The impact of matched savings scheme on financial behavior of financial education training participants

Results of the evaluation of the program with "Integracja Foundation"

1. Introduction

The following report presents the results of the evaluation of the "Penny to Penny" program which was carried out by MFC and its local partner Integracja Foundation in Poland in 2011.
The program lasted for half a year and consisted of a one-day training course on managing household finance followed by a 6-month competition.
The training was a short version of MFC's "Plan your Future" training module. In the competition, the participants were expected to deposit at least 20zł on a bank account every month for 6 months.

The program was announced among the beneficiaries of Integracja Foundation – the disabled. The participation was purely voluntary and without any consequences on accessing other services of the foundation.

Altogether, 61 people enrolled for the 6-month competition after the training. The additional 11 people participated in the training but were not interested in the competition. They served as a comparison group to the competition participants.

2. Evaluation methodology

The evaluation was conducted both on the participants of the program as well as on non-participants who served as a control group.
Qualitative and quantitative methods were used.

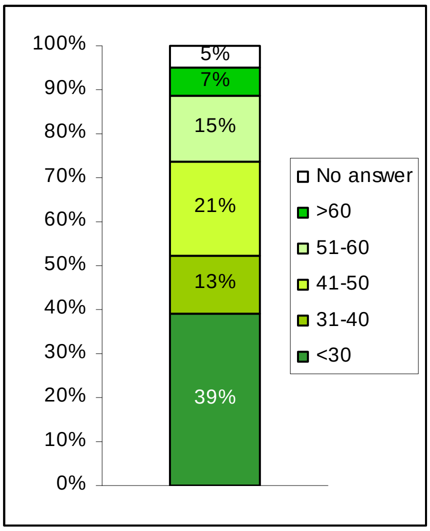
Each training participant self-completed a 26-question survey in the beginning of the course. Questions covered financial practices employed by the participant's household (tracking expenses, budget planning, saving, borrowing), attitudes towards financial management, and some socio-demographic and psychological questions.
Additionally, the participants of the competition filled an 8-question post-survey with questions about their experience during the 6 months of saving and were interviewed face-to-face about their future plans regarding financial management.
A sub-group of competition participants, who dropped out of the program before the end were interviewed by phone.
The sub-group of training participants who did not participate in the competition was also interviewed by phone.

3. Description of the participants of the competition

3.1. Socio-demographic characteristics

Almost 40% of the participants were young people below 30 years old. Women and men were equally represented in the group. 23% of the participants lived in one-person households and the other 33% had at least one child (maximum 3) in the household. Only one person was a single parent.

Figure 1: Age distribution of program participants (% participants)



- **Financial situation**

Over half of the participants received income from social services and 20% lived from pensions. Only in the households of 33% participants there were people with permanent jobs.

Over half of the participants (64%) considered their financial situation as bad. Such perception was more often characteristic for participants living in one-person households and in those without anyone permanently employed.

Figure 2: Income sources of participant households (% participants)

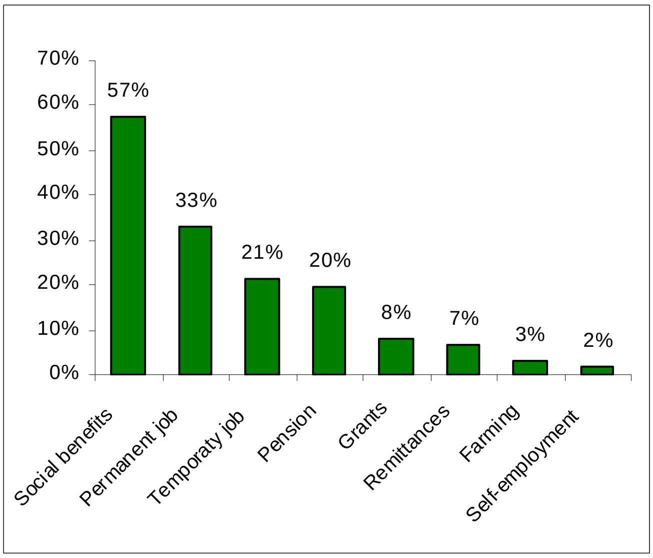
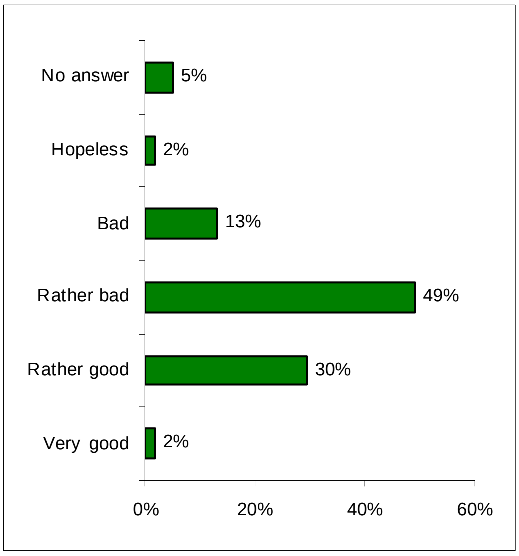


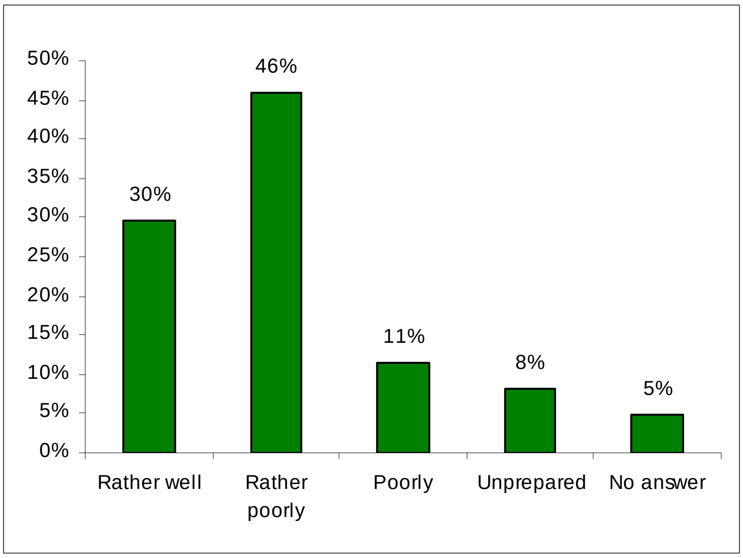
Figure 3: Perception of financial situation of the household (% participants)



- **Preparedness for financial emergencies**

As most of the participants were in bad financial situation, their preparedness for financial emergencies was also poor, although half of them had some money put aside for a rainy day.
Preparedness was better among younger people below 30 years old, internally-driven and in better financial situation.

Figure 4: Preparedness for unexpected expenses (% participants)

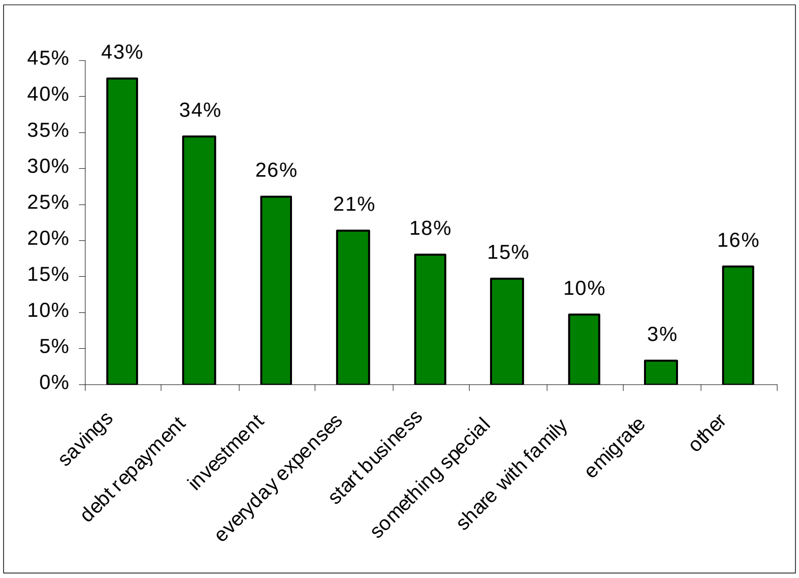


- **Priorities in spending additional money**

The degree of money shortages and the necessity of certain expenses was tested through a hypothetical question of the priority of spendings if extra cash of 10,000 zł (over 3,000 USD or the equivalent of over 10 monthly social minimums) was received.

Although 43% would save such extra money for later, 34% would use it for repaying loans. This indicates the scale of indebtedness and the perceived emergency to reduce debt as soon as it is possible.

Figure 5: Preferred ways of using extra cash



3.2. Perception of one's own financial knowledge

The vast majority of participants (74%) estimated their knowledge about managing financial matters as good or very good.

Figure 6: Knowledge about financial management (% participants)

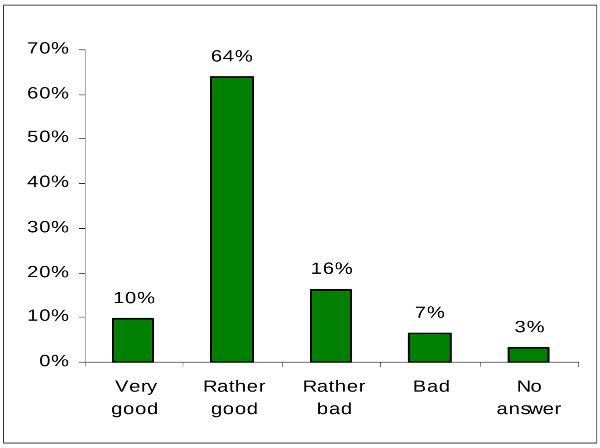
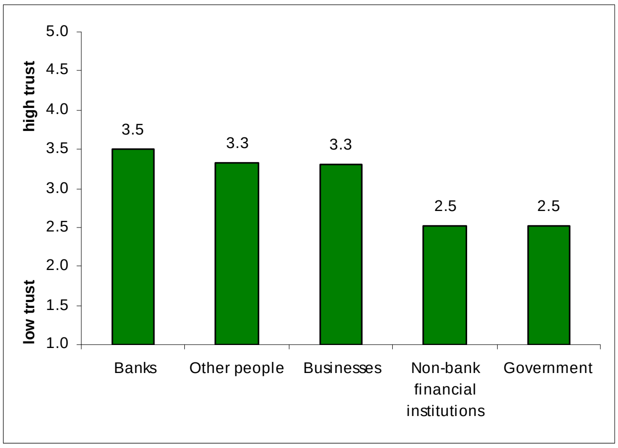


Figure 7: Average trust towards different types of institutions and people (% participants)



3.3. Trust

The participants were trustful towards banks, private businesses and generally people, but exhibited distrust for non-bank financial institutions and the government (Figure 5).

3.4. Locus of control

The majority of participants were internally-driven (average Locus of Control score was 17.5 on a scale from 7 to 35), that is believed that they were in control of their lives.
The participants with more internal locus of control were younger (below 30 years old), felt that they knew how to manage finance and more often perceived the financial situation of their households as good.

Figure 8: Locus of control (% participants)

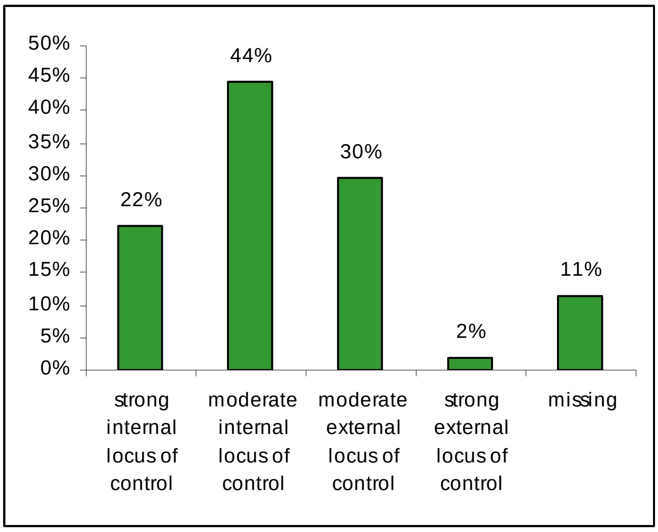
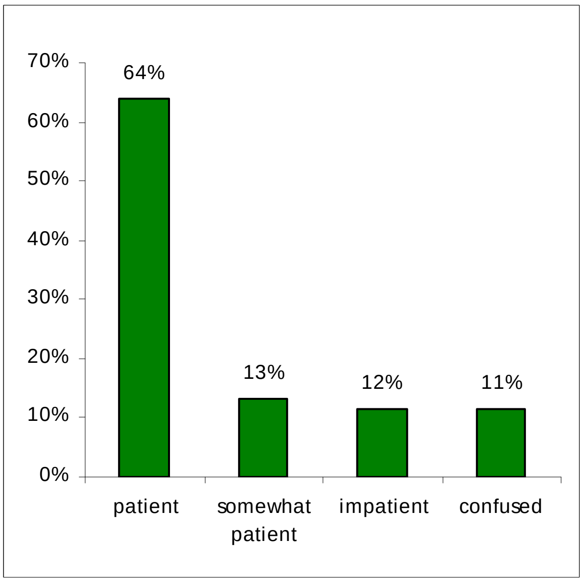


Figure 9: Time preferences (% participants)



Locus of control is defined as a general, relatively stable propensity to see the world in a particular way and the perception of one's place in the world. More specifically, locus of control is a measure of an individual's belief about cause and effect within their life. Locus of control has two extremes—external and internal. Someone who has an external locus of control believes that outside forces and events dictate their actions, decisions, and behavior. Those with an external viewpoint are more likely to feel that powerful others construct barriers that limit one's accomplishments. Internals generally believe that they possess the skills, abilities, and knowledge to dictate outcomes experienced in their lives. Those with an internal locus of control perspective are apt to be goal-driven and more often than not, they exhibit responsible financial decision-making skills.

3.5. Time preferences

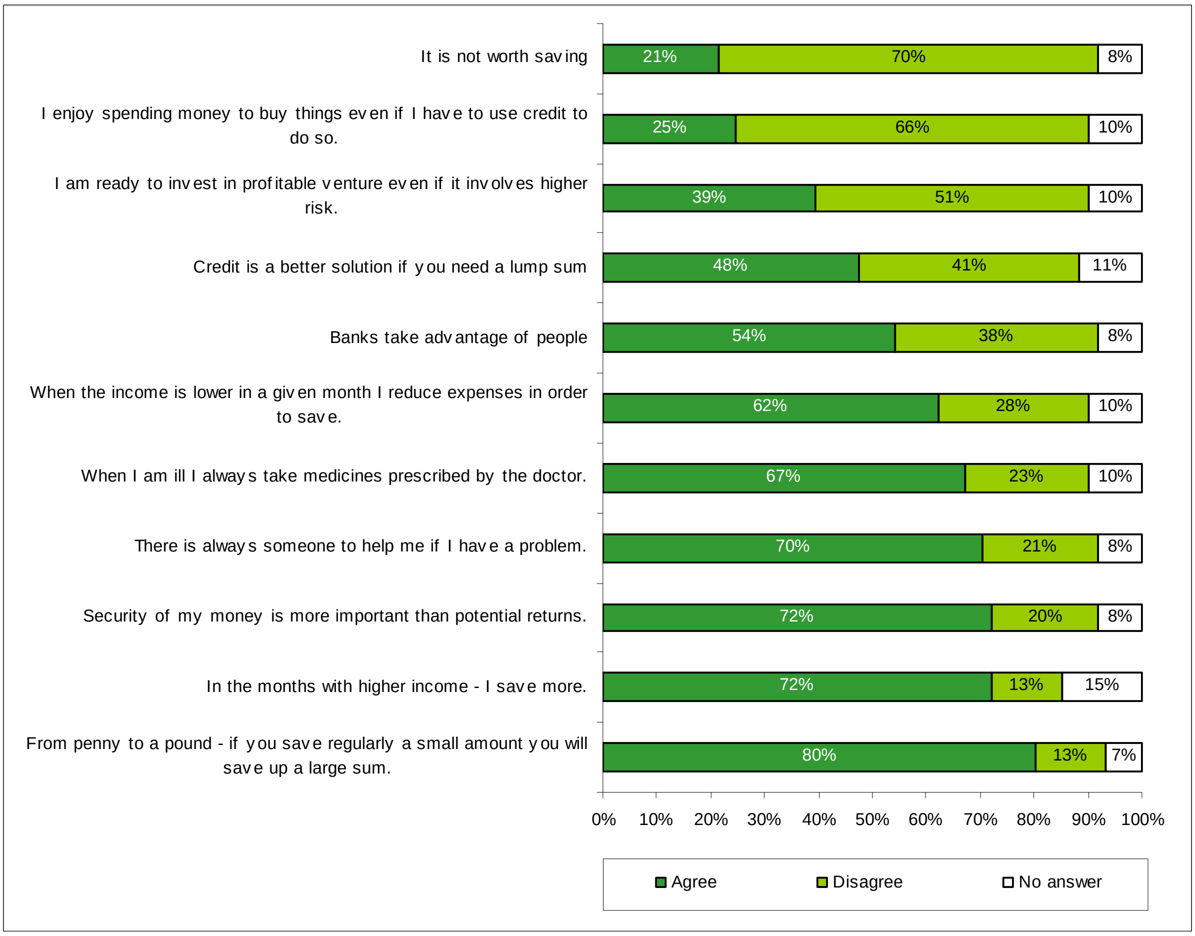
When asked a hypothetical question about the preference to receive a smaller sum today (in this case 150 zl) or to wait one month longer for a larger amount (175 zł) the majority of the participants (64%) were found to be patient - they exhibited preference towards a delayed higher reward. Further 13% (somewhat patient) would wait only if the amount was higher (200zł). Only 12% were found to be impatient and wanted a small sum today even if offered 200 zł or more next month. The choice was not found to be correlated with the assessment of one's own financial standing, so the impatience was not characteristic for people financially worse-off. But those who were patient to wait for a larger sum had higher esteem about their financial knowledge.

Time preferences or hyperbolic discounting refers to the choice between immediate small awards over the delayed larger awards and reveal how people value costs and benefits that occur in the future versus those in the present.
Individuals tend to systematically overvalue immediate costs and benefits and undervalue those in the future (i.e., hyperbolic discount) - their preferences are not time-consistent and they give greater importance to present events in comparison to those in the future. As regards the credit decisions, the hyperbolic discount factor pushes individuals, in the moment they have to decide whether to purchase on credit terms or not, to opt for immediate purchase. This decision is made despite the fact that the individual is rationally able to judge that the level of debt taken on is unsustainable in comparison to future income receipts. This behavioral factor explains why individuals choose "buy now, pay later" solutions that bring immediate gratification at a future cost. It means that individuals adopt impatient, short-sighted behavior patterns which make it difficult for them to be fully aware of the consequences of their spending decisions on the sustainability of personal debt.

3.6. Attitudes

The participants had positive attitudes towards saving: they believed that it is worth saving, even if small amounts, they tried to save more when income was higher and reduce expenses in order to save in the months of lower income. The majority were cautious and preferred secure deposits rather than risk-bearing, but potentially more profitable investments.
Even though half of the participants favored credit for larger purchases, only a quarter enjoy buying things on credit.

Figure 10: Attitudes towards saving and borrowing (% participants)



3.7. Financial habits

- **Income tracking**

Only 37% of the participants knew how much they spent, that is in some way tracked their expenses. Almost half of the participants only were roughly aware about the amount of their expenses.
Those who tracked expenses thought they had good knowledge about managing finance.

Figure 11: Awareness of the amounts spent (% participants)

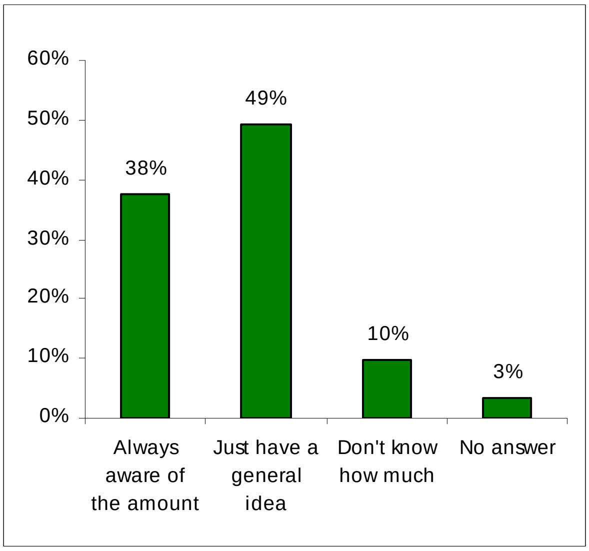
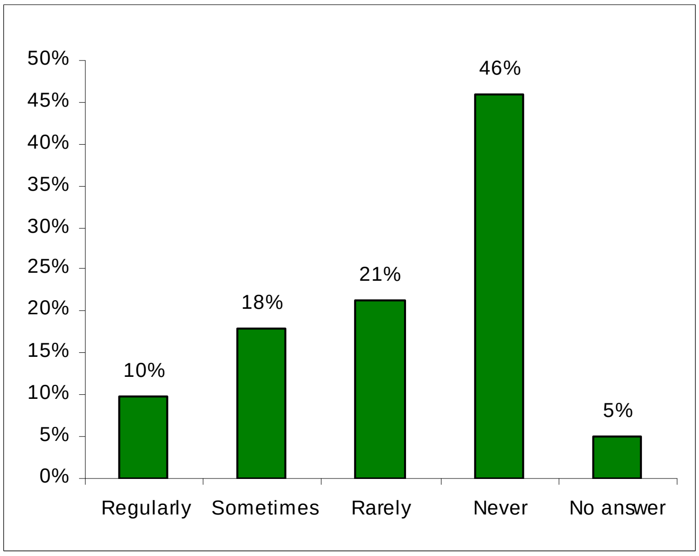


Figure 12: Frequency of preparing household budget (% participants)



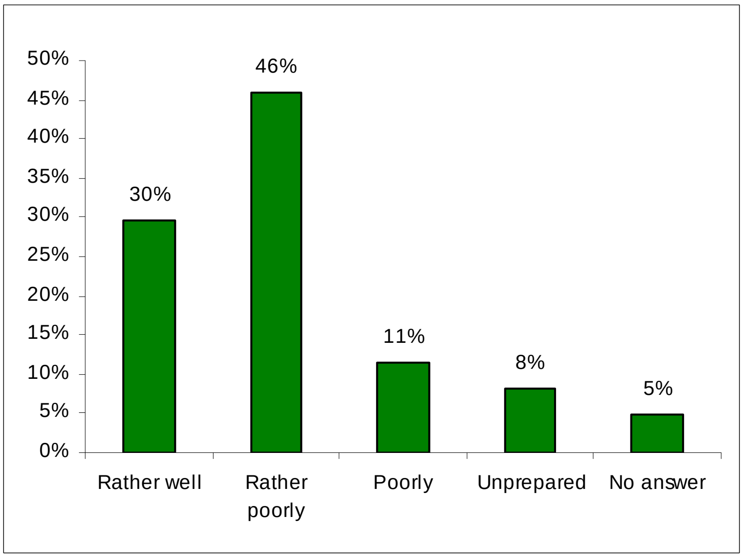
- **Planning income and expenses – household budget**

Half of the participants did not prepare household budget at all and only 10% did it regularly. Planning of income and expenses was more often seen among those participants who thought they had good financial knowledge.

- **Preparedness for financial emergencies**

As most of the participants were in bad financial situation, their preparedness for financial emergencies was also poor, although half of them had some money put aside for a rainy day. Preparedness was better among younger people below 30 years old, internally-driven and in better financial situation.

Figure 13: Preparedness for unexpected expenses (% participants)



- **Saving**

Despite bad financial situation 69% of the participants thought that they were able to put aside some money for future expenses. Over half of the participants (56%) stated that they actually saved, usually putting aside some money first before covering monthly expenses.

The fact of saving was not correlated with the financial situation, but certain characteristics differentiated savers and non-savers.
Savers were found to have higher esteem of their financial knowledge, more often planned income and expenses, were more patient to wait for a larger amount of money. The locus of control did not play a role in the saving process.

Figure 14: Perceived ability to save (% participants)

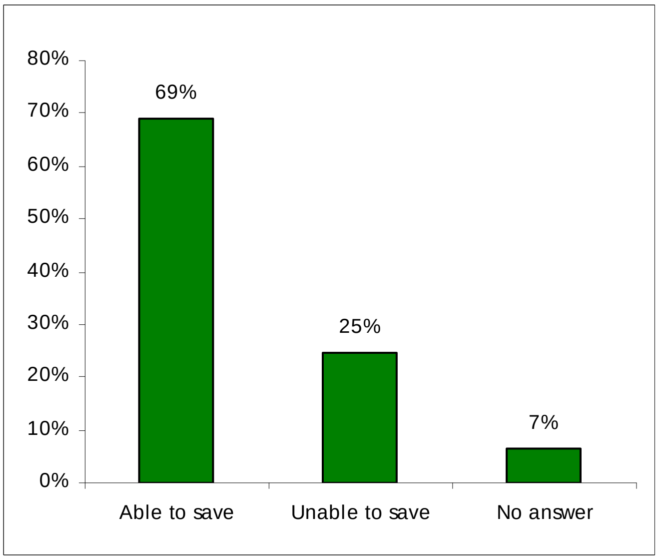


Figure 15: The fact of saving (% participants)

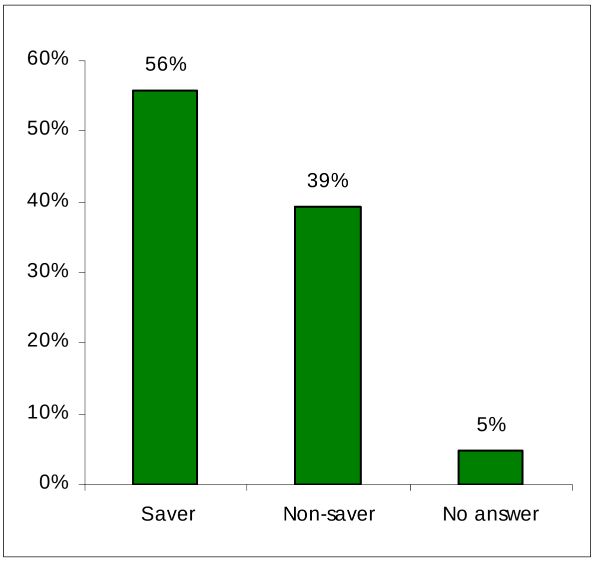
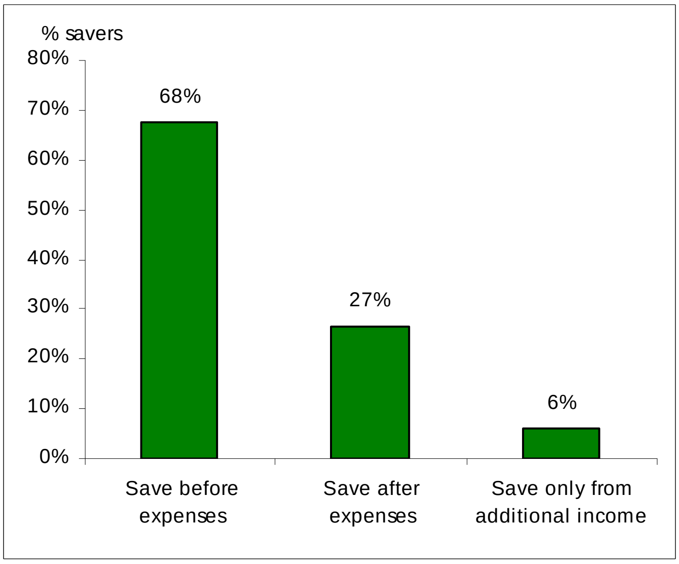


Figure 16: Saving patterns (% participants)



Apart from saving for an emergency fund many participants also saved for specific goals. Most often the saving goals were holidays and house-related expenses. The largest group of the participants saved for long-term goals: for 31% of the participants the saving horizon was one year or longer.

Figure 17: Saving goals other than emergency fund
(% participants)

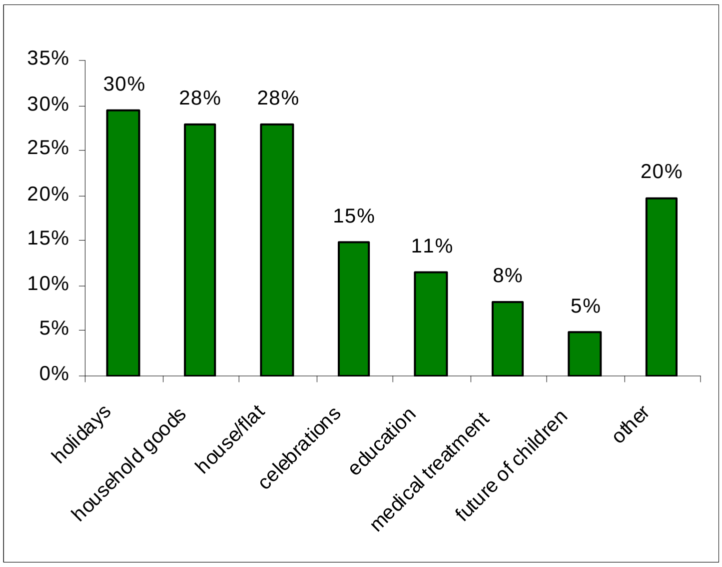
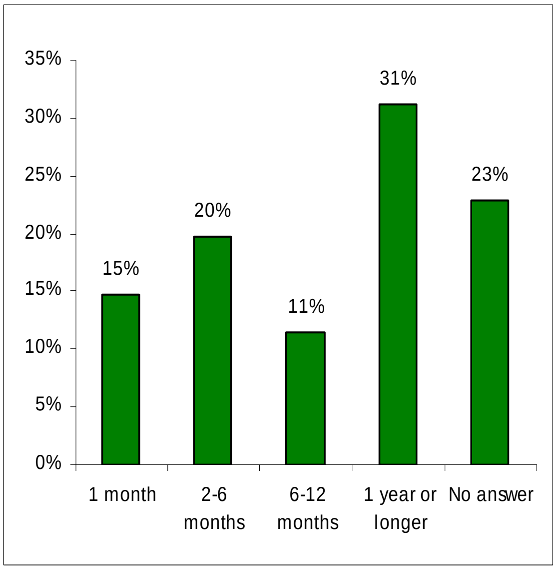
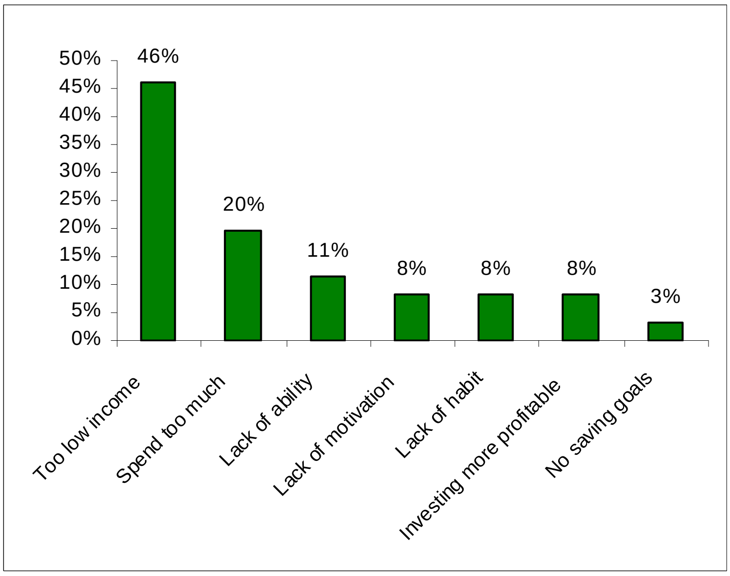


Figure 18: Saving horizon
(% participants)



While many participants saved, some 38% did not, mainly because of low income. Such opinion prevailed among 46% of non-savers which is understandable in view of the fact that so many program participants lived from social benefits which are in Poland quite low. Only one third of the participants admitted not saving because of spending too much money. But nobody was driven towards non-saving because of the lack of belief in the importance of saving.

Figure 19: Reasons for not saving (% participants)



- **Borrowing**

42% of the participants had loans or credits at the time of the beginning of the program. These people differed from the rest of the group in that they more often regarded their financial situation as bad, more often than non-borrowers felt unprepared for financial emergencies and were less likely to save.
Borrowers were also found to be more externally-driven.

It seems that borrowing happens out of necessity, more often among people without enough money from current income or from savings.

Non-bank credit, mainly installment purchase, was quite popular among the participants, indicating that larger purchases are often made on credit rather than financed from savings. People who used this form of credit more often considered their financial situation as bad and felt not prepared for financial emergencies.

As many as 12% of the participants felt over-indebted, more often single person households, impatient and with low assessment of own financial knowledge.

Figure 20: Self-assessment of debt situation

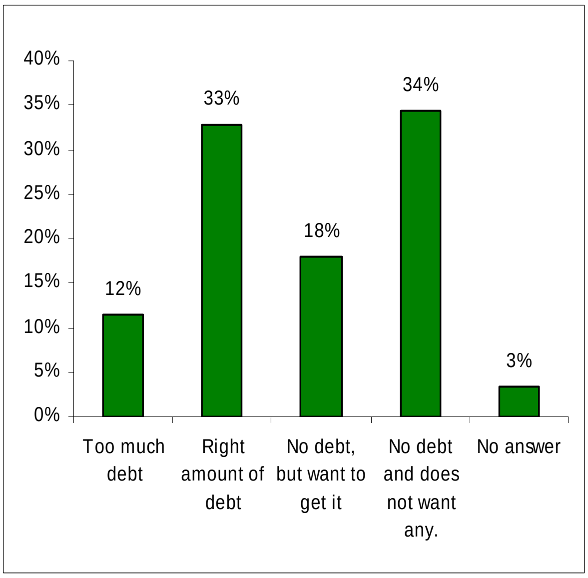
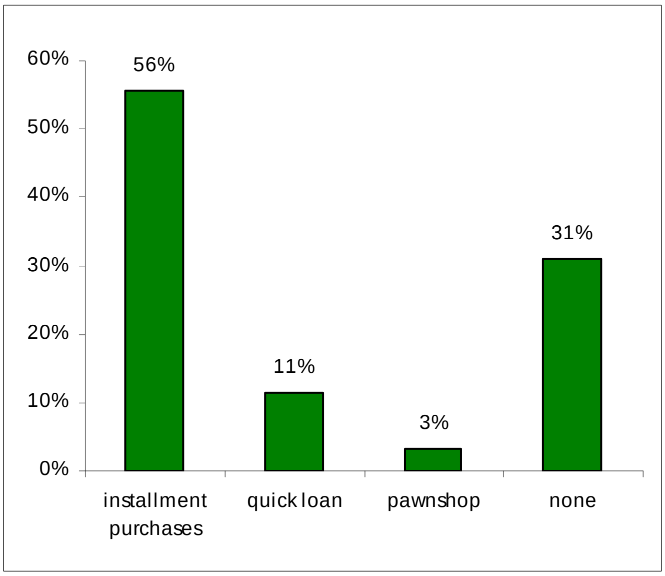


Figure 21: Types of non-bank credit ever used by participants



Summary of participant characteristics:

- Two-thirds (64%) of the participants perceived their financial situation as bad, as 57% of their households lived from social assistance and 20% from pensions. Only a third had income from a permanent job or self-employment.
- Many participants (67%) felt financially unprepared for sudden expenses, even though half of the participants have some savings put aside for rainy days. Apparently, the collected sums were not sufficiently high to feel protected against unexpected costs.
- 42% of the participants had debts at the time of the program and 12% of the group felt over-indebted.
- In addition financial practices of the participants were not impressive, as 67% did not prepare household budget or did it rarely. Also, 60% did not rigorously track their expenses.
- On the other hand, the majority of the participants exhibited reasonable attitudes towards borrowing and saving.
- Almost 70% of the participants realized that they could save and over half (57%) actually saved money, with many doing it upfront – put aside a certain amount before covering the expenses. Many participants saved for long-term goals, related to housing or recreation.

4. Results of the program

4.1. Project take-up: self-selection into the program

Out of 72 participants of the 'Plan your Future' training the majority (85% or 61 people) were interested in the participation in the 6-month competition.
For the remaining 15% the program which aimed at helping people to develop the habit of regular saving was not interesting as they already saved and did it upfront, before making expenses.
These people were in a relatively better financial situation, had savings and felt prepared for financial emergencies. Participation in the saving program did not seem to add any new skills to their current practices.

The other characteristics which distinguished program participants from non-participants was the way of using credit. Although none of the groups was seen to use credit more extensively, people who did not did not participate less often admitted to using non-bank credit. This is characteristic for people in better financial situation who saved proactively, were prepared for unexpected expenses and had positive financial practices such as household budget planning.
The two groups had also slightly different attitudes towards financial management. Program participants viewed credit for large purchases more favorably than non-participants.

4.2. The choice between a match and lottery

People who agreed to participate in the 6-month program had a choice of the final award: a match option – a guaranteed sum equal the minimum required amount of savings at the end of the program (one-to-one match of up to 240zł) or the lottery option - participation in a lottery with the main win of 1500 zł and smaller wins of 1000 or 500 and guaranteed amount of 25 zł.

52% out of the participants chose the match and 48% chose the lottery. The match option was chosen more often by people with income from pensions or temporary jobs, and those who were less patient to wait for money. Lottery was preferred by people with time preferences towards delayed higher award.

Figure 22: Choice of the final award among people with income from temporary jobs

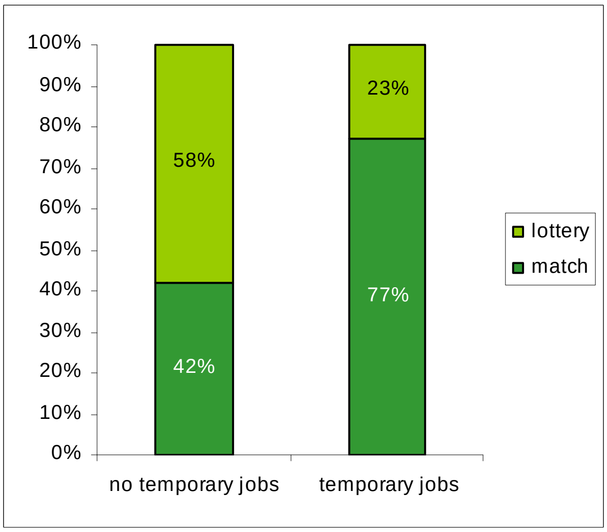
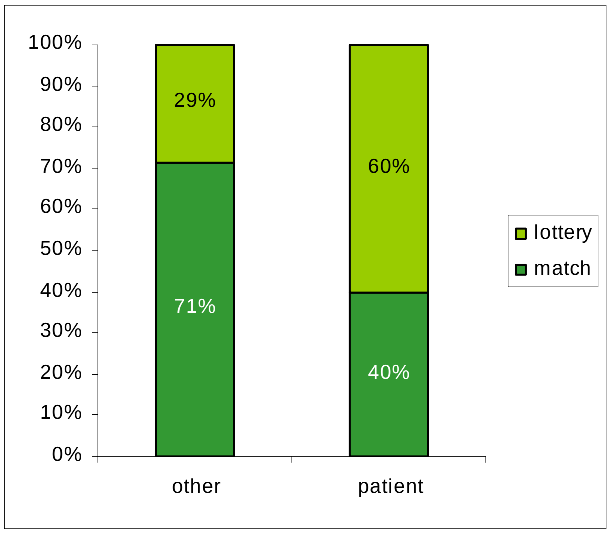


Figure 23: Choice of the final award among people patient to wait for larger rewards over time

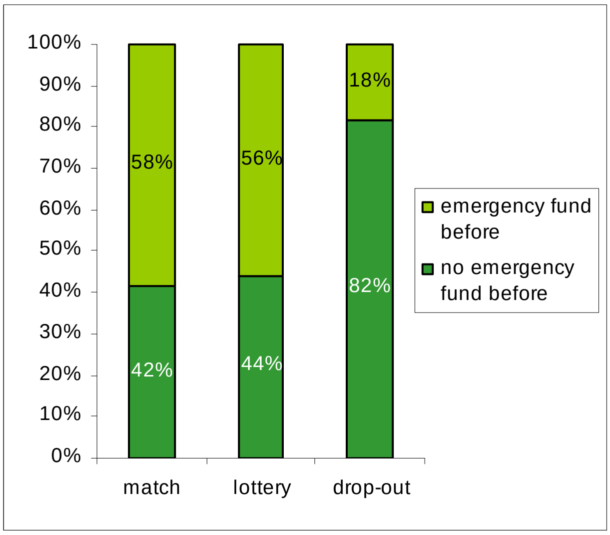


4.3. Survival rate

18% of the program participants did not meet the requirements of monthly saving of 20zł and dropped out pf the program. The exclusion from the program applied to those participants who twice during 6 months failed to timely present the bank account balance with the saved amount.
In the majority of cases the reason for dropping out was repeated delays in money transfers to the bank account either because of bank inefficiency or for personal reasons.

People who dropped out did not have an emergency fund: 82% of the participants who terminated their participation in the competition did not have savings for rainy days. Among the participants who successfully saved until the end of the competition only 43% did not create such a fund.
This shows that often the reason for dropping out could be the lack of cash which could transferred into the program account from some other accounts where the emergency fund was stored.

Figure 24: Presence of the emergency fund in the households of the participants who dropped out from the program and those who survived



There were no other characteristics distinguishing those who did not survive until the end of the competition. However, people who at least once failed to save the required amount on time (some of them managed to continue without further failures and some of them dropped out of the program) less often were savers before the beginning of the program.

Despite dropping out, 60% of non-survivors continued saving and introduced skills learned during the training in their household financial management.

5. After the program completion but before the announcement of the lottery results

92% of the participants who managed to complete the program felt that saving 20zł each month for half a year was easy. Most of them did not have to make any sacrifices, but some decided to resign from certain pleasures such as sweets, new clothes or cigarettes.

The largest share of the participants (26%) used the opportunity of the program to increase their emergency fund – they will use the money saved for a rainy day. Men more often planned to keep the saved money for emergencies.

94% of the participants will continue saving as the program gave them confidence about their ability to save regularly.

6. Conclusions

- The program managed to reach its target group of low income people who felt vulnerable and unprotected against unexpected expenses. Although many of the participants already saved when coming to the training, the amount they saved was insufficient to feel protected against emergencies.

- Additionally, the program could address their deficiencies in financial management. A large group did not track expenses and did not prepare household budget. The training addressed these issues.

- The target group exhibited positive attitude towards saving and many of the participants already saved, which fared well for their successful completion of the competition component of the program. The majority of the participants realized that they could save more than they in fact did. The program provided the opportunity to test this ability.

- The program equipped the participants with the skill for overcoming, to some extent, their vulnerability. As the most common saving goal was the increase of the emergency fund, the participants learned how to gradually build up financial reserves and increase protection against financial risks.

- It turned out that despite reservations towards borrowing, many participants borrowed and often resorted to non-bank credit. The fact that they were able to make repayments showed that they regularly raised the required sums. Due to the small group of non-participants, it was not possible to test whether such people borrowed from other sources to repay debts or managed to put aside the installment amounts from their current income. If the latter was true, then the ability to save up rather than use credit and then save down to repay it with interest and fees seems to be a better option for low income people.

- The comparison of the characteristics of people who terminated the participants with those who survived until the end of the program indicates that some of the survivors could use their emergency fund to make the monthly 20zł transfer. This would mean that in fact they did not save the money during the month but rather moved them from one pocket to another.

- Positive self-selection into the program – training participants who were better-off and already saved did not enroll for the program. This could be the result of the fact that the guaranteed sum was relatively low (120-240 zł) and the participation in the program required some effort, so for the better-off the costs exceeded benefits.
  Therefore, the threat that people who had savings will join the program only for monetary gains (guaranteed sum or a chance to win in the lottery) did not materialize. The competition participants were indeed those people who had deficiencies in financial management and, despite good will, were not always able to plan ahead and make savings rather than use credit.

The evaluation allowed for testing several hypotheses:

1. The majority of social security beneficiaries do not save and are therefore vulnerable to financial shocks.

Partially confirmed – disabled social beneficiaries do save, but are vulnerable because the amounts saved are not sufficient to protect them from financial shocks.

2. Despite not saving, many social security beneficiaries recognize the need to save and volunteer to participate in a project.

Confirmed – competition take-up was higher among non-savers.

3. Saving with incentives project helps the participants develop a habit of regular saving.

Confirmed – the participants stated that the program allowed them to improve their ability to save regularly.

4. Regular saving contributes to the perception of financial stability and better preparedness for financial shocks.

Confirmed – 26% of the participants will use the saved amount to increase the emergency fund.

5. Lack of saving habits is connected with certain attitudes and psychological traits such as external locus of control, high discounting of future, etc.

Partially confirmed – savers were more patient to wait for money and had higher opinion about their financial knowledge, but there were no significant differences in the locus of control.

6. People who save at least small amounts have better money management practices (household budget, monitoring savings) and perceive their financial situation as better.

Partially confirmed - savers had better financial practices (income planning), but the perception of one's own financial situation was similar for savers and non-savers.

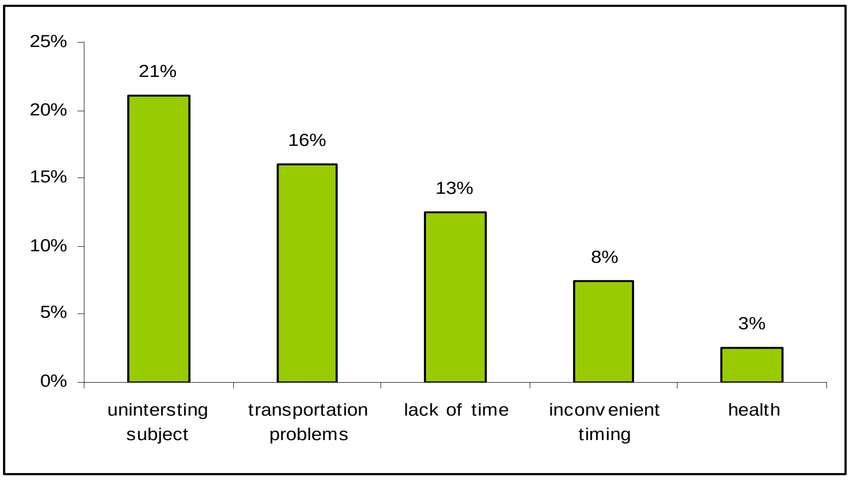
7. Those who have lower risk aversion choose the lottery option.

Not confirmed

Eligible population

The program targeted low-income people who went through the training session.
However, the number of such people is rather limited.
Only 25% of invited people came to the training. A sub-sample of the people (40 respondents) who initially agreed to participate in the training were interviewed at the end of the project. It turned out that 18% did not decide to participate because of the subject of the training. It seems that financial education was not the priority for low-income disabled people. Indeed, these people were under lower financial pressure as they more often felt that they lived in good financial conditions.

Figure 25: Reasons for non-participation in the training



The financial practices did not differ significantly between training participants and non-participants. Both groups just as frequently did not plan their financial flows, felt unprepared for financial emergencies or borrowed money.

Figure 26: Perception of one's own financial situation among training participants and non-participants