

Katalin Botos – József Botos – Dániel Béres –
József Csernák – Erzsébet Németh

Financial Literacy and Risk-Taking of Households in the Hungarian Central Great Plain

SUMMARY: The intense innovational activity typical of the financial sector in the last 30 years requires households to have increasingly comprehensive and complex financial knowledge. The main objective of our study, therefore, was to assess and evaluate risk management activity, which is an integral part of financial literacy, using the questionnaire survey focusing on households of the Central Great Plain and conducted by the Kossuth College of Lakitelek as basis. We have determined that the households examined are conservative with respect to their finances and strive to minimise risks as much as possible, which is commendable. Unfortunately, however, they lack the financial knowledge to make prudent decisions. In truth, risk management strategy based on inadequate knowledge, but thought to be sound is nothing more than a substitution of risk types, the significance of which households are unable to assess realistically as they lack necessary financial knowledge.

KEYWORDS: financial literacy, risk, risk management, Central Great Plain

JEL CODES: D12, D14, D69, D82, G02, G20, H31, Z13

Demand for financial literacy has been increasing gradually over the last 30 years, but its true significance was revealed by the global financial crisis of 2008. According to the 2009 study released by the research group made up of experts of the four international institutions coordinated by the World Bank (IBRD, OECD, DFID, CGAP), certain financial prod-

ucts have today reached a degree of such complexity that not even financial experts can precisely assess the risks therein. Of course, the situation in retail finances is not nearly this bad; however, product innovation has impacted the retail businesses of financial enterprises as well.

The population is faced with an increasing number of financial products. This only repre-

ACKNOWLEDGEMENTS

The authors would like to take this opportunity to thank all those who, with their work and support, have contributed to creating the knowledge-base that serves as the foundation of the present paper.

First and foremost, we owe a debt of gratitude to the Kossuth College of the Hungarian Folk High School Society of Lakitelek, established by *Sándor Lezsák*, for providing us with their database and the resources required by those actively participating in the research to assess the financial-economic situation and knowledge of the population.

We would also like to thank *Ferenc Bódi*, *Attila Fekete*, *Magdolna Leveleki*, *Gábor Loska*, *János Oláh*, and *István Szabó* for contributing to the completion of the Kossuth College report and the underpinning knowledge-base, with valuable establishing and background support work.

Last, but not least we wish to say thank you to the close to 200 students and their teachers who played a crucial role in the operational phase of the survey, and as a result of the persistent and committed work of whom, a database conducive to drawing well-substantiated socio-economic conclusions was compiled.

sents great danger for both the individual and the whole of the economy if previously acquired financial knowledge has not been developed further, thereby creating a gap between financial knowledge and the knowledge-level required to safely use the financial products on offer. In addition to the above, *Habschik et al.* (2007) and *Marcolin et al.* (2006) also state that individuals more and more left on their own in their financial decisions are forced to tackle an increasing need (compulsion) for self-support.

No responsible financial decision, with sufficient output for the decision-maker, can be made without adequate financial knowledge (Hung et al, 2009; EBRI, 2007). Financial knowledge in itself, however, is not enough as the 2010 joint survey of GFK and the National Bank of Hungary (MNB) shows, among other things, that familiarity with a given financial product is not necessarily accompanied by its utilisation. Drawing conclusions from this as well as the findings of studies seeking the definition of financial literacy,¹ we cannot arbitrarily narrow down the concept of financial literacy to simply having financial knowledge. The National Bank of Hungary's Financial Literacy Centre represented the very same position when in 2008 it formulated its own definition, which is as follows:

“A level of financial knowledge and skills that enables individuals to identify the fundamental financial information required to make their conscious and prudent decisions; and after the acquisition of identified data allows them to interpret said data, make decisions on their basis, all the while assessing potential future financial and other consequences of their decisions.”

The primary objective of our study is to assess and evaluate the financial literacy of Central Great Plain households (including rural households) from a risk-taking aspect

with the help of indicators fundamentally typical of financial literacy.

In the first part of the paper (material and method), we will present the research site, the characteristics of the sample forming the basis of the database, the financial literacy indicators examined during the research, and we will also highlight the factors impacting the validity of the results obtained. The next part of the study presents in detail and by topic the results achieved during the processing of the database. The paper ends with our conclusions and the summary.

MATERIAL AND METHOD

In 2011, the Kossuth College of the Hungarian Folk High School Society of Lakitelek compiled a questionnaire to survey the financial-economic situation and knowledge of the population. The survey was conducted in two rounds, in the spring and fall of 2011, by students of higher education participating in the research.

One thousand one hundred thirty one persons were surveyed in the first round and 1 773 in the second (the full sample comprised 2 905 persons). During the second round, the survey included additional questions (beyond those asked in the first phase); we took the lower sample number into account when interpreting these new questions.

The survey was conducted in 21 settlements and towns and on the population of the neighbouring farmland (see *Chart 1*).

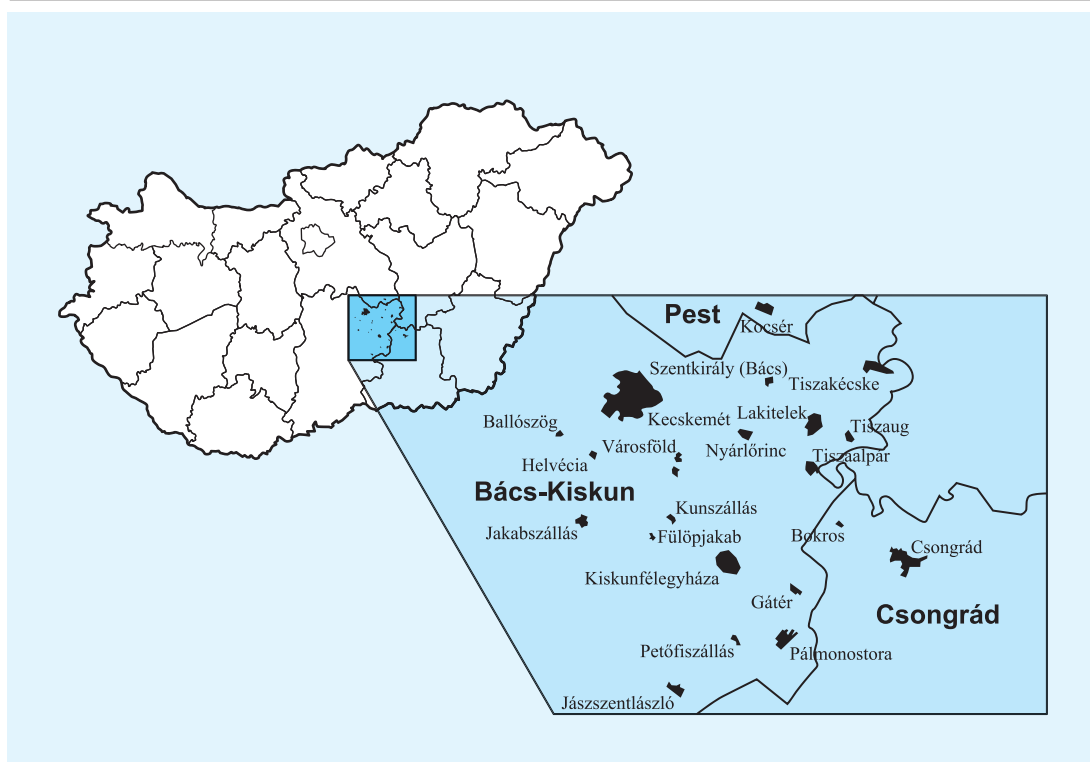
As *Chart 1* shows, the survey covered all settlement types, from villages to towns with county rank; the break-down of the sample and total population according to settlement type is shown in *Chart 2*.

Despite the fact that in terms of settlement types the sample can be considered representative, we have taken distortions arising from age

E-mail address: botos.katalin@jak.ppke.hu

Chart 1

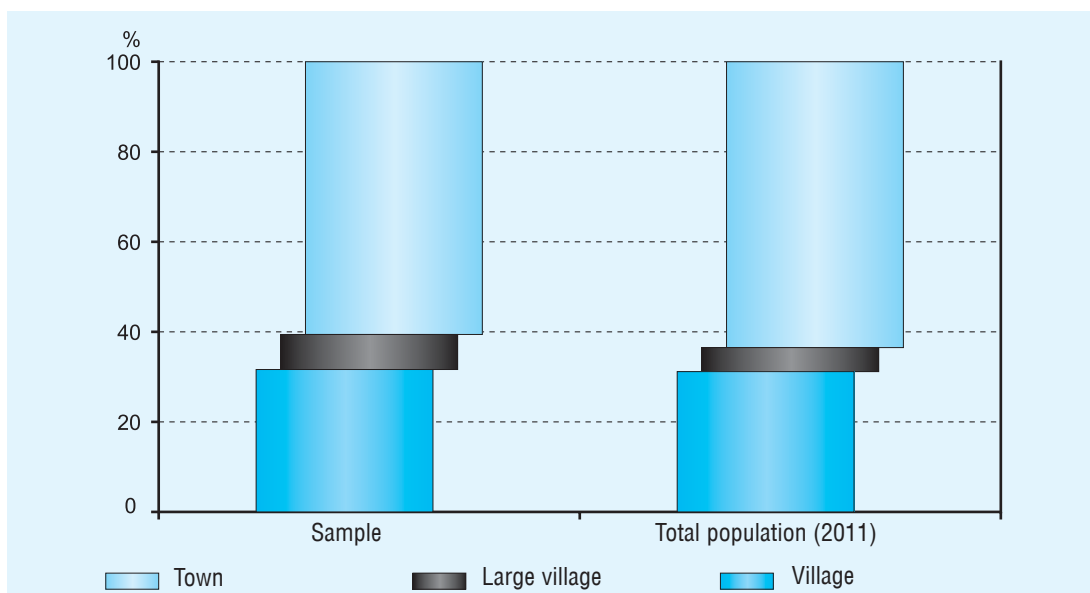
SETTLEMENTS AND TOWNS PARTICIPATING IN THE QUESTIONNAIRE SURVEY



Source: authors' own editing

Chart 2

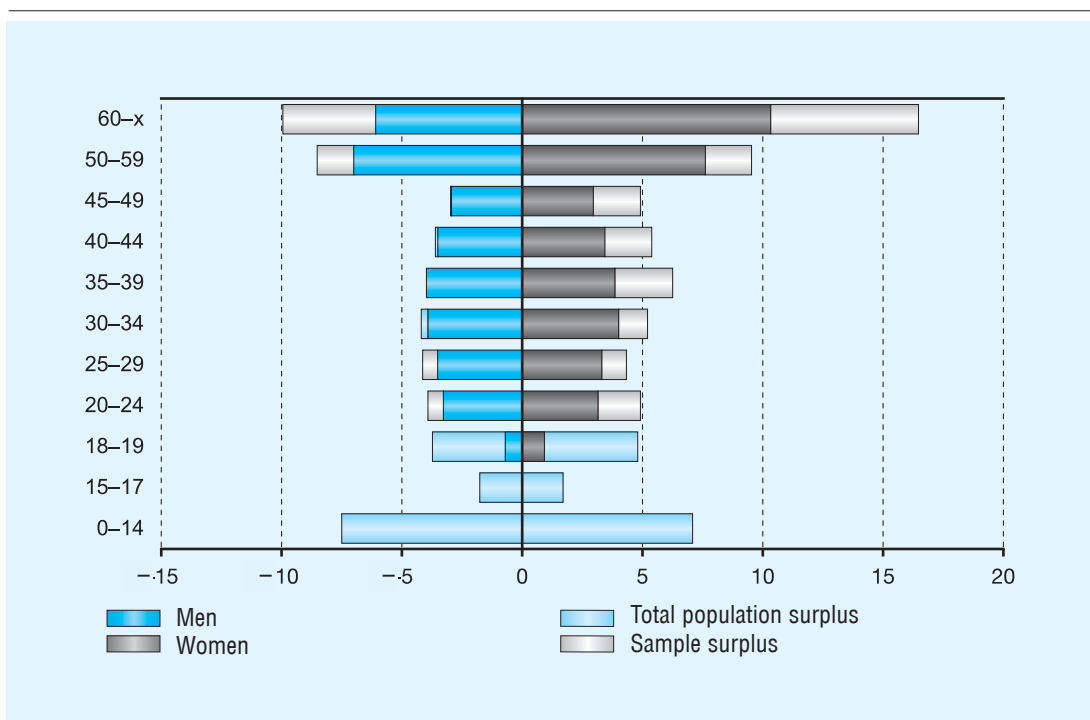
BREAK-DOWN OF THE SAMPLE ACCORDING TO SETTLEMENT TYPE



Note: towns with county rank are overrepresented in the sample compared to towns

Source: authors' own editing

AGE COMPOSITION OF THE SAMPLE



Source: authors' own editing based on data collection and HCSO data

composition into account when interpreting results (see Chart 3).

Respondents were asked to answer 71 questions in the first round, while in the second round the survey included an additional 18 questions. The present paper focuses on financial literacy; therefore, during our analysis we only detailed the results of relevant questions/topics.

Nearly half of the survey questions focused on various socio-demographic characteristics, such as profession, the number of persons in the household and income. It is very important to note that the basic examination unit of the study is the household and not the individual.

As far as data processing is concerned, besides the methods of descriptive statistics we also employed cross tabulation.

Finally, as a supplement to the questionnaire survey-based database, we also utilised the

online data query system of the Central Statistical Office (HCSO) as a data source.

CHARACTERISTICS OF FINANCIAL LITERACY

The various Hungarian and international studies line up a number of criteria to assess the financial literacy of individuals. In our case, the basic examination unit of the study is the household and not the individual, and as a result the scope of criteria qualifying financial literacy is somewhat narrower.

1 Regardless of whether we are talking about a specific financial literacy study [such as the survey conducted by *Beal et al.* (2003) on the financial literacy of Australian students] or a simple border-line study [such as the research conducted by *Cleek* (1985) or *Yeung* (1998),

where mental illnesses were linked to finances], income plays a crucial role; as such, its analysis is the focal point of our study as well. In this case, income is used to determine whether the population can be characterised through savings or borrowing.

② Many of the Hungarian financial literacy studies (see for instance Székely, 2010; and MNB, 2010) placed considerable emphasis on population cash flow – or more precisely the financial instruments used to manage cash flow – which is why we selected it as the second focal point of our study.

③ Households utilise their unused income to generate savings, i.e. they delay their consumption for a later date. In the third main field of our research, we seek to find out how efficiently households are able to manage their savings, i.e. what form of savings they choose (examination of the correlation of yield and risk).

④ Our last and final aspect is advance consumption, that is the examination of the need for external funds. In this case, we examined the management of borrowing risks.

In our opinion, the above characteristics, though rudimentary, provide excellent aspects for analysis, which enable us to gain valuable information on the risk-taking behaviour of households.

VALIDITY OF THE RESULTS

The survey was conducted anonymously in two rounds involving the same settlements. As a result, we cannot rule out that the same household is featured in the database more than once; we were unable to subsequently filter out this deficiency, even during the cleaning of the database, as we did not find identical records. Another negative factor was the fact that the two questionnaires were not identical; therefore, the additional ques-

tions and available answers may have influenced respondents.

Beyond the above, the representativeness of the sample in terms of gender and age composition was inadequate; therefore, care must be taken to appropriately weight groups under and over-represented by the age pyramid. We cannot assess the financial literacy of the under-20 age group on the basis of the database.

Given the unique nature of the questionnaire survey, another problem source is the issue that in the case of attitude-related questions, the survey receives the opinion of the responding individual and not that of the entire household.

Finally, results may also be influenced by the fact that with respect to more sensitive topics, the willingness to reply is not 100 per cent.

Taking these critical observations into account, the survey population is conducive to observing general tendencies with respect to financial literacy, and also to having survey assumptions serve as starting points for further research dealing with financial literacy.

RESULTS

A suitable level of income is one of the main elements of the assessment of financial literacy, and for this reason we begin the presentation of results by delving into the topic of income.

Income

Income depends on several other factors. It is impacted, among other things, by the gender, academic qualifications, age and profession of the given individual and also what type of settlement he/she lives in. In this case, however, we did not want to know how these variables affect each other or the income level of the individual [several other studies provide adequate answers to these questions – see for

instance RMR (2003)], but rather what volume of income is generated in the whole of the household – the basic examination unit of our study is the household and not the individual.

During data recording, care was taken to ask only one individual per household; the database shows that the average number of people living in one household is 2.85 (see Chart 4). Kerülő's (2009) research puts the average size of Hungarian households at 2.6 persons, and as such we shall accept the generated value as acceptable.

Examining the survey population on the basis of the total net income data provided by respondents, we arrive at the result that the average income of households varies and on average is HUF 177 thousand. Chart 5 illustrates this graphically.

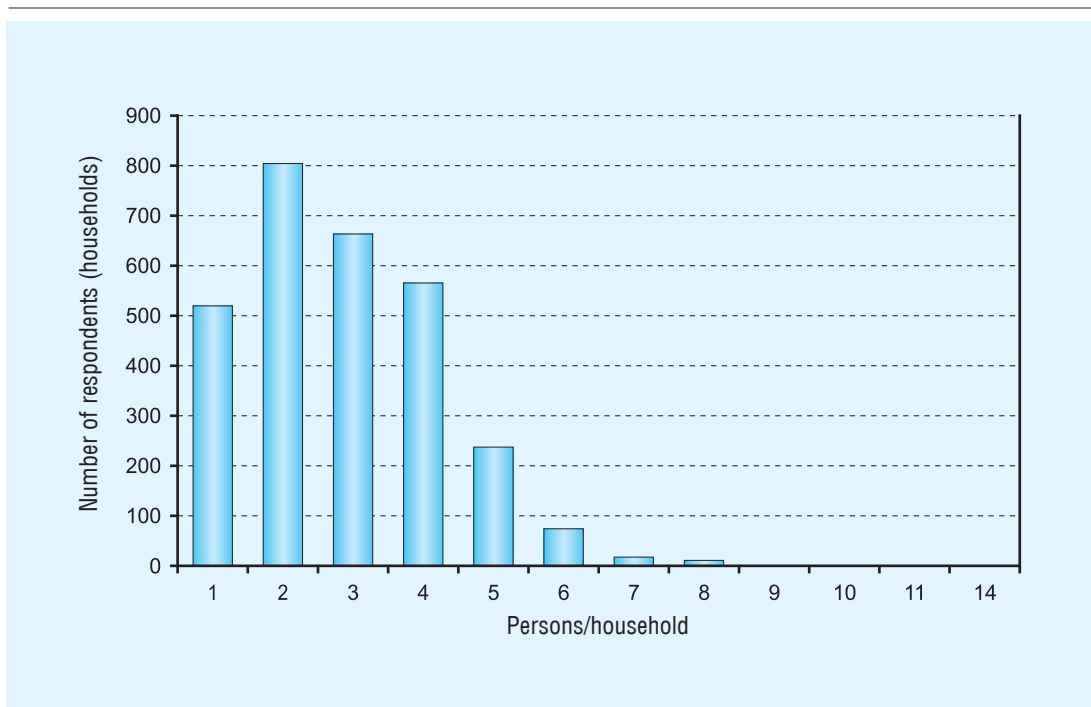
Given that based on HCSO data, average per capita net income in 2010 was HUF 78.3 thou-

sand and that in Chart 5, the majority of households are below this level, we can state that people living in the examined region have below-average income levels by Hungarian standards. However, before drawing any conclusions with respect to financial literacy, we should examine income sources in greater detail.

Table 1 illustrates that the primary source of income for households in the region are wages and salaries, followed by income from pensions and own businesses (enterprise). If we examine average incomes corresponding to the given income type, we see that the HUF 177 thousand average income per household calculated above is below the national average due to the high ratio of pensioners (we should not forget that as in the population, the ratio of over-60 persons is significant (and over-represented) in the sample as well).

Chart 4

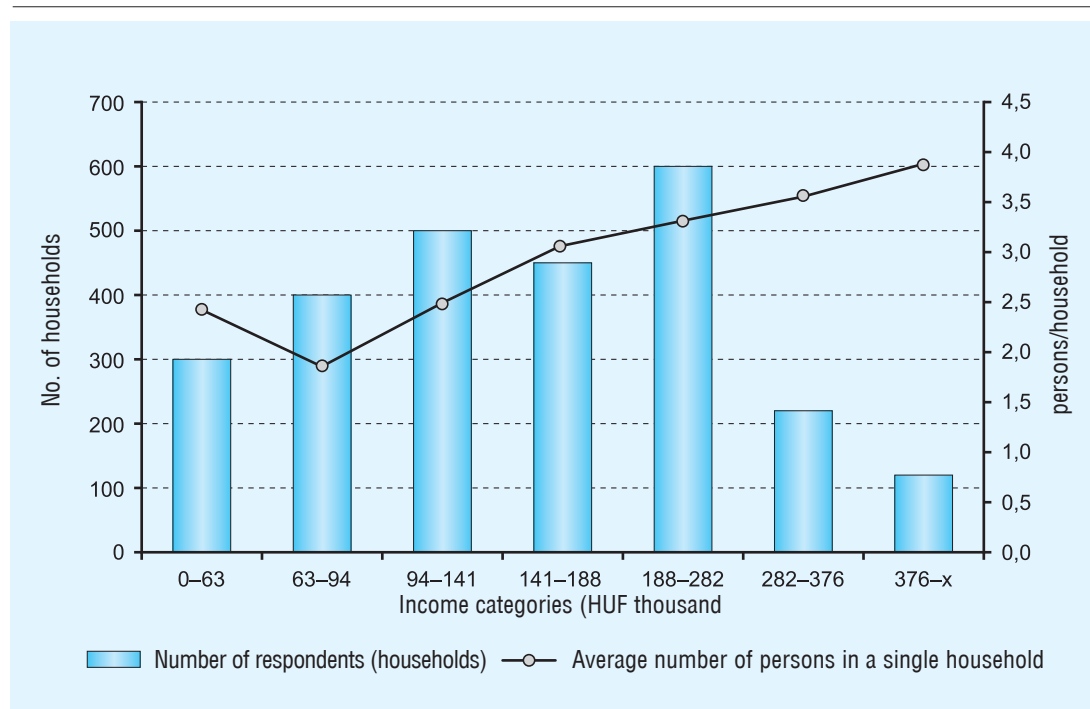
THE NUMBER OF PERSONS IN HOUSEHOLDS



Note: n=2888
Source: authors' own editing

Chart 5

INCOME AND THE NUMBER OF PERSONS IN A HOUSEHOLD



Note: n=2634

Source: authors' own editing

Table 1

INCOME SOURCE AND THE AVERAGE INCOME RELATED TO INCOME TYPE

Source of income	Frequency (no. of)	Average income related to the given income type (HUF thousand)
Wage, salary	1,481	201
Pension	708	121
Enterprise	156	245
Unemployment and other social benefits	83	92
Farming, farmers	55	184
Income from social security (e.g. child-care allowance, child-care benefit)	28	90
Other	19	164

Source: authors' own editing

We should also mention that the households also have other—non-monetary—incomes. For example if the household produces agricultural products (market garden, domestic animals) for its own consumption (as well). Of those surveyed, 45.5 per cent said they engage in

household farming; given that more than 61 per cent of respondents live in towns and cities, this means some of the town population also generates such (unmeasured) income.²

We must also mention that there are also differences in terms of income between the vari-

Table 2

AVERAGE MONTHLY NET INCOME OF HOUSEHOLDS

Settlement type	Number of respondents (persons)	Average monthly net income of household (HUF thousand)
Town with county rank	859	204
Town	668	164
Large village	190	174
Village	791	157

Source: authors' own editing

ous settlement types (Spence et al., 2009), as shown by *Table 2*.

According to *Spence et al.* (2009), the larger a town, the greater the income of individuals (and as a result households); however, accordingly price levels are also higher. What is interesting in this case is that the average monthly net income of town and city households is below that of large villages (the difference between the two cannot be explained by households performing household farming).

The research also covered the farmland belonging to the settlements. We discovered that financial income falls 25–30 per cent short of that of persons living in settlements; however, close to 85 per cent engage in household farming.³ As the average number of persons living on rural farms does not differ from the examined survey population, the per capita net income of rural households is even further below the national average. It comes as no surprise that the primary income source of such individuals is pension (43 per cent), followed by wages (33 per cent). Of rural households surveyed, 67.5 per cent manage income of less than HUF 141 thousand.

The questionnaire also asked respondents whether they consider themselves poor or wealthy. The result is shown *Chart 6*.

As we can see, a significant proportion of respondents consider themselves poor, but only 5 per cent feel they are very poor. We think it is important to mention that when respondents assessed their own financial situa-

tion, we found no correlation with income source (e.g. there are pensioners among the very poor and the very rich as well; the same is true for entrepreneurs). For rural households, the feeling of poverty is higher.

Last but not least, we also attempted to approach the level of income (poverty) through the specific life situation of respondents; their responses to the question as to what they would spend their increased income on do a good job of illustrating the actual financial situation of examined households (*see Chart 7*).

Chart 7 shows that only 13 per cent of surveyed households would spend additional income on repaying debts and current expenses, which shows that the majority of households is able to sustain itself from the current income level; in response to the verification question asking how well they are able to get by on their current income, 15 per cent of respondents said not at all, and, as such, we consider the conclusion confirmed.

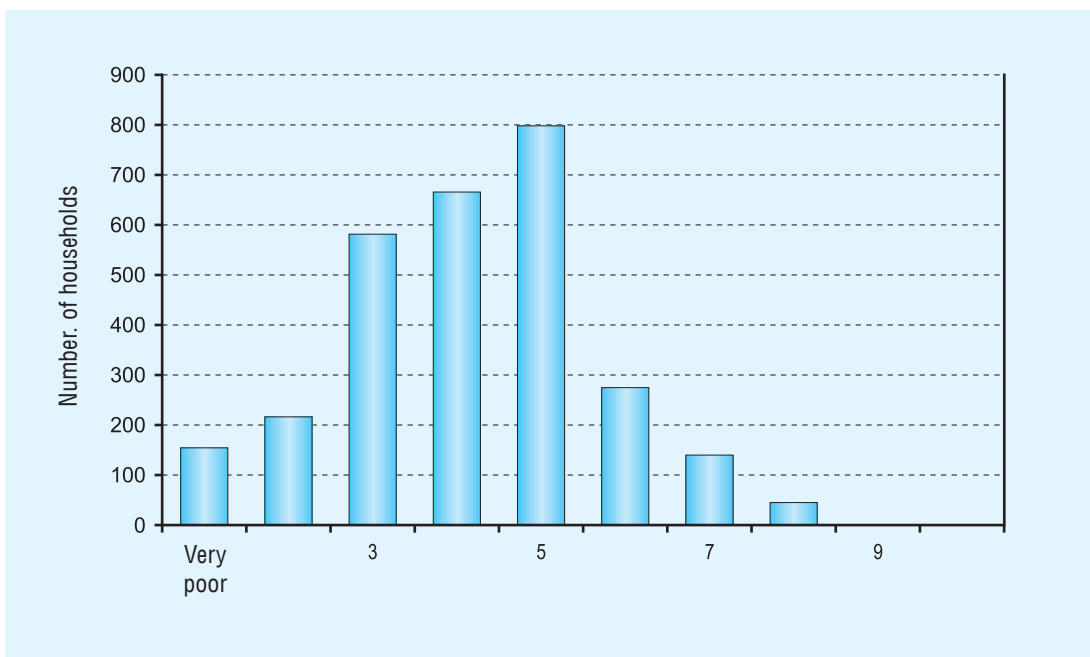
Forty per cent of respondents would raise living standards using the surplus income; in this context, the amount spent on children represents investment into human resources.

Thirty-two per cent of respondents would save or spend the surplus income on other purposes. For the most part, these savings or other purposes are the following:

- ① house or housing goals,
- ② children/grand-children,
- ③ old-age/pension, and finally
- ④ funeral.

Chart 6

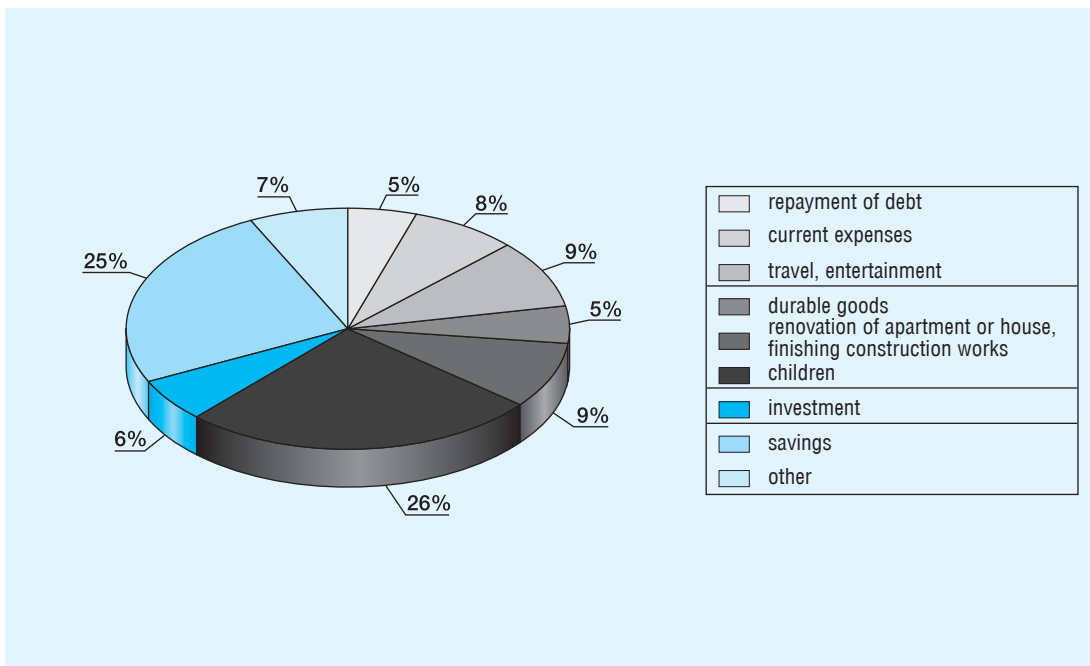
THE HOUSEHOLDS' OWN PERCEPTION OF THEIR FINANCIAL SITUATION



Source: authors' own editing

Chart 7

IF YOU HAD TWICE THE INCOME YOU HAVE NOW, WHAT WOULD YOU SPEND IT ON?



Source: authors' own editing

As we can see, the goals are not significantly different from the aforementioned 40 per cent. Together the two make up 72 per cent, i.e. a significant proportion of respondents would be able to generate savings.

In the case of those living on farms, double income would primarily serve saving objectives (to a greater extent than for those living in settlements); spending on current expenses and purchasing durable goods is less frequent.

In contrast with the previous results, only 20.5 per cent of these respondents said they would be able to save some of their income.

Based on the above, we can state that in spite of the below national average (measured) income of people living in the examined region, which would suppose that that financial literacy is also low as the indicators used to measure it primarily depend on income levels, the survey population is conducive, in part due to lower price levels in the region and in part due

to non-financial incomes, to drawing conclusions regarding financial literacy.

The cash-flow of households

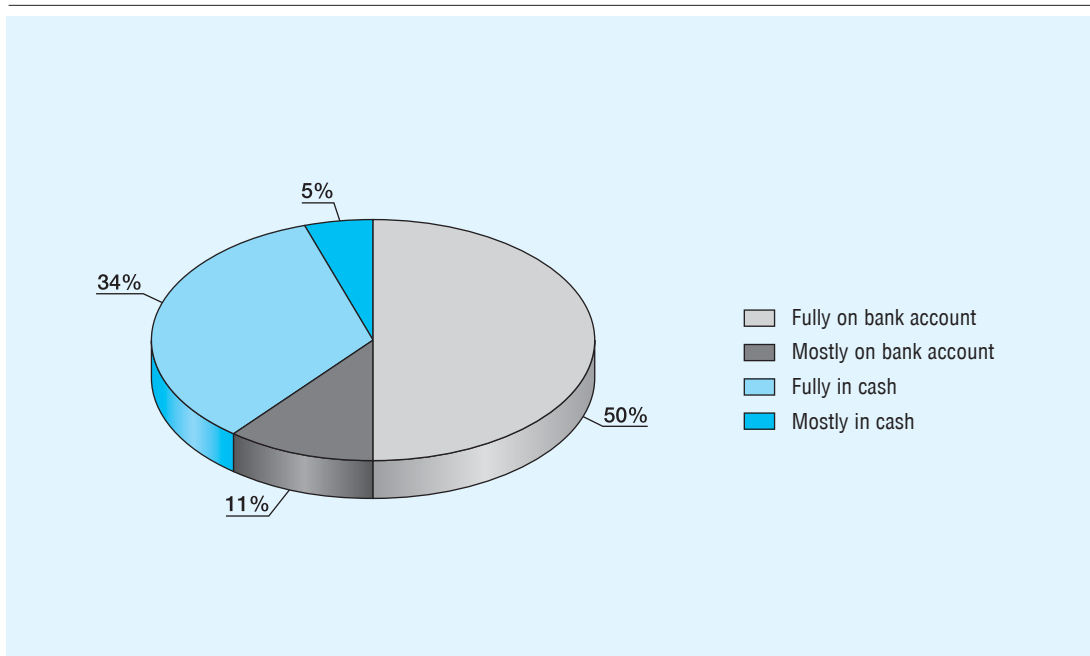
With respect to financial literacy, we used the cash-flow method to examine the ability and willingness of households to break with the use of cash and utilise cashless solutions that are more efficient for the economy (e.g. purchasing using bank cards).

The very first and one of the most basic aspects is how the given household receives its income (see Chart 8).

The fact that 39 per cent of respondents still insists on using cash can be considered the joint effect of multiple factors. On the one hand, though statistically insignificant, among those who receive their salaries fully in cash, there are more who think money deposited in a

Chart 8

HOW DO HOUSEHOLDS RECEIVE THEIR INCOME?



Note: n=2772
Source: authors' own editing

bank can be completely lost; i.e. they exhibit risk-averse behaviour based on lack of knowledge. On the other hand, the use of cash indirectly indicates that the participants of the survey do not necessarily receive their income or at least part of it through the so-called 'white economy' (as the cash demand of the economy is indirectly also determined by the size of the 'black economy' (Odorán et al., 2008)). We also can consider this latter a risk-minimising form of behaviour.

Among those living on farms, the role of cash is more pronounced; more than 50 per cent receive their income fully in cash.

The preference of cash as opposed to bank account transfers does not mean that the persons in question have no basic financial products. The fact that 78.3 per cent of the surveyed population had bank accounts in their name illustrates this well.⁴ The findings are further refined by the results that at the time of the survey only 61.9 per cent had bank cards, 9.9 per cent had credit cards and only 3.9 per cent held foreign currency accounts.

With respect to financial literacy, the question is what the attitude of respondents is to using bank cards (held by the majority of respondents) that are considered substitutes for cash. Of respondents, 56.7 per cent feel paying with bank cards is a good thing. Based on cross tabulation, there is significant correlation between how one receives his/her income and his/her attitude towards paying with bank cards. We only found negative attitudes towards bank card use among those who receive their income fully in cash (for instance individuals living on farms); in all other cases, most individuals considered the use of bank cards a good thing. Approaching from another aspect, the number of people who prefer bank card use and people who dislike bank cards is approximately the same among those living in villages and large villages, while those living in towns and cities definitely prefer bank card use.

Coming from another, third aspect, we can state that pensioners represent a definite majority among those with negative attitudes towards bank card use. Interestingly, among entrepreneurs the ratio of those preferring and non-preferring bank card use is about 50-50 per cent. This fact can be linked to the aforementioned black economy as well as the negative attitude towards delayed financial performance.⁵ Finally, examining attitude towards bank card use according to income categories, we can conclude that the higher one's income, the more positive the attitude towards complementary currency; interestingly, HUF 100 thousand monthly net income is the limit where most consider bank card use a positive thing.

The ratio of people using 'Internet banking' is only 26.9 per cent, which percentage comes primarily from households in the higher income category. The same is true for both those using credit cards and those holding foreign currency accounts. We can therefore state that the range of financial products used increases parallel to the increase of income level. In our opinion, in contrast with the conclusions found in Hungarian and international literature, this does not mean that the level of financial literacy increases in proportion to income size or the increase of the range of utilised financial products. Rather, this simply means that financial literacy should be judged differently for people in different life situations. Staying with the current example, the fact that someone has no credit card could in essence mean that he/she is able to appropriately assess his/her load bearing capacity, which is a positive behaviour form on the part of lower income households; we will touch upon this topic later on when dealing with loans.

In summary, what we can say about the cash-flow of examined households is that the majority of the population does have the option to select cashless payment methods. The fact that

these methods are underutilised does, however, cast a shadow on this positive result. For instance, the attitudes of those with lower incomes, the pensioner age-group who are less receptive to technology or those performing not entirely legal economic activities towards bank card use is less positive. Amongst other factors – negatively affecting the use of cash substitutes, but not examined in the present study – we can mention for instance if there are no ATMs in the given settlement or if bank cards are not accepted in local business units.

Savings

Despite the fact that 72 per cent of surveyed households would be able to generate savings by doubling their net monthly income, in reality – based on the answers provided by respondents – only 20.5 per cent are able to save (in

the case of those living on farms, this value is only 14 per cent). Now, let us examine in more detail what saving goals this narrow stratum has, what income they use to generate savings, what level of savings they achieve and what financial instruments they select for their savings (risk and yield).

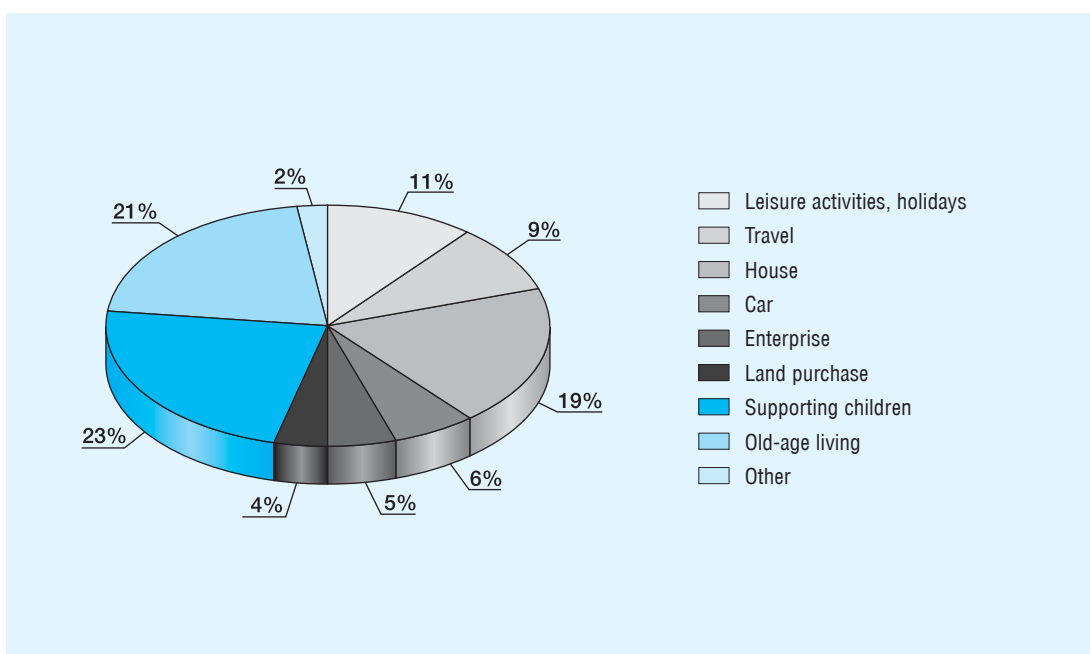
The primary motivations for saving are summarised in *Chart 9*. Naturally, the savings goals are treated separately from the motivations for savings that we have examined in *Chart 7*.

Given the wide scale of savings goals featured in *Chart 9*, a broad range of financial products is available to those with savings both in terms of savings and external funds; therefore, the level of financial literacy can be well assessed through the financial products actually utilised.

It is a positive feature that old-age self-provision represents a high ratio among households (21+2 per cent), as do savings goals that

Chart 9

BREAK-DOWN ACCORDING TO SAVING GOALS



Note: a household could indicate more than one goal
Source: authors' own editing

serve to generate further income (enterprises, land purchases, supporting children – 32 per cent). If we consider house purchases and car purchasing intentions as long-term investments, 80 per cent of savings qualify as investments in a better standard of living in the future.

In the case of those living in rural environments, the farming motivation (land purchase, enterprising) and saving up for funerals are present more strongly at the expense of travel and leisure activities.

Chart 10 shows the distribution of households that are able to save according to income categories. Seventy-six per cent of saving households come from those with incomes over HUF 141 thousand. What is interesting in connection with the diagram is that generating savings is not impossible even for households with incomes lower than HUF 63 thousand;

this result, however, must be treated with reservation as many respondents previously replied that they are unable to get by on their income (only a single person said that even savings are possible with such income).

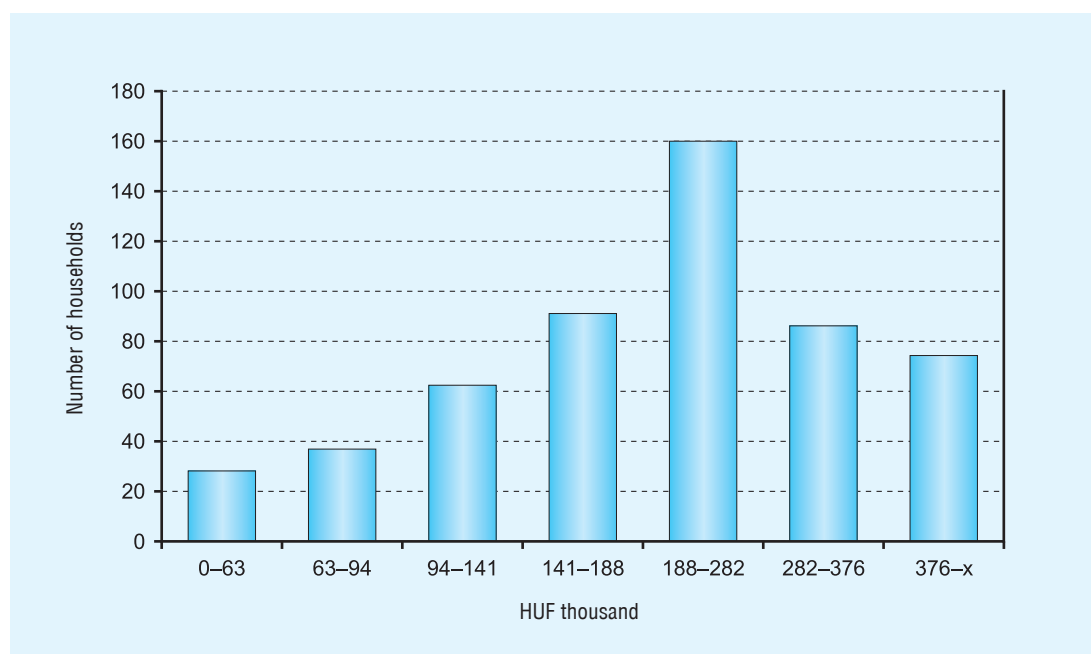
The data in Table 3 illustrate the basic correlation that the greater the average monthly net income of the given household, the greater the savings it can generate. In the case of those generating a different level of savings, in most cases respondents replied as to the rate of savings with the answer “varying”.

It is, however, an even more important issue amongst which financial instruments savings are distributed, and how consistent the surveyed households are regarding the degree of risk-taking (see Table 4).

Although most people indicated bank deposits to be the safest form of investment, it must be noted that real estate seems to be the

Chart 10

THE NUMBER OF HOUSEHOLDS THAT ARE ABLE TO SAVE ACCORDING TO INCOME CATEGORIES



Source: authors' own editing

Table 3

HOUSEHOLDS' ABILITY TO SAVE

Savings rate	Ratio of households within those able to save (%)	Average monthly net income of households (HUF thousand)
Less than one tenth	38.41	204
One tenth of income	29.73	246
One quarter	18.94	278
Other ratio	12.92	296

Source: authors' own editing

safest form of investment (residential property plus agricultural land); both types of real property precede bank deposits in the case of rural households. Close to half of households surveyed keep their savings in bank deposits, followed by cash (26.23 per cent). This may be construed as both a negative and positive feature in terms of financial literacy. On the one hand it is negative in that people who keep their savings in cash do not earn interest; on the other hand it may be regarded as a measure to ensure security. A choice can only be made between the two, if we had a clear picture about how much cash households need to manage their everyday lives, because then we could

compare the cash savings to that amount. However, this is not possible within the scope of this research, which is why we chose a different solution to the problem.

The fact that 75 per cent of savings are kept in bank deposits and cash is an indication of short-term planning. Considering that more than 60 per cent of households thought that they can maintain their savings for more than a year, we consider the financial literacy established on the basis of the chosen forms of savings to be absolutely negative in that people are not choosing the financial product (risk and yield) that best fits the time horizon of the investment.

Table 4

FORMS OF INVESTMENT CONSIDERED SAFE AND ACTUAL FORMS OF SAVINGS (%)

	Forms of savings						
	Bank deposit	Investment fund	Other	Securities	Cash	Home-buyer savings	Total
Form of savings considered secure							
Purchase of government securities	8.01	0.91	1.09	3.46	1.64	1.64	16.76
Bank deposit	17.85	0.73	1.46	0.73	4.37	1.09	26.23
Securities	1.82	0.55	0.55	0.91	1.46	0.36	5.65
Investment fund	0.36	0.55	0.00	0.18	0.55	0.00	1.64
Other	1.28	0.18	0.18	0.18	2.55	0.00	4.37
Land purchase	10.56	1.82	0.91	0.55	7.65	0.55	22.04
Real estate purchase	10.02	1.09	1.46	0.73	8.01	2.00	23.32
Total	49.91	5.83	5.65	6.74	26.23	5.65	100.00

Source: authors' own editing

Overall, it can be established that the households featured in the survey that are able to put money aside have adequate savings purposes, which, however, do not fully coincide with the purposes that would be chosen by households that are currently unable to put money aside if their income were to double. The majority of the latter category would rather invest in an economic good requiring a larger investment capable of directly improving their standard of living. Financial enterprises have created a wide financial product range to cater to the myriad of savings motives. As a result, it is a negative feature that a considerable portion of households do not use these. Instead they put their money into forms of savings considered more secure such as bank deposits and cash, which suggests that savers are characterised by low financial literacy, more precisely a lack of adequate knowledge regarding financial products. It is a positive feature, however, that their low financial literacy does not manifest in an excessive risk appetite, i.e. they are using financial products that suit their level of financial knowledge.

Loans

Financial literacy may be deemed appropriate from the perspective of loans, if the households can properly assess their load bearing capacity, as well as other risks associated with the loans (such as exchange risk) and they can fulfil their loan repayment obligations to the financial institutions involved. In this chapter we shall examine these considerations in more detail.

Considering that income wise the region under review is a less developed, more disadvantaged area, we were surprised to find out that only 39.4 per cent of households had bank loans⁶ (at 25.6 per cent the ratio is even smaller in the case of rural households). Although we have not asked questions about people's

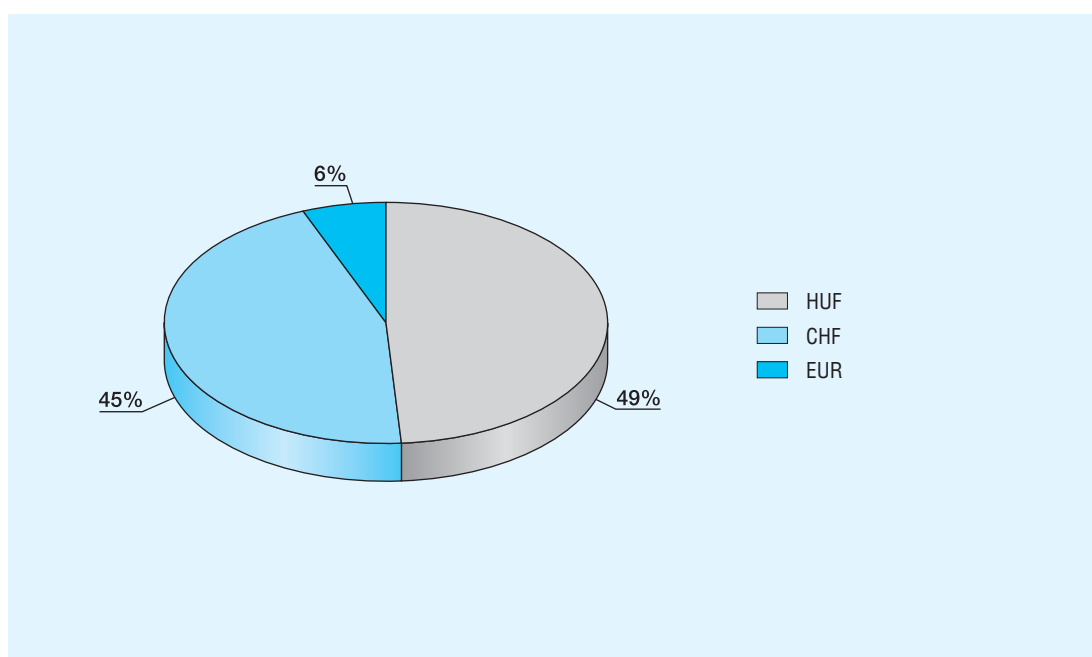
attitudes towards external funds, the low ratio of loans shows that the surveyed households are conservative about loans.

A considerable portion of the loans are for housing purposes (more than 50 per cent). These are followed by personal loans (17 per cent) and home equity loans (14 per cent). Other loan purposes include motor vehicles, consumption and business loans (these three total 19 per cent). This allows us to conclude that the surveyed households have access to a wide range of loan products and that they use them, albeit to a limited extent.

The distribution of the loans of households per foreign currency is shown in *Chart 11*. It can be discerned from the data that more than 50 per cent of the loans of the surveyed households are denominated in a foreign currency (HUF denominated loans make up 69 per cent of the loans of farming households). We asked households to rate the kind of burden the loan they have meant for them. Interestingly, only 10.7 per cent of the borrowers said that the loan they took out represented an unbearable burden on their household (only a little bit more than half of these debtors were foreign currency debtors). Most people (42.71 per cent) marked the answer saying that the repayment of their loan was a big problem for them (the ratio of foreign currency debtors in this category was much higher—60.4 per cent). Taking the other two categories (the loan is not a big problem and the loan is not a problem at all) into account for the purposes of the survey, we found that the ratio of foreign currency debtors in these categories was smaller compared to domestic currency debtors, i.e. we managed to prove that household had not taken the exchange risk into account; we did not expect to end up with different findings in this regard.

Only 6.78 per cent of households have outstanding financial payment obligations to public utility companies, banks, the Tax

DISTRIBUTION OF THE LOANS OF HOUSEHOLDS PER FOREIGN CURRENCY



Source: authors' own editing

Authority, relatives or other private individuals. That is a positive from the perspective of financial literacy, because it shows that the vast majority of the surveyed households were able to generate enough funds to meet their payment obligations. Had the exchange risk on the foreign currency loans not been realised in its current form, this could in fact mean that households were able to gauge their own load bearing capacity realistically based on the information available to them.

Considering that foreign exchange risk is a motive that substantially increased the financial burden on households, we were also curious to find out where they got their information before they took out the loan. We found that 56.7 per cent of the households received their information from a bank officer, whereas 12.8 per cent received their information from the media. The two taken together represent 70 per cent, i.e. the majority of borrowers made a

decision about their loans based on the information provided to them by the financial institutions themselves. In addition, the role of relatives was also important; 12.6 per cent of respondents relied on them to get the information they needed to take out the loan.

Based on this it can be established that the surveyed households made sense of the information made available to them based on their previous knowledge and experience. Due to the fact exchange risk had not previously been a real risk factor, the weight of that risk was not fully appreciated during the loan application process. In conclusion: the assessment that households' financial literacy is low because of their loans does not stem from the conscious, irresponsible risk-taking of the borrowers; rather it is the result of their lack of financial knowledge and financial literacy, which did not allow them to manage the additional sources of risk that followed.

CONCLUSIONS

The net income of the households in the surveyed settlements is low compared to the national average, but its rate is adequate for the purposes of drawing up an assessment relying on the selected characteristics, characterising financial literacy, because the majority of the households surveyed, including the smaller-income rural households, are able to provide for their subsistence at their current income levels.

In terms of cash-flow, the vast majority of the households surveyed had basic financial products (bank account), which allows them to use cash-free financial solutions, a positive indicator of financial literacy. This, however, does not mean in and of itself that they possess the necessary knowledge about either the product or that they actually use the financial product in their everyday lives. The use of a bank account and bank cards is not very popular amongst the ranks of the older generations and those living in small settlements (primarily people with retirement income only or low income levels). People's attitudes to bank card use tend to turn positive above income levels of HUF 100 thousand (per household).

Looking at the various banking products it can be established that the number of financial products used increases with household income. In our opinion this is not a measure of higher levels of financial literacy, rather it signals a need to assess it along different lines.

With regard to savings, we found that if the net income of households were to double, the number of households capable of putting funds aside would increase to 3.5 times its current number, which means that households have a positive financial outlook for their future (planning, long-term plans). In contrast, however, the survey shows that only 20.5 per cent of the population is actually able to put money

aside (76 per cent of them are households with incomes of over HUF 141 thousand).

Most households regard bank deposits as the safest form of saving, and therefore, most savings are kept in this financial instrument. Although the second and third safest form of saving is investing in real estate (agricultural land and residential property), the surveyed households regarded cash savings as the second safest form of saving. Due to the fact that savings goals tended to be mostly long-term and that the selected financial instruments were short-term in nature, we have a negative opinion about the handling of savings from a financial literacy aspect; it is a mitigating factor, however, that the respondents do not invest in products they are unfamiliar with.

With regard to loans only 39.4 per cent of the surveyed households had used external funds, including both HUF and foreign currency denominated loans. We proved that the majority of borrowers did not take the exchange risk into account. Considering, however, that most of the households were able to meet their external fund use related payment obligations, even if with difficulty, is an indicator to us that the surveyed households made sense of the information made available to them based on their previous (prior to realising exchange risk) knowledge and experience (this knowledge, however, was insufficient).

The income of rural households is lower than the income of households located in settlements. On the one hand this can be explained by the ratio of people with retirement income, and on the other hand it can be explained by the fact that people living in isolated rural dwellings do not enjoy the positive externalities available in settlements. This is also partly the reason why cash has such a dominant role in the lives of rural households. Lower income levels result in a smaller number of people who can put money aside. Rural households consider real estate to be the safest

form of savings (regarded better than bank deposits), but even they tend to keep their savings in cash of bank deposits.

Overall it can be established that the households examined are conservative with respect to their finances and strive to minimise risk as much as possible, which is commendable in terms of the assessment of their level of financial literacy. Income levels gave households access to loans as well as savings. In terms of savings, due to a lack of appropriate knowledge, households tend to stick to known forms of asset preservation, which, however, are not capable of helping them reach their savings goals effectively. In terms of loans it can be established that the information necessary to make an informed financial decision was available (statutory requirement); however, households were unable to assess the risks appropriately because they were inexperienced and/or did not possess the necessary financial knowledge. In essence, what seems to be “conscious risk averse” behaviour on the savings side (high ratios of households with cash sav-

ings) is “uninformed risk-taking” (inflation, lost interest income, crime). By the same token, the lower repayment risk of foreign currency loans, previously regarded as cheaper, (risk averse behaviour) obscured the real risk (exchange risk–uninformed risk-taking). Based on the above, it is clear that risk management activity is present in households (even among rural households), which may be considered commendable. Due to the deficiencies of financial knowledge and inexperience, however, households are unable to judge and assess that terminating or mitigating a given risk may cause other risks to appear or intensify. The assessment of the true significance of this newly arising risk also encounters obstacles on account of the reasons above. Based on the contents of the present study, we can come to the final conclusion that in spite of the presence of the positive traits of financial literacy, in terms of risk management the level of financial literacy among Central Great Plain households is insufficient and further development is required.

NOTES

¹ Defining and Measuring Financial Literacy (Hung et al. 2009); Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy (Remund, 2010); Survey of Financial Literacy Schemes in the EU27 (Habschick, 2007)

² In order to measure income from household farming, more complex information is required; therefore assessing its rate and extent is not one of our goals.

³ In the case of persons living in settlements, this ratio is below 50 per cent for all settlement types.

⁴ Of the entire survey population (student, pensioner, unemployed, living on farms, etc.)

⁵ There is no research covering this; however, both cases could prove to be interesting in terms of financial literacy.

⁶ The study did not assess whether the low loan use was the result of the puritanical views of the inhabitants of the region or their low creditworthiness; low income levels seem to underscore the latter, while the reasons expressed during the survey seem to support the former assertion.

LITERATURE

- BEAL, D. J. – DELPACHITRA, S. B. (2003). Financial Literacy among Australian University Students. *Economic Papers*. 22(1), pp. 65–78
- CLEEK, M. G. P., T. A. (1985). Perceived Causes of Divorce: An Analysis of Interrelationships. *Journal of Marriage and the Family*. 47(1), pp. 179–183
- HABSCHICK, M. S. – BRITTA – EVERS, J. (2007). Survey of Financial Literacy Schemes in the EU-27: EversJung
- HUNG, A. A. – Parker, A. M. – Yoong, J. (2009). Defining and Measuring Financial Literacy.
- KERÜLŐ, J. (2009). *Demográfia (Demography)*. Nyíregyháza: Krúdy Könyvkiadó és Nyomda
- MARCOLIN, S. – ABRAHAM, A. (2006). Financial Literacy Research: Current Literature and Future Opportunities, Proceedings of the 3rd International Conference on Contemporary Business Conference Proceedings. *Leura*, NSW.
- ODORÁN R. – SISAK B. (2008). A magyar gazdaság készpénzigénye - továbbra is olajozottan működhet a rejtett gazdaság? (Cash Demand of the Hungarian Economy – Is the Shadow Economy Still Running Smoothly?) *MNB szemle (MNB Bulletin)*, December 2008, 2008. pp. 19–25
- REMUND, D. L. (2010). Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy, *Journal of Consumer Affairs*, 44(2), pp. 276–295
- SPENCE, M. – ANNEZ, P. C. – BUCKLEY, R. M. (2009). Urbanization and Growth. *The World Bank*. Washington D.C.
- SZÉKELY, L. (2010). A holnap pénze - Pénzügyi kultúra az információs társadalomban (Tomorrow's Money – Financial Literacy in the Information Society). Budapest, *Excenter*
- YEUNG, W. J. H., S. L. (1998). Family Adaptations to Income and Job Loss in the U.S. *Journal of Family and Economic Issues*, 19(3), pp. 255–283
- EBRI 2007. Retirement Confidence Survey. <http://www.ebri.org>: Employee Benefit Research Institute
- GFK & PénzÍránytű (Financial Compass). 2010. Financial Literacy Survey
- IBRD, OECD, DFID & CGAP (2009). The Case for Financial Literacy in Developing Countries – Promoting Access to Finance by Empowering Consumers
- MNB (2008). Együttműködési megállapodás a pénzügyi kultúra fejlesztéséről (MNB és PSZÁF) (Cooperation Agreement on the Development of Financial Literacy (MNB and PSZÁF)), 2012. Budapest, National Bank of Hungary, Hungarian Financial Supervisory Authority
- RMR 2003. ANZ Survey of Adult Financial Literacy in Australia: Final Report. Melbourne, Australia: Ray Morgan Research