

# FINANCIAL LITERACY IN SLOVAKIA AND HUNGARY IN RELATION TO AGE

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## **Abstract**

In this paper, we shed some light on one of the most important issues today, namely financial literacy and its importance in our lives. Finance is a part of everyone's life. We perceive their importance on a daily basis in relation to current expenditures, but also in terms of the financial concepts to which people are exposed at every step. Banks attract us to various loans, we listen to information about inflation, we can read about taxes on the radio, we can read about pensions in the press, and experts constantly warn about investments, financial security and stability. Our goal was to compare the level of financial literacy between Slovakia and Hungary, furthermore we wanted to find out whether younger or elder people are more proficient in financial literacy. For our research, we collected more than 1000 questionnaires, which were evaluated by SPSS program.

**Key words:** finance, financial literacy, Slovakia, Hungary

**JEL Code:** G53; I22; P36

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## **Introduction**

In our research, we were curious to see whether neighbouring countries, in this case Hungary and Slovakia, could show significant differences in financial literacy and insurance. We also thought there could be differences in terms of age. In our opinion, those who are older have a trivially higher life experience, from which we conclude that they have encountered financial products and services several times, presumably their experience is also higher, thereby higher financial literacy. Our work is based on measuring financial literacy in parallel with life insurance.

### **1. Financial literacy**

Financial literacy develops an individual's specific skills and responsible behaviour in managing personal finances. The recent global financial crisis has revealed how terrible the

lack of financial education and skills of individuals and the low level of (risk) awareness can be. Although financial literacy did not cause the crisis, it definitely worsened the effects of the crisis on the lives of individuals, their children, and the stability of the entire national economy. The results of research on financial literacy by the Organization for Economic Co-operation and Development (OECD) show that more than 80% of European citizens have chosen to buy financial products and not use independent information or advice. More than 40% of respondents in European countries did not even collect information before selecting financial products (Insurance Europe, 2017).

Lin et al., (2017) show that people with high financial knowledge are more likely to buy life insurance. Furthermore, they find that all four components of financial literacy have significantly positive coefficients, with insurance and pension planning contributing the most. In addition, financial advisers as well as formal and informal sources of information, such as advertisements in the commercial descriptions of financial institutions and conversations with family and friends, are both positively related to the demand for life insurance.

According to some surveys, using a number of very different measures of financial literacy, it has been consistently shown that higher financial literacy is positively related to a higher probability of obtaining life insurance as well as a higher premium paid. (Wang et al., 2021).

Allgood and Walstad (2015) use the 2009 wave of the U.S. National Financial Capability Study to examine how both actual and perceived financial literacy affect a number of financial decisions. Focusing on life insurance, they find that adults with high perceived and actual financial literacy are more likely to have life insurance.

### **1.1 Financial literacy in Slovakia**

In recent years, the issue of financial literacy of young people has become increasingly important. This view is evidenced by a number of research studies aimed at exploring the factors that determine the level of financial literacy of study subjects. In 2008, the Slovak government approved a draft education strategy on financial issues and personal financial management. Based on this document, the Ministry of Education has prepared the National Financial Literacy Standard (NSFL), the current version (1.2) of which entered into force on 1 September 2017. NSFL focuses on topics such as financial responsibility, money protection, credit and debt, savings and investment, risk management and insurance, etc., (Belás et al., 2016; NBS, 2019; Gavurova et al., 2019).

## **1.2 Hungary's financial literacy**

The Hungarian Insurance Association (MABISZ) has developed a detailed educational training program with materials that provide general financial education for young people (aged 17 to 19). The insurance materials were approved and published in 2016 by the Hungarian Institute for Educational Research and Development. Insurance has been part of the national education program since 2013 (Insurance Europe, 2017; Sági et al., 2019).

One of the main challenges in conducting research on financial literacy is that it is difficult to determine how to measure financial literacy because there is no standard definition and model in the research literature. (Hung et al., 2009; Huston, 2010; Lusardi & Mitchell, 2014; Remund, 2010). Measuring financial literacy based on the theories mentioned above (Lin et al., 2017; Wang et al., 2021; Allgood and Walstad, 2015) is paralleled with life insurance, that is, if someone has life insurance, it is likely have a higher level of financial literacy. Along this parallel, our research was conducted to break down countries and age groups.

## **2. Methodology**

In the course of our work, we dealt with insurance relationships within financial literacy. We were curious as to whether or not residence, age, or the way finances are handled, affect the insurance habits of respondents.

We are primarily looking for literature that provides the theoretical background for our research. We then proceeded to collect the primary data, which meant quantitative research. During the research, the data were collected using questionnaire. The questionnaire was completed in 1479 cases in a mixed distribution of the two countries.

H1: In the case of Slovakia, we assume that its residents pay a higher attention to reducing future risk factors than in Hungary.

H2: There is no correlation between age and financial literacy.

H3: Those who seek financial advice from financial institutions are more likely to buy life insurance.

First of all, we would like to present the general characteristics of the respondents. Our work consists of cross-country research, in which we focused on finding differences according to place of residence and age group. The two countries chosen were Hungary and Slovakia. A total of 1479 people have responded to our survey, with a distribution of 811 respondents in Slovakia and 668 respondents in Hungary.

The age of the respondents is mixed. In our study, the age distribution was divided into 4 groups, the proportion of which was as follows, 771 questionnaires were received from 18-28 age groups, which was 52.13% of the total questionnaire. There are 307 responses among 29-39-year olds. Between the ages of 40 and 52, 308 fills were received. The 53-65 age group of respondents shows lower participation, which means 93 respondents, their share is only 6.29%.

### **3. Presentation of results**

In the present research, we have focused on financial literacy to secure the future financial background. We hypothesize that respondents with higher financial literacy are likely to be more concerned with risk management and more aware of the value of protection (Allgood and Walstad, 2015).

Financial literacy is, in fact, more directly related to knowledge of financial markets, risks, and insurance than general literacy. In other words, higher financial literacy can increase the demand for life insurance with the same qualifications (Wang et al., 2021).

#### **3.1 Country breakdown**

The main issue related to our research is to break down by country which respondents have life insurance. The results show, that in Slovakia, 66.6% of respondents have life insurance, while 33.4% do not. Examining Hungary, this ratio shows a different trend, as 52.8% of the respondents indicated the “no” option and 47.2% the “yes” option.

The result of the test  $\chi^2(1, N = 1479) = 56.690$   $p = 0.000$  (two tailed) supports our previous assumption that the proportion of insurance in Slovakia is higher if we are based on theory, i.e. insurance is closely related to financial literacy. Thus, our result was supported because we found a significant difference between the two countries, i.e. the Chi-square is smaller than the generally accepted  $p \leq 0.05$  in the social sciences. The value of Cramer’s V is 0.196 so we can conclude that there is a weaker than average significant relationship between the two variables.

Our scope extended to the division of insurance, where we divided life insurance into illness and accident insurance. 77.2% of respondents in Slovakia consider accident insurance to be more important and only 22.8% think that it is more important to insure illness in life insurance. Regarding Hungary, 84.4% of respondents chose the “accident” option and 15.6% chose the “illness” option.

Based on the Chi-square test,  $\chi^2 (1, N = 1479) = 12.221$   $p = 0.000$  (two tailed) proves that there is a significant difference in the composition of life insurance between the two countries, since the Chi-square is  $p \leq 0.05$ . Cramer's V value is 0.091, which means that a weak relationship was identified between the two variables and there is a significant relationship.

To our next question, What criteria would you take out your life insurance, surprisingly, Hungarian respondents answered in a higher proportion "Pay in any case if something happens to me", which means 82.8%, in the case of Slovakia this was only indicated by 76.8% of respondents. The second highest value in the case of Slovakia was given to the "Pay if you have an accident" option, which was 9.9% and 7.2% for Hungary. The "If I get sick, pay" option was chosen by 6.4% of respondents in Slovakia, while 5.1% of respondents in Hungary chose it. Surprisingly, 6.9% of those surveyed in Slovakia thought that the only thing that is important about life insurance is that it is cheap, there is a 4.9% ratio among respondents in Hungary.

The result of the Chi-square test  $\chi^2 (3, N = 1479) = 8.128$   $p = 0.043$  (two tailed) we found a significant difference between the two countries, i.e. the Chi-square  $p \leq 0.05$ . The value of Cramer's V is 0.074, so we can conclude that there is a weak significant relationship between the two variables.

For our "With whom do you solve your finances" question, the distribution is as follows. The sample showed that 74.3% of Hungarian respondents solve their finances alone, compared to 65.1% in Slovakia. With a banking / insurance dealer, 14.3% of the respondents are Slovak residents and 10.9% are Hungarian residents. Among the respondents, 20.6% chose the "With a financial professional" option for Slovakia, while 14.8% of the Hungarian respondents chose this option.

Based on the Chi-square test,  $\chi^2 (2, N = 1479) = 14.476$   $p = 0.001$  (two tailed) proves that between the two countries, there is a significant difference in who the respondents solve their finances with, since the Chi-square  $p \leq 0.05$ . Cramer's V is 0.099, which means that there is a weaker significant relationship between the two variables.

### **3.2 Age correlations**

Another major issue in the research is age distribution. It is true that 4 age groups were asked, but we only wanted to divide them into two, one who is probably at the beginning of his career and is just beginning to meet our real-life issues, this younger age group that is 18-28

years old, and the other age group is 29 -65 years old, those who are likely to have a higher life and financial experience.

To our question that “you have life insurance” in terms of age, more than half of the respondents aged 18-28, 56.2% answered that they have life insurance in a similar picture in the 29-65 age group where 59.6% of respondents indicated that you have life insurance. Of those surveyed, 18.8% of 18-28-year olds and 40.4% of 29-65-year olds said they did not have life insurance.

The result of the test  $\chi^2(1, N = 1479) = 1.795$   $p = 0.180$  (two tailed) proves that there is no significant correlation between age and life insurance policy, i.e. the Chi-square is larger than the accepted  $p \leq 0.05$ .

In the age distribution for the division of insurance, where life insurance is divided into sickness and accident insurance. 17.8% of the respondents aged 18-28 indicated that they pay the most attention to sickness insurance in life insurance, compared to 21.5% in the 29-65 age group. It can be clearly seen that the majority of the respondents in both groups indicated accident insurance, 82.2% of 18-28-year olds and 78.5% of 29-65-year olds.

The result of the test  $\chi^2(1, N = 1479) = 3.213$   $p = 0.073$  (two tailed) proves that there is no significant correlation between the composition of age and life insurance, i.e. the Chi-square is greater than  $p \leq 0.05$ .

To our next question, based on what criteria would you take out your life insurance, we got the following data by age distribution, 80.5% of 18-28-year olds answered that they would like to pay for their life insurance in all cases, for 29-65-year olds this ratio 78.4%. If an accident occurs, the response option was marked by 9.3% among 18-28-year olds, while 7.9% among 29-65-year olds. In the 18-28 age group, the lowest rate was given to the “if I get sick, pay” option, in the 29-65 age group it was 7.3%. From a price perspective, those who only care about being cheap are 5.7% of 18-28-year olds, showing the lowest response rate of 29-65-year olds at 6.4%.

The result of the test  $\chi^2(3, N = 1479) = 6.812$   $p = 0.078$  (two tailed) proves that there is no significant correlation with respect to age, i.e. the Chi-square is larger than the generally accepted  $p \leq 0.05$ .

For our “With whom do you solve your finances” question, the distribution is as follows in the age distribution. The sample showed that 71.1% of 18-28-year olds solve their finances alone, 13.1% entrust their finances to a bank / insurance dealer and 15.8% use the services of a financial specialist. In the 29-65 age group, a smaller proportion, 67.2%, solve

their finances alone, and 12.4% entrust their finances to a bank / insurance dealer, and a higher proportion, compared to the younger age group, entrust their finances to a professional.

The result of the test  $\chi^2(2, N = 1479) = 5.102$   $p = 0.078$  (two tailed) proves that there is no significant correlation between age and the way of solving finances, i.e. the Chi-square is larger than  $p \leq 0.05$ .

### 3.3 Methods of finance

We found it interesting to examine with a cross-tabulation method the "With whom do you solve your finances?" and "Do you have life insurance?" issues. Those who solve alone have almost half of their finances and do not have life insurance. The proportion of our respondents who do not solve their finances alone, i.e. with a bank / insurance dealer (75.1%) or a financial specialist (73.3%), take out life insurance at a higher rate.

**Tab. 1: Parallels between life insurance and advisers**

		Do you have life insurance?		Total
		I have	I do not have	
With whom do you solve your finances?	Count	518	506	1024
	% within With whom do you solve your finances?	50.6%	49.4%	100.0%
with a bank / insurance dealer	Count	142	47	189
	% within With whom do you solve your finances?	75.1%	24.9%	100.0%
financial specialist	Count	195	71	266
	% within With whom do you solve your finances?	73.3%	26.7%	100.0%
Total	Count	855	624	1479
	% within With whom do you solve your finances?	57.8%	42.2%	100.0%

Source: Own results

The test result  $\chi^2(2, N = 1479) = 71.358$   $p = 0.000$  (two tailed) supports our hypothesis that those who do not solve their finances alone are more likely to take out life

insurance and are more likely to have higher financial literacy. Our result is significant because the Chi-square is  $p \leq 0.05$ . The value of Cramer's V is 0.220, so we can conclude that there is a weaker than average significant relationship between the two variables.

**Tab. 2: Chi-square test**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	71.358 <sup>a</sup>	2	0.000
Likelihood Ratio	74.016	2	0.000
Linear-by-Linear Association	60.309	1	0.000
N of Valid Cases	1479		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 79.74.

Source: Own results

## 4. Conclusion

In our research, built on the literature, we assume that people with life insurance may have higher financial literacy. In our questionnaire research, we considered a number of factors that were analysed using the Chi-square test. In the course of the analyses, the hypothesis tests we set up gained certainty.

In our first hypothesis, we were interested in the fact that the residents of Slovakia pay much higher attention to the reduction of future risk factors than the residents of Hungary. Based on the information and results available to us, we concluded that there is some relationship between the two factors, however, their number and quantity are not sufficient to present relevant results. We suggest investigating the research of our hypothesis in the future, possibly after a more detailed segmentation, and in our opinion, we can use sufficient information from the obtained data to answer our hypothesis.

In our next hypothesis, we sought to answer the assumption that there is no relevant correlation between the age of the respondents and the financial literacy of the given person. From the answers obtained in our research, we performed a Chi-square test, based on which we can state that our hypothesis was confirmed, i.e. we did not really find a correlation between the age and the financial literacy of the respondents.

In our third hypothesis, we were interested in the fact that one of the respondents who seek financial advice from financial institutions are more likely to buy life insurance. Based on the answers of the respondents and the results of the Chi-square, it was revealed to us that

there is a significant relationship between the factors set up in our hypothesis, so our hypothesis was confirmed. This means that people who seek the advice of a third party during their lifetime are more likely to buy life insurance.

We would definitely like to deepen further research on the topic, possibly by breaking it down into more detailed segments and researching within it.

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