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What Influences the Savings Decisions of the Hungarian Population?

SUMMARY: We created a theoretical model of the main factors that influence household savings based on our secondary research, then conducted a questionnaire survey involving 4106 Hungarian households in the scope of primary research. The examined households had a low level of financial knowledge. They believe that financial literacy needs to be developed, since in general it is true that they are not adequately familiar with the various financial services and state aid options related to them. We came to the conclusion that households clearly believe that developing financial culture among the Hungarian population is of key importance. Four household types were distinguished from each other: 1. "Wishing to provide for themselves": Their knowledge of savings products is above average, and they also try to take advantage of various tax allowances to a moderate degree. 2. "Lives for today": They are least familiar with the various savings options. Exploiting State tax incentives is of no interest to them. 3. "Conscious and financially literate self-provider": They are most open to State influence through tax breaks when making savings decisions. 4. "Self-provider, with no financial knowledge": Although they are not familiar with the various financial options, they seek to take advantage of tax benefits as broadly as possible. All four household types believe that the primary focus should be on the education of vocational and high school students. Developing the adult population's know-how should also be treated as a priority, but improving the financial literacy of primary school pupils is also considered necessary.

KEYWORDS: savings, self-provision, state influence, financial know-how, education

JEL CODES: A14, A20, D03, D12, D14, D31, E21, G02, G28, H21, H24, H31, I22

Despite every age group being directly affected by this subject, our financial literacy is not yet properly developed: a responsible attitude of self-provision is missing from the lives of many individuals and households. The role of savings has always been an important area of economics and economic analyses effective at any given time. It remains an important factor even today, since a considerable part of Hungarian households have no savings, they tend to have loans instead, the instalments of which represent a high proportion expressed as a percentage of households' net income. This problem is often traced back to

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inadequate financial literacy, and as such our topic analyses a highly topical matter.

Due to the known and anticipated problems related to pensions, the subject is likewise important and topical at the level of society. Savings reduce the uncertainties of life in retirement (Starr, 2006), while life expectancy influences savings targeting retirement (Bloom et al., 2006). Real property holdings and pension amounts are also key determinants of pensioners' behaviour as consumers (Blake, 2004). A high proportion of households fail to cater to the security of their years in retirement (Lusardi, 2001). The prevention of old age poverty is in the interest of society. Radical measures are required in this regard. Teaching

of financial know-how, setting an example, an appropriate family upbringing, the efficient operation of civil society organisations, and mediation through the media are all necessary to boost savings (Starr, 2006). Financial education of appropriate quality is indispensable, and the State also has to play a key role in it (Stiglitz, 2013). The need for targeted savings and households' long-term financial planning must be emphasised through educational programs (Lee et al., 2000), since the population's savings are essential for and act as a direct driver in terms of the economy as a whole (Hira, 1987).

Teaching finances helps households become targeted savers, think in the long-term, and provide for their and their children's future. (Hogart & Anguelov, 2003) Financial literacy is indispensable all over the world for the sake of ensuring security during retirement years. In spite of this fact, financial literacy is very low worldwide, regardless of how developed the financial market may be in a given country. It is true in every country that more advanced education correlates strongly with financial knowledge, but even in the case of those with the highest level of schooling, one can state that the level of financial literacy is generally low (Lusardi − Mitchell, 2011). The savings of many households is not enough to achieve security during retirement years. In many cases, policy-makers seek to provide an incentive in this regard through tax allowances. Broader education of financial know-how could be another possible method (Wiener & Doescher, 2008).

Developing an attitude of self-provision at the youngest possible age by setting a good example and teaching is very important for individuals, households and society alike. In our opinion, experiences from the family, habits and upbringing greatly influence how we behave as adults later in life, and our responsible or irresponsible actions related to savings. We agree that the primary responsibility for

developing children's values lies with parents. The most crucial educator role must remain that of parents (Szűcs, 2011); on the other hand, while parents may well be savers, yet this will be to no avail if they fail to teach their children to do the same (Copur et al., 2010). At the same time, we also consider conveying financial and economic knowledge through the school system to be very important. Education changes how an individual thinks about finances, which is why implementing finance education in as broad a scope as possible is crucial (Bernheim & Garrett, 1996). Financial education and social incentive programs can only be successful if they are able to alter individual and household mindsets, preferences, priorities, and thinking. The greatest possible number of households must be persuaded to accept the savings rules that aim to increase such savings (Yuh & Hanna, 2010). Parents who are better trained financially due to having studied financial know-how at an educational institution are much more financially competent (Hogart & Anguelov, 2003). Higher levels of financial knowledge go hand-in-hand with more responsible and more conscious financial decisions, i.e. financial literacy has a positive effect on households' savings behaviour (Sabri & Macdonald, 2010). We would like to see our research results utilised by being used as help in taking the State measure, decision with far reaching implications whereby the education of financial know-how that is indispensable in our daily lives is introduced as early as in primary schools, since every household is in dire need of this knowledge (Zsótér & Nagy, 2012).

OBJECTIVE

We set ourselves three major goals during our research. Our first objective was to set up a theoretical model regarding household savings decisions based on the collection

and processing of secondary information. In line with our second objective, savings decision-related behaviour in Hungary was surveyed based on primary research using representative questionnaire interviews. Our goal was the priority examination of the State's role regarding the effect it has on household savings. Our third objective was to categorise Hungarian households based on their savings behaviour and the key features of their financial literacy, since households' behaviour related to finances can be expected to be different for the various household types.

Based on all of the above, the following main hypotheses were established.

H1. Hungarian households can be classified as different types in terms of their financial decisions.

We would like to recognise and understand Hungarian household types in line with our third objective, and to distinguish them based on their typical financial behaviours and attitudes. We believed that households use different methods and non-identical ways of thinking to make their various financial decisions. That is why we assumed that if similarly thinking households were classified in the same group, it would then be possible to distinguish multiple groups of this kind.

H2. State regulation influences the population's long-term savings in Hungary.

In line with our second objective, we also examined whether or not the State is capable of influencing long-term savings in Hungary with the help of the regulating and incentivising functions of taxes, tax benefits and State aid, and if so, to what degree. Our assumption was that households' finances-related thinking, attitude and know-how greatly influences this as well.

H3. There is a need in Hungary today for teaching the possibilities of utilising finances in practice.

We expect that the survey will corroborate that the State is able to influence or better

influence households that have more financial knowledge, in other words, that State influence is less able to function efficiently without appropriate financial knowledge. In our opinion, Hungarian households feel a lack of the practical aspects of financial knowledge in many cases, therefore they consider the education thereof important, even as early as at primary school age. At the same time, there seems to be an increasing demand for this among the adult population, as well.

METHOD

Following the review of relevant Hungarian and international literature, a theoretical model was set up about the factors that influence households' savings. The processing of literature revealed that the authors, thus for instance *Keynes* (1965), *Modigliani* (1988) and *Friedman* (1996) all attribute households' financial and savings decisions to the combined effect of multiple influencing factors. At the same time, there are different factors impacting the savings habits of single individuals and households, and with varying intensity on top of that. This is why in the scope of our primary research, we sought an answer to whether or not it would be possible to distinguish households with different savings habits in Hungary. If yes, then our goal is to establish what characterises such households, and which factors are able to influence their savings behaviour. We put critical focus on whether or not State incentives were able to influence different type households in making their financial decisions, reason being that State taxation policy appeared as a factor influencing savings in multiple theories, as Keynes (1965) and *Mankiw* (2005) both wrote. In addition to that, the role of the State is significant in the level and quality of the population's financial knowledge, since savings-related literature

(e.g. Lusardi & Mitchell, 2011; Copur et al., 2010; Béres & Huzdik, 2012; Zsótér & Nagy, 2012; Béres et al., 2013; Labri, 2013) treats the significance of financial literacy as being critical. A questionnaire survey pertaining to households (and not individuals) was conducted with the help of quantitative research methodology, taking all of the above into consideration, which involved compiling a questionnaire to suit our targets as listed above, i.e. one that asked about households' savings habits and asset structure.

The questionnaire interviews for the comprehensive research were conducted between November 2012 and May 2013. 4106 households were included in the sample. The reason for this exact number is that there were 4,105,708 households in Hungary based on figures from the 2011 census. A representative survey was implemented both per county *(see Table 1)* and per settlement type. The reason for choosing this criteria was that there might be differences in terms of financial literacy, savings habits, and openness to State influence

Table 1

NUMBER OF HOUSEHOLDS IN HUNGARY PER COUNTIES BASED ON THE 2011 CENSUS AND SAMPLING FOR OUR RESEARCH, *N* = 4106

Unit of measurement: household

Counties	Nationwide data	Data from the questionnaire survey
Budapest	819,708	820
Bács-Kiskun	217,749	218
Baranya	160,040	160
Békés	153,687	154
Borsod-Abaúj-Zemplén	272,635	273
Csongrád	178,325	178
Fejér	168,444	168
Győr-Moson-Sopron	176,743	177
Hajdú-Bihar	219,541	220
Heves	127,048	127
Jász-Nagykun-Szolnok	160,380	160
Komárom-Esztergom	123,723	124
Nógrád	83,052	83
Pest	457,463	457
Somogy	126,939	127
Szabolcs-Szatmár-Bereg	209,554	210
Tolna	93,417	93
Vas	100,443	100
Veszprém	141,974	142
Zala	114,843	115
Total:	**4,105,708**	**4106**

Source: Edited based on own and HCSO (2013) research

not only by geography (per county, region), but also by settlement type.

Microsoft Excel and SPSS 14.0 software was used to process both questionnaires. In our investigation, we tried to find an answer to what types of groups households can be split into, and what is typical of the various groups' savings habits and savings-related mindset. Single variable − mainly average, modus, median and distribution − statistical methods were used first during the analysis. We did our best to also illustrate statistical data and research results graphically with the help of charts and tables. In addition to single variable statistical methods, the quality of the relationship between multiple factors was examined with the help of Cramér's coefficient of association, since any investigated phenomenon is better understood when examined by more than just itself. Factor and cluster analysis, as well as discriminant analysis was also performed during our research. Factor analysis was used to compact data and information extracted from it, since it allows for the collective consideration of multiple criteria. It serves the purpose of profiling complex phenomena. This method compresses variables to artificially created variables, i.e. factors based on the relationship that exists among the different variables (Jánosa, 2011). It aims to develop variable groups in which variables correlate (Kerékgyártó et al., 2009). The applicability of factor analysis was validated on the basis of the Kaiser-Meyer-Olkin (KMO) criterion. Factor analysis cannot be completed where the Kaiser-Meyer-Olkin (KMO) value is less than 0.5, since the level of correlation is not suitable among the different variables. Bartlett's test was also of help in our decision-making. In the case of Bartlett's test, if the level of significance is below 0.05, this means that the variables are suitable for factor analysis as correlation exists among them (Kerékgyártó et al., 2009). Having validated the

factor analysis criteria, the number of factors was determined with the help of a scree plot chart. A scree plot chart illustrates own values as a sequence of factors. Axis x marks the serial number of the factors, axis y is used to show own values. Own value shows how many times more information each factor contains in relation to the variable with a unit worth of information content (Jánosa, 2011).

After completing factor analysis, K-centred cluster analysis was carried out to analyse correlations, as part of which the key influencing variables of financial literacy were analysed with the help of the ANOVA table. Kendall's W was applied to determine the level of interviewed households' concordance regarding factors that influence savings-related decisions. This also helped in specifying the number of clusters. The purpose of cluster analysis is to segment the elements of a multitude so that differences within groups are as small as possible, while those among groups are as great as possible. Segment members within clusters are similar, but they differ from the members of other groups (Szűcs, 2004). Homogeneous groups were formed on the basis of the variables, in which group members are close to each other based on their characteristics, i.e. intra-group similarity is maximal. It is not expedient to specify either a too low or too high number of clusters, as it does not lead to satisfactory results. The goal is to create types, of a sort, during cluster analysis (Jánosa, 2011). In our case, the plan was to use this method and list households in Hungary by types based on their attitudes and decisions associated with saving. Discriminant analysis was performed after household types were determined. This also helped to illustrate the various clusters. Discriminant analysis is a multiple variable method that can be used to establish which variables are ones that best distinguish the groups developed during cluster analysis. Finally, the percentage of

households we managed to classify correctly as part of grouping based on cluster analysis was determined.

RESULTS

Secondary research results: Creation of a theoretical model on factors influencing household savings

When creating our own savings model, the primary goal was to present factors that influence savings in the most complete and complex manner possible, taking correlations into consideration *(see Chart 1)*. As we developed the model, our baseline was that State regulation has both an indirect and direct impact on factors influencing savings, and thus on households' savings as well. We sought to also represent Keynes' theory, Friedman's lifecycle hypothesis, and Modigliani's permanent income hypothesis while charting our model. *Kasilingham* and *Jayabal's* (2011) diagram distinguishing saving capacity from the propensity to save was also taken into consideration. They believe propensity to save is decisive rather than capacity. We did not make a distinction among the two, since they also depend on the combined effect and intensity of many factors. We have highlighted both in light grey in a standard way. In our model, we sought to represent the factors that influence both saving capacity and propensity to save, along with their collective impact on savings goals, savings behaviour, and ultimately on the magnitude of savings. Our opinion is that various individuals and households can be classified and characterised by disposition towards financial savings and savings behaviour. Factors that can and those that cannot be influenced were also distinguished. There are no arrows pointing towards factors that cannot be influenced,

and these are marked using a pentagonal diagram in middle green. "State regulation" was indicated as the baseline factor, and "magnitude of household savings" as the end-product.

The financial institution system and education of finances, along with financial knowledge and financial literacy established through these are marked in light green and highlighted as a unit. By influencing savings goals and savings behaviour, State regulation has an immense influencing role and social responsibility regarding the magnitude of household savings through the financial system. As savings goals and savings behaviour are influenced by the many many listed and illustrated influencing factors, these are marked in our model using dark grey, since they are an equally important and critical stage in the savings decision-making process. Factors other than the above mentioned that can be influenced are marked in middle grey on the diagram, in order to distinguish them from the rest of the factors.

Primary research results

Our goal was to conduct as comprehensive a study and research as possible in connection with the savings decisions and behaviour of households in Hungary, based on the responses from the 4106 households that were interviewed. Looking at *Chart 2,* one can see that the most typical household savings in Hungary are those below HUF 500 thousand (27.47 per cent). 22.92 per cent do not have any savings at all.

Increasing income reduces the number of households that have no savings whatsoever, and increasing income also shows a growing tendency in the magnitude of combined household savings. At the same time, the value of Cramér's coefficient of association is 0.223,
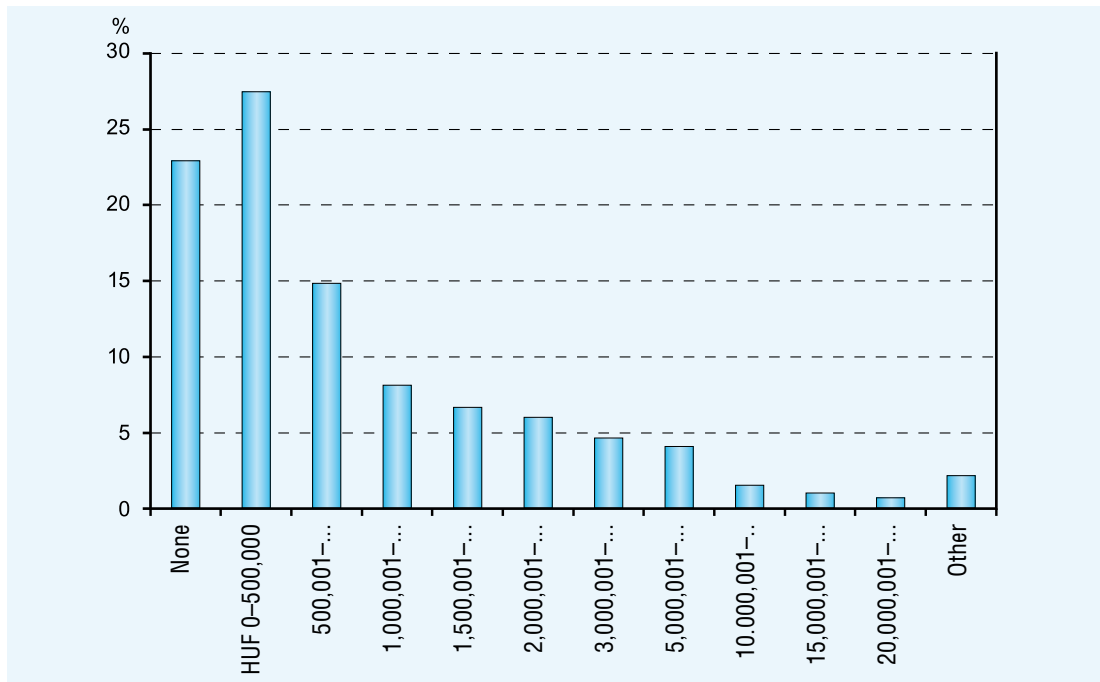
Chart 1

MODEL: FACTORS INFLUENCING HOUSEHOLD SAVINGS

Source: own research

Chart 2
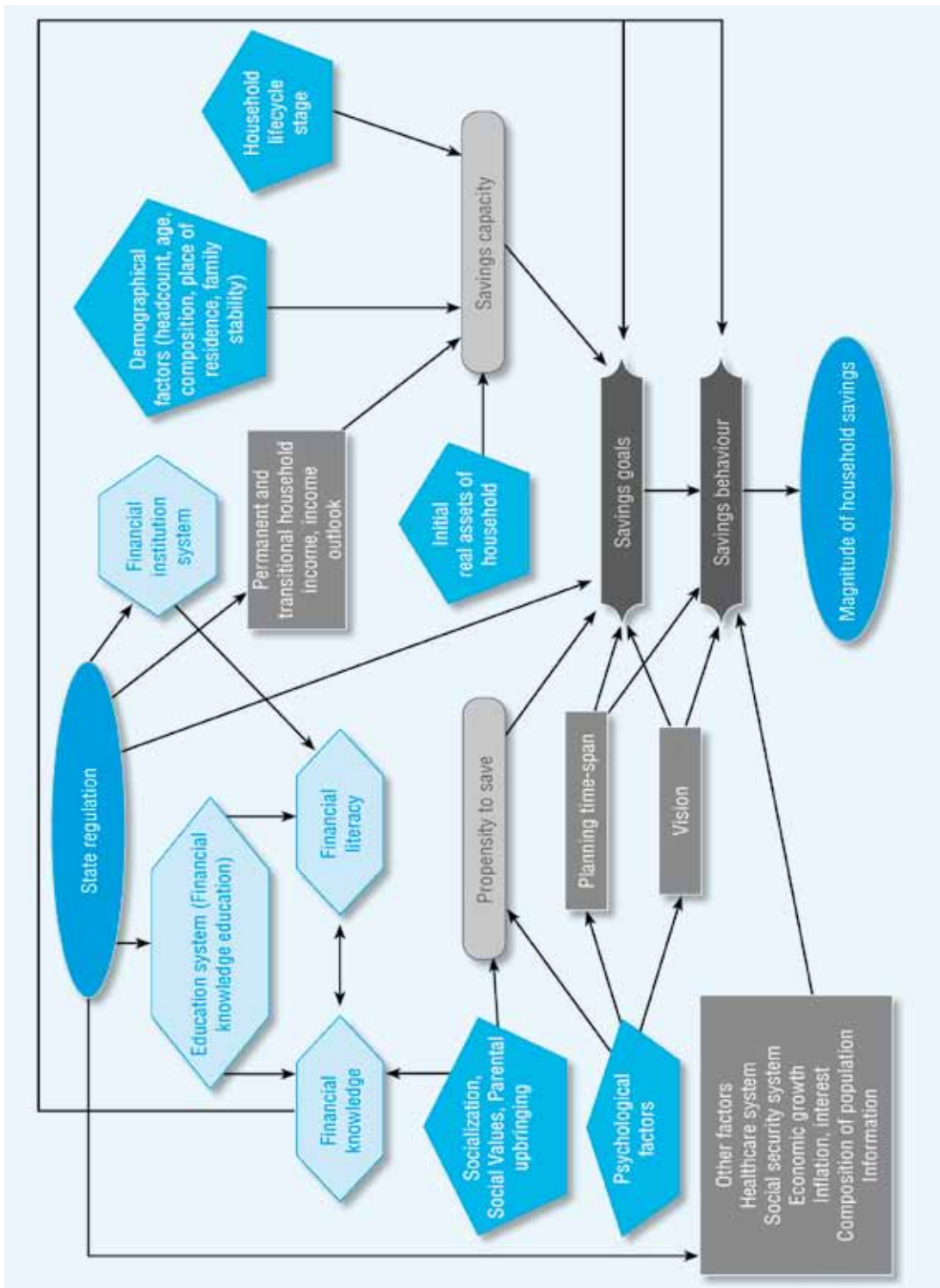
**COMBINED SAVINGS OF INTERVIEWED HOUSEHOLDS,
*N* = 4106**

Source: own research

which suggests a weak connection between per capita household income and how savings change, i.e. this is not the only thing that influences how they develop. The size of loans in interviewed households is favourable, as 40.26 per cent have no loan debt at all, while 14.22 per cent only have a loan debt below five hundred thousand forints. The proportion of loans increases between HUF 3 and 10 million, then goes down again. At the same time, households also have real-estate assets. The value of households' real-estate property is typically (28.7 per cent) between HUF 5 and 10 million. The proportion of real-estate worth between HUF 10 and 15 million is 19.8 per cent. 11.7 per cent of interviewed households have no real-estate property, and 40.26 per cent have no loans.

We also asked what they consider when making savings-related decisions. Members of households primarily make their savings decisions together based on security, after contemplating every detail meticulously, even including any tax benefit options. Taking yield into consideration and the opinion of specialists only comes after that *(see Chart 3)*.

27 per cent of interviewed households could perhaps, and 24 per cent could certainly save an additional HUF 15–30 thousand a month, yet they do not. In terms of proportion, 42 per cent said that they definitely cannot set any more aside. The proportion of those that are uncertain is still quite high, which reflects a lack of awareness and competence, as well as the "negative" quality of attitude. 8 per cent has full confidence in the State pension being enough to cover their needs during the years of retirement. The ratio of those who have no confidence (39 per cent) or less confidence (24 per cent) in it being sufficient to rely on just

Chart 3

"WHAT DOES YOUR HOUSEHOLD BASE SAVINGS AND INVESTMENT DECISIONS ON?"
N = 4106
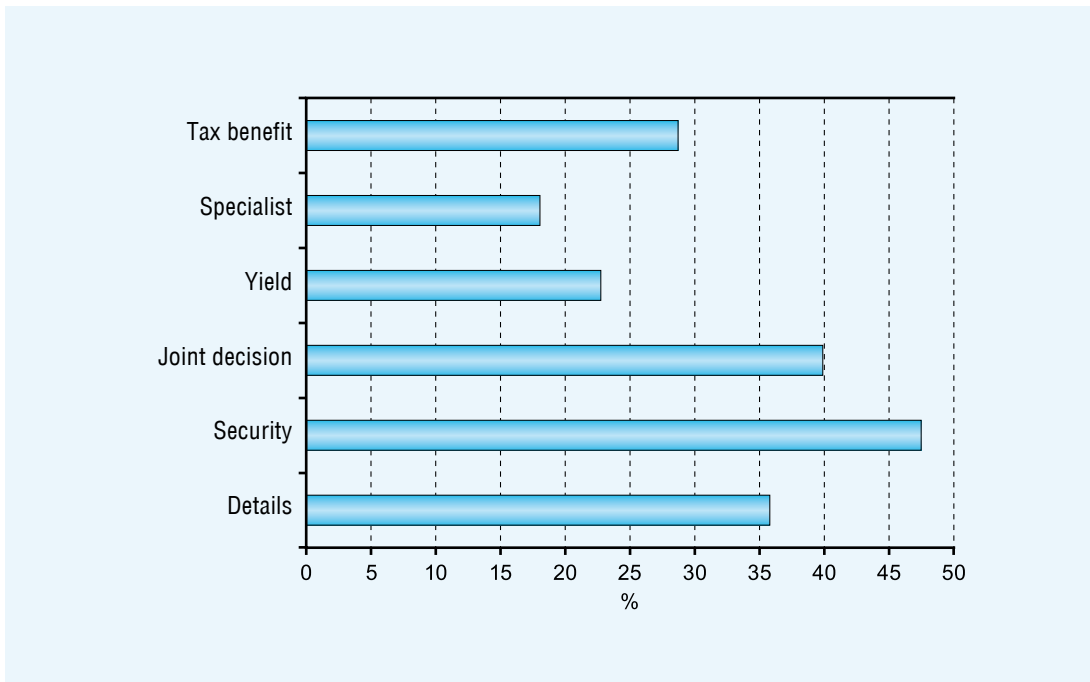
Source: own research

a State pension for the sake of security during retirement years is greater. Despite this, half of the interviewees hardly know voluntary pension fund accounts or not at all. The ratio related to pension savings accounts is even worse (63.7 per cent). Very few know pension-purpose savings that are linked to State tax incentives. At the same time, even fewer have such accounts. Currently, only 40 per cent have voluntary private pension accounts, and only 17 per cent hold pension savings accounts. We would like to see that change over time. People should take notice of such investments combined with State tax incentives, and exploit all of the State aid options that promote savings according to their financial possibilities. The question is why they are not aware of these opportunities. Is it for a lack of interest or because the information fails to reach them? Another question is that even if they do know about State aid options, why do more people fail to take advantage of them? Are they negligent or cannot afford to exploit the given savings opportunity? This is exactly why we will also examine whether or not it is possible to distinguish several household types in terms of their savings decisions as a result of our nationwide representative research. If yes, we will also investigate how different State incentives impact these households.

HUNGARIAN HOUSEHOLD TYPES BASED ON THEIR SAVINGS HABITS

Factor analysis was conducted with the help of data received from the 4106 households. The Kaiser–Meyer–Olkin (KMO) criterion was used to conclude that research data are "very well" suited for factor analysis, since its

value is 0.887, i.e. greater than 0.8. The scree plot chart also provided help in determining the number of factors, and on the basis of this we determined this as four. The factors were also rotated for the sake of the better transparency of household savings habits. Based on the rotated factor weight table *(see Table 2)*, the factors influencing households' savings decisions and the thoughts related to them were classified in the following factors.

Factor 1: The influencing of savings decisions by the State in the form of tax benefits.

Factor 2: Understanding of different savings forms.

Factor 3: Need for one's own financial security and that of the household, and decisions taken based on this.

Factor 4: The need for developing financial literacy, and confidence in a certain State pension.

One interesting fact is that for Factor 4, "The State pension will be able to cover needs during my retirement years" gets a negative value, which means that confidence in a certain State pension is lower.

The nationwide representative survey revealed that the 4 factors explain 57.76 per cent in total of households' savings-related know-how and savings habits, along with the decisions taken based on these. State influence on savings through tax benefits is able to impact households' savings decisions by 28.183 per cent. Cluster analysis was also performed based on 24 variables in the interest of appropriate segmentation. Based on the Kendall indicator, one can say that there is just 23.3 per cent agreement regarding factors influencing savings decisions among the interviewed households, so multiple clusters had to be created. We decided to create 4 clusters.

The number of elements in the clusters varies. The number of elements in cluster 1 is 1191, 781 in cluster 2, 1215 in cluster 3, and 919 households in cluster 4. During cluster verification, one may say that 95.6 per cent of households were successfully classified in the various segments, meaning that the cluster analysis can be considered satisfactory. The spatial location of the clusters was illustrated with the help of discriminant analysis. *Chart 4* illustrates the segments of the interviewed households, i.e. the 4 clusters. This chart clearly shows that the four clusters are adequately disparate.

Based on the processing of results, households can be classified into 4 different types on the basis of their savings habits.

Cluster 1: Wishing to provide for themselves They consider the desire of households to attain financial security to be least important, but this value is still quite high in their case (4.64) *(see Chart 5)*. Their knowledge of savings products is above average, and they also try to take advantage of various tax allowances to a moderate degree. They consider the dissemination and understanding of financial knowledge to be more important than the members of Cluster 2 "Living for today". 29 per cent of interviewed households are in this group.

Cluster 2: Lives for today They are the people who have the least confidence in future State pensions, yet do nothing to counter this. Average value is just 1.93 on a scale of 1–5. Despite this, they are least familiar with the various savings options. Exploiting State tax incentives is of no interest to them. At the same time, they believe having financial security is important. They only consider the need for education in financial know-how to be medium. For them, this is less important than it is for members of the other clusters. In our opinion, this is also a kind of apathy, since they are not familiar with the options of the various tax benefits, which they are thus unable to exploit, yet nor do they think it would be important for coming generations to learn about these as early as during their school
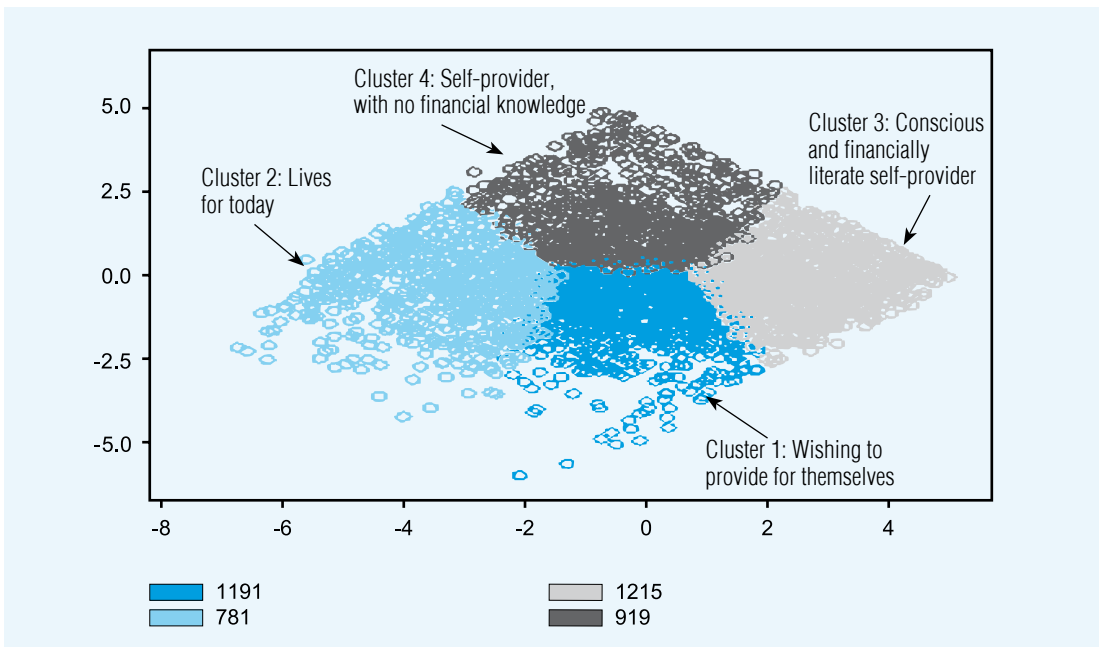
Table 2

ROTATED FACTOR WEIGHT MATRIX FOR THE COMPREHENSIVE RESEARCH, *N* = 4106

|	Factors			
	1	2	3	4
I am influenced by the option of using State aid when taking out a pension savings account	**0.863**	0.168	0.106	0.026
I am influenced by the option of using State aid when taking out a voluntary pension fund account	**0.85**	0.188	0.092	0.035
I am influenced by the option of using State aid when taking out a voluntary health insurance fund account	**0.84**	0.197	0.094	0.01
I am influenced by the option of using State aid when taking out a long-term investment account	**0.836**	0.114	0.11	0.076
The option of using State aid/tax benefits influences my other savings decisions	**0.794**	0.081	0.139	0.08
I am influenced by the option of using State aid when taking out a home savings fund account	**0.736**	0.207	0.102	0.128
I know about voluntary health insurance fund accounts	0.122	**0.836**	0.064	0.04
I know about voluntary pension fund accounts	0.118	**0.817**	0.065	0.074
I know about pension savings accounts	0.145	**0.796**	0.077	0.084
I am aware of the advantages of a home savings fund policy	0.177	**0.769**	0.09	0.025
I know about long-term investment accounts	0.173	**0.695**	0.09	0.055
I know about the Start account (Baby Bond)	0.117	**0.635**	0.107	−0.079
We must save for our children's future	0.102	0.067	**0.735**	0.142
An "emergency reserve" is necessary for the sake of the family's financial security	0.09	0.027	**0.718**	0.174
We have to save in the interest of a home-related goal	0.154	0.027	**0.7**	0.134
I have to set money aside regardless of how much I make	0.069	0.18	**0.678**	−0.121
Living without savings is risky	0.035	0.072	**0.648**	0.103
I have to save for the security of the retirement years	0.163	0.097	**0.642**	0.202
Living without insurance is risky	0.103	0.227	**0.503**	−0.342
My family's financial security is important	−0.038	−0.045	0.449	**0.364**
Teaching the practical utility of financial knowledge is necessary in vocational and high schools	0.193	0.093	0.205	**0.752**
Financial literacy needs to be developed among the adult population	0.196	0.201	0.185	**0.7**
Teaching the practical utility of financial knowledge is necessary in primary schools	0.198	0.106	0.193	**0.614**
The State pension will be able to cover needs during my retirement years	0.238	0.148	0.031	**−0.46**

Source: own research

Chart 4

INTERVIEWED HOUSEHOLD CLUSTERS, *N* = 4106

Cluster 4: Self-provider, with no financial knowledge

Cluster 3: Conscious and financially literate self-provider

Cluster 2: Lives for today

Cluster 1: Wishing to provide for themselves

1191	1215
781	919

Source: own research

Cshart 5

AVERAGE VALUES FOR STATEMENTS ARTICULATED IN RELATION TO SAVINGS IN THE CASE OF THE "WISHING TO PROVIDE FOR THEMSELVES" CLUSTER, *N* = 4106
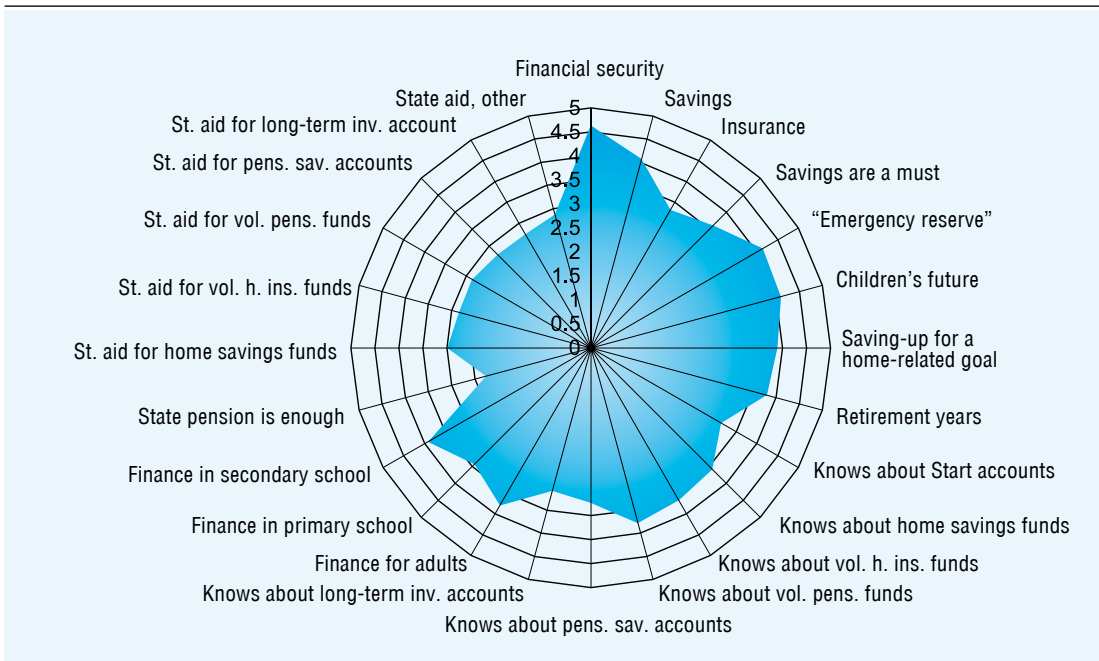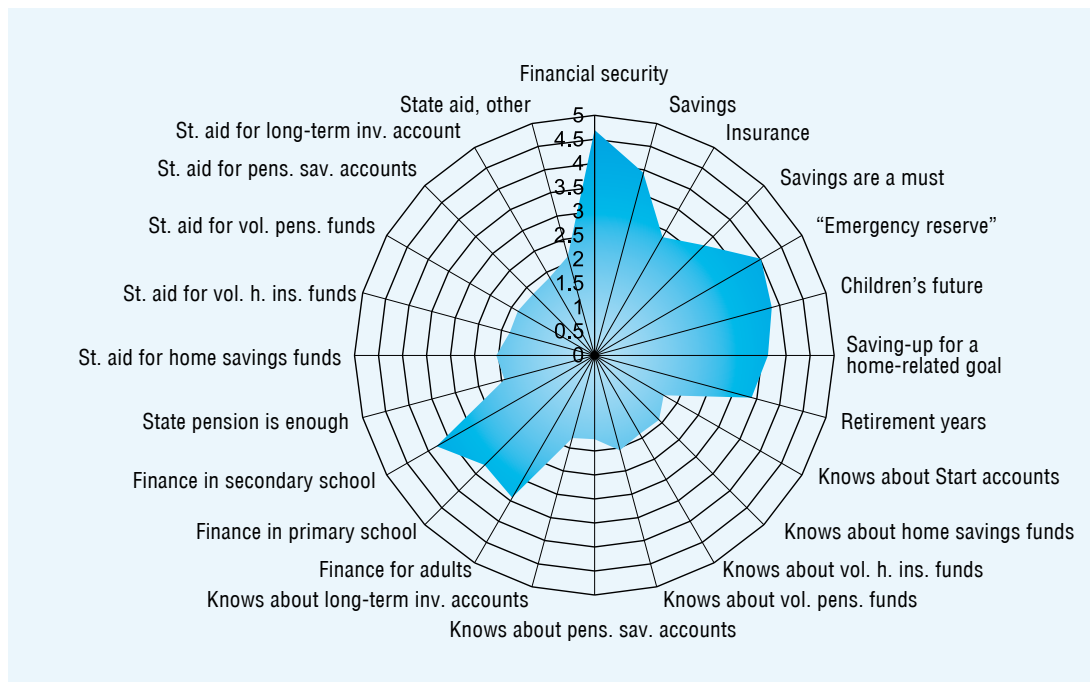

Source: own research

years if possible *(see Chart 6)*. 19 per cent of interviewed households are in this group.

Cluster 3: Conscious and financially literate self-provider They are most open to State influence through tax breaks when making their savings decisions, although they are also most confident about their future State pension being enough to cover their future needs. At the same time, this value is likewise very low in their case (average value is just 2.61564 on a scale of 1–5). They are also the most avid proponents of financial literacy development, while being most familiar with different savings products and the tax benefits and State aid related to these. They do everything they can for the sake of their own and their family's financial security *(see Chart 7)*. 29,6 per cent of interviewed households are in this group.

Cluster 4: Self-provider, with no financial knowledge Financial security is most important for those who belong in this group. Although to a lesser degree than for the members of the 3rd, the "Conscious and financially literate self-provider" Cluster, but they also consider providing for their children's future, for home arrangements and retirement years to be very important. Their financial knowledge is very low in spite of this. At the same time, they realise the importance of developing financial knowledge from as early as primary school age (4.09). Although they are not familiar with the various financial options, they seek (3.77–4.05) to take advantage of tax benefits as broadly as possible *(see Chart 8)*. 22,4 per cent of interviewed households are in this group.
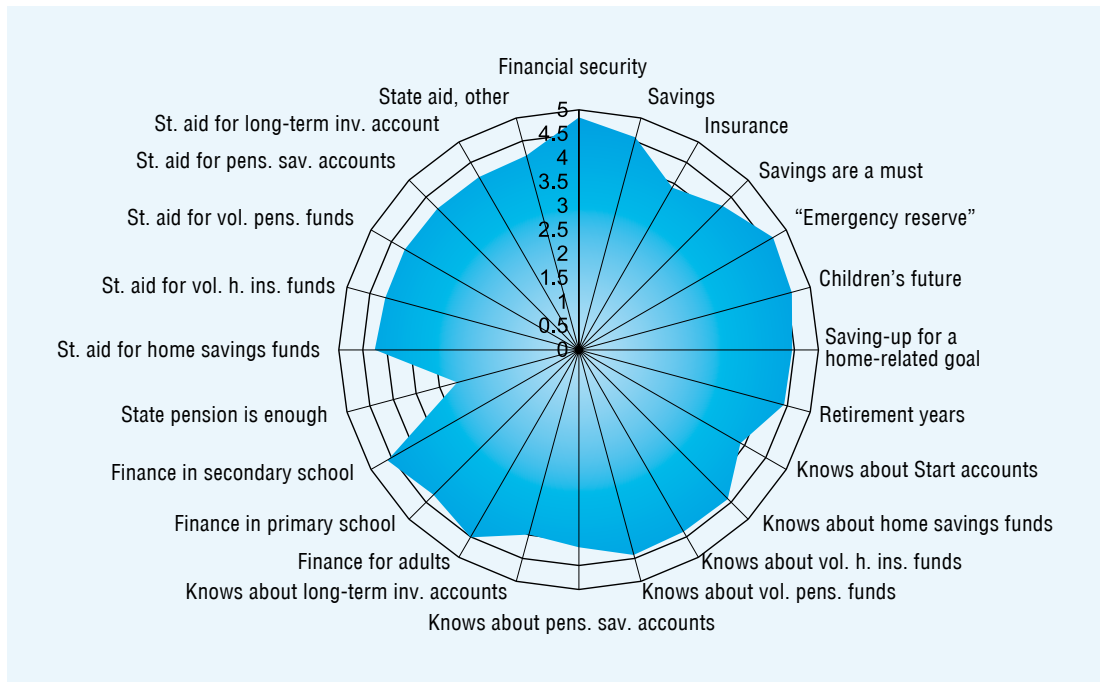
Chart 6

AVERAGE VALUES FOR STATEMENTS ARTICULATED IN RELATION TO SAVINGS IN THE CASE OF THE "LIVES FOR TODAY" CLUSTER, *N* = 4106

Source: own research

Chart 7

AVERAGE VALUES FOR STATEMENTS ARTICULATED IN RELATION TO SAVINGS IN THE CASE OF THE "CONSCIOUS AND FINANCIALLY LITERATE SELF-PROVIDER" CLUSTER, *N* = 4106
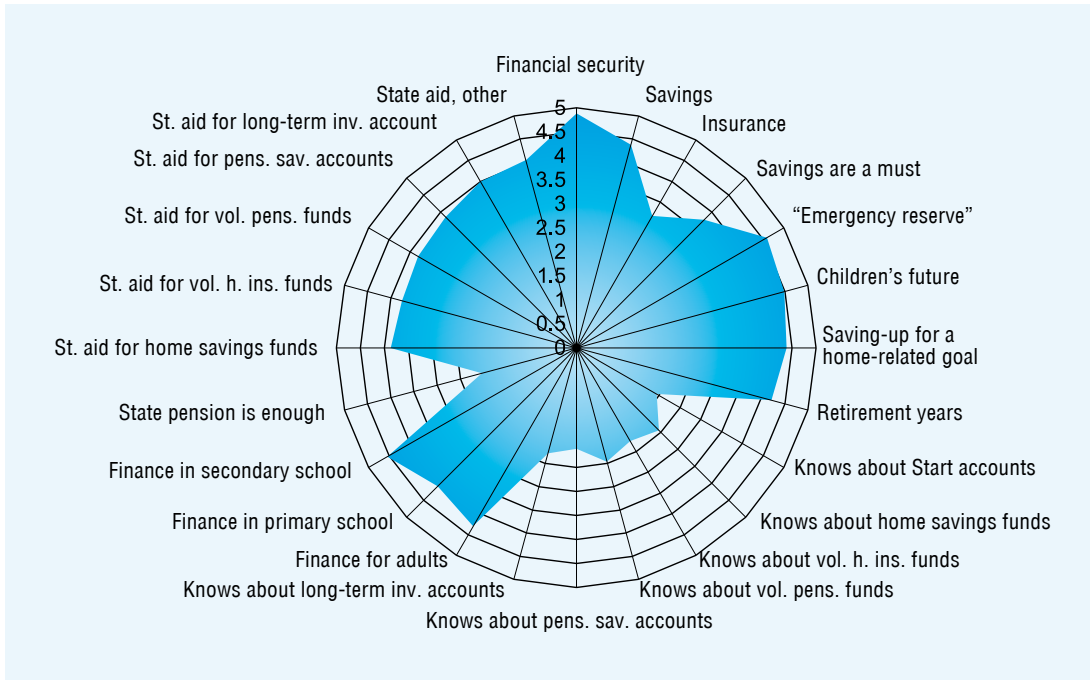

Source: own research

THE NEED OF HUNGARIAN HOUSEHOLDS FOR THE TEACHING OF THE PRACTICAL UTILITY OF FINANCIAL KNOWLEDGE

Self-provision is a behaviour that can be learned, which is influenced in part by parental behaviour patterns, and in part by educational institutions (from kindergarten to university), as well as the social environment itself. Governments must treat the conveying of financial and economics know-how in the broadest possible scope as being critical in the interest of individuals making more conscious decisions regarding the management of their household finances as they become more financially competent, which is, of course, also advantageous and indispensable for society as a whole. During our research, we observed that 83 per cent of interviewed households consider

the improvement of financial literacy as being important or of prime importance. Only 3 per cent rejected this completely. Another thing that became obvious was that the majority of respondents are not sufficiently familiar with various financial services, State aid and tax benefit options. We came to the conclusion that households clearly believe that developing financial culture among the Hungarian population is of key importance. Since, however, questions were aimed at 3 different target groups, it was possible to distinguish the group whose financial know-how development they believe is most important.

As part of the per cluster study, it turned out that different household types consider the education of vocational and high school students to be most important, followed by developing the adult population's knowledge, but improving

Chart 8

AVERAGE VALUES FOR STATEMENTS ARTICULATED IN RELATION TO SAVINGS IN THE CASE OF THE "SELF-PROVIDER, WITH NO FINANCIAL KNOWLEDGE" CLUSTER, *N* = 4106

Source: own research

the financial literacy of primary school pupils is also considered necessary. We would like to call attention to the fact that the per cluster order of these is identical in all three cases:

❶ "Conscious and financially literate self-provider"

❷ "Self-provider, with no financial knowledge"

❸ "Wishing to provide for themselves"

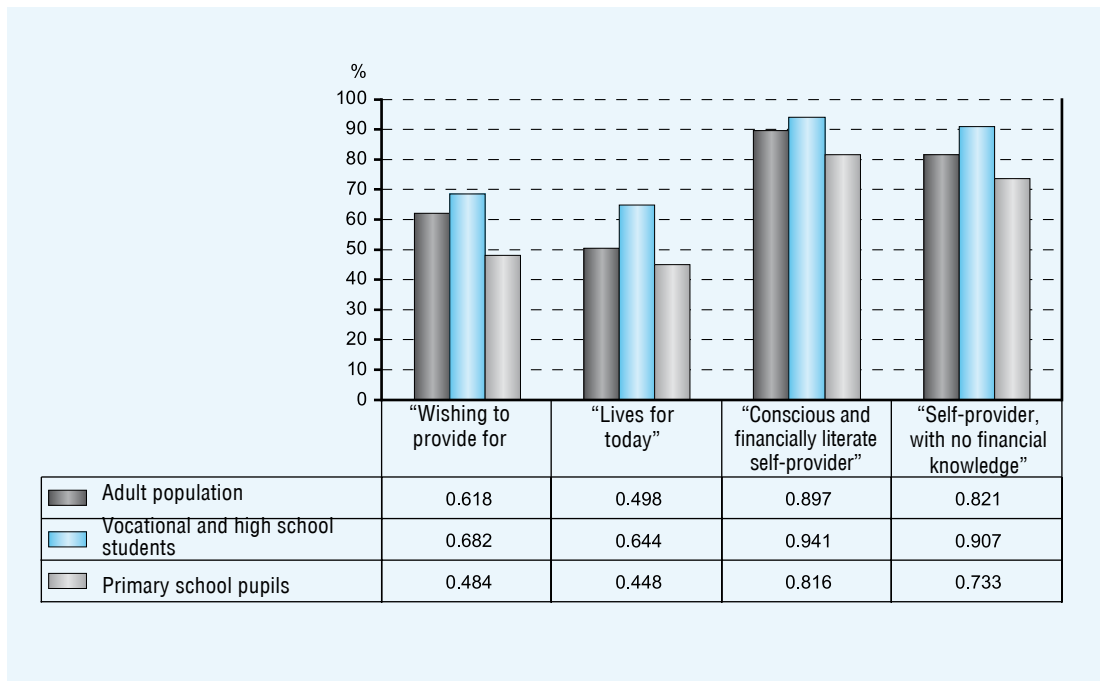"Lives for today" *(see Chart 9),* although every household considers it important

CONCLUSIONS

Access to information is one of the rights taxpayers have in welfare states, i.e. the right of tax subjects to receive up to date information about how the tax system works, and thus become familiar with it (Nemec–Wright,

2000). Economics models emphasise that decision-makers are rational and well-informed. This is exactly where we see the root of the problem. Currently, this is not accomplished in Hungary. The majority of the adult population never learned any finance and economics in the school system, and many of them have not done so since then during their adult lives. The State developing suitable systems for promoting long-term savings is in vain if the adult members of individual households are unaware of them, and even if they are, fail to recognise the benefits of these and are unable to put them to use because they consider them excessively complex and are incapable of realising their advantages with appropriate efficiency due to their lack of financial training.

During our research we concluded that the State is unable to use its various incentives to

Chart 9

THE DEGREE TO WHICH INTERVIEWED HOUSEHOLDS CONSIDER EDUCATION OF THE PRACTICAL UTILISATION OF FINANCIAL KNOWLEDGE NECESSARY (IMPORTANT AND OF PRIME IMPORTANCE) AMONG PRIMARY SCHOOL PUPILS, VOCATIONAL AND HIGH SCHOOL STUDENTS, AND THE ADULT POPULATION, BY CLUSTERS, *N* = 4106

	"Wishing to provide for	"Lives for today"	"Conscious and financially literate self-provider"	"Self-provider, with no financial knowledge"
Adult population	0.618	0.498	0.897	0.821
Vocational and high school students	0.682	0.644	0.941	0.907
Primary school pupils	0.484	0.448	0.816	0.733

Source: own research

affect the savings of households in Hungary in the same way, particularly those that serve the achievement of long-term goals. It was revealed that geographic location is not the key driver for individual households' savings behaviour, rather the type into which they can be classified based on their financial attitudes. The degree to which the State can influence them in the form of tax benefits, however, is one of the key determinants for type classification, along with the level of households' familiarity with different forms of saving. These two factors explain 40.435 per cent of households' savings-related know-how and savings habits, along with the decisions taken based on these. At the same time, it also became clear that the State is unable to uniformly affect the various household types that were determined and profiled.

We concluded that there are two main hindering factors for using State tax incentives and aid related to residential savings. These are knowledge and confidence. People must be taught, at the earliest possible age, how to handle and think about money. This can help in developing both knowledge and confidence. In our opinion − as confirmed during the research we conducted −, the practical education of financial know-how should already be introduced in primary schools, since every household is in dire need of such skills, both in their own interest and that of society as a whole.

In our fast-paced world, parents cannot be expected to take sole responsibility for whether or not they teach or are capable of teaching their children about fundamental

financial and economic concepts, especially since in many cases they did not learn these at school themselves; they also frequently have difficulty finding their own way in the world of finance, a hidden and continuously changing and developing domain. Just as we cannot let Hungarians become illiterate in information technology and foreign languages, we cannot allow this to happen in the area of finances either. During our research it was revealed that Hungarian households have articulated their need whereby they would indeed prefer for at least their children to learn such skills through the school system, although many of them also require this kind of training as adults.

The importance of the State's role became clear regarding the existence and lack of financial knowledge. At the same time, we have to realise that business and financial organisations also need to take an active role in curbing the spread of financial illiteracy. We believe that for as long as the teaching of basic economics and financial knowledge is not achieved in a standard and mandatory way in the Hungarian school system, these areas will remain an alien, incomprehensible and non-decodable world for people. The State will likewise remain unable to exert sufficient influence on a large part of households in Hungary until this happens. It will not be able to persuade them to start their various special targeted savings in good time for the sake of

their long-term targets − e.g. home-related goals and the security of retirement years −, which the State also supplements in the form of State aid and tax benefits. A large part of households, however, have no idea about even the existence of such, but even if they have accidentally heard of them, they have no idea what they mean, and they are particularly unaware and unable to comprehend what action they would need to take in the interest of taking advantage of such benefits. This results in households losing interest in the subject altogether.

We recommend introducing the education of the practical utility of finances as early as grades 7 and 8 in primary schools, as this age group is already capable of taking in such knowledge. Their being enabled to apply this know-how as a skill is becoming increasingly necessary in their later life. Subsequent studies will be able to prove whether the proportion of the "Conscious and financially literate self-provider" cluster will increase significantly among Hungarian households as the age group which starts learning fundamental financial knowledge indispensable for households' lives in primary school grade 7 grows up to adulthood. In our opinion, the role of the State also affects how the proportion of the various types changes. We would like to conduct that study, which we hope to see happen during our active lifetimes.

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