings, poverty, ETP Slovakia, Eastern Slovakia

Abstrakt

Cieľom príspevku je analyzovať program mikroúspor ETP Slovensko. Existuje medzera v literatúre o mikroúsporách ako forme mikrofinancovania a ich vplyvu na úspory klientov, mikropodniky, domácnosti, obce a finančné inštitúcie. Mikrofinancovanie vzniká ako nový nástroj pre rozvojových, ako aj vyspelých krajinách. Je všeobecne známe, že od roku 1970 je často spájaný s menom nositeľa Nobelovej ceny mieru Prof. Muhammad Yunus. Na základe vzorky 112 domácností z troch miest (Ostrovany, Stará Ľubovňa a Moldava nad Bodvou) posudzujúcej

subjektívne vnímanie domácností, možno predpokladať, že programy mikroúspor majú pozitívny vplyv na chudobu a prispievajú k jej zníženiu.
Kľúčové slová: *mikrofinancie, mikropôžičky, chudoba, ETP Slovensko, Východné Slovensko*

Introduction

Microfinance arises as a new tool in developing as well as developed countries. It is widely known since the 1970's and often connected with the name of Nobel Peace Prize laureate Prof. Muhammad Yunus. Microfinance can be broadly defined as the provision – on a sustainable basis – of financial services to those that have difficulties in accessing the financial market (IOE, 2006).
The aim of the paper is to analyze microsavings program of ETP Slovakia in Eastern Slovakia. The program supports the poorest families and its aim is to improve their standard of living.

Definition of Microfinance

The term "microfinance" began to emerge in economic literature in the 1970's in connection with creation of Grameen bank and the name of Muhammad Yunus.
Although microfinance as known today has been evolving since the 19th century, the first microfinance institutions in Europe were established in Slovakia and Austria about 1845 – 1846. The capital of the so called money institutes was made up of deposits of poor and their aim was to alleviate poverty and famine in society (Tkáč, 1997). Tkáč (1997) further considers them to be first of such institutions in Europe. The microcredit movement in Austria in 1846 is known as the "Bread Association" and was created by the priest Raiffeinsen after a hard winter which left local farmers indebted (Psico and Dias, 2007).
Microfinance can be broadly defined as the provision – on a sustainable basis – of financial services to those that have difficulties in accessing the financial market (IOE, 2006). Financial services include credits, savings products, insurance and transfers (IOE, 2006; Parker, 2001; World Bank, 2004; MPDF, 2005; CGAP,

2004a; Robinson, 2001). Microfinance is an income producing tool rather than a consumption aid (Magner, 2007).

Microfinance is often related to investments and setting up micro and small enterprises (IOE, 2006, Magner, 2007), but microfinance is widely discussed as a tool for investment to housing, health and education, as well as a tool for overcoming unexpected situations of households. (Parker, 2001; MPDF, 2005; CGAP, 2004a; Khawari, 2004; CGAP, 2004b).

The concept of microfinance is usually connected with developing countries and e. g. Robinson defines them as "small-scale financial services – primarily credit and savings – provided to people who farm or fish or herd; who operate small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and groups at the local levels of developing countries, both rural and urban." (Robinson, 2001). But microfinance can make a powerful contribution to employment generation and wealth creation in developing, transition and developed economies as well (Magner, 2007).

The main goal of microfinance is to alleviate poverty in terms of its several dimensions, such as improved income, employment and household expenditure, and reduced vulnerability to economic and social crises (World Bank, 2004). According to several studies there exist a positive relation among microfinance and poverty reduction, employment growth, welfare and income increase. (IOE, 2006; World Bank, 2004; MPDF, 2005; ARD, 2004).

According to Muhammad Yunus of Grameen Bank, a successful circle can be set up: "low income – credit – investment – more income – more credit – more investment – more income" (Khawari, 2004).

Microsavings as Form of Microfinance

There exists a gap in the microfinance literature on microsavings and their impact on clients, microenterprises, households, communities, and financial institutions (Devaney, 2006).

No matter how poor, families almost always can and want to save, whether in cash or in kind (cattle and jewelry are common non-cash saving mechanisms). Poor households save to manage risk and plan cash flow for future investments. They reduce their vulnerability by saving to cushion against shocks such as natural disasters, crop failures, job loss, illness and death. They "smooth consumption" by saving enough to support themselves during seasons when their income is lower, and save up lump sums large enough for family and business investments (Parker, 2001).

ETP Slovakia Microsavings Program in Eastern Slovakia

The Open Society Institute has entered into a partnership with ETP Slovakia in late 2006, to implement a three-year Individual Development Account (IDA) program targeting communities in Eastern Slovakia which have a high concentration of low-income Roma.

IDAs have a ten-year history in the United States, and the program has also been successfully adopted in a number of countries, proving that even the poorest people can save on a regular basis.

The program was launched in Slovakia in 2006. The funds matching these savings under the program enable participants to have higher aspirations, including asset goals that would otherwise be beyond their means. Participants are expected to demonstrate that they can both generate income and save some of this. Matching funds then act as a reward for behavior which steers people out of poverty. It provides a step up towards otherwise unattainable assets such as home ownership, home repair, vocational certification, education or enterprise start-up. Participants have been receiving financial education that can reduce their economic disenfranchisement and dependency, and increase their knowledge of money management and legal issues. The greatest benefit of the program is that the participants take an active part in it and achieve their asset goals through their own efforts. Its long-term purpose is to demonstrate the superiority of conditional cash transfers over the existing Slovak welfare system and towards helping beneficiaries reach financial independence. Typical assets saved for are a driver's license, purchasing a home computer, home

purchase, repair or extension, e. g. building bathroom/kitchen, or starting a small business. All participants receive personal money management counseling, and if applicable, assistance in purchasing a home or starting a small business. ETP Slovakia's personal advisors receive the applications, verify candidates' eligibility, help participants develop a family budget, provide basic financial education, track the participants' saving activity, provide advice during financial emergencies, and ultimately issue matching funds.

As of June 2009:

a) a total of 62 IDA clients are currently saving,
b) so far 84 clients have fulfilled the criteria and have received their match funding, this gives 146 (so far) successful IDA clients,
c) 99 clients out of 245 clients have dropped out so far.

Hypotheses

The aim of this paper is to assess contribution of microfinance to poverty alleviation and the concerned hypothesis is assumed: *ETP microsavings program contributes to poverty alleviation*. In order to evaluate this hypothesis five partial hypotheses are analyzed:

1. *Clients involved in the program have ability to save.*
2. *Active and successful clients perceive higher level of overall quality of living than unsuccessful clients.*
3. *Active and successful clients perceive positive subjective change in quality of living.*
4. *Active and successful clients perceive their ability to manage household better than unsuccessful clients.*
5. *Active and successful clients perceive positive change in level of their household management.*

Methods

Description of Data

There have been households from 15 towns involved in the program so far. Twelve of the towns have been from Eastern Slovakia (see Fig. 1).

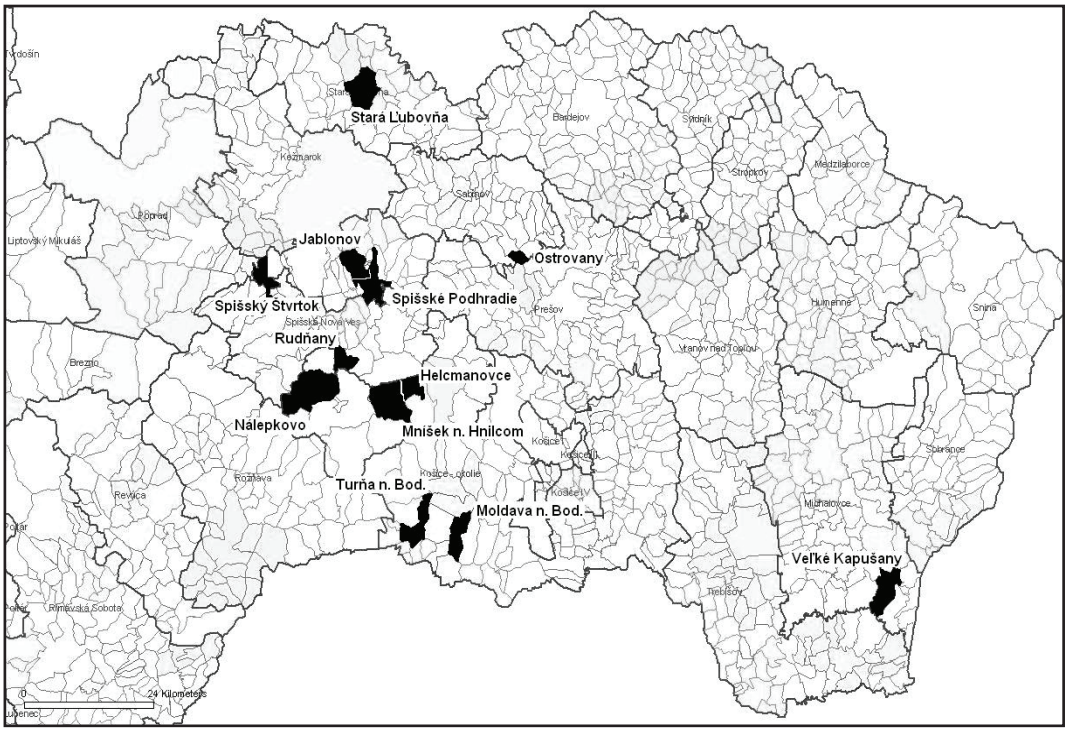

Fig. 1: Towns involved in the program
Source: own

Clients' success rates varied (tab. 1), which can be in close relation with heterogeneity of cultures, nationalities and structures of population in the towns. Due to large number of clients and towns, only three towns with the highest numbers of clients are analyzed: Stará Ľubovňa (70), Ostrovany (45) and Moldava nad Bodvou (38).

Tab. 1: Structure of Clients

Town	Number of Unsuccessful Clients	Number of Successful Clients	Number of Active Clients	Total
Turňa nad Bodvou	5	0	2	7
Moldava nad Bodvou	24	2	12	38
Jablonov	3	8	0	11
Spišské Podhradie	4	6	0	10
Spišský Štvrtok	3	4	0	7
Rudňany	4	1	11	16
Nálepkovo	27	5	1	33
Helcmanovce	0	1	0	1
Mníšek nad Hnilcom	1	0	0	1
Stará Ľubovňa	15	36	19	70
Veľké Kapušany	0	1	5	6
Ostrovany	13	20	12	45

Source: own

Data Sources

There have been two main data sources:
1. entrance questionnaire developed by ETP Slovakia,
2. own questionnaire aimed at assessing the effects of program on the participating households.

The role of entrance questionnaire was to gain data on households' characteristics such as size, education, incomes, expenditures, etc. Available questionnaires from applicant households have been included. Applicant households are further divided into households accepted to the program and those unaccepted. Own questionnaire was aimed at accepted households only. The data were collected between 25th and 29th June 2009 with assistance of social workers. 115 households were visited, of which 112 questionnaires were accepted after factual and logical control.

Description of Sample

We have to distinguish between applicant households and clients. Clients are only households that have been accepted to the program.

Applicant Households

Complete data about 170 households applying for the program are available for analysis (61 from Ostrovany, 75 from Stara Lubovna and 34 from Moldava n. Bodvou).
Almost 70% of applicant household are represented by female in the sample. Only 12% of applicants were full-time-employed at the time of applying to participate in the program. 19% of applicants don't have primary education and the highest level of education of 55% of applicants is primary. Mean age of applicants is 39 year (median is 36) and mean size of household is 5,4 (median is 5).
Mean households' income is 455 EUR (median: 414 EUR), mean expenditures are 343 EUR (median 285 EUR) and mean difference between incomes and expenditures is 112 EUR (median: 96,5 EUR).
For characteristics' breakdown according to the cities, see tab. 2.

Tab. 2: Selected Characteristics of Applicant Households

Characteristics \ Town	Ostrovany	Stará Ľubovňa	Moldava n. B.
Sample size,	61	75	34
- Not accepted to the program:	17	17	4
- Accepted, of which [%]:	44	58	30
- Unsuccessful clients	*16,0*	*15,5*	*60,0*
- Active clients	*47,6*	*25,9*	*36,7*
- Successful clients	*36,4*	*58,6*	*3,3*
Gender of applicants [%]			
- Male	24,6	40,0	23,5
- Female	75,4	60,0	76,5
Economic Activity [%]			
- Employed (full-time)	11,5	16,0	2,9
- Employed (part-time)	1,6	5,3	0,0
- Activation works	60,7	9,3	41,2
- Unemployed	6,6	30,7	8,8
Education [%]:			
- Unfinished primary school	34,1	8,0	20,6
- Finished primary school	54,1	48,0	70,6
Age:			
- Mean	36,3	42,4	36,5
- Median	35,0	40,0	33,5
Household size:			
- Mean	5,9	5,2	4,8
- Median	6,0	5,0	4,0
Household's incomes (EUR):			
- Mean	374,2	511,1	475,6
- Median	340,9	478,0	433,8
Household's expenditures (EUR):			
- Mean	314,8	403,2	260,2
- Median	259,6	356,7	237,2
Difference between incomes and expenditures (EUR):			
- Mean	59,4	107,9	215,4
- Median	66,1	95,6	190,7

Source: own

Clients

For comparison of structure of actual frequencies (*act*.) of clients broken down by gender, education level and status and the structure of sample (*sam*.) see tables 3, 4 and 5.

Tab. 3 Break down of clients by gender

Town / Gender	Ostrovany		Stará Ľubovňa		Moldava n. Bod.		Total	
	act.	sam.	act.	sam.	act.	sam.	act.	sam.
Male	12	10	22	22	8	6	42	38
Female	32	21	36	34	22	19	90	74
Total	44	31	58	56	30	25	132	112

Source: own

Tab. 4 Break down of clients by education level

Town / Education level	Ostrovany		Stará Ľubovňa		Moldava n. Bod.		Total	
	act.	sam.	act.	sam.	act.	sam.	act.	**sam.**
Unfinished primary	14	9	2	2	6	5	22	16
Finished primary	24	19	33	31	22	18	79	68
Vocational secondary	6	3	21	21	2	2	29	26
General secondary	0	0	1	1	0	0	1	1
Total	44	31	57	55	30	25	131	111

Source: own

Tab. 5 Break down of clients by status

Town / Status*	Ostrovany		Stará Ľubovňa		Moldava n. Bod.		Total	
	act.	sam.	act.	sam.	act.	sam.	act.	sam.
Successful	16	10	34	34	1	1	51	45
Active	21	17	15	14	11	10	47	41
Unsuccessful	7	4	9	8	18	14	34	26
Total	44	31	58	56	30	25	132	112

Source: own

Statistical Methods

The questionnaires were processed in MS Excel 2007. Statistical tests for hypotheses testing were performed in R v. 2.7.2.
Due to the nature of data (not a random sample, difficult to define population, finite population), only permutation tests (see e. g. (Good, 2000) were used and *exact* (or *approximate* – in case of too large number of possible permutations) *p-values* were calculated.

Results and Discussion

H1: Clients involved in the program have ability to save
We define ability to save as ability to remain in the program. In order to verify the hypothesis we compare the proportion of active and successful clients to the proportion of unsuccessful clients.

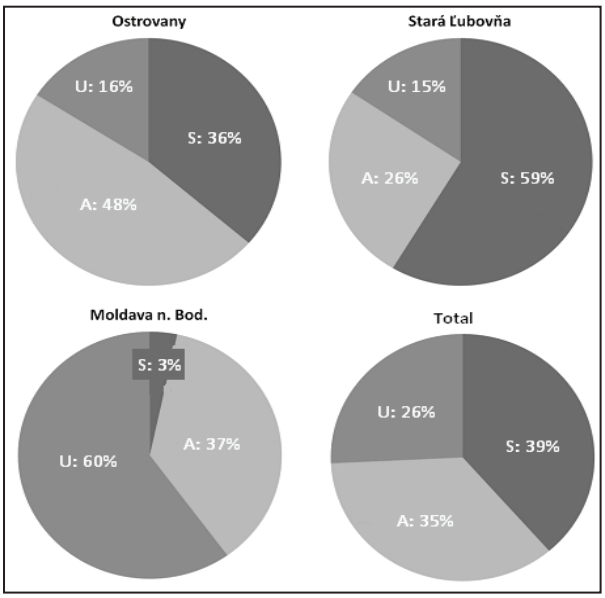

Fig. 2: Proportion of Clients by their status
Source: own

Note: S: Successful clients – A: Active clients – U: Unsuccessful clients

According to the results 38% of clients have finished program successfully, 35,4% of clients are still active and 25,8% have been unsuccessful. It means that 74,2% of clients have ability to save, which is significantly higher (p-value $1{,}1 \cdot 10^{-8}$) than 25,8% (unsuccessful clients). The highest proportion of unsuccessful clients is reported in Moldava (60%), where the proportion of unsuccessful clients is significantly higher than in the remaining towns.

H2: Active and successful clients perceive higher level of overall quality of living than unsuccessful clients

In order to evaluate the hypothesis a question from questionnaire is used: "*How do you personally perceive the change in your standard of living? (comparing situation before your participation in program and now)*". Possible answers:

Negative change (–1) – No change (0) – Positive change (1)
There are no "negative change" answers in the sample, i. e. the variable can be considered as binary variable and the problem is reduced to 2x2 contingency table problem (tab. 6).

Tab. 6: Perception of change in quality of living between successful and unsuccessful clients

		Change		Total
		No	Positive	
Clients	Successful and active	29	57	86
	Unsuccessful	23	3	26
Total		52	60	112

Source: own

According to the results in tab. 6 we can really suppose that successful and active clients tend to perceive positive change and unsuccessful clients no change. This hypothesis is also supported by the result of permutation test (or Fisher's exact test in this case) – p-value: $6 \cdot 10^{-7}$ (see tab. 7).

Tab. 7: Perception of quality of life change according to towns

Town	p-value
Ostrovany	0,0756
Stará Ľubovňa	0,0192
Moldava n. Bod.	0,0002
Total	$6 \cdot 10^{-7}$

Source: own

Using the significance level 0,05 we would fail to reject the null hypothesis of no differences in answers between successful and unsuccessful clients in the city of Ostrovany. Situation in analyzed towns is graphically compared in Fig. 3:

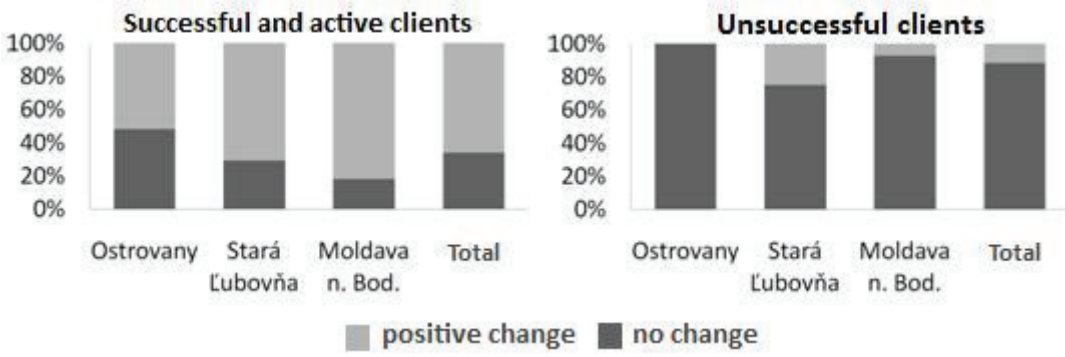

Fig. 3: Answers of successful and active clients compared to unsuccessful clients
Source: own

H3: Active and successful clients perceive positive subjective change in quality of living

Based on the results of H2 it can be assumed that successful and active clients really do perceive positive subjective change in the quality of living.
The hypotheses are supported by the one-sided one-sample permutation tests of proportions. Again, there is an exception – we fail to reject the null hypothesis of equal proportions of households perceiving no change and households perceiving positive change in the town of Ostrovany (see tab. 8).

Tab. 8: Perception of quality of life change according to towns

Town	p-value
Total	0,0017
Ostrovany	0,5000
Stará Ľubovňa	0,0028
Moldava n. Bod.	0,0327

Source: own

H4: Active and successful clients perceive their ability to manage household better than unsuccessful clients

In order to evaluate the hypothesis a question from questionnaire is used: "*How do you personally perceive the change in your ability to manage your household? (comparing situation before your participation in program and now)*". Possible answers:

Negative change (–1) – No change (0) – Positive change (1)
Again there are no "negative change" answers in the sample, i. e. the variable can be considered as binary variable and the problem is reduced to 2x2 contingency table problem (tab. 9).

Tab. 9: Perception of change in ability to manage household between successful and unsuccessful clients

		Change		Total
		No	Positive	
Clients	Successful and active	19	67	86
	Unsuccessful	18	8	26
Total		37	75	112

Source: own

According to the results in tab. 9 we can really suppose that successful and active clients tend to perceive positive change and unsuccessful clients no change. This hypothesis is also supported by the result of permutation test (or Fisher's exact test in this case) – p-value: $1{,}7 \cdot 10^{-5}$.

H5: Active and successful clients perceive positive change in level of their household management

Again based on the results of H4 it can be assumed that successful and active clients really do perceive positive subjective change in level of their household management.
The hypothesis is supported by the one-sided one-sample permutation test of proportions (p-value $9{,}7 \cdot 10^{-8}$).

Conclusion

Microfinance tools have been widely used in developing as well as developed world over three decades. There is much evidence showing that microfinance is effective as o tool for alleviating poverty under certain circumstances. Yet there has been little evidence of effects of microfinance in Slovakia.
The paper analyzes microsavings program of ETP in Eastern Slovakia. Based on sample of 112 households from three towns (Ostrovany, Stará Ľubovňa and Moldava nad Bodvou) assessing subjective perception of households we can assume that microsavings programs have positive effects on poverty and contribute to poverty alleviation.

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