

ARTICLE

Financial literacy and financial wellbeing: Evidence from Eastern Europe in a high inflation environment

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Abstract

We analyze financial literacy regarding interest rates, inflation, and risk diversification in nine Eastern European countries based on survey data collected in the fall 2022. The percentage of individuals with an understanding of all three concepts is generally low but varies strongly among countries, from 13 percent in Romania to 47 percent in the Czech Republic. Financial illiteracy is particularly acute among those with primary or lower secondary education. Among the three concepts, inflation is what people know best in eight out of nine countries – a pattern which has emerged recently and is in contrast to other countries, where interest rate literacy is highest. Differences in lifetime inflation experience, in particular experience of high or hyperinflation, affect inflation literacy. Higher financial literacy is associated with a higher propensity to save and a lower propensity to be financially vulnerable in six out of nine countries.

Keywords: financial literacy; big three; inflation; Eastern Europe

JEL Codes: G53; D14; D83; E31

I. Introduction

This paper analyzes financial literacy in nine Central, Eastern, and Southeastern European countries: Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, North Macedonia, Poland, Romania, and Serbia.¹ It contributes to the so-called *Financial Literacy around the World* (*FLat World*)² project, which collects and compares data on financial literacy questions assessing knowledge of *interest rates*, *inflation*, and *risk diversification* across countries (Lusardi and Mitchell, 2011b, 2014). In the literature, these questions have come to be known as the "Big Three" (see Hastings et al., 2013).

By fall 2022, due to food and energy price increases every fifth adult living in the nine Eastern European countries struggled to make ends meet (OeNB Euro Survey, 2022). Governments and central banks implemented and are implementing policy measures to alleviate the effect of inflation on (vulnerable) households.

The pressure on households to make informed financial decisions and adjust to the high inflation environment not only in terms of day-to-day expenditures but also in terms of

¹ For simplicity, we will refer to these countries as "Eastern European" countries.

² https://gflec.org/initiatives/flat-world/.

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investment and borrowing decisions has, nevertheless, increased. Already prior to the relatively recent hikes in inflation rates, more responsibility has been shifted to households with regard to their financial decisions and financial literacy has become more and more important (Lusardi and Mitchell, 2014; OECD, 2006). In the context of recent inflation hikes, taking stock of financial literacy and identifying who lacks financial literacy in particular with regard to inflation can serve as a first step in supporting those who are particularly vulnerable. While households previously were faced with navigating increasingly complex financial services, high inflation has added the challenge of prioritizing spending and understanding central bank interest rates and their impact on households' assets and liabilities. Borrowers who are struggling with higher food and energy prices may in addition face higher interest rates and have to take informed decisions regarding adjustable rate loans. Savers may for the first time be faced with thinking in terms of real returns, understanding to what extent banks pass on interest rate hikes and how inflation affects different investments.

We present evidence for the nine Eastern European countries on the level of financial literacy regarding interest rates, inflation, and risk diversification. We analyze heterogeneities in financial literacy within countries across socio-demographic characteristics. Focusing on inflation literacy, we investigate whether understanding of inflation is related to socio-demographic characteristics and analyze who lacks understanding of inflation and is therefore particularly vulnerable to recent inflation hikes.

The nine countries we analyze share a rather short experience of financial markets and financial decision-making of less than 35 years. All countries went from planned to market economies in the early 1990s. As planned economies they maintained controlled price systems. During and after transition, the countries experienced macroeconomic crises including high and volatile inflation or even hyperinflation. Since then, countries have successfully pursued policies of macroeconomic stabilization; however, in 2022, all countries experienced double-digit inflation rates – the highest in a decade. We investigate to what extent differences in lifetime experience of inflation and the common experience of recent inflation affect inflation literacy. Finally, we analyze whether financial literacy matters for savings and also for financial vulnerability.

Our work contributes to the literature in several respects. Previous research on financial literacy comparing financial literacy across countries frequently had to rely on data that were not harmonized ex ante. In our work, we provide evidence from a unique and ex ante harmonized dataset for nine countries. While the data we rely on are not designed as a survey on financial literacy, they have the advantage that they provide timely evidence in the context of recent inflation hikes. Our analysis is based on the most recent wave of the OeNB Euro Survey, which was conducted in fall 2022 – at a time when inflation rates had already increased substantially in the countries covered by the survey. Drawing on differences in inflation histories of the countries we cover, we further add to the literature that studies how lifetime experience affects beliefs and behavior.

We show that financial literacy varies substantially across the nine countries covered by the survey. In eight out of nine countries, knowledge of inflation is highest, i.e., it is what people know the most among the three concepts. This is a recent development and is unusual when compared to other countries, where interest rate literacy is higher than inflation literacy. We find that in all countries, individuals with primary and lower secondary education are least literate. Looking at the unique Eastern European history regarding inflation, we show that lifetime inflation experience and memories of hyperinflation are associated with higher inflation literacy.

We find that higher financial literacy is associated with a higher propensity to save and a lower propensity to be financially vulnerable in six out of nine countries. These results are robust to adding different controls, in particular interviewer age, gender, and

experience, but are likely still affected by endogeneity issues, i.e., taking into account that financial literacy could be a decision variable itself.

The rest of this paper is organized as follows: Section 2 provides background information on the countries we analyze. Section 3 describes the data; Section 3.1 presents details on the Big Three financial literacy questions and provides descriptive statistics at the country level. Section 3.2 describes how financial literacy varies within countries across socio-demographics. Section 4 zooms in on inflation literacy and analyzes who is particularly vulnerable lacking knowledge of inflation, while Section 5 provides evidence how the lifetime experience of inflation affects inflation literacy. Finally, Section 6 investigates whether financial literacy is associated with behavior and Section 7 concludes.

2. Background

The Eastern European countries we study have a rather short history of developed financial markets compared to other countries with similar levels of GDP per capita. All of the nine countries went through transition from planned to market economies in the early 1990s. At the same time, some went also through wars and crises; for example, the constituent republics of the Socialist Federal Republic (SFR) of Yugoslavia split apart and ethnic conflicts, wars of independence, and insurgencies took place in the former SFR of Yugoslavia from 1991 to 2001.

Apart from the common experience of transition, the countries we analyze differ significantly both in terms of factors which have been shown to be correlated with financial literacy and in terms of issues where improving financial literacy can be one means of addressing concerns. See Table A1.7 for an overview of selected indicators.

In 2022, GDP per capita ranged from 6592 current USD in North Macedonia, which is comparable to the income of Peru, to 27638 current USD in the Czech Republic, which is comparable to other EU member states. In 2022, the demographically youngest country in the sample of countries we cover was North Macedonia with an age dependency ratio of 45 percent, which is at the same level as China. Croatia, Bulgaria, and the Czech Republic are the demographically oldest countries, with the age dependency ratio at 57 percent – one percentage point above Germany. While financial inclusion (measured as the percent of adults who have an account at a financial institution) increased in all countries since 2017, it still varies significantly: In Romania, almost every third adult does not have access to an account; in the Czech Republic, only 5 percent do not have access to an account. The differences are even larger when looking at savings at a financial institution: In North Macedonia, just 15 percent have savings at a financial institution compared to 60 percent in the Czech Republic.

As part of the transition from planned to market economies, several countries experienced economic turmoil and also hyperinflation. The nature of macroeconomic crises differed across countries. Appendix, Table A1.7 provides an overview of whether and in which year countries went through banking, currency, or sovereign debt crises. Laeven and Valencia (2020) show that banking crises occurred in all countries except North Macedonia and Serbia, with the earliest banking crisis happening in Hungary in 1991 and the last banking crisis happening again in Hungary in 2008. Serbia did not experience a banking crisis but experienced a currency crisis in 2000. North Macedonia, as other countries of the former SFR of Yugoslavia, suffered from hyperinflation in 1992/1993. Bulgaria, Poland, and Romania also experienced hyperinflation. Table A1.8 in the Appendix shows the inflation rates since transition from planned to market economies in these countries.

In 2022, all of the countries we analyzed experienced the highest inflation rates in a decade. The monetary policy framework for four of the countries is an exchange rate anchor vis-à-vis the euro: Bosnia and Herzegovina and Bulgaria operate a currency

board. Croatia was part of the ERM II in 2022, adopting the euro on January 1, 2023. North Macedonia has been targeting the denar exchange rate against the German mark since 1995 and from 2002 onwards against the euro. The Czech Republic, Hungary, Poland, Romania, and Serbia conduct their monetary policy within and inflation-targeting framework. All of these countries started increasing their policy rates since mid-2021 or late 2021. In addition, most countries introduced aid packages to shield households from spiraling prices, in particular energy prices.

Regarding financial literacy, Croatia, the Czech Republic, Hungary, Poland, and Romania have been implementing national strategies for financial education (OECD, 2022). North Macedonia adopted its first strategy for financial inclusion and financial education for the time period 2021–2025. The Ministry of Finance in Bulgaria has a National Strategy and Action plan for the same time period. In Bosnia and Herzegovina and Serbia, the national central banks are implementing strategies for financial education.³

3. Data overview and summary statistics

The data source for our analysis is the *OeNB Euro Survey* – a survey carried out by Austria's central bank among individuals, aged 18 or older, in ten Central, Eastern, and Southeastern European countries: six EU Member States (Bulgaria, Croatia, Czech Republic, Hungary, Poland, and Romania) and four EU candidates (Albania, Bosnia and Herzegovina, North Macedonia, and Serbia). The OeNB Euro Survey has been conducted on a regular basis since 2007 as a repeated cross-sectional survey. The interviews are conducted faceto-face. The survey design seeks to maximize comparability across countries.

The fieldwork is conducted simultaneously in all countries. Our analysis draws on the most recent survey wave conducted between 28 September, 2022 and 10 November, 2022. In each country, a sample (based on multistage random route sampling procedures) of around 1000 individuals is interviewed. Each sample reflects a country's population characteristics in terms of age, gender, region, and ethnicity. Weights are calibrated on census population statistics for age, gender, and region, and, where available, on education and ethnicity. Weights are calibrated separately for each wave and country.⁵ Table A1.1 shows descriptive statistics by country for all variables used in this analysis. Table A1.3 compares population statistics for age and gender with unweighted sample statistics. To allow the reader to assess to what extent the OeNB Euro Survey represents the nine countries' population apart from age and gender, Table A1.4 shows official statistics and weighted OeNB Euro Survey results for unemployment, education, and home ownership. It indicates a high correlation of survey results with official statistics.

The survey uses a common questionnaire for all countries, which consists of core questions on euroization, trust, expectations, and related financial decisions that are repeated in each wave; there are also special survey modules. These modules address issues of central bank policy relevance in analyzing and monitoring the financial situation of individuals and households. The questionnaire further elicits socio-economic characteristics as well as basic indicators of wealth, in addition to the Big Three questions. Survey questionnaires can be downloaded from the OeNB Euro Survey website.⁶

 $^{^3}$ This paper does not aim to assess the success of various policy measures that have been carried out in Eastern European countries to address – and perhaps already successfully narrow – the financial literacy gaps we describe.

⁴ Due to ongoing data quality checks, we exclude Albania from the present analysis.

⁵ For five countries, population statistics relate to the year 2011; more recent census data are available only for Bulgaria, the Czech Republic, North Macedonia, and Romania. For those countries where official enumerations were conducted in 2011, the latest available "updated" version of census data is used, i.e., data do not refer to the 2011 population but the latest official population statistics.

⁶ See https://www.oenb.at/en/Monetary-Policy/Surveys/OeNB-Euro-Survey/data-sharing.html.

Table A1.2 provides the survey questions and the coding for all variables used in this analysis.

The following issues should be taken into account when interpreting the results: Non-response varies across countries and across survey waves. The gross sample size in fall 2022 ranges from 1359 in North Macedonia to 3416 in Poland. The number of interrupted interviews is zero in some countries and up to 231 in other countries. We do not have sufficient information on the number of individuals who refused to participate in the survey to construct non-response weights.

Further, we do not impute missing values for item non-response. The share of "no answer" responses is below 3 percent in all countries for the questions on financial literacy. In our regression analyses, we set "do not know" and "no answer" responses to missing (see also Table A1.2 for variable definitions). There are two exceptions: The first exception is the income question for which a substantial share of respondents refuses to answer. For income, we introduce an indicator variable for observations with missing income information. In robustness analyses, we employ information provided by the interviewer on the income situation of the household. The second exception are the questions on financial literacy: Here we include "do not know" responses as meaningful answers and do not set the responses to missing.

3.1. Findings regarding financial literacy

Since 2012, the OeNB Euro Survey collects answers to the three standard financial literacy questions on *interest rates*, *inflation*, and *risk diversification* (Lusardi and Mitchell, 2011b), which have come to be known as the Big Three questions in the literature. The wording for the financial literacy questions in the OeNB Euro Survey is as follows:

Interest rate. Suppose you had 100 [local currency] in a savings account and the interest rate was 2 percent per year. Disregarding any bank fees, how much do you think you would have in the account after 5 years if you left the money to grow: more than 102, exactly 102, less than 102 local currency? (i) More than 102 local currency (correct answer) (ii) Exactly 102 local currency (iii) Less than 102 local currency (iv) Do not know (v) No answer.

Inflation. Suppose that the interest rate on your savings account was 4 percent per year and inflation was 5 percent per year. Again disregarding any bank fees – after 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account? (i) More (ii) Exactly the same (iii) Less (correct answer) (iv) Do not know (v) No answer.

Risk diversification. When an investor spreads his money among different assets, does the risk of losing money (i) Increase (ii) Decrease (*correct answer*) (iii) Stay the same (iv) Do not know (v) No answer.

The OeNB Euro Survey included the original question on risk diversification as proposed by Lusardi and Mitchell (2011b) only in 2011.⁷ In all subsequent survey waves, the OeNB Euro Survey has been using a different question, following the same approach as the S&P Global Finlit Survey (Klapper and Lusardi, 2020).⁸ The reason for changing the wording of the risk diversification question was that the concept of "mutual funds," used in the original

⁷ The wording of the original risk diversification question is: Do you think that the following statement is true or false? "Buying a single company stock usually provides a safer return than a stock mutual fund." True; False; I do not know; I refuse to answer.

⁸ https://gflec.org/initiatives/sp-global-finlit-survey.

question, was not well understood in some of the countries, which resulted in unusually high shares of "do not know" responses (see, e.g., Beckmann, 2013, who finds the share of "do not know" responses on the original risk diversification question in Romania in 2011 to be above 60 percent).

Based on the three questions, we define three binary variables, where the correct answer is coded as 1, wrong answers and "do not know" responses are coded as 0, and "no answer" responses are coded as "missing." The three binary variables are then aggregated to a financial literacy score, defined as the number of correct answers. Thus, we have the following measures of financial literacy: (i) three separate binary variables for each of the three financial literacy questions – *interest correct, inflation correct, and risk correct*, (ii) a financial literacy score taking on integer values between 0 and 3 – *total number correct*, and (iii) a binary variable which is coded as 1 if all three questions are answered correctly and 0 otherwise – *all three correct*.

Tables 1a and 2b present results for the adult population aged 18 and older and the population aged 25–65. We present both results by country and a population-weighted average across countries (see column *Total*).¹⁰

On average, 56.8 percent are financially literate regarding interest rates. The level varies between 45 percent in Romania and 71 percent in Serbia. Inflation literacy is much higher on average at 71.8 percent. However, again, there are substantial differences between countries with just 52 percent of inflation literate adults in Bosnia and Herzegovina and North Macedonia and 80 percent in Bulgaria. Knowledge about risk diversification is lowest at 46.3 percent on average and varies from 29 percent in Romania to 67 percent in the Czech Republic.

The finding that inflation literacy is higher than interest rate literacy is in contrast to previous research employing the comparative approach of the *FLat World* project (see, for example, results presented by Lusardi and Mitchell, 2014). Interestingly, this pattern has emerged over time – in 2012, OeNB Euro Survey results show that interest rate literacy is higher than inflation literacy in seven countries (Beckmann and Reiter, 2020). By 2019, this was still the case in five countries; by 2021, it was the case in three countries only. By 2022, North Macedonia is the only country, where interest rate literacy is higher than inflation literacy.¹¹

The Czech Republic is a noteworthy exception when comparing risk literacy and interest rate literacy. Risk literacy is slightly higher than interest rate literacy. This has been the case in the Czech Republic since 2021 and is in line with findings for major advanced economies (see Figure 2, Klapper and Lusardi, 2020).

The propensity to answer "do not know" varies considerably across countries. On average, every fifth adult responds they "do not know" the answer to at least one of the three questions. In Croatia, less than 3 percent of individuals state they "do not know" the answer to at least one question. In Bulgaria, almost every third individual states they

⁹ We choose to code "no answer" as missing for two reasons. Firstly, the percentage of respondents who respond "no answer" all questions for financial literacy is very low at less than 1 percent and less than 3 percent for the individual questions. Secondly, respondent characteristics differ significantly between those who respond "no answer" and those who "do not know" the answer to the financial literacy questions. While education is not significantly correlated with refusals, it is strongly and significantly correlated with "do not know" responses.

¹⁰ Note that weighting by the size of the adult populations in the nine countries allows us to interpret results as "average Eastern European" rather than a non-existent adult who is 1/9 North Macedonian, 1/9 Bulgarian, 1/9 Polish, etc. Given the respective country sizes, the weighted average is driven by Poland.

¹¹ The OeNB Euro Survey is the only repeated cross-sectional survey that includes the Big Three questions at an annual frequency. Therefore, it is difficult to investigate whether the increase in inflation literacy compared to interest rate literacy is a unique Eastern European phenomenon or a broader phenomenon. The OECD INFE surveys for 2016 and 2020 show, however, that in countries that participated in both waves, understanding the definition of inflation has improved over time (OECD, 2016, 2020).

Table Ia. Summary statistics on three financial literacy questions, full sample

•	•	•	•							
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Tota
(A) Interest question										
More than 102*	45.9	53.9	64. I	64.8	53.7	53.2	59.6	45.2	71.3	56.8
Exactly 102	22.5	15.9	21.1	19.7	28.5	22.7	14.5	21.2	14.9	18.5
Less than 102	19.0	18.6	12.0	8.6	12.2	13.5	11.9	26.9	7.3	14.9
Do not know (DK)	9.8	11.1	0.6	6.2	5.4	10.4	13.1	6.4	6.0	9.1
Answer refused	2.8	0.5	2.3	0.7	0.2	0.2	0.9	0.3	0.6	0.8
N	1000	1009	1021	1000	1000	1014	1010	1029	1020	910
(B) Inflation question										
More	6.4	2.5	11.2	6.5	5.9	10.2	4.1	5.8	8.5	5.6
Exactly the same	26.2	6.9	17.9	9.1	16.8	28.2	9.4	18.3	13.6	13.2
Less*	52.0	80.4	69.1	74.9	71.1	51.9	73.9	69.6	72.6	71.8
Do not know (DK)	12.9	9.8	0.6	8.6	5.9	9.5	12.3	5.9	4.7	8.9
Answer refused	2.4	0.4	1.3	0.9	0.3	0.2	0.3	0.4	0.6	0.5
N	1000	1009	1021	1000	1000	1014	1010	1029	1020	910
(C) Risk question										
Increase	17.3	26.5	33.5	9.2	20.8	27.8	14.6	33.6	31.6	21.3
Decrease*	38.4	33.7	42.0	67.0	48.0	43.6	53.1	29.3	42.0	46.3
Stay the same	28.1	16.1	22.4	17.7	22.7	19.1	17.7	26.3	17.1	20.
Do not know (DK)	13.1	22.6	1.5	5.5	8.1	9.2	14.3	10.5	8.6	11.6
Answer refused	3.1	1.2	0.6	0.6	0.4	0.3	0.3	0.4	0.7	0.0
N	1000	1009	1021	1000	1000	1014	1010	1029	1020	910

Table Ia. (Continued)

	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
(D) Cross-question cor	nsistency									
Interest and inflation	29.0	46.7	49.3	55.3	43.3	31.2	51.7	33.4	58.2	46.5
All correct	14.4	19.9	23.9	46.8	22.6	17.7	35.3	12.8	28.2	27.9
None correct	20.4	9.1	10.5	9.0	10.8	14.6	12.7	13.7	8.6	12.0
At least I DK	21.4	31.3	2.5	11.5	12.4	18.1	25.7	15.4	13.2	19.3
All DK	4.2	3.3	0.0	2.3	2.2	3.4	4.3	2.0	1.2	3.0
N	941	992	992	985	994	1008	994	1023	1009	8938

Notes: Country-specific distributions of responses to financial literacy questions in full sample. In part (D), only those respondents who gave an answer to all three questions are considered. Statistics are based on weighted data from the fall 2022 wave of the OeNB Euro Survey. Correct answers are marked with an asterisk.

"do not know" the answer to at least one question. While Bulgaria stands out with this high percentage of "do not know" answers, the percentage of all questions answered as "do not know" is comparable to other countries at 3 percent.

Compared to previous research that used the original question on risk diversification, which referred to "mutual funds", the percentage of "do not know" responses is surprisingly low. Still, of the three questions concerned, the share of "do not know" responses is highest at 11.6 percent on average for the question on risk diversification. As the OeNB Euro Survey did include the original question referring to stock mutual funds in 2011 (see also Beckmann, 2013), we can compare "do not know" responses for the two risk diversification questions. For the original question, the percentage of "do not know" responses is on average 50 percent. Therefore, the lower percentage of "do not know" responses to the question on risk diversification in the 2022 wave of the OeNB Euro Survey is likely related to the wording of the question. We should note, however, that the percentage of "do not know" answers is also low for the other two questions and this may be related to the way the data are collected: The OECD Toolkit for Measuring Financial Literacy (OECD, 2018) recommends that financial literacy surveys to be conducted face-to-face. Partly due to lower costs, surveys in general are increasingly conducted as selfadministered surveys. Previous research has shown that respondent effort, item nonresponse, and "do not know" responses are significantly higher in self-administered surveys than in interviewer-administered surveys (Al Baghal and Lynn, 2015; Heerwegh and Loosveldt, 2008).

Answers to the three literacy questions are correlated, albeit not very strongly. As pointed out by previous research, this suggests that the questions measure different concepts (Lusardi and Mitchell, 2011a). On average, 46.5 percent are literate regarding interest rates and inflation. Again, there are large differences between countries ranging from 30 percent (Bosnia and Herzegovina) to 58 percent (Serbia). On average, less than every third individual (27.9%) in Eastern Europe answers all questions correctly. The percentage differs strongly between countries ranging from 12.8 percent in Romania to 46.8 percent in the Czech Republic.

Table 1b shows statistics for the population aged 25–65. The differences between the overall adult population and the population aged 25–65 are very small. On average, financial literacy is slightly higher among the population aged 25–65 with 29.1 percent answering all three questions correctly compared to 27.9 percent for the total adult population. The finding that the level of financial literacy is higher among the population aged 25–65 than among the overall adult population does not hold in North Macedonia and Bosnia and Herzegovina. In North Macedonia, inflation literacy is lower among 25–65-year-olds than among all adults aged 18 years and older. The same is true for Bosnia and Herzegovina. The percentage of individuals who answer at least one question as "do not know" is consistently higher in the population aged 18 years and older than in the population aged between 25 and 65.

Klapper and Lusardi (2020) show that financial literacy across the world is positively correlated with GDP per capita. Appendix, Figure A1 confirms this finding. We further confirm that the "country ranking" in the level of financial literacy is broadly in line with findings from other surveys. The OeNB Euro Survey is the only survey which is conducted annually and where both the questions and survey methodology are comparable across countries and years. However, there are a few other surveys measuring financial literacy in the countries covered in this paper. For example, the OECD INFE surveys of financial knowledge, financial behavior, and financial attitudes have been conducted in Croatia, the Czech Republic, Hungary, and Poland (Atkinson and Messy, 2012; OECD, 2016). In addition, surveys of financial literacy were conducted in Bulgaria, Croatia, North Macedonia, and Romania (OECD, 2020). Furthermore, surveys by the World Bank have been conducted in Bosnia and Herzegovina and Bulgaria. The Standard and Poor's Global Financial Literacy

Table 1b. Summary statistics on three financial literacy questions, age 25-65

•	,	•	•							
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Tota
(A) Interest question										
More than 102*	46.2	55.2	65.I	68.0	55.2	56.8	61.6	47.7	73.2	58.7
Exactly 102	23.1	17.8	21.0	20.1	29.6	22.8	13.8	20.0	13.0	18.2
Less than 102	19.6	18.9	11.7	8.5	11.0	12.2	10.3	26.6	7.5	14.2
Do not know (DK)	8.0	7.7	0.5	2.9	3.9	8.1	13.4	5.3	5.6	8.1
Answer refused	3.1	0.5	1.8	0.6	0.3	0.1	0.9	0.3	0.6	0.7
N	704	775	791	697	730	734	695	742	782	6650
(B) Inflation question										
More	6.2	2.8	11.2	7.3	6.3	10.2	4.7	6.0	8.0	5.9
Exactly the same	25.8	7.6	18.3	9.3	14.7	31.3	8.4	18.8	14.3	13.0
Less*	53.3	81.9	69.0	76.2	74.0	50.3	73.9	69.9	73.0	72.4
Do not know (DK)	12.0	7.4	0.5	6.3	4.5	8.1	12.6	4.7	4.0	8.1
Answer refused	2.6	0.4	0.9	0.9	0.5	0.1	0.4	0.6	0.7	0.6
N	704	775	791	697	730	734	695	742	782	6650
(C) Risk question										
Increase	16.7	26.1	33.3	9.2	21.7	27.2	15.3	34.2	32.5	21.9
Decrease*	38.1	36.0	43.6	71.8	48.6	46.8	53.8	30.0	42.9	47.4
Stay the same	29.3	17.5	21.1	14.9	22.3	18.2	17.2	26.4	15.9	19.8
Do not know (DK)	12.7	19.3	1.4	3.5	6.9	7.5	13.2	9.0	7.9	10.2
Answer refused	3.3	1.1	0.6	0.6	0.5	0.4	0.4	0.4	0.8	0.0
N	704	775	791	697	730	734	695	742	782	665

(Continued)

Table 1b. (Continued)

	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
(D) Cross-question co	nsistency									
Interest and inflation	30.0	47.4	49.4	57.5	46.0	33.1	53.3	35.5	60.1	48.2
All correct	15.3	21.7	25.2	50.0	22.7	19.7	36.3	14.1	30.1	29.1
None correct	19.5	7.2	10.0	6.4	9.3	13.9	12.4	13.4	8.1	11.2
At least I DK	19.7	26.2	2.0	7.6	10.1	15.1	25.1	13.2	12.2	17.4
All DK	3.7	1.5	0.0	1.0	1.8	2.9	4.1	1.6	1.2	2.5
N	657	762	772	688	725	729	683	737	773	6526

Notes: Country-specific distributions of responses to financial literacy questions for those 25–65. In part (D), only those respondents who gave an answer to all three questions are considered. Statistics are based on weighted data from the fall 2022 wave of the OeNB Euro Survey. Correct answers are marked with an asterisk.

Survey of 2014 covers all the countries we analyze (Klapper et al., 2015). It is interesting to note that the Czech Republic continues to show the highest levels of financial knowledge within Eastern Europe, while Serbia previously showed lower levels compared to other countries but has caught up significantly according to our results (see also Table A1.6). Furthermore, according to The Standard and Poor's Global Financial Literacy Survey, 58 percent of people in the Czech Republic are financially literate, while the proportion is much lower in other Eastern European countries (it is only 22 percent in Romania) (Klapper and Lusardi, 2020). These findings are also consistent with other surveys. For example, students in the Czech Republic scored above the OECD average in the 2012 PISA OECD data, measuring financial literacy among 15 year old and above other Eastern European countries.¹²

3.2. Who is financially literate?

Previous research on financial literacy has shown that it differs not only across countries but also within countries across socio-demographic characteristics. Lusardi and Mitchell (2011b) summarize the findings as follows: (1) Regarding age, financial literacy follows an inverted U-shape, meaning that younger and older age groups perform worse than the middle age groups. (2) Men display higher financial literacy than women. (3) Higher educated people are more financially literate than lower educated people. (4) Working people perform better than nonworking people.

Table 2a presents how inflation literacy varies across socio-demographics for the nine Eastern European countries in 2022. Appendix Tables A2.1–A2.9 show results for all financial literacy aspects by socio-demographic characteristics by country.

Age. On average across countries (see *Total*, Table 2a), inflation literacy follows an inverted U-shape pattern. However, in contrast to previous research, we do not find a clear inverted U-shape pattern for age in all countries. For example, regarding inflation literacy, in five countries those who are 36–50 years old know the most. However, in Hungary and the Czech Republic, the youngest age group (35 years old and younger) knows the most. Looking beyond inflation literacy at all aspects of financial literacy also does not always show a U-shape for all countries (see Tables A2.1–A2.9).

Gender. The gender gap in financial literacy has been subject of several in-depth analyses (see, e.g., Bucher-Koenen et al., 2021; Bucher-Koenen et al., 2017; Bottazzi and Lusardi, 2021; Driva et al., 2016; Fonseca et al., 2012; Rink et al., 2021). The gender gap in financial literacy varies across countries; however, Cupák et al. (2018) find it is consistently smaller in countries which previously had communist regimes than in countries which did not. This finding is in line with research studying the communist legacy on gender equality (Lippmann and Senik, 2018; Lippmann et al., 2020). In a previous *FLat World* analysis, Klapper and Panos (2011) show that in Russia there are only small differences in the percent of correct responses but that there is a gender gap in the percent of "do not know" responses. Beckmann and Kiesl-Reiter (2023) use cohort-based analyses and show that the lower gender gap in financial literacy in Eastern Europe cannot be explained by the communist legacy.

When looking at inflation literacy, we do find evidence of a gender gap of 4 percentage points on average (*Total*, Table 2a). However, gender differences vary a lot in our sample of countries. For inflation literacy, Bosnia and Herzegovina, Croatia, and North Macedonia display no or a reverse gender gap, i.e., women are more financially literate than men. Poland has the largest gender gap in inflation literacy followed by Serbia and the Czech Republic (see Table 2a).

¹² https://www.oecd.org/pisa/keyfindings/PISA-2012-results-volume-vi.pdf

Table 2a. Inflation literacy: Differences across socio-demographic groups (%)

	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Age										
35 and younger	51.6	81.1	67.4	78.4	74.0	47.5	73.0	70.9	73.8	71.9
36–50	56.8	82.5	73.6	75.2	73.2	54.3	76.8	67.2	74. I	73.7
51–65	55.7	81.2	66.1	76.7	71.8	50.7	74.4	73.1	73.I	73. I
Older than 65	48.6	77.8	72.4	73.4	65.2	57.0	72.2	67.3	72.I	70.2
Sex										
Male	53.4	82.1	68.7	77.8	68.8	52.0	78.9	71.3	75.9	74.5
Female	53.5	79.7	70.0	74.1	73.6	51.9	70.2	68.8	71.1	70.4
Education										
Primary and lower secondary	50.9	61.9	65.7	55.5	52.1	47.8	62.0	64.3	70.6	61.8
Upper secondary	55.6	80.2	69.6	76.4	71.8	51.9	72.9	70.7	74.9	72. I
Tertiary	47.0	87.6	70.2	83.8	81.2	56.0	87.9	69.7	76.6	81.3
Employment status										
Retired	54.5	78. I	65.8	73.1	69.4	58.0	70.7	70.4	70.4	70.3
Not employed	51.1	73.8	63.4	70.7	69.0	48.0	66.3	71.3	75.I	66.9
Working	53.2	83.6	72.2	76.1	72.7	51.6	77.3	70.4	73.5	74.1
Self-employed	64.3	81.5	71.5	87.1	74.5	43.9	82.6	61.9	84.3	77.8

Notes: The table shows statistics of correct answers to the inflation question for different socio-demographic groups. Upper secondary includes post-secondary non-tertiary education, and tertiary includes first stage and second stage of tertiary education. Statistics are based on weighted data from the fall 2022 wave of the OeNB Euro Survey. The sample consists of those respondents who gave an answer to all three financial literacy questions and for whom information on socio-demographic characteristics is available (for details, see the Appendix).

Looking at all aspects of financial literacy (see Tables A2.1–A2.9), Bosnia and Herzegovina displays a gender gap, whereas women in Croatia and North Macedonia are more financially literate than men. For the remaining countries, the gender gap increases with the overall level of financial literacy: It is highest in Poland at almost 9 percentage points, followed by Hungary, the Czech Republic, and Serbia.

Education. To analyze how financial literacy is correlated with education, we do not use the categories originally used in the *FLat World* comparative analysis as the categories "primary," "post-secondary non-tertiary," and "second stage tertiary education" are too small in our sample of 1000 respondents per country (see also Table A1.5). Instead, we pool (i) "primary" and "lower secondary," (ii) "upper secondary" and "post-secondary non-tertiary," and (iii) "first stage of tertiary" and "second stage of tertiary" education. Table A1.4 shows that the level of education in the OeNB Euro Survey for these pooled categories is very similar to official statistics.

For education, the Total in Table 2a confirms previous research, see, e.g., Christelis et al. (2010). Inflation literacy is lowest for individuals with primary or lower secondary education and highest for those with tertiary education. However, some countries diverge from this pattern. North Macedonia is an interesting case regarding the differences in inflation literacy and education. Firstly, it is the only country in our analysis where inflation literacy is lower than interest rate literacy. Secondly, the gradient for inflation literacy from primary to second-stage tertiary education is relatively small. In North Macedonia, this gradient is much higher for other aspects of financial literacy: The gap in overall financial literacy in North Macedonia between primary and second stage tertiary education is 17 percentage points, and it is 13 percentage points for the pooled categories we employ to facilitate comparison across all countries in our analysis (see Table A2.6). One reason for the relatively small education gap for inflation literacy in North Macedonia could be that already in 2020, price hikes in electricity led to protests and in August 2022 an energy crisis was declared. Energy prices for households increased by almost 10 percent in 2022 and social protests continued throughout 2022, likely increasing awareness of inflation throughout the population.

Results for Bosnia and Herzegovina are surprising at first sight as inflation literacy is highest for those with upper secondary education. However, previous waves of the OeNB Euro Survey in Bosnia and Herzegovina do not reveal this pattern but instead show financial literacy increases with education. In 2021, the percentage of inflation literate individuals in Bosnia and Herzegovina was 49 percent among individuals with primary or lower secondary education and 52 percent among individuals with tertiary education. The percentage of individuals who answer all questions correctly is 6 percent among individuals with primary or lower secondary education and 13 percent among individuals with tertiary education. Pooling education categories to facilitate comparability of results across countries may not be appropriate for the specific case of Bosnia and Herzegovina. If we use "years of schooling" rather than education categories, we find each additional year of schooling increases the likelihood of answering a financial literacy question correctly by a factor of 0.03.

For interest rate literacy, our results for Hungary also do not indicate that literacy increases with education. Again, however, this finding is unique for the 2022 wave. Moreover, FLat World analyses for both Russia and Australia also do not find a linear

¹³ From a survey methodological perspective, one possible explanation might also be respondent fatigue: Looking at Table A2.1 reveals that the share of "do not know" responses is similar for primary and tertiary education. Given that financial literacy questions are asked at the end of the questionnaire, the high percentage of do not know responses for respondents with tertiary education could point toward respondent fatigue rather than knowledge driving results. Indeed, the median duration of interviews is 2 min shorter for respondents with tertiary education than for respondents with less than tertiary education.

increase of financial literacy with education. Therefore, although surprising, it is not a unique feature of Bosnia and Herzegovina, Hungary, and North Macedonia that the results somewhat diverge from the expected increase of financial literacy with education.

Employment. Financial literacy differs by employment status. On average, selfemployed and working individuals know the most regarding inflation. In five countries (Bosnia and Herzegovina, the Czech Republic, Hungary, Poland, and Serbia), self-employed individuals have the highest level of inflation literacy. For Bosnia and Herzegovina, the Czech Republic, and Poland, this is the case also for overall financial literacy (see Tables A2.1, A2.4, and A2.7). For Bulgaria, the self-employed have a lower level of inflation literacy than working individuals but have a higher overall level of financial literacy (Table A2.2). In Croatia, working individuals have the highest level of financial literacy for all aspects. In North Macedonia, retired individuals have the highest level of inflation literacy, which might be related to the experience of hyperinflation in the early 1990s. However, overall financial literacy is highest for working individuals (Table A2.6). In Romania, "not employed" have higher inflation literacy than working individuals, but the difference is small and does not hold when looking at overall literacy (Table A2.8). For Hungary, however, Table A2.5 shows that overall financial literacy is highest among "not employed." Taking a closer look at this finding reveals it is driven by students. The category "not employed" comprises students, where 44 percent correctly answer all three literacy questions in Hungary and unemployed individuals, where 21 percent correctly answer all financial literacy questions.

In summary, our results for nine Eastern European countries do not confirm findings from previous research regarding the relationship between age and financial literacy. They only partially confirm the existence of a gender gap in financial literacy. We do confirm a positive correlation between financial literacy and education with some deviations from this pattern, which can, however, be explained. We also show that those who work or are self-employed are more financially literate than those who are retired or not employed.

4. Inflation literacy in the context of recent inflation developments

In 2022, when inflation rates peaked globally, all of the nine countries we analyze experienced the highest inflation rates in a decade. Among the countries, Hungary had the highest inflation rate in 2022 at 15 percent; Croatia had the lowest inflation rate at 10.6 percent.

Figure 1 shows inflation rates for the past 20 years for the nine countries we cover. Table A1.8 shows the development of inflation rates since transition in the early 1990s. The figure illustrates that in all countries, except Serbia, inflation in 2022 was higher than during the Global Financial Crisis in 2008. However, looking back to 2002 both Romania and Serbia experienced inflation rates of above 20 percent. Table A1.8 further illustrates that five countries experienced inflation rates above 50 percent since transition in the early 1990s. Both Bulgaria and Croatia experienced inflation rates exceeding 1000. Serbia had inflation rates of above 100 percent in 2001, Romania had inflation rates of above 60 percent in 1998. In 1994, North Macedonia experienced inflation of above 250 percent.

Against this background, this section takes a closer look at heterogeneities inflation literacy across socio-demographics to identify which households are likely most vulnerable in the wake of inflation hikes. While the previous section studied the correlation between individual socio-demographic characteristics and financial literacy in general, Table 2b analyzes the role of socio-demographic characteristics for inflation literacy jointly, reporting the estimates of a simple Ordinary Least Squares (OLS) regression.

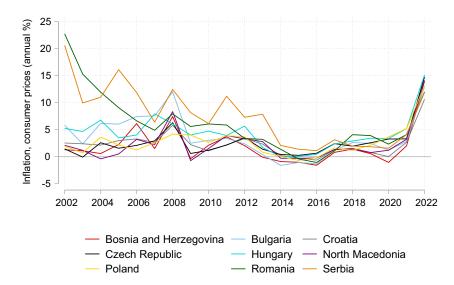


Figure 1. Inflation 2002–2022.

Notes: This figure shows the development of CPI inflation per country over the period 2002–2022. For an overview of inflation in each country and year, see Table A1.8 in the Appendix. Data Source: wiiw.

The striking result when looking at the average (column *Total*) is that, ceteris paribus, education is the only significant socio-demographic correlate of inflation literacy. Compared to individuals with primary or lower secondary education, those with upper secondary education are 10 percentage points more likely to be inflation literate and those with tertiary education are 14 percentage points more likely to be inflation literate. Looking at individual countries, education is a significant determinant of inflation literacy in Bulgaria, the Czech Republic, Hungary, and Poland.

On average, employment does not affect inflation literacy, but two groups of individual country patterns can be identified: In the first group of countries (Bosnia and Herzegovina, Hungary), retired individuals are significantly better in their understanding of inflation than working individuals. In the second group of countries (the Czech Republic and to some extent Serbia), self-employed individuals have a better knowledge of inflation than working individuals.

Table 2b further reveals that holding other socio-demographic characteristics constant, on average across countries, there is no gender gap in inflation literacy. Poland and Hungary are exceptions: In the former country, women are significantly less likely to be inflation literate than men. In the latter country, men are significantly less likely to be inflation literate than women.

Given the different inflation history (Table A1.8), it is surprising to note that age, on average across countries, is not significantly correlated with inflation literacy. In three countries, the cohort of individuals aged 65 and older differs significantly from the youngest cohort. In Bosnia and Herzegovina and in Hungary, the oldest cohort is significantly less likely to be inflation literate than the youngest cohort. In Croatia, individuals aged 65 years and older are 15 percentage points more likely to be inflation literate than individuals aged 35 years and younger.

In summary, Table 2b reveals that those with primary and lower secondary education know the least about inflation. Very frequently, these will also be the households who are most affected by food and energy price increases.

In the next section, we will investigate the relationship between lifetime inflation experience and inflation literacy in more depth, making use of the heterogeneity between

Inflation correct Bosnia and Czech North Republic Macedonia Total Herzegovina Bulgaria Croatia Hungary Poland Romania Serbia Female 0.005 -0.0180.019 -0.0300.068** 0.005 -0.065**-0.038-0.032-0.012(0.037)(0.026)(0.029)(0.028)(0.031)(0.032)(0.030)(0.027)(0.023)(0.010)Age (ref: 35 and younger) 36-50 0.036 -0.011 0.054 -0.048-0.011 0.087 -0.006-0.039-0.0020.012 (0.051)(0.035)(0.042)(0.044)(0.042)(0.053)(0.046)(0.041)(0.040)(0.015)51-65 0.011 -0.0130.012 -0.024-0.03 I 0.035 0.056 0.023 0.018 0.015 (0.051)(0.034)(0.047)(0.051)(0.041)(0.054)(0.043)(0.042)(0.047)(0.015)-0.005Older than 65 -0.127*0.015 0.154** -0.021-0.171** 0.050 0.050 -0.0230.051 (0.069)(0.064)(0.073)(0.108)(0.072)(0.085)(0.066)(0.071)(0.097)(0.026)Education (ref: primary and lower secondary) 0.028 0.160*** 0.070 0.195*** 0.221*** 0.075 0.122*** 0.074 0.027 0.095*** Upper secondary (0.052)(0.057)(0.066)(0.067)(0.057)(0.052)(0.042)(0.058)(0.046)(810.0)-0.0720.232*** 0.258*** 0.331*** 0.262*** 0.137*** **Tertiary** 0.057 0.134* 180.0 0.036 (0.068)(0.063)(0.072)(0.073)(0.070)(0.054)(0.021)(0.062)(0.072)(0.046)Employment status (ref: working) 0.133** -0.099*0.150*** -0.075 810.0 Retired -0.014-0.0140.089 -0.0500.008 (0.058)(0.021)(0.053)(0.056)(0.103)(0.057)(0.063)(0.056)(0.057)(0.077)Not employed -0.021-0.068-0.071-0.0260.006 0.003 -0.0490.022 0.010 -0.024(0.053)(0.045)(0.052)(0.055)(0.062)(0.049)(0.059)(0.050)(0.050)(810.0)

Table 2b. (Continued)

			•	•	Inflation corre	ect	•	•	•	
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Self-employed	0.124	-0.035	-0.004	0.087**	0.011	-0.07I	0.006	-0.066	0.104*	0.013
	(0.080)	(0.049)	(0.055)	(0.041)	(0.064)	(0.076)	(0.047)	(0.071)	(0.055)	(0.020)
Constant	0.511***	0.668***	0.620***	0.603***	0.471***	0.386***	0.648***	0.652***	0.727***	0.462***
	(0.074)	(0.069)	(0.077)	(0.077)	(0.070)	(0.078)	(0.054)	(0.072)	(0.057)	(0.036)
Mean DepVar	0.54	0.81	0.70	0.76	0.72	0.53	0.75	0.69	0.74	0.69
R ²	0.02	0.03	0.01	0.03	0.05	0.02	0.06	0.01	0.01	0.05
N	961	999	1006	987	990	1006	996	1014	1010	8969

Notes: The table shows estimation results for financial literacy. Standard errors clustered at the primary sampling unit level in parentheses. The column Total also includes country fixed effects. *p < 0.10, **p < 0.05, ***p < 0.01.

Data Source: OeNB Euro Survey.

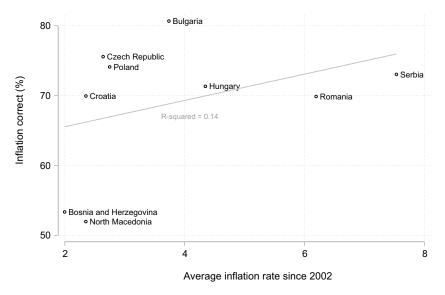


Figure 2. Inflation literacy and average inflation since 2002.

Notes: This figure shows the correlation between average inflation since 2002 and inflation literacy (percent correct) on the country level. Data Source: OenB Euro Survey, wiiw.

and within countries and also exploiting previous waves of the OeNB Euro Survey where inflation literacy was not potentially affected by recent inflation hikes.

5. Does inflation experience affect inflation literacy?

Malmendier and Nagel (2016) argue that lifetime personal inflation experience plays an important role in shaping inflation expectations. They show that for younger individuals the recent experience affects expectations more strongly than for older individuals. This is because the recent experience accounts for a greater share of their lifetime experience. Malmendier and Nagel (2016) further show that heterogeneities in inflation expectations between different age cohorts (which are driven by differences in lifetime inflation experience) are particularly pronounced following periods of high and volatile inflation. For Eastern Europe, Brown and Stix (2015) provide evidence of a hysteresis effect: Individuals who experienced high inflation or incurred personal financial losses during transition in the early 1990s are more likely to expect a depreciation of their local currency against the euro. At an individual level, Van Rooij et al. (2011) point to the role of negative experiences for acquiring financial knowledge. They find that individuals whose older siblings or parents experience negative financial shocks are more financially literate.

Motivated by these findings regarding the impact of experience on expectations and financial literacy, we investigate whether (1) at the aggregate level there is a correlation between (historic) inflation rates and inflation literacy (2) individuals who actively remember periods of high inflation or hyperinflation are more likely to be inflation literate (3) individuals are more likely to learn about inflation and become inflation literate in a high inflation environment.

Malmendier and Nagel (2016) show that heterogeneities in inflation expectations can be explained, *inter alia* by the mean rate of inflation over lifetime experience. Figure 2 investigates whether there is any evidence of higher mean average inflation being associated with higher inflation literacy at the country level. Looking back at average

Poland

Serbia

Romania

		who ex maximu	individuals operienced om inflation 2022
	% of individuals for whom inflation in 2022 was maximum in adult lifetime	Mean	Maximum
Bosnia and Herzegovina	41	29	41
Bulgaria	31	31	41
Croatia	46	32	45
Czech Republic	46	34	46
Hungary	39	31	42
North Macedonia	45	32	44

Table 3a. Lifetime inflation experience vs. 2022 experience

Notes: The table shows the percentage of individuals for whom the inflation rate of 2022 was the highest they experienced in their adult life. It also shows the average and maximum age of those individual for whom 2022 was the highest inflation experience. For variable definitions, see Appendix A1.2.

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inflation developments over the past 20 years suggests a weakly positive correlation.¹⁴ There is no correlation at the country level between recent 2022 inflation rates and inflation literacy (see Appendix, Figure A2). This lack of correlation suggests that the Malmendier and Nagel (2016) finding of lifetime rather than current inflation experience affecting inflation expectations might be transferable to inflation literacy.

Combining the information in Table A1.8 and the age of the respondents, we calculate for whom the 2022 inflation rate is the highest inflation rate they experienced as adults (i.e., aged 18 years and older). Table 3a shows that between 23 percent (Serbia) and up to 46 percent (Croatia and the Czech Republic) as adults experienced the highest inflation in 2022. The oldest individuals who experienced the maximum inflation rate in their adult life in 2022 are 31 years old in Serbia and up to 46 years old in the Czech Republic. On average, individuals who experienced the highest inflation rate in their adult life in 2022 are 31 years old (24 years in Serbia, 34 years in the Czech Republic.)

Calculating lifetime inflation experience based on individuals' age and historic inflation rates in the country they currently live in assumes (i) individuals were born in the country they currently live in and never left and (ii) individuals were affected by changes in inflation rates in a way that such these changes (at the macroeconomic level) constitute a personal experience.

The OeNB Euro Survey includes a question whether individuals remember periods of high inflation. In all countries, more than 50 percent of individuals state that they remember periods of high inflation (see Table A1.1). Table 3b compares inflation literacy

 $^{^{14}}$ We calculate average inflation since 2002, because this is the timeframe for which comparable inflation data are available for all countries. See Table A1.8.

¹⁵ Note that in six out of nine countries, close to 50 percent or more of individuals also state that they lost money during transition from planned to market economies. The median age of respondents who state losing money in transition crises is 59; thus, it is probable that this is not a memory that is passed on from parents to children but a personal experience.

			ers periods inflation	Но
	N	Yes	No	$\overline{Yes = No}$
Bosnia and Herzegovina	933	56.2	49.1	**
Bulgaria	966	81.3	80.7	
Croatia	949	71.4	67.2	
Czech Republic	939	78.9	71.5	**
Hungary	958	73.4	66.9	*
North Macedonia	974	52.3	52.6	
Poland	918	77.5	72.7	*
Romania	968	71.7	66.8	
Serbia	993	73.7	70.7	

Table 3b. Inflation literacy by memory of high inflation

Notes: The table shows percentage of individuals who correctly answer the question on inflation, by remembering periods of high inflation. The sample consists of those respondents who gave an answer to both the inflation literacy and memory question. Statistics are based on weighted data from the fall 2022 wave of the OeNB Euro Survey.

***, ***, and * indicate that the difference between "Yes" and "No" is significant at the 1%, 5%, and 10% level.

for those who state they remember periods of high inflation and those who state they do not remember such periods. There is a positive association between inflation memory and inflation literacy in Bosnia and Herzegovina, the Czech Republic, Hungary, and Poland. On average, though, there is only limited evidence that active memory of inflation is associated with higher inflation literacy.

When taking into account socio-demographic characteristics, this picture does not change much. Table 3c Specification 1 presents results from OLS regressions of inflation literacy on socio-demographic characteristics (see Table 2b) and memories of high inflation for the wave 2022. It shows that, on average, individuals who remember periods of high inflation are 5.5 percentage points more likely to be inflation literate. Looking at results for individual countries, we find a significant association between high inflation memories and inflation literacy in three out of nine countries.

In 2022, the most recent experience of inflation was the highest lifetime experience for every third individual on average (see Table 3a). In a first attempt to disentangle the impact of having experienced high inflation in the recent past and having experienced hyperinflation in the nineties, we repeat the regression of Specification 1, Table 3c but include a dummy variable which takes the value one if inflation rates in 2022 are the highest lifetime inflation rates. This indicator is insignificant in all regressions (Specification 2).

In the third panel (Specification 3) of Table 3c, we make use of the fact that the question on inflation literacy and memories of high inflation was included prior to the recent inflation hike. The average effect of memories of inflation on inflation literacy is very similar to the one when just looking at 2022. In contrast to 2022, memories of high inflation are significantly correlated with inflation literacy in all countries except Croatia. On the one hand, this may be due to the fact that we have around 8500 observations for each country instead of less than 1000. On the other hand, in 2022 the role of memories may have been weaker compared to the recent experience of inflation hikes. In contrast to Table 3b, Table 3c indicates taking into account socio-demographic characteristics, individuals who actively remember periods of high or hyperinflation are indeed significantly more likely to be inflation literate – especially when looking at a longer time horizon and not just the recent inflation experience.

Table 3c. OLS estimates of inflation literacy on experience

					Inflation cor	rect				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification I (Wave 2022)										
Remember high inflation	0.091*	0.023	0.027	0.078**	0.087*	-0.011	0.049	0.044	0.080	0.055***
	(0.053)	(0.039)	(0.047)	(0.033)	(0.046)	(0.046)	(0.037)	(0.040)	(0.070)	(0.015)
Socio-demographics	✓	1	1	✓	1	1	1	1	1	1
Mean DepVar	0.55	18.0	0.70	0.76	0.72	0.53	0.76	0.70	0.73	0.70
R ²	0.03	0.02	0.01	0.04	0.05	0.01	0.06	0.01	0.01	0.01
N	919	960	945	935	951	968	909	958	989	8534
Specification 2 (Wave 2022)										
Remember high inflation	0.094*	0.030	0.025	0.077**	0.094**	-0.014	0.058	0.041	0.071	0.055**
	(0.053)	(0.039)	(0.047)	(0.033)	(0.047)	(0.046)	(0.038)	(0.040)	(0.072)	(0.015)
Maximum inflation experience in 2022	0.041	0.045	-0.032	-0.028	0.083	-0.032	0.069	-0.180	-0.069	0.007
	(0.071)	(0.047)	(0.062)	(0.064)	(0.056)	(0.062)	(0.050)	(0.120)	(0.075)	(0.020)
Socio-demographics	✓	1	1	1	1	1	1	1	1	1
Mean DepVar	0.55	0.81	0.70	0.76	0.72	0.53	0.76	0.70	0.73	0.70
R ²	0.03	0.02	0.01	0.04	0.05	0.02	0.06	0.01	0.01	0.01
N	919	960	945	935	951	968	909	958	989	8534
Specification 3 (Wave 2012 to 2022)										
Remember high inflation	0.024*	0.082***	0.009	0.023*	0.092***	0.038***	0.072***	0.053***	0.055***	0.050***
	(0.014)	(0.015)	(0.013)	(0.013)	(0.015)	(0.015)	(0.014)	(0.014)	(0.020)	(0.005)
Year fixed effects	✓	1	1	1	1	✓	1	1	1	✓
Socio-demographics	✓	1	1	1	1	/	/	1	1	✓
Mean DepVar	0.45	0.76	0.65	0.71	0.62	0.46	0.51	0.54	0.61	0.59
R ²	0.02	0.04	0.02	0.03	0.03	0.04	0.07	0.05	0.03	0.03
N	8472	8914	8713	9120	9286	8775	8742	8611	9191	79,824

Notes: The table shows estimation results for inflation literacy. Standard errors clustered at the primary sampling unit level in parentheses. The full estimation results are presented in the Appendix, Tables A3c.1–A3c.3. *p < 0.10, ***p < 0.05, ****p < 0.05, ****p < 0.01.

Data Source: OeNB Euro Survey.

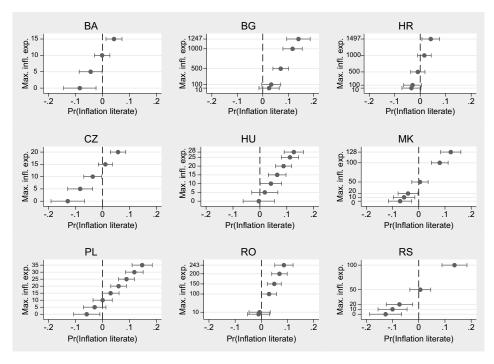


Figure 3. Marginal effects at representative values of lifetime inflation experience.

Notes: This figure shows marginal effects of inflation memories at representative values of lifetime inflation experience with 95 percent confidence intervals from probit regressions of inflation literacy on the control variables included in Table A3c.3, maximum lifetime inflation experience, and year fixed effects. We use the official ISO two-letter country codes to abbreviate country names: BA (Bosnia and Herzegovina), BG (Bulgaria), HR (Croatia), CZ (Czech Republic), HU (Hungary), MK (North Macedonia), PL (Poland), RO (Romania), and RS (Serbia). Data Source: OeNB Euro Survey, 2012–2022.

Next, we investigate whether the correlation between memories and inflation literacy differs depending on the level of lifetime inflation experience. Figure 3 shows results from probit regressions drawing on OeNB Euro Survey data from 2012 to 2022, where the dependent variable is inflation literacy and the explanatory variables are equal to those used in Table 3c. In addition, we interact memories of high inflation with the maximum lifetime inflation experience.

Figure 3 shows marginal effects at representative values of maximum lifetime inflation experience. The range for the respective representative values differs between countries (see Table A1.8). The figure shows that inflation literacy is influenced not only by whether individuals remember periods of high inflation but also by the level of maximum lifetime inflation experience. For example, individuals who experienced hyperinflation in Bulgaria are more than 10 percentage points more likely to be inflation literate than those individuals who experienced the inflation rate of 12.9 percent in 2022.

6. Does financial literacy matter?

Previous research has shown that financial literacy affects financial decisions such as retirement planning, stock market participation, and portfolio diversification (see Lusardi and Mitchell (2014) for an overview) as well as financial resilience (Klapper and Lusardi, 2020), borrowing and overindebtedness (Almenberg et al., 2020; Berg and Zia, 2017; Gathergood and Weber, 2017; Lusardi and Tufano, 2015; Van Ooijen and van Rooij, 2016).

In this paper, we study how financial literacy affects financial wellbeing and fragility. Ideally, we would employ measures such as being able to cope with an unexpected shock (financial resilience), overindebtedness, in addition to planning for the future. We are restricted to the questions available in the OeNB Euro Survey questionnaire of 2022. We look at two outcomes: *Having savings* as well as being *Financially vulnerable* (i.e., the inability to borrow in case of emergency); the question wording for the two outcomes is as follows:

Having savings. There are several ways in which one can hold savings. For example, one can hold cash, use bank accounts, have life insurances, hold mutual funds, pension funds, etc. For the following questions, please also think about joint savings with your partner. Do you currently have any savings? (i) Yes (ii) No (iii) Do not know (iv) No answer.

Financially vulnerable. Now imagine that you have an emergency, and you need to borrow [4 times an average monthly salary in COUNTRY] How likely is it that you could borrow this amount from a bank? (i) Very likely (ii) Likely (iii) Unlikely (iv) Very (v) Do not know (vi) No answer.

We construct two binary indicators. For *Having savings* respondents who reply "Yes" are coded as 1, those who reply "No" are coded as 0. "Do not know" and "no answer" responses are coded as missing. For *Financially vulnerable*, we code responses "Very unlikely" and "Unlikely" as 1 and responses "Very likely" and "Likely" as 0. "Do not know" and "no answer" responses are coded as missing.

To what extent do these variables capture financial wellbeing or on the contrary financial vulnerability? In 2022, the OeNB Euro Survey asked respondents (1) what percentage of the household income the household had to spend on necessary expenditure, (2) whether making ends meet despite food and energy price increases was a severe struggle for their households, and (3) whether in an average month they could save any money. The survey also includes a question whether respondents owe any money to or have any loans from any of the following sources (a) banks using a bank loan, (b) banks using the overdraft facility, (c) credit card debt, a utility provider, (d) family, relatives, or friends, (f) microfinance institutions, pawnshops, payday lenders, or other non-bank consumer lenders, or (g) other sources.

In all countries, *Having savings* is negatively and significantly correlated with the household's necessary expenditures exceeding 80 percent of income, severely struggling to make ends meet, and owing money to several sources. It is positively and significantly correlated with being able to save in a regular month. *Financially vulnerable* is positively and significantly correlated with necessary expenditures exceeding 80 percent of income, severely struggling to make ends meet, and owing money to several sources. It is negatively and significantly correlated with being able to save in a regular month. This reassures us that both outcomes capture a meaningful aspect of financial wellbeing or the lack of financial wellbeing – financial vulnerability.

Table 4a indicates a positive correlation of *Having savings* with financial literacy. It is interesting to note that for inflation literacy the correlation is weaker or even negative (see Bosnia and Herzegovina and Serbia), which is likely related to the previously discussed role of lifetime experience. Table 4b indicates a negative correlation of *Financially vulnerable* with financial literacy. The negative correlation is present in all countries and for all aspects of financial literacy. The exception, again, is related to inflation literacy in Serbia, where the financially vulnerable shows equal levels of inflation literacy as those who are not financially vulnerable. Section 6.1 investigates whether these relationships hold when controlling for other characteristics that affect savings and financial vulnerability.

Table 4a. Financial literacy of those not having savings (N) and having savings (Y)

	В	Α	В	G	H	lR.	C	Z	Н	IU	۲	1K	P	L	R	0	F	lS.	Т	tl.
	N	Υ	Ν	Υ	Ν	Υ	Ν	Υ	N	Υ	N	Υ	N	Υ	N	Υ	Ν	Υ	N	Υ
Interest rate question																				
Correct	46.6	49.5	50.2	59.9	60.9	68.8	51.9	72.3	52.2	56.2	45.3	63.4	52.7	70.0	42.6	52.7	71.9	72.7	51.4	65.9
DK	8.9	7.8	13.3	8.2	1.4	0.0	11.4	2.8	5.8	4.4	13.9	6.0	17.4	9.3	6.6	3.8	7.0	1.9	10.8	6.2
Inflation question																				
Correct	55.2	50.7	80.4	80.7	65.6	72.6	64.0	82.3	68.6	77.0	50.2	55.3	69.0	82.0	70.3	69.5	73.9	72.7	69.I	77.9
DK	10.6	11.5	11.8	7.0	0.9	0.4	14.3	5.2	5.6	4.7	12.7	5.5	15.4	8.5	5.5	5.8	4.8	3.0	9.8	6.6
Risk question																				
Correct	39.0	44.7	31.1	39.1	35.I	46.2	55.5	73.3	46.4	50.3	42.4	44.6	44.I	62.9	29.4	30.6	41.4	44.7	39.6	55.9
DK	12.0	8.5	25.7	19.7	1.9	1.0	9.6	3.5	9.2	6.3	11.3	6.9	17.5	10.2	10.0	10.1	8.9	7.0	13.1	8.6
Summary																				
Correct: interest and inflation	29.0	28.8	43.3	51.0	44.9	52.9	39.8	63.2	41.9	46.2	27.1	37.0	41.4	63.9	31.6	36.7	58.7	57. I	39.8	56.0
Correct: all three	15.1	13.2	17.3	24.3	18.2	28.9	30.0	55.2	20.9	25.9	14.7	21.3	23.6	47.9	12.1	14.5	27.4	30.0	19.9	38.7
Number correct answers	1.4	1.4	1.6	1.8	1.6	1.9	1.7	2.3	1.7	1.8	1.4	1.6	1.7	2.1	1.4	1.5	1.9	1.9	1.6	2.0

Notes: N denotes those who have not savings; Y denotes those who have savings.

Data Source: OeNB Euro Survey.

Table 4b. Financial literacy of those not financially vulnerable (N) and financially vulnerable (Y)

	В	Α	В	G	Н	IR	C	Z	Н	IU	Μ	IK	P	L	R	0	R	lS.	Т	tl.
	N	Υ	N	Υ	N	Υ	N	Υ	N	Υ	N	Υ	N	Υ	N	Υ	N	Υ	N	Υ
Interest rate question																				
Correct	53.7	40.7	59.6	44.6	71.0	58.3	77.8	56.2	56.2	50.9	59.2	48.8	67.4	52.8	54.5	41.2	74.4	70.I	65.I	50.6
DK	6.2	10.9	6.1	17.9	0.1	1.0	1.9	9.9	3.2	6.8	6.6	13.0	8.0	17.9	4.6	4.6	3.4	7.8	5.6	10.
Inflation question																				
Correct	53.8	52.6	83.7	75.5	77.3	60.5	85.I	68.4	76. I	68.9	55.9	49.0	80.2	67.8	70.9	69.9	73.I	73.4	77.4	68.
DK	10.1	11.3	5.7	14.5	0.4	8.0	3.3	14.0	3.0	6.7	6.7	11.5	8.0	15.7	4.0	4.9	2.2	6.0	5.7	10.2
Risk question																				
Correct	49.7	33.I	39.6	27.4	47.0	34.2	78.8	56.3	52.3	44.9	49.3	38.8	60. I	46.9	35.4	26.9	49. I	38.0	54.7	39.6
DK	10.2	11.1	15.3	28.0	1.6	1.0	3.1	8.6	5.2	10.2	3.7	13.1	10.6	15.1	4.8	11.2	1.6	11.8	7.8	12.0
Summary																				
Correct: interest and inflation	33.5	24.4	50.9	38.3	57.8	39.4	70.2	43.7	46.0	41.5	37.6	25.8	60.0	43.3	41.1	29.1	58.8	57.5	55.0	39.
Correct: all three	17.7	10.7	25.0	13.2	31.2	15.7	61.8	35.2	25.5	21.5	21.5	14.0	42.8	28.0	18.0	9.9	33.5	24.8	36.2	20.
Number correct answers	1.6	1.3	1.8	1.5	2.0	1.5	2.4	1.8	1.8	1.6	1.6	1.4	2.1	1.7	1.6	1.4	2.0	1.8	2.0	L

Notes: N denotes those who are not financially vulnerable; Y denotes those who are financially vulnerable. Data Source: OeNB Euro Survey.

6.1. Multivariate models of saving and financial vulnerability on financial literacy

Tables 5 and 6 present OLS estimates from multivariate regressions. The dependent variables are *Having savings* in Table 5 and *Financially vulnerable* in Table 6. We control for socio-demographic characteristics: age, gender, marital status, the number of children in the household, education, employment status, and income as well as an indicator whether households suffered an income shock in the past 12 months and an indicator whether individuals own the house they live in. Regressions further include regional fixed effects. In addition, the regressions include three different measures of financial literacy. Specification 1 includes *All three correct*, specification 2 includes *Total number correct*, and Specification 3 includes *Interest correct*, *Inflation correct*, and *Risk correct*. Full estimation results are available in Tables A5.1–A5.3 for savings and in Tables A6.1–A6.3 for financial vulnerability.

On average across countries, financial literacy is positively and significantly correlated with having savings and negatively and significantly correlated with being financially vulnerable. Individuals who answer all three questions correctly are 7 percentage points more likely to save and 9 percentage points less likely to be financially vulnerable (columns *Total*, Tables 5 and 6). Results for individual countries diverge strongly from this average.

In the Czech Republic and Poland, which are the countries with relatively high financial literacy, financial literacy is correlated with both savings and financial vulnerability. The probability of having savings increases by 14 percentage points for individuals who answer all three questions correctly in the Czech Republic and by 16 percentage points in Poland. These two countries have the highest percentage of savers (see: Mean DepVar). The probability of being financially vulnerable decreases by 16 percentage points for individuals who answer all three questions correctly in the Czech Republic and by 10 percentage points in Poland. Using the alternative measure for financial literacy (*Total number correct*) confirms that financial literacy and savings are positively and significantly correlated on average across countries and also in the Czech Republic and Poland.

Looking at the individual measures of financial literacy, on average across countries, being interest rate literate, and understanding risk diversification are positively and significantly associated with savings. For financial vulnerability, inflation literacy also plays a role. The role of the different aspects of financial literacy differs across countries. For the Czech Republic, being interest rate literate increases the probability of having savings by 10 percentage points, and being inflation literate increases the probability of having savings by 12 percentage points. Understanding of risk diversification does not affect savings according to our estimates for the Czech Republic. For Poland, inflation literacy also has the strongest effect; understanding of risk diversification is positively correlated with having savings, but only marginally significant. Looking at financial vulnerability shows that interest rate literacy is particularly important in the Czech Republic, whereas in Poland inflation literacy stands out.

For other countries, results are more mixed. For North Macedonia, we find that financial literacy is only associated with savings but not with financial vulnerability. For Bosnia and Herzegovina, Bulgaria, Croatia, and Romania, we find a negatively significant effect on financial vulnerability but none on savings. In Bosnia and Herzegovina, this effect is driven by understanding of risk diversification. In Croatia, it is driven by inflation literacy. Both in Bulgaria and Romania, no particular aspect of financial literacy stands out in affecting financial vulnerability.

In Hungary, according to our estimates, financial literacy is associated neither with savings nor with financial vulnerability. In Serbia, we find no significant correlation with savings. For financial vulnerability, there is also no significant impact when looking at *All correct* and *Total number correct*.

Table 5. OLS estimates of having savings on financial literacy

				ŀ	Having saving	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification I										
All three correct	-0.037	0.027	0.046	0.142***	0.084*	0.113***	0.158***	0.026	-0.022	0.071***
	(0.046)	(0.051)	(0.041)	(0.037)	(0.045)	(0.042)	(0.038)	(0.047)	(0.042)	(0.015)
Region fixed effects	✓	✓	✓	✓	1	✓	✓	✓	1	✓
Socio-demographics	✓	✓	✓	✓	1	✓	✓	✓	1	✓
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R ²	0.13	0.16	0.16	0.24	0.13	0.14	0.23	0.12	0.15	0.19
N	877	905	987	960	964	966	923	993	992	8567
Specification 2										
Total number correct	0.008	0.023	0.030	0.075***	0.039*	0.060***	0.074***	0.021	-0.024	0.038***
	(0.020)	(0.023)	(0.019)	(0.021)	(0.022)	(0.018)	(0.019)	(0.019)	(0.021)	(0.007)
Region fixed effects	✓	1	1	1	1	1	1	1	1	1
Socio-demographics	✓	1	1	1	1	1	1	/	1	1
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R ²	0.13	0.16	0.16	0.24	0.13	0.14	0.23	0.12	0.15	0.19
N	877	905	987	960	964	966	923	993	992	8567
Specification 3										
Interest correct	0.008	0.092**	0.047	0.100***	0.051	0.147***	0.070	0.062*	-0.023	0.069***
	(0.038)	(0.043)	(0.038)	(0.031)	(0.043)	(0.034)	(0.042)	(0.033)	(0.044)	(0.013)
Inflation correct	-0.021	-0.060	-0.002	0.120***	0.052	0.017	0.094**	0.011	-0.04 I	0.015
	(0.036)	(0.048)	(0.037)	(0.041)	(0.046)	(0.037)	(0.044)	(0.034)	(0.040)	(0.014)

(Continued)

Table 5. (Continued)

		Having savings										
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total		
Risk correct	0.039	0.011	11 0.045	0.009	0.014	0.011	0.062*	-0.010	-0.010	0.027**		
	(0.034)	(0.040)	(0.035)	(0.043)	(0.033)	(0.037)	(0.033)	(0.033)	(0.034)	(0.012)		
Region fixed effects	✓	1	✓	1	✓	✓	✓	✓	1	✓		
Socio-demographics	✓	1	1	1	1	✓	✓	✓	1	1		
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44		
R ²	0.13	0.17	0.16	0.24	0.14	0.15	0.23	0.12	0.15	0.20		
N	877	905	987	960	964	966	923	993	992	8567		

Notes: The table shows estimation results for having savings. Standard errors clustered at the primary sampling unit level in parentheses. The full estimation results are presented in the Appendix, Tables A5.1–A5.3. *p < 0.10, ***p < 0.05, ****p < 0.05, ****p < 0.01.

Data Source: OeNB Euro Survey.

Table 6. OLS estimates of being financially vulnerable on financial literacy

				Finan	cially vulner	able				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification I										
All three correct	-0.054	-0.102**	-0.163***	-0.148***	-0.004	-0.05 I	-0.088**	-0.093**	-0.022	-0.086***
	(0.054)	(0.044)	(0.038)	(0.035)	(0.039)	(0.043)	(0.034)	(0.044)	(0.035)	(0.013)
Region fixed effects	✓	1	✓	1	1	1	✓	1	1	1
Socio-demographics	✓	1	✓	1	1	1	✓	1	1	1
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R^2	0.24	0.29	0.20	0.37	0.24	0.23	0.28	0.19	0.34	0.24
N	834	864	969	870	935	968	900	938	965	8243
Specification 2										
Total number correct	-0.044**	-0.056***	-0.096***	-0.070***	-0.012	-0.034*	-0.056***	-0.043**	0.001	-0.049***
	(0.020)	(0.020)	(810.0)	(810.0)	(810.0)	(0.018)	(0.015)	(0.018)	(810.0)	(0.006)
Region fixed effects	✓	1	1	1	1	1	1	1	1	1
Socio-demographics	✓	1	1	1	1	1	1	1	1	1
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R^2	0.24	0.29	0.21	0.37	0.24	0.23	0.28	0.20	0.34	0.25
N	834	864	969	870	935	968	900	938	965	8243
Specification 3										
Interest correct	0.002	-0.072**	-0.093***	-0.101***	-0.023	-0.022	-0.034	-0.048	-0.018	-0.05 I***
	(0.037)	(0.035)	(0.037)	(0.038)	(0.039)	(0.037)	(0.037)	(0.036)	(0.035)	(0.012)

(Continued)

Table 6. (Continued)

	Financially vulnerable										
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary 0.022	North Macedonia	Poland	Romania -0.03 I	Serbia	Total	
Inflation correct	-0.005	-0.027	-0.128***	-0.085**		-0.046	-0.104**		0.072*	-0.032***	
	(0.035)	(0.037)	(0.035)	(0.040)	(0.039)	(0.032)	(0.040)	(0.033)	(0.037)	(0.012)	
Risk correct	-0.141***	-0.059*	-0.068**	-0.023	-0.030	-0.035	-0.035	-0.048	(0.037) -0.051 (0.032)	-0.063***	
	(0.035)	(0.032)	(0.031)	(0.036)	(0.033)	(0.032)	(0.030)	(0.035)	(0.032)	(0.011)	
Region fixed effects	✓	✓	✓	1	/	1	✓	1	/	1	
Socio-demographics	✓	✓	✓	1	/	1	✓	1	/	1	
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51	
R^2	0.25	0.30	0.22	0.37	0.24	0.23	0.28	0.20	0.35	0.25	
N	834	864	969	870	935	968	900	938	965	8243	

Notes: The table shows estimation results for being financially vulnerable. Standard errors clustered at the primary sampling unit level in parentheses. The full estimation results are presented in the Appendix, Tables A6.1–A6.3. *p < 0.10, ***p < 0.05, ****p < 0.05, ****p < 0.01.

Data Source: OeNB Euro Survey.

These estimates should be considered with some caution. On the one hand, there could be reverse causality: Those who save could be more likely to become financially literate due to experience. This would lead to an upward bias. For financial vulnerability, OLS estimates are likely downward biased because better financial literacy lowers the propensity to be financially vulnerable, whereas experience with being financially vulnerable, e.g., being rejected by several banks when applying for credit likely increases financial literacy.

On the other hand, results could also be affected by measurement error. Compared to the *OECD Toolkit for Measuring Financial Literacy* (OECD, 2018), the Big Three questions have the advantage that they can be integrated into existing surveys at low cost. At the same time, this limits the measure to three concepts which may increase measurement error. For example, with the Big Three questions where there are a limited number of answers to choose from, respondents may guess rather than know the correct answer, i.e., misclassification would be relevant. Lusardi and Mitchell (2017) and Van Rooij et al. (2011) show that guessing is, indeed, a concern. By contrast, the OECD INFE Survey likely captures additional aspects of financial literacy that are complementary. However, with more questions measurement error could also increase if the additional questions introduce additional sources of inconsistency or error in the measurement process.

More recently, Crossley et al. (2020) argue that financial literacy questions test both respondents' and interviewers' knowledge; interviewers, who presumably know the correct answers, may help respondents. The authors find that interviewer effects are larger for financial literacy questions than for other survey questions. Finally, the specification we employ is parsimonious in order to facilitate comparison of regression results across countries in the *FLat World* analyses. However, savings, especially in times of high inflation, are likely affected by many other variables, for example, by expectations. In Eastern Europe, consumers have historically sought to save in a safe-haven currency and continue to exhibit a high cash preference. For these individuals, expectations both regarding the local and the safe haven currency will affect saving behavior. Financial vulnerability, on the other hand, is likely also affected by, e.g., job security. Furthermore, risk aversion, time preference, and other individual beliefs such as trust are likely to affect both savings and financial vulnerability. The estimates of financial literacy may be affected by these omitted variables and by other variables which are included as controls.

The literature on financial literacy has typically addressed these concerns and in particular the concern regarding measurement error by resorting to instrumental variable estimation – see Lusardi and Mitchell (2014) for an overview of papers until 2014. Instruments have included early life events (e.g., approximated by understanding of financial matters by parents) and environmental factors (e.g., the exposure to universities or government spending on education). We do not have a suitable set of instrument for financial literacy which causes variation in financial literacy but does not affect *Having savings* or *Financially vulnerable* directly. However, we note that, typically, these IV estimates find a stronger effect of financial literacy on outcomes than the OLS estimates, so our estimates may underestimate the true effect of financial literacy on wellbeing.

6.2. Robustness analyses

We conduct several robustness analyses. Olbrich et al. (2023) confirm the results of Crossley et al. (2020) for the OeNB Euro Survey. We repeat estimations including interviewer age and gender as control variables. Furthermore, we investigate whether interviewers' experience affects results by (i) including a dummy variable for interviewers

¹⁶ We also repeat estimations including interviewer fixed effects; however, workload for some interviewers is low at less than 10 interviews.

who conducted interviews for the OeNB Euro Survey in previous years and – *Interviewer worked for OeNB Euro Survey before 2022* (ii) including a variable which indicates whether it is the first, second, third, etc. interview that the interviewer conducted in 2022 – *Interview sequence*.

Secondly, we include additional control variables. In particular, we address the concern that the high percentage of refusals regarding income may affect our estimates. We utilize information recorded by the interviewer independently from respondents' answers regarding the wealth of the household (*Interviewer: Respondent residence poor or very poor*). Tables 7 and 8 present results of robustness analyses. Appendix Tables A7.1–A8.3 present full estimation results for robustness analyses.

Comparing the *Total* columns in Tables 5 and 7 shows that including the additional control variables for interviewer characteristics and experience as well as income does not substantially change results regarding the impact of financial literacy on savings – both with respect to significance and magnitude of the estimated effect. Results also show, however, that interviewer characteristics and experience are negatively and significantly correlated with savings. Regarding interviewer experience, long-term experience (*Interviewer worked for OeNB Euro Survey before 2022*) matters, experience during the 2022 fieldwork period (*Interview sequence*) does not. Controlling for interviewer characteristics and experience does not substantially change results for *Having savings* looking at results for individual countries.

Interviewers' assessment of the respondents' residence as poor is negatively and significantly correlated with $Having\ savings\ (-10\ percentage\ points\ on\ average)$ and positively and significantly correlated with being financially vulnerable (7 percentage points). Adding this additional control variable does not change the estimated association between financial literacy and savings or between financial literacy and financial vulnerability.

7. Discussion and conclusions

In Eastern Europe, less than 50 percent of adults have a good understanding of basic financial concepts like interest rates, risk diversification, and inflation. The level of financial literacy varies between and within countries. Eastern European countries differ from other countries in two aspects: Firstly, in most countries there is no gender gap in financial literacy. Secondly, there is no clear-cut relationship between age and financial literacy.

Eastern European countries are also similar to other countries: Financial literacy increases with education. Indeed, for inflation literacy we find that education is the most important determinant. This finding is worrisome as the least-educated population is likely also among the most vulnerable to recent food and energy price increases. At a time when aid packages to protect households from soaring food and energy prices have to be adjusted due to government budgetary concerns, monetary policy tightening may not suffice to prevent de-anchoring of inflation expectations – especially when households lack understanding of inflation and interest rates.

For Eastern Europe, the unique history of transition from planned to market economies has left a trace on financial literacy. Inflation literacy increases with experience of high inflation or hyperinflation and active memories of such periods. For about one-third of the adult population, the inflation rate in 2022 was the highest rate they experienced as adults. However, our findings should not be misunderstood as a reason for complacency that the current economic challenges will "act as teachers" improving financial literacy. The well-known risks which financial illiteracy poses for households are exacerbated by high inflation and monetary policy tightening.

Table 7. Robustness analysis of having savings on financial literacy

					Having savi	ngs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification I										
All three correct	-0.071	0.011	0.055	0.126***	0.083*	0.097**	0.160***	0.021	-0.032	0.064**
	(0.051)	(0.053)	(0.041)	(0.036)	(0.046)	(0.044)	(0.034)	(0.046)	-0.032 (0.041) 0.001 (0.002) -0.147** (0.064) -0.006 (0.052) -0.004 (0.004)	(0.015)
Interviewer age	0.003**	0.003	0.001	0.003	0.006**	0.004**	-0.000	0.002	0.001	0.002**
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	-0.107**	-0.086	-0.065	0.036	0.016	-0.025	-0.126**	0.014	-0.147**	-0.055**
	(0.049)	(0.091)	(0.077)	(0.066)	(0.056)	(0.053)	(0.051)	(0.051)	(0.064)	(0.021)
Interviewer worked for OeNB Euro Survey	-0.164**	-0.212**	-0.204***	0.052	0.019	0.005	0.061	-0.097	-0.006	-0.060**
before 2022	(0.072)	(0.104)	(0.063)	(0.065)	(0.059)	(0.075)	(0.073)	(0.062)	-0.032 (0.041) 0.001 (0.002) -0.147** (0.064) -0.006 (0.052) -0.004 (0.004) * -0.074* (0.039) ✓ 0.28 0.17	(0.024)
Interview sequence	-0.000	0.002	-0.001	0.000	-0.003	0.001	-0.004	-0.002	-0.004	-0.00 I
	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)	(0.003)	(0.004)	(0.003)	-0.032 (0.041) 0.001 (0.002) -0.147*** (0.064) -0.006 (0.052) -0.004 (0.004) * -0.074* (0.039) ✓ 0.28 0.17	(0.001)
Interviewer: Respondent residence poor or	-0.112**	-0.129*	-0.018	-0.157***	-0.044	-0.067	-0.128***	-0.185***	-0.074*	-0.100***
very poor	(0.049)	(0.067)	(0.063)	(0.054)	(0.059)	(0.054)	(0.048)	(0.041)	(0.039)	(0.018)
Region fixed effects	✓	1	1	1	✓	✓	1	/	1	1
Socio-demographics	✓	✓	1	1	✓	✓	✓	/	1	✓
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R^2	0.15	0.17	0.17	0.26	0.15	0.14	0.25	0.14	0.17	0.20
N	877	905	987	960	964	966	923	993	992	8567

(Continued)

					Having savi	ngs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification 2										
Total number correct	-0.008	0.016	0.035*	0.070***	0.036	0.052***	0.070***	0.022	-0.030	0.034**
	(0.020)	(0.023)	(0.020)	(0.020)	(0.022)	(0.019)	(0.018)	(0.019)	(0.020)	(0.007)
Interviewer age	0.003*	0.003	0.001	0.003	0.006**	0.003*	-0.00 I	0.002	0.001	0.002***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	0.020) 0.001 0.001 0.002) 0.001 0.002) 0.003 0.004) 0.004) 0.0052) 0.01 0.004 0.004) 0.004) 0.004) 0.004) 0.004) 0.004) 0.004) 0.004)	(0.001)
Interviewer female	-0.101**	-0.082	-0.056	0.045	0.010	-0.024	-0.106**	0.010	-0.148**	-0.054**
	(0.049)	(0.091)	(0.077)	(0.065)	(0.055)	(0.053)	(0.051)	(0.051)	(0.064)	(0.020)
Interviewer worked for OeNB Euro Survey	-0.160**	-0.210**	-0.206***	0.052	0.018	0.006	0.056	-0.103	-0.006	-0.061**
before 2022	(0.071)	(0.103)	(0.063)	(0.064)	(0.058)	(0.075)	(0.073)	(0.063)	(0.052)	(0.024)
Interview sequence	-0.000	0.002	-0.00 I	0.000	-0.003	0.001	-0.004	-0.00 I	-0.004	-0.00 I
	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.001)
Interviewer: Respondent residence poor or	-0.118**	-0.125*	-0.018	-0.157***	-0.043	-0.066	-0.127***	-0.184***	-0.076*	-0.099** <u></u>
very poor	(0.049)	(0.066)	(0.063)	(0.055)	(0.060)	(0.054)	(0.048)	(0.041)	(0.039)	(0.018)
Region fixed effects	1	1	1	✓	✓	✓	✓	1	1	1
Socio-demographics	✓	1	1	1	✓	✓	1	/	✓	1
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R ²	0.15	0.17	0.18	0.26	0.15	0.15	0.25	0.14	0.17	0.20
N	877	905	987	960	964	966	923	993	992	8567
Specification 3										
Interest correct	-0.018	0.090**	0.066*	0.110***	0.050	0.140***	0.065	0.062*	-0.037	0.068**
	(0.037)	(0.040)	(0.037)	(0.031)	(0.043)	(0.036)	(0.041)	(0.033)	(0.043)	(0.013)

Table 7. (Continued)

				<u></u>	Having savi	ings				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Inflation correct	-0.028	-0.07 I	-0.010	0.100**	0.051	0.008	0.088**	0.012	-0.036	0.008
	(0.036)	(0.046)	(0.036)	(0.042)	(0.045)	(0.039)	(0.043)	(0.034)	(0.041)	(0.014)
Risk correct	0.028	0.001	0.048	-0.000	0.009	0.010	0.060*	-0.008	-0.017	0.024**
	(0.036)	(0.039)	(0.036)	(0.039)	(0.033)	(0.036)	(0.032)	(0.033)	(0.033)	(0.012)
Interviewer age	0.003*	0.003	0.001	0.003	0.006**	0.003	-0.001	0.002	0.001	0.002***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	-0.099**	-0.082	-0.052	0.047	0.011	-0.043	-0.106**	0.008	-0.148**	-0.054***
	(0.049)	(0.092)	(0.077)	(0.064)	(0.055)	(0.058)	(0.052)	(0.052) (0.065)	(0.065)	(0.020)
Interviewer worked for OeNB Euro Survey	-0.162**	-0.206**	-0.215***	0.048	0.014	0.007	0.057	-0.104	-0.006	-0.063***
before 2022	(0.071)	(0.100)	(0.062)	(0.063)	(0.058)	(0.075)	(0.073)	(0.063)	-0.036 (0.041) -0.017 (0.033) 0.001 (0.002) -0.148*** (0.065) -0.006 (0.052) -0.004 (0.004)	(0.024)
Interview sequence	-0.000	0.002	-0.002	0.000	-0.003	0.001	-0.004	-0.00 I	-0.004	-0.001
	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)	(0.003)	(0.004)	(0.003)	-0.036 (0.041) -0.017 (0.033) 0.001 (0.002) -0.148** (0.065) -0.006 (0.052) -0.004 (0.004) * -0.076* (0.039) ✓ 0.28 0.17	(0.001)
Interviewer: Respondent residence poor or	-0.115**	-0.134**	-0.020	-0.159***	-0.043	-0.058	-0.126***	-0.182***	-0.076*	-0.099***
very poor	(0.049)	(0.066)	(0.063)	(0.056)	(0.060)	(0.054)	(0.047)	(0.041)	(0.039)	(0.018)
Region fixed effects	✓	1	✓	1	✓	1	1	/	1	1
Socio-demographics	✓	1	✓	1	✓	1	1	1	1	1
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R^2	0.15	0.18	0.18	0.26	0.15	0.16	0.25	0.14	0.17	0.20
N	877	905	987	960	964	966	923	993	992	8567

Notes: The table shows estimation results for having savings. Standard errors clustered at the primary sampling unit level in parentheses. The full estimation results are presented in the Appendix, Tables A7.1–A7.3. p < 0.10, p < 0.05, p < 0.01.

Data Source: OeNB Euro Survey.

Table 8. Robustness analysis of being financially vulnerable on financial literacy

				Fi	inancially vu	Inerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification I										
All three correct	-0.024	-0.085*	-0.165***	-0.155***	-0.006	-0.073*	-0.093***	-0.076*	-0.029	-0.086**
	(0.057)	(0.045)	(0.040)	(0.035)	(0.039)	(0.043)	(0.034)	(0.045)	(0.037)	(0.013)
Interviewer age	-0.002	0.002	-0.003**	0.002	0.000	0.005***	0.001	-0.004***	0.002	0.000
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	0.146***	0.105	0.078	0.012	-0.03 I	-0.024	-0.004	-0.146***	-0.001	0.015
	(0.041)	(0.073)	(0.060)	(0.052)	(0.050)	(0.051)	(0.045)	(0.047)	(0.050)	(0.018)
Interviewer worked for OeNB Euro Survey	0.077	-0.03 I	0.223***	-0.147*	-0.02 I	0.078	-0.000	0.010	0.028	0.028
before 2022	(0.053)	(0.088)	(0.050)	(0.087)	(0.050)	(0.063)	(0.062)	(0.059)	(0.045)	(0.020)
Interview sequence	-0.001	-0.002	-0.00 I	0.002	0.002	0.001	-0.004	0.002	-0.005	0.000
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)	(0.003)	(0.001)
Interviewer: Respondent residence poor or	0.005	0.125**	-0.057	0.053	0.036	0.069	0.102**	0.109**	0.180***	0.075**
very poor	(0.069)	(0.054)	(0.058)	(0.037)	(0.063)	(0.050)	(0.049)	(0.047)	(0.036)	(0.017)
Region fixed effects	✓	1	1	/	1	1	1	✓	1	1
Socio-demographics	✓	✓	✓	1	1	1	✓	1	✓	✓
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R ²	0.26	0.30	0.22	0.38	0.24	0.25	0.28	0.21	0.36	0.24
N	834	864	969	870	935	968	900	938	965	8243

Table 8. (Continued)

				Fi	inancially vu	Inerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification 2										
Total number correct	-0.036*	-0.049**	-0.098***	-0.072***	-0.013	-0.048**	-0.060***	-0.03 I*	0.001	-0.049**
	(0.019)	(0.020)	(810.0)	(0.018)	(0.018)	(0.019)	(0.015)	(810.0)	(810.0)	(0.006)
Interviewer age	-0.002	0.002	-0.003**	0.001	0.001	0.005***	0.001	-0.004**	0.001	0.000
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	0.143***	0.101	0.057	0.003	-0.034	-0.022	-0.024	-0.144***	0.004	0.013
	(0.042)	(0.071)	(0.057)	(0.052)	(0.049)	(0.051)	(0.044)	(0.046)	(0.050)	(0.018)
Interviewer worked for OeNB Euro Survey	0.066	-0.032	0.226***	-0.143	-0.019	0.077	0.000	0.017	0.028	0.030
before 2022	(0.052)	(0.085)	(0.051)	(0.087)	(0.049)	(0.060)	(0.062)	(0.059)	(0.046)	(0.020)
Interview sequence	-0.000	-0.002	-0.001	0.002	0.002	0.001	-0.004	0.002	-0.005	0.000
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)	(0.003)	(0.001)
Interviewer: Respondent residence poor or	0.002	0.119**	-0.058	0.059	0.034	0.068	0.108**	0.108**	0.178***	0.073**
very poor	(0.069)	(0.053)	(0.057)	(0.038)	(0.064)	(0.051)	(0.049)	(0.047)	(0.036)	(0.017)
Region fixed effects	✓	✓	✓	✓	1	1	✓	1	1	✓
Socio-demographics	✓	✓	✓	1	1	1	✓	1	✓	✓
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R^2	0.26	0.30	0.24	0.37	0.24	0.25	0.29	0.21	0.36	0.25
N	834	864	969	870	935	968	900	938	965	8243

				Fi	nancially vu	Inerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Specification 3										
Interest correct	0.008	-0.063*	-0.108***	-0.105***	-0.026	-0.037	-0.038	-0.030	-0.011	-0.05 l***
	(0.035)	(0.035)	(0.038)	(0.038)	(0.041)	(0.037)	(0.037)	(0.036)	(0.034)	(0.012)
Inflation correct	0.005	-0.019	-0.116***	-0.082*	0.024	-0.060*	-0.108***	-0.029	0.069*	−0.032***
	(0.034)	(0.037)	(0.034)	(0.042)	(0.040)	(0.032)	(0.040)	(0.032)	(0.037)	(0.012)
Risk correct	-0.135***	-0.055*	-0.071**	-0.027	-0.03 I	-0.046	-0.039	-0.032	-0.053*	-0.064***
	(0.035)	(0.033)	(0.030)	(0.036)	(0.033)	(0.032)	(0.030)	(0.035)	(0.031)	(0.011)
Interviewer age	-0.00 I	0.002	-0.003**	0.001	0.001	0.005***	0.001	-0.004**	0.001	0.000
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	0.140***	0.102	0.057	0.002	-0.040	-0.027	-0.025	-0.144***	-0.003	0.013
	(0.041)	(0.071)	(0.057)	(0.052)	(0.051)	(0.051)	(0.045)	(0.047)	(0.050)	(0.018)
Interviewer worked for OeNB Euro Survey	0.075	-0.032	0.226***	-0.141	-0.019	0.075	-0.003	0.017	0.028	0.030
before 2022	(0.051)	(0.085)	(0.051)	(0.087)	(0.049)	(0.061)	(0.062)	(0.059)	(0.044)	(0.020)
Interview sequence	0.000	-0.002	-0.00I	0.002	0.002	0.001	-0.004	0.002	-0.005	0.000
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)	(0.003)	(0.001)
Interviewer: Respondent residence poor or	-0.00 I	0.121**	-0.059	0.061	0.034	0.069	0.107**	0.108**	0.180***	0.073**
very poor	(0.068)	(0.053)	(0.058)	(0.039)	(0.064)	(0.051)	(0.049)	(0.047)	(0.036)	(0.017)
Region fixed effects	✓	1	1	✓	✓	1	1	1	1	✓
Socio-demographics	✓	1	✓	✓	1	1	✓	1	✓	✓
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R ²	0.27	0.30	0.24	0.37	0.24	0.25	0.29	0.21	0.36	0.25
N	834	864	969	870	935	968	900	938	965	8243

Notes: The table shows estimation results for being financially vulnerable. Standard errors clustered at the primary sampling unit level in parentheses. The full estimation results are presented in the Appendix, Tables A8.1–A8.3. *p < 0.10, ***p < 0.05, ****p < 0.05, ****p < 0.01.

Data Source: OeNB Euro Survey.

We do not claim to identify a causal impact of financial literacy on behavior. On average across countries, our analysis shows a positive and significant correlation of financial literacy with savings and a negative and significant correlation with financial vulnerability. In Eastern Europe, both savers and borrowers face both high inflation and interest rate hikes for the first time in decades – an environment that is a challenge to navigate even for informed consumers. Furthermore, consumers are saddled with risks that originated in the low inflation and interest rate environment, such as adjustable rate loans. Given these well-known and new challenges, policymakers should address gaps in consumer protection as well as continue efforts to enhance financial literacy.

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Appendix Data appendix

Table A1.1. Summary statistics

	Min	Max	BA	BG	HR	CZ	HU	MK	PL	RO	RS
Age	18	91	50.19	49.61	45.12	49.06	49.07	50.21	49.28	47.51	46.78
			(16.83)	(15.58)	(15.85)	(17.35)	(16.28)	(16.38)	(16.80)	(16.33)	(15.57
Female	0	I	0.54	0.53	0.61	0.51	0.58	0.54	0.51	0.52	0.50
			(0.50)	(0.50)	(0.49)	(0.50)	(0.49)	(0.50)	(0.50)	(0.50)	(0.50
Education											
Primary and lower secondary	0	I	0.18	0.09	0.07	0.08	0.12	0.21	0.21	0.10	0.3
			(0.39)	(0.28)	(0.26)	(0.27)	(0.32)	(0.41)	(0.41)	(0.30)	(0.47
Upper secondary	0	I	0.67	0.58	0.68	0.74	0.68	0.57	0.55	0.74	0.4
			(0.47)	(0.49)	(0.47)	(0.44)	(0.47)	(0.50)	(0.50)	(0.44)	(0.49
Tertiary	0	1	0.15	0.33	0.25	0.19	0.20	0.22	0.25	0.16	0.25
			(0.36)	(0.47)	(0.43)	(0.39)	(0.40)	(0.42)	(0.43)	(0.37)	(0.44
Married	0	1	0.58	0.67	0.53	0.56	0.54	0.69	0.60	0.65	0.6
			(0.49)	(0.47)	(0.50)	(0.50)	(0.50)	(0.46)	(0.49)	(0.48)	(0.49
Single	0	1	0.20	0.17	0.30	0.25	0.20	0.15	0.25	0.21	0.23
			(0.40)	(0.38)	(0.46)	(0.43)	(0.40)	(0.35)	(0.43)	(0.41)	(0.42
Separated	0	I	0.05	0.08	0.09	0.11	0.14	0.03	0.06	0.05	0.08
			(0.22)	(0.26)	(0.28)	(0.31)	(0.35)	(0.17)	(0.24)	(0.22)	(0.28

Table A1.1. (Continued)

,											
	Min	Max	BA	BG	HR	CZ	HU	MK	PL	RO	RS
Widow	0	1	0.17	0.08	0.08	0.09	0.12	0.13	0.09	0.09	0.07
			(0.38)	(0.28)	(0.27)	(0.28)	(0.33)	(0.34)	(0.29)	(0.29)	(0.26
Income refused	0	1	0.43	0.39	0.11	0.11	0.24	0.21	0.20	0.10	0.24
			(0.50)	(0.49)	(0.31)	(0.32)	(0.43)	(0.40)	(0.40)	(0.29)	(0.42
Income 1st quartile	0	1	0.16	0.15	0.22	0.23	0.18	0.21	0.20	0.23	0.16
			(0.37)	(0.35)	(0.42)	(0.42)	(0.39)	(0.40)	(0.40)	(0.42)	(0.37
Income 2nd quartile	0	ı	0.15	0.14	0.23	0.21	0.19	0.22	0.20	0.22	0.20
			(0.35)	(0.35)	(0.42)	(0.41)	(0.39)	(0.42)	(0.40)	(0.42)	(0.40
Income 3rd quartile	0	ı	0.14	0.18	0.26	0.23	0.20	0.20	0.20	0.23	0.21
			(0.35)	(0.38)	(0.44)	(0.42)	(0.40)	(0.40)	(0.40)	(0.42)	(0.41
Income 4th quartile	0	ı	0.12	0.15	0.17	0.22	0.19	0.17	0.20	0.23	0.19
			(0.33)	(0.35)	(0.38)	(0.41)	(0.39)	(0.37)	(0.40)	(0.42)	(0.39
Retired	0	ı	0.28	0.21	0.20	0.22	0.25	0.28	0.30	0.28	0.19
			(0.45)	(0.40)	(0.40)	(0.42)	(0.43)	(0.45)	(0.46)	(0.45)	(0.39
Not employed	0	ı	0.30	0.13	0.13	0.11	0.07	0.18	0.12	0.11	0.18
			(0.46)	(0.33)	(0.34)	(0.32)	(0.25)	(0.38)	(0.33)	(0.31)	(0.38
Working	0	I	0.37	0.58	0.58	0.56	0.63	0.46	0.49	0.56	0.58
			(0.48)	(0.49)	(0.49)	(0.50)	(0.48)	(0.50)	(0.50)	(0.50)	(0.49
Self-employed	0	I	0.04	0.08	0.08	0.10	0.05	0.09	0.08	0.06	0.05
			(0.20)	(0.28)	(0.28)	(0.30)	(0.22)	(0.28)	(0.28)	(0.23)	(0.23

Table A1.1. (Continued)

	Min	Max	ВА	BG	HR	CZ	HU	MK	PL	RO	RS
Had income shock	0	I	0.25	0.24	0.24	0.26	0.20	0.41	0.21	0.32	0.23
			(0.43)	(0.42)	(0.43)	(0.44)	(0.40)	(0.49)	(0.41)	(0.47)	(0.42
Number of children	0	8	0.45	0.41	0.48	0.50	0.40	0.59	0.50	0.35	0.60
			(0.85)	(0.71)	(0.80)	(0.83)	(0.80)	(0.93)	(0.85)	(0.69)	(0.85
Own house	0	1	0.95)	0.93	0.86	0.74	0.87	0.87	0.79	0.91	0.93
			(0.22)	(0.25)	(0.35)	(0.44)	(0.34)	(0.34)	(0.41)	(0.29)	(0.25
Remembers high inflation	0	1	0.70	0.80	0.63	0.54	0.74	0.66	0.64	0.70	0.73
			(0.46)	(0.40)	(0.48)	(0.50)	(0.44)	(0.47)	(0.48)	(0.46)	(0.45
Lifetime inflation experience	10.63	1497.38	15.16	832.18	684.22	17.94	23.34	81.37	26.68	144.59	74.84
			(0.79)	(583.07)	(736.06)	(3.02)	(6.22)	(56.17)	(10.63)	(107.34)	(42.52
Maximum inflation experience in 2022	0	1	0.31	0.32	0.53	0.48	0.35	0.39	0.37	0.31	0.20
			(0.46)	(0.46)	(0.50)	(0.50)	(0.48)	(0.49)	(0.48)	(0.46)	(0.40
Interviewer: Respondent residence poor or very poor	0	1	0.06	0.08	0.07	0.12	0.08	0.10	0.11	0.06	0.11
			(0.24)	(0.27)	(0.25)	(0.32)	(0.26)	(0.30)	(0.31)	(0.24)	(0.31
Having savings	0	1	0.30	0.43	0.53	0.69	0.41	0.47	0.52	0.27	0.28
			(0.46)	(0.50)	(0.50)	(0.46)	(0.49)	(0.50)	(0.50)	(0.44)	(0.45
Financially vulnerable	0	1	0.53	0.42	0.49	0.52	0.49	0.56	0.41	0.67	0.50
			(0.50)	(0.49)	(0.50)	(0.50)	(0.50)	(0.50)	(0.49)	(0.47)	(0.50
			(0.50)	(0.49)	(0.50)	(0.50)	(0.50)	(0.50)	(0.49)	(0.47)	

Notes: The table shows the (unweighted) sample means and standard deviations in parentheses of the respective variables. We use the official ISO two-letter country codes to abbreviate country names: BA (Bosnia and Herzegovina), BG (Bulgaria), HR (Croatia), CZ (Czech Republic), HU (Hungary), MK (North Macedonia), PL (Poland), RO (Romania), and RS (Serbia).

Data Source: OeNB Euro Survey, 2022.

Table A1.2. Description of variables

Label	Description	Underlying survey question
Age	Numerical	What is your age?
35 and younger	= I if aged 35 and younger, and 0 otherwise	
36–50	= 1 if aged 36–50, and 0 otherwise	
51–65	= 1 if aged 51–65, and 0 otherwise	
Older than 65	= I if aged older than 65, and 0 otherwise	
Education		What is your highest educational attainment?
Primary and lower secondary	 I if highest educational attainment is early childhood education/No formal education, primary education, or lower secondary education, and 0 otherwise 	
Upper secondary	= I if highest educational attainment is upper secondary education or post-secondary non-tertiary education, and 0 otherwise	
Tertiary	— I if highest educational attainment is short-cycle tertiary education, bachelor's or equivalent level, master's or equivalent level, or doctoral or equivalent level, and 0 otherwise	
Employment status		Which of the following best describes your employment status?
Working	 I if employment status is employee or contributing family worker, and 0 otherwise 	
Retired	= I if employment status is <i>retired</i> , and 0 otherwise	
Not employed	= I if employment status is student/ pupil, maternity/parental leave, not working for salary, seeking a job, or not working for salary, not seeking a job, and 0 otherwise	
Self-employed	= I if employment status is employer (company up to 3 employees), employer (company more than 3 employees), or own account worker, and 0 otherwise	
Marital status	3	What is your marital status?
Married	 I if marital status is married same household or married separate households, and 0 otherwise 	
Single	= 1 if marital status is single, and 0 otherwise	
Separated	I if marital status is separated/ divorced, and 0 otherwise	
Widow	= I if marital status is widowed, and 0 otherwise	

Table A1.2. (Continued)

Label	Description	Underlying survey question
Income		What is the total monthly income of your household after taxes? If you cannot provide an exact amount an approximate answer would also be helpful
Income: 1st quartile	= I if monthly net household income is in the 1st quartile, and 0 otherwise	
Income: 2nd quartile	= I if monthly net household income is in the 2nd quartile, and 0 otherwise	
Income: 3rd quartile	= I if monthly net household income is in the 3rd quartile, and 0 otherwise	
Income: 4th quartile	= I if monthly net household income is in the 4th quartile, and 0 otherwise	
Income: refused	= 1 if answer on monthly net household income refused, and 0 otherwise	
Female	= I if female, and 0 otherwise	What is your gender?
Had income shock	= 1 if household experienced an unexpected significant reduction of its income over the past 12 months, and 0 otherwise	Did your household experience an unexpected significant reduction of its income over the past 12 months?
Number of children	Numerical; sum of persons aged between 0 and 17 years	How many of the persons permanently living in this household (including yourself) are between (1) 0 and 6 years old, (2) 7 and 13 years old, (3) 14 and 17 years old, (4) 18 and 25 years old, (5) 26 and 54 years old, (6) 55 and 64 years old, (7) 65+ years old, (8) do no know, and (9) no answer
Own house	= I if anyone in the household owns the house or apartment they live in (their main residence), and 0 otherwise	Do you or anyone in your household own any of the following?
Interest correct	= I if answer is more than 102, and 0 if answer is exactly 102, less than 102, or do not know	Suppose you had 100 [local currency] in a savings account and the interest rate was 2% per year. Disregarding any bank fees, how much do you think you would have in the account after 5 years if you left the money to grow: more than 102, exactly 102, less than 102 [local currency]?
Inflation correct	if answer is less, and 0 if answer is more, exactly the same, or do not know	Suppose that the interest rate on your savings account was 4% per year and inflation was 5% per year. Again, disregarding any bank fees — after I year, would you be able to buy more than, exactly the same as or less than today with the money in this account?
Risk correct	= 1 if answer is decrease, and 0 if answer is increase, stay the same, or do not know	When an investor spreads his money among different assets, does his risk of losing money?
All three correct	= I if Interest correct, inflation correct, and risk correct all equal to I	

Table A1.2. (Continued)

Label	Description	Underlying survey question
Total number correct	Numerical; sum of interest correct, inflation correct, and risk correct	
Remembers high inflation	 I if remembers periods of high inflation during which prices increased sharply, and 0 otherwise 	Do you personally remember any of the following periods? Periods of high inflation during which prices increased sharply
Lifetime inflation experience	Numerical	Respondent lifetime calculated as age I to age in current wave, maximum inflation rate in lifetime based on Table A1.8
Maximum inflation experience in 2022	= I if maximum lifetime inflation experience is equal to inflation rate in 2022, 0 otherwise	Based on lifetime inflation experience and inflation rate in 2022, see Table A1.8
Financially vulnerable	= I if borrowing from a bank in an emergency <i>unlikely</i> or <i>very unlikely</i> , and 0 otherwise	Now imagine that you have an emergency, and you need to borrow [4 times an average monthly salary in COUNTRY] How likely is it that you could borrow this amount from a bank (1) Very likely, (2) likely, (3) unlikely, (4) very unlikely, (5) do not know, and (6) no answer
Having savings	= I if having any savings, and 0 otherwise	There are several ways in which one can hold savings. For example, one can hold cash, use bank accounts, have life insurances, hold mutual funds, pension funds, etc. For the following questions, please also think about joint savings with your partner. Do you currently have any savings?
Interviewer-based variables		
Interviewer age	Numerical	
Interviewer gender	= I if interviewer female, and 0 otherwise	
Interviewer worked for OeNB Euro Survey before 2022	= 1 if previous experience, and 0 if 2022 survey first wave	
Interview sequence	$\begin{aligned} &\text{Numerical} = 1 &\text{if first interview in wave} \\ &2022, = 2 &\text{if second interview in wave} \\ &2022, &\text{etc.} \end{aligned}$	
Interviewer: Respondent residence poor or very poor	Numerical = I if interviewer assesses respondent's residence as poor or very poor, 0 if interviewer assesses respondent's residence as good or excellent	

Notes: The table shows a detailed description of the variables and the underlying survey questions.

Table A1.3. Population vs. sample statistics for gender and age

	Population	Sample (unweighted
Bosnia and Herzegovin	a	
Male	48.5	45.7
Female	51.5	54.3
18–29	21.0	14.6
30–44	25.9	22.5
45–59	27.8	28.6
60+	25.3	34.3
Bulgaria		
Male	47.4	47.2
Female	52.6	52.8
18–29	12.6	12.3
30–39	15.4	16.1
40–49	18.0	20.0
50–59	17.2	22.3
60+	36.9	29.3
Croatia		
Male	47.5	39.4
Female	52.5	60.6
18–29	18.6	19.3
30–44	24.8	30.7
45–59	27.0	28.4
60+	29.6	21.6
Czech Republic		
Male	49.3	48.6
Female	50.7	51.4
18–34	24.9	23.6
35–54	35.4	38.7
55+	39.8	37.7
Hungary		
Male	46.9	42.0
Female	53.1	58.0
18–39	34.6	30.2
40–59	33.8	40.6
60+	31.5	29.2
North Macedonia		
Male	49.1	46.4
Female	50.9	53.6

Table A1.3. (Continued)

	Population	Sample (unweighted)
18–34	26.5	19.9
35–54	34.7	37.3
55+	38.8	42.8
Poland		
Male	47.7	48.7
Female	52.3	51.3
18–29	16.0	15.5
30–49	38.0	37.2
50–59	14.7	15.0
60+	31.3	32.2
Romania		
Male	48.4	47.6
Female	51.6	52.4
18–24	8.8	10.0
25–34	17.2	16.3
35–44	19.7	18.3
45–54	19.1	17.5
55–64	14.5	16.0
65+	20.6	21.9
Serbia		
Male	48.1	49.6
Female	51.9	50.4
18–34	26.7	23.5
35–54	33.2	41.1
55+	40.1	35.4

Notes: The table shows the population statistics and descriptive statistics from the OeNB Euro Survey fall 2022 wave. Population statistics are based on the latest available (updated) Census data. Survey statistics are unweighted. The categories are based on those that are used to calibrate weights and, therefore, not constructed for optimal comparison across countries.

Table A1.4. Com	parison of selected	I indicators from	OeNB Euro	Survey with	official statistics

Indicator	Source	ВА	BG	HR	CZ	HU	MK	PL	RO	RS
Unemployment	Labor Force Survey, 2022	15.5	4.3	7.1	2.3	3.7	14.6	2.9	5.7	9.7
	OeNB Euro Survey, 2022	13.8	3.9	2.8	1.7	1.9	8.4	2.6	2.9	8.2
Home ownership	Eurostat	na	85.0	91.1	77.I	90.1	85.8	87.2	94.8	86.0
	OeNB Euro Survey, 2022	94.2	93.5	86.7	74.0	86.0	86.5	78.4	90.8	93.0
Education										
ISCED level 0-2	Eurostat/Census	32.8	21.5	17.5	12.1	21.8	33.4	12.9	21.6	34.6
ISCED level 3–4	Eurostat/Census	54	52.9	60.5	64.5	60.5	44. I	57.5	62.0	49.I
ISCED level 5–8	Eurostat/Census	13.2	25.6	22	23.4	22.0	19.6	29.6	16.4	16.3
ISCED level 0–2	OeNB Euro Survey, 2022	32.9	21.5	17.5	12.1	21.8	33.5	12.9	21.7	34.6
ISCED level 3–4	OeNB Euro Survey, 2022	53.8	52.9	60.5	64.4	57.6	46.9	57.5	61.9	49.I
ISCED level 5–8	OeNB Euro Survey, 2022	13.3	25.6	22.0	23.5	20.6	19.6	29.6	16.5	16.3

Notes: The table compares official statistics on unemployment, home ownership, and education with results from the OeNB Euro Survey fall wave 2022. Survey data are weighted. We use the official ISO two-letter country codes to abbreviate country names: BA (Bosnia and Herzegovina), BG (Bulgaria), HR (Croatia), CZ (Czech Republic), HU (Hungary), MK (North Macedonia), PL (Poland), RO (Romania), and RS (Serbia).

Data Source: Eurostat, Census, OeNB Euro Survey.

Table A1.5. Education according to ISCED 2011 in OeNB Euro Survey, 2022.

	ВА	BG	HR	CZ	HU	MK	PL	RO	RS
No formal education	0.3	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.7
Primary education	6.8	2.8	1.0	0.2	0.0	5.6	1.1	1.8	2.2
Lower secondary education	25.9	18.7	16.1	12.0	21.8	27.4	11.8	19.9	31.6
Upper secondary education	52.9	46.2	59.8	63.6	51.5	43.6	52.9	58.1	48.2
Post-secondary non-tertiary education	1.0	6.7	0.7	0.8	6.2	3.3	4.6	3.7	0.9
Short-cycle tertiary education	2.3	3.0	6.6	0.4	3.7	0.1	0.7	0.0	9.6
Bachelor's or equivalent level	8.9	8.2	4.2	11.2	13.2	15.6	8.5	12.0	4.9
Master's or equivalent level	1.9	13.8	11.0	10.5	3.7	3.9	20.1	4.1	1.5
Doctoral or equivalent level	0.1	0.6	0.2	1.4	0.0	0.0	0.3	0.3	0.4

Notes: The table shows weighted statistics using the ISCED 2011 categories for education. We use the official ISO two-letter country codes to abbreviate country names: BA (Bosnia and Herzegovina), BG (Bulgaria), HR (Croatia), CZ (Czech Republic), HU (Hungary), MK (North Macedonia), PL (Poland), RO (Romania), and RS (Serbia).

Data Source: OeNB Euro Survey.

Source				OeN	B Euro S	Survey				S&P Global Finlit Survey
Indicator				3 out o	of 3 corr	rect (%)				3 out of 4 correct (%)
Year	2022	2021	2019	2018	2016	2015	2014	2013	2012	2014
CZ	47	44	42	39	45	39	35	35	38	58
PL	35	29	30	28	21	20	П	19	17	42
RS	28	23	17	20	16	16	13	13	10	38
HR	24	19	28	23	21	20	13	14	24	44
HU	23	21	26	17	24	28	27	27	28	54
BG	20	17	18	12	22	31	27	24	21	35
MK	18	18	9	10	9	10	9	13	14	21
ВА	14	10	8	6	10	12	7	П	15	27
RO	13	12	8	10	7	12	5	5	6	22

Table A1.6. Financially literate individuals according to OeNB Euro Survey and S&P Global Finlit Survey

Notes: The definition of "being financially literate" varies, for the OeNB Euro Survey "financially literate" is defined following the FLat World as answering correctly 3 out of 3 questions. For the S&P Global Finlit Survey, Klapper et al. (2015) define 3 out of 4 questions as financially literate." We use the official ISO two-letter country codes to abbreviate country names: BA (Bosnia and Herzegovina), BG (Bulgaria), HR (Croatia), CZ (Czech Republic), HU (Hungary), MK (North Macedonia), PL (Poland), RO (Romania), and RS (Serbia). Source: Klapper et al. (2015) and OeNB Euro Survey (2012–2016; 2018-2019, 2021-22). 55

Table A1.7. Country background information

			Financial institution account	Saved at financial institution		Crises	
Country	GDP per capita 2022	Age dependency ratio 2022	% age 15	and older	Banking crisis	Currency crisis	Sovereign debt crisis
Bosnia and Herzegovina	7585	49.9	79.34	18.66	1992	_	_
Bulgaria	13773	57.2	83.97	23.12	Jan 1996	Apr 1996	1990
Croatia	18413	57.3	91.8	25.24	Mar 1998	-	-
Czech Republic	27638	57.7	94.94	25.24	Jun 1996	-	-
Hungary	18463	52.6	88.22	31.91	1991, Sep 2008	_	-
North Macedonia	6592	44.8	85.29	14.85	1993	-	-
Poland	18321	50.8	95.72	36.43	1992	_	1981
Romania	15892	52.8	69.12	18.7	1998	Jan 1996	Dec 1982
Serbia	9394	53.8	89.42	18.93	_	Dec 2000	-

Notes: The table shows background information on nine Eastern European countries.

Source: Data on GDP per capita (in current USD), age dependency ratio, and account and savings from World Bank Database; information on occurrence of crises from Laeven and Valencia (2020).

Table A1.8. Inflation

Country	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bosnia and Herzegovina	na	na	na	na	na	15.7	5.6	4.9	3.2	1.3	1.1	0.6	2.3	6.1	1.5	7.5	-0.4	2.1	3.7	2.1	-0. I	-0.9	-1.0	-1.6	0.8	1.4	0.6	-1.1	2.0	14.0
Bulgaria	74.0	93.3	69.3	115.7	1,247.6	39.6	2.6	10.3	7.4	5.8	2.4	6.2	6.0	7.4	7.6	12.0	2.5	3.0	3.4	2.4	0.4	-1.6	-1.1	-1.3	1.2	2.6	2.5	1.2	2.8	13.0
Croatia	1,497.4	252.2	2.0	3.5	3.6	5.7	4.1	4.4	4.3	2.5	2.4	2.1	3.0	3.3	2.7	5.8	2.2	1.1	2.2	3.3	2.3	0.2	-0.3	-0.6	1.3	1.6	0.8	0.0	2.7	10.6
Czech Republic	20.8	10.0	9.1	8.8	8.4	10.8	2.1	3.9	4.5	1.5	-0.I	2.6	1.6	2.1	2.9	6.3	0.6	1.2	2.2	3.5	1.4	0.4	0.3	0.7	2.4	2.0	2.6	3.3	3.3	14.8
Hungary	22.5	18.8	28.2	23.6	18.3	14.3	10.0	9.9	9.1	5.3	4.7	6.8	3.5	4.0	7.9	6. l	4.0	4.7	3.9	5.7	1.7	0.0	0.1	0.5	2.4	2.9	3.4	3.4	5.2	15.2
North Macedonia	na	128.3	15.7	2.3	2.6	-0.I	-0.7	6.2	4.9	2.1	1.2	-0.4	0.5	3.2	2.2	8.4	-0.7	1.5	3.9	3.3	2.8	-0.3	-0.3	-0.2	1.4	1.5	0.8	1.2	3.2	14.1
Poland	35.5	32.2	28.1	19.9	15.0	11.9	7.3	10.1	5.3	2.0	0.7	3.6	2.2	1.3	2.6	4.2	4.0	2.6	3.9	3.7	0.8	0.1	-0.7	-0.2	1.6	1.2	2.1	3.7	5.2	13.2
Romania	243.1	166.5	33.4	38.2	153.4	64.0	45.3	46.2	34.8	22.7	15.3	11.9	9.1	6.6	4.9	7.9	5.6	6. I	5.9	3.4	3.2	1.4	-0.4	-1.1	1.1	4.1	3.9	2.3	4.1	12.0
Serbia	na	na	na	na	na	na	na	na	104.2	20.6	10.0	11.0	16.1	11.9	6.4	12.5	8.2	6.1	11.2	7.3	7.9	2.1	1.4	1.1	3.1	2.0	1.9	1.6	4.1	11.9

Notes: This table shows the development of CPI inflation per country over the period 1993–2022. Inflation of 10% or higher is highlighted in gray, and inflation of 100% or higher is in bold. Data Source: wiiw.

Results appendix

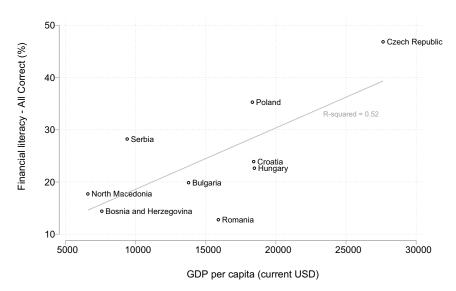


Figure A.I. Financial literacy and GDP per capita.

Notes: This figure shows the correlation between GDP per capita (in current USD) and financial literacy (percent all correct) at the country level in 2022.

Data Source: OenB Euro Survey, World Bank Database.

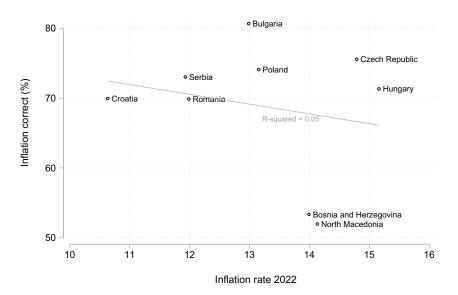


Figure A.2. Inflation literacy and inflation in 2022.

Notes: This figure shows the correlation between inflation and inflation literacy (percent correct) at the country level in 2022. Data Source: OenB Euro Survey, wiiw.

Table A2.1. Financial literacy in Bosnia and Herzegovina: differences across socio-demographic groups (%)

		Intere	est	Inflatio	on	Risk	(Over	rall
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	30.4	48.0	10.4	51.6	10.2	37.6	9.1	11.5	17.8
36-50	26.8	53.8	7.0	56.8	11.6	42.2	15.8	19.4	21.9
51–65	24.8	44.8	8.2	55.7	11.5	41.4	10.7	15.9	19.8
Older than 65	18.1	41.2	14.0	48.6	16.8	39.5	17.1	9.9	29.2
N	941								
Sex									
Male	48.9	49.3	7.9	53.4	11.8	44.5	12.3	16.9	19.9
Female	51.1	45.8	11.2	53.5	12.4	36.0	13.2	12.0	23.0
N	941								
Education									
Primary and lower secondary	23.2	42.0	13.6	50.9	16.9	37.7	17.4	9.3	27.6
Upper secondary	63.5	49.8	7.1	55.6	9.2	41.6	11.2	17.0	19.0
Tertiary	13.3	46.9	13.8	47.0	17.4	35.9	11.3	10.1	22.2
N	938								
Employment status									
Retired	22.6	45.6	10.4	54.5	12.0	40.9	15.8	12.4	25.5
Not employed	34.3	38.8	11.0	51.1	11.8	38.4	10.1	11.5	19.3
Working	39.0	55.7	7.7	53.2	11.9	39.8	13.3	15.5	21.0
Self-employed	4.1	46.6	14.7	64.3	16.3	50.7	14.0	31.2	20.4
N	929								

Table A2.2. Financial literacy in Bulgaria: differences across socio-demographic groups (%)

		Intere	est	Inflation	on	Risk	(Over	all
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	21.0	56.2	9.6	81.1	8.0	30.4	20.5	18.3	29.7
36–50	27.0	56.9	5.8	82.5	7.7	33.0	17.7	20.2	24.4
51–65	30.8	54.7	10.0	81.2	7.4	42.0	21.4	24.0	27.6
Older than 65	21.2	49.3	21.4	77.8	17.9	27.6	33.3	15.0	46.9
N	992								
Sex									
Male	47.6	55.4	9.1	82.1	8.4	35.4	20.4	20.2	28.5
Female	52.4	53.6	13.1	79.7	11.1	32.9	24.9	19.6	33.8
N	992								
Education									
Primary and lower secondary	9.4	41.1	35.2	61.9	28.2	24.0	46.9	8.0	64.3
Upper secondary	58.5	51.9	12.0	80.2	10.2	30.2	23.7	15.7	33.1
Tertiary	32.1	62.9	2.7	87.6	3.8	44.0	14.0	31.0	18.3
N	991								
Employment status									
Retired	26.0	50.4	21.2	78.1	17.7	28.5	34. I	17.1	46.7
Not employed	12.2	53.6	15.2	73.8	13.4	30.7	24.0	15.4	35.9
Working	53.8	54.7	6.3	83.6	5.4	36.3	17.3	21.0	23.6
Self-employed	8.0	65.9	5.9	81.5	7.8	42.6	20.7	27.3	26.4
N	987								

Table A2.3. Financial literacy in Croatia: differences across socio-demographic groups (%)

		Intere	st	Inflatio	on	Risk		Over	rall
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	29.5	61.3	0.9	67.4	1.3	42.3	1.9	23.8	3.8
36–50	25.1	67.4	0.0	73.6	0.0	40.9	1.9	23.3	1.9
51–65	28.9	65.8	0.7	66.1	0.3	41.9	1.2	25.3	1.5
Older than 65	16.6	68.4	0.9	72.4	0.6	36.9	1.3	22.5	2.8
N	992								
Sex									
Male	47.9	64.2	0.5	68.7	0.6	40.4	1.4	22.9	2.3
Female	52.1	66.3	0.7	70.0	0.6	41.5	1.7	24.8	2.7
N	992								
Education									
Primary and lower secondary	8.7	63.9	2.9	65.7	1.2	23.4	3.4	9.2	6.3
Upper secondary	66.8	64.0	0.3	69.6	0.6	40.4	1.8	22.8	2.6
Tertiary	24.5	69.4	0.7	70.2	0.4	48.6	0.3	32.2	1.0
N	992								
Employment status									
Retired	26.2	69.9	0.9	65.8	0.8	39.0	1.2	23.3	2.5
Not employed	12.5	57.8	1.8	63.4	0.0	34.9	2.0	19.0	2.9
Working	53.7	65.4	0.3	72.2	0.7	43.1	1.9	25.4	2.7
Self-employed	7.5	62.3	0.0	71.5	0.0	43.3	0.0	23.7	0.0
N	991								

Table A2.4. Financial literacy in Czech Republic: differences across socio-demographic groups (%)

		Intere	est	Inflati	on	Risk	(Over	all
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	24.6	67.7	2.7	78.4	6.3	72.7	4.0	48.5	7.5
36–50	28.8	65.7	3.8	75.2	6.2	70.1	4.1	49.8	9.2
51–65	23.5	71.7	1.8	76.7	7.0	73.5	2.7	49.4	7.0
Older than 65	23.1	56.7	15.9	73.4	14.5	53.2	11.7	38.9	23.0
N	985								
Sex									
Male	49.6	68.2	5.1	77.8	6.9	68.6	4.4	49.5	9.4
Female	50.4	63.0	6.6	74.1	9.7	66.7	6.6	44.3	13.4
N	985								
Education									
Primary and lower secondary	7.6	39.2	17.9	55.5	20.3	37.5	15.0	19.2	26.1
Upper secondary	73.6	66.0	6.0	76.4	8.7	67.0	5.9	46.7	12.2
Tertiary	18.8	74.3	0.5	83.8	2.1	81.6	0.0	59.5	2.6
N	982								
Employment status									
Retired	23.5	57.0	16.1	73.1	16.5	52.7	12.8	38.6	24.8
Not employed	10.9	66.1	5.3	70.7	12.4	63.3	7.1	43.0	12.4
Working	55.4	68.2	2.3	76.1	5.1	74.0	2.7	48.8	7.2
Self-employed	10.3	69.5	2.0	87.1	3.0	71.4	2.0	58.6	3.0
N	984								

Table A2.5. Financial literacy in Hungary: differences across socio-demographic groups (%)

		Intere	est	Inflation	on	Risk	(Ove	rall
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	27.7	56.8	3.4	74.0	4.9	48.8	6.0	25.3	10.4
36–50	27.3	55.5	3.6	73.2	3.8	50.4	5.9	22.9	8.0
51–65	23.3	52.8	5.2	71.8	5.5	46.2	9.7	20.7	12.5
Older than 65	21.6	49.2	10.5	65.2	10.1	46.4	12.0	21.0	20.2
N	994								
Sex									
Male	46.8	57.6	5.4	68.8	6.2	52.4	6.4	27.3	10.2
Female	53.2	50.5	5.4	73.6	5.6	44.3	9.6	18.5	14.3
N	994								
Education									
Primary and lower secondary	12.5	54.8	12.0	52.1	11.5	42.9	18.8	16.0	28.1
Upper secondary	66.2	54.0	4.7	71.8	5.6	48.9	6.7	23.5	10.4
Tertiary	21.2	52.9	3.9	81.2	3.3	48.8	6.2	23.9	9.0
N	994								
Employment status									
Retired	26.4	52.2	9.0	69.4	8.4	43.5	12.1	20.7	19.2
Not employed	6.7	52.2	7.5	69.0	8.4	46.3	14.7	30.3	17.0
Working	61.4	54.1	3.5	72.7	4.4	50.4	5.7	22.3	9.1
Self-employed	5.4	62.6	4.7	74.5	3.4	46.2	6.7	26.8	6.7
N	987								

Table A2.6. Financial literacy in North Macedonia: differences across socio-demographic groups (%)

		Intere	est	Inflatio	on	Risl	<	Ove	rall
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	28.8	55.7	11.9	47.5	10.9	48.2	7.9	18.4	18.0
36–50	25.8	59.5	5.6	54.3	6.4	49.5	6.5	21.8	13.6
51–65	25.5	52.5	9.9	50.7	9.5	42.2	9.1	17.6	17.8
Older than 65	19.9	43.1	15.0	57.0	11.8	32.3	14.6	11.5	24.7
N	1008								
Sex									
Male	49.2	57.5	8.8	52.0	9.2	43.2	8.1	17.2	15.9
Female	50.8	49.3	11.9	51.9	9.9	44.4	10.2	18.2	20.3
N	1008								
Education									
Primary and lower secondary	19.3	33.5	23.0	47.8	15.9	36.8	20.4	5.9	34.5
Upper secondary	57.5	55.8	9.1	51.9	9.9	45.1	8.1	21.1	16.7
Tertiary	23.2	63.8	3.0	56.0	3.6	46.5	2.5	19.3	8.3
N	1006								
Employment status									
Retired	25.4	46.5	13.7	58.0	10.5	36.5	12.4	13.7	23.5
Not employed	18.7	47.9	14.4	48.0	14.8	36.5	12.1	15.5	24.8
Working	47.0	58.8	6.3	51.6	6.5	51.6	5.8	21.5	12.2
Self-employed	9.0	55.8	13.3	43.9	11.8	37.9	11.0	12.8	19.8
N	1004								

Table A2.7. Financial literacy in Poland: differences across socio-demographic groups (%)

		Intere	est	Inflatio	on	Risk	(Over	all
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	23.2	63.5	9.7	73.0	9.0	56.4	11.8	37.8	20.7
36–50	31.3	62.4	14.5	76.8	12.6	53.0	13.0	37.5	26.4
51–65	23.4	61.5	14.1	74.4	14.9	57.0	14.4	36.3	26.2
Older than 65	22.2	51.7	13.7	72.2	13.4	47.7	18.5	28.5	29.4
N	994								
Sex									
Male	47.1	63.7	11.1	78.9	10.6	57.7	13.5	40.8	22.5
Female	52.9	56.9	14.9	70.2	14.2	49.8	15.0	30.4	28.6
N	994								
Education									
Primary and lower secondary	20.9	50.9	21.7	62.0	18.9	39.4	25.5	22.2	39.3
Upper secondary	54.2	57.2	12.8	72.9	13.7	52.2	13.6	30.8	26.8
Tertiary	24.9	74.1	6.6	87.9	4.5	68.4	6.3	56.0	11.8
N	994								
Employment status									
Retired	29.1	53.6	14.4	70.7	16.3	50.6	17.8	28.7	30.4
Not employed	11.6	61.7	16.5	66.3	14.5	51.8	15.7	34.8	27.1
Working	50.4	63.3	11.5	77.3	9.6	54.2	12.3	37.7	22.7
Self-employed	8.8	61.9	15.0	82.6	11.3	60.1	12.1	43.8	23.5
N	984								

Table A2.8. Financial literacy in Romania: differences across socio-demographic groups (%)

		Intere	est	Inflatio	on	Risk	(Over	all
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	30.2	55.8	3.2	70.9	3.0	29.2	6.3	13.6	11.3
36–50	24.0	46.7	5.2	67.2	5.5	28.6	9.8	13.3	13.2
51–65	27.9	45.0	6.3	73.1	4.7	32.4	10.3	14.8	14.6
Older than 65	18.0	27.3	12.3	67.3	13.1	26.3	19.1	7.4	26.2
N	1023								
Sex									
Male	47.3	46.5	5.6	71.3	5.0	28.8	8.7	14.2	12.5
Female	52.7	44.6	6.7	68.8	6.8	30.0	12.2	11.5	18.0
N	1023								
Education									
Primary and lower secondary	9.7	30.8	16.2	64.3	16.4	23.2	33.5	6.4	36.2
Upper secondary	73.9	44.2	5.0	70.7	4.9	28.3	9.2	12.3	13.7
Tertiary	16.3	60.0	5.7	69.7	4.5	38.5	3.4	19.0	10.7
N	1019								
Employment status									
Retired	27.6	31.5	10.4	70.4	10.1	27.5	16.6	9.4	22.0
Not employed	11.0	56.1	3.8	71.3	4.0	20.4	12.2	7.6	14.7
Working	55.5	50.6	4.7	70.4	4.3	32.5	7.9	15.2	13.1
Self-employed	5.8	44.1	4.0	61.9	5.7	26.4	4.5	14.9	7.6
N	1016								

Table A2.9. Financial literacy in Serbia: differences across socio-demographic groups (%)

		Intere	st	Inflatio	on	Risl	(Ove	rall
	Sample	Correct	DK	Correct	DK	Correct	DK	3 Correct	≥I DK
Age									
35 and younger	28.7	70.7	5.0	73.8	3.6	47.9	3.2	29.6	8.9
36–50	24.5	78.2	2.4	74.1	2.5	43.7	5.2	30.9	7.8
51–65	30.6	72.4	9.0	73.1	5.8	37.9	12.7	27.6	18.0
Older than 65	16.2	63.1	7.9	72.1	5.9	39.3	15.3	22.8	19.8
N	1009								
Sex									
Male	48.1	72.3	4.8	75.9	2.8	44.3	5.8	29.7	9.7
Female	51.9	71.3	7.2	71.1	5.9	40.7	11.1	26.9	16.4
N	1009								
Education									
Primary and lower secondary	42.5	65.2	9.2	70.6	6.1	36.0	14.7	21.5	19.7
Upper secondary	41.1	77.3	4.5	74.9	3.6	45.6	4.5	31.7	9.3
Tertiary	16.4	75.3	1.5	76.6	1.9	51.5	2.8	37.0	5.8
N	1009								
Employment status									
Retired	23.0	61.1	11.9	70.4	6.8	34.8	19.2	19.9	25.5
Not employed	20.9	74.6	8.0	75.1	7.1	40.9	10.0	27.5	16.9
Working	51.6	74.6	3.2	73.5	2.6	46.0	3.7	31.5	7.0
Self-employed	4.4	87.1	0.0	84.3	0.0	47.4	4.6	36.7	4.6
N	1005								

Table A3c.1. OLS estimates of inflation literacy on inflation experience: Specification 1 (Wave 2022)

				I	nflation corre	ect				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Remember high inflation	0.091*	0.023	0.027	0.078**	0.087*	-0.011	0.049	0.044	0.080	0.055**
	(0.053)	(0.039)	(0.047)	(0.033)	(0.046)	(0.046)	(0.037)	(0.040)	(0.070)	(0.015)
Age (ref: 35 and younger)										
36–50	0.013	-0.032	0.038	-0.073	-0.040	0.086	0.009	-0.059	-0.049	-0.012
	(0.055)	(0.041)	(0.050)	(0.046)	(0.044)	(0.054)	(0.044)	(0.044)	(0.058)	(0.016)
51–65	-0.028	-0.035	-0.012	-0.055	-0.077*	0.039	0.043	0.016	-0.035	-0.017
	(0.056)	(0.045)	(0.058)	(0.056)	(0.045)	(0.058)	(0.043)	(0.045)	(0.067)	(810.0)
Older than 65	-0.161**	-0.012	0.133	-0.028	-0.228***	0.074	0.026	-0.034	-0.001	-0.027
	(0.072)	(0.069)	(0.082)	(0.109)	(0.078)	(0.089)	(0.069)	(0.077)	(0.103)	(0.028)
Female	-0.00 I	-0.016	0.017	-0.015	0.062**	0.002	-0.062*	-0.024	-0.030	-0.009
	(0.037)	(0.025)	(0.030)	(0.027)	(0.031)	(0.032)	(0.032)	(0.027)	(0.023)	(0.010)
Education (ref: primary ar	nd lower secondary)									
Upper secondary	0.018	0.123**	0.050	0.192***	0.198***	0.063	0.129***	0.061	0.030	0.087**
	(0.055)	(0.056)	(0.069)	(0.067)	(0.057)	(0.053)	(0.044)	(0.059)	(0.046)	(0.019)
Tertiary	-0.069	0.187***	0.018	0.253***	0.303***	0.120*	0.268***	0.055	0.025	0.131**
	(0.070)	(0.061)	(0.074)	(0.073)	(0.062)	(0.072)	(0.046)	(0.072)	(0.054)	(0.022)
Employment status (ref: v	vorking)									
Retired	0.118**	-0.019	-0.109*	-0.044	0.149**	0.079	-0.046	0.007	-0.078	-0.007
	(0.058)	(0.053)	(0.058)	(0.100)	(0.058)	(0.063)	(0.057)	(0.057)	(0.076)	(0.021)
Not employed	-0.020	-0.072	-0.072	-0.035	-0.011	0.002	-0.026	0.014	0.019	-0.057**
	(0.055)	(0.045)	(0.053)	(0.058)	(0.065)	(0.051)	(0.064)	(0.052)	(0.052)	(0.019)

Table A3c.1. (Continued)

				I	nflation corre	ect				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Self-employed	0.131	-0.035	0.002	0.097**	-0.004	-0.055	0.024	-0.085	0.109*	0.016
	(0.091)	(0.053)	(0.056)	(0.042)	(0.064)	(0.073)	(0.044)	(0.071)	(0.056)	(0.021)
Constant	0.489***	0.709***	0.643***	0.579***	0.468***	0.403***	0.623***	0.641***	0.703***	0.603***
	(0.080)	(0.069)	(0.078)	(0.082)	(0.072)	(0.081)	(0.060)	(0.075)	(0.065)	(0.025)
Mean DepVar	0.55	0.81	0.70	0.76	0.72	0.53	0.76	0.70	0.73	0.70
R ²	0.03	0.02	0.01	0.04	0.05	0.01	0.06	0.01	0.01	0.01
N	919	960	945	935	951	968	909	958	989	8534

Notes: The table shows estimation results for inflation literacy. Standard errors clustered at the PSU level in parentheses. *p < 0.10, ***p < 0.05, ****p < 0.01. Data Source: OeNB Euro Survey.

Table A3c.2. OLS estimates of inflation literacy on past vs. recent inflation experience: Specificaiton 2 (Wave 2022)

					Inflation corre	ct				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Remember high inflation	0.094*	0.030	0.025	0.077**	0.094**	-0.014	0.058	0.041	0.071	0.055***
	(0.053)	(0.039)	(0.047)	(0.033)	(0.047)	(0.046)	(0.038)	(0.040)	(0.072)	(0.015)
Maximum inflation experience in	0.041	0.045	-0.032	-0.028	0.083	-0.032	0.069	-0.180	-0.069	0.007
2022	(0.071)	(0.047)	(0.062)	(0.064)	(0.056)	(0.062)	(0.050)	(0.120)	(0.075)	(0.020)
Age (ref: 35 and younger)										
36–50	0.039	-0.007	0.030	-0.079	0.009	0.075	0.046	-0.227*	-0.092	-0.008
	(0.075)	(0.043)	(0.053)	(0.050)	(0.056)	(0.059)	(0.052)	(0.121)	(0.063)	(0.019)
51–65	0.011	0.005	-0.042	-0.082	0.002	0.010	0.107*	-0.163	-0.078	-0.011
	(0.097)	(0.058)	(0.080)	(0.083)	(0.065)	(0.085)	(0.062)	(0.127)	(0.072)	(0.025)
Older than 65	-0.123	0.027	0.103	-0.055	-0.150	0.045	0.089	-0.213	-0.044	-0.02 I
	(0.112)	(0.077)	(0.101)	(0.120)	(0.094)	(0.106)	(180.0)	(0.144)	(0.109)	(0.034)
Female	-0.00 I	-0.015	0.017	-0.015	0.059*	0.002	-0.064**	-0.024	-0.030	-0.010
	(0.038)	(0.026)	(0.030)	(0.027)	(0.031)	(0.032)	(0.032)	(0.027)	(0.023)	(0.010)
Education (ref: primary and lower sec	ondary)									
Upper secondary	0.017	0.121**	0.050	0.192***	0.198***	0.063	0.129***	0.057	0.032	0.086***
	(0.055)	(0.056)	(0.069)	(0.067)	(0.057)	(0.053)	(0.044)	(0.060)	(0.046)	(0.019)
Tertiary	-0.073	0.182***	0.019	0.253***	0.298***	0.122*	0.263***	0.049	0.027	0.131***
	(0.070)	(0.061)	(0.074)	(0.074)	(0.062)	(0.072)	(0.046)	(0.072)	(0.054)	(0.022)
Employment status (ref: working)										
Retired	0.119**	-0.020	-0.109*	-0.044	0.149**	0.079	-0.045	0.006	-0.076	-0.007
	(0.058)	(0.053)	(0.058)	(0.100)	(0.058)	(0.063)	(0.057)	(0.057)	(0.076)	(0.021)

Table A3c.2. (Continued)

					Inflation corre	ct				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Not employed	-0.019	-0.074	-0.07 I	-0.034	-0.012	0.002	-0.026	0.014	0.030	-0.057***
	(0.054)	(0.046)	(0.053)	(0.058)	(0.065)	(0.051)	(0.064)	(0.052)	(0.055)	(0.019)
Self-employed	0.132	-0.035	0.002	0.097**	-0.002	-0.056	0.028	-0.082	0.107*	0.016
	(0.091)	(0.053)	(0.056)	(0.042)	(0.065)	(0.073)	(0.044)	(0.070)	(0.056)	(0.021)
Constant	0.449***	0.665***	0.675***	0.606***	0.386***	0.436***	0.553***	0.827***	0.752***	0.596***
	(0.109)	(0.084)	(0.101)	(0.102)	(0.090)	(0.098)	(0.089)	(0.139)	(180.0)	(0.032)
Mean DepVar	0.55	0.81	0.70	0.76	0.72	0.53	0.76	0.70	0.73	0.70
R ²	0.03	0.02	0.01	0.04	0.05	0.02	0.06	0.01	0.01	0.01
N	919	960	945	935	951	968	909	958	989	8534

Notes: The table shows estimation results for inflation literacy. Standard errors clustered at the PSU level in parentheses. *p < 0.10, **p < 0.05, ***p < 0.01. Data Source: OeNB Euro Survey.

Table A3c.3. OLS estimates of inflation literacy on inflation experience: Specification 3 (Wave 2012—2022)

				I	nflation corre	ect				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Remember high inflation	0.024*	0.082***	0.009	0.023*	0.092***	0.038***	0.072***	0.053***	0.055***	0.050**
	(0.014)	(0.015)	(0.013)	(0.013)	(0.015)	(0.015)	(0.014)	(0.014)	(0.020)	(0.005)
Age (ref: 35 and younger))									
36–50	0.024	-0.028*	0.075***	-0.033**	-0.005	0.069***	-0.009	0.020	-0.010	0.012**
	(0.015)	(0.015)	(0.015)	(0.014)	(0.014)	(0.017)	(0.015)	(0.015)	(0.017)	(0.005)
51–65	0.030*	-0.036**	0.108***	-0.037**	0.026	0.094***	0.029*	0.063***	-0.013	0.032**
	(0.017)	(0.016)	(0.017)	(0.015)	(0.016)	(0.018)	(0.016)	(0.017)	(0.020)	(0.006)
Older than 65	-0.037	-0.071***	0.066**	0.014	-0.035	0.104***	-0.003	0.020	-0.015	0.016*
	(0.025)	(0.025)	(0.026)	(0.027)	(0.026)	(0.027)	(0.026)	(0.025)	(0.032)	(0.009)
Female	-0.031***	-0.015	-0.026**	-0.008	-0.015	-0.028**	-0.055***	-0.04I***	-0.034***	-0.025**
	(0.011)	(0.009)	(0.010)	(0.009)	(0.010)	(0.011)	(0.011)	(0.010)	(0.009)	(0.003)
Medium education	0.057***	0.151***	0.087***	0.160***	0.117***	0.129***	0.085***	0.126***	0.082***	0.113**
	(0.017)	(0.019)	(0.020)	(0.021)	(810.0)	(0.017)	(0.015)	(0.031)	(0.017)	(0.006)
High education	0.093***	0.205***	0.156***	0.262***	0.198***	0.183***	0.151***	0.183***	0.108***	0.169**
	(0.024)	(0.021)	(0.024)	(0.024)	(0.022)	(0.022)	(0.019)	(0.034)	(0.021)	(800.0)
Employment status (ref: v	working)									
Retired	0.044**	0.001	-0.022	−0.075 ***	0.033	-0.013	-0.014	-0.051***	-0.045**	-0.035**
	(0.020)	(0.018)	(810.0)	(0.025)	(0.020)	(0.021)	(0.022)	(0.019)	(0.022)	(0.007)
Not employed	0.004	-0.029*	-0.00 I	-0.016	0.081***	-0.042***	-0.039**	-0.030*	0.010	-0.050**
	(0.015)	(0.015)	(0.016)	(0.018)	(0.020)	(0.015)	(0.018)	(0.017)	(0.016)	(0.006)

Table A3c.3. (Continued)

				li	nflation corre	ect				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Self-employed	0.031	0.001	0.043*	0.084***	0.031	-0.04I	0.013	-0.020	0.012	0.026***
	(0.031)	(0.016)	(0.022)	(0.016)	(0.021)	(0.025)	(0.021)	(0.023)	(0.027)	(800.0)
Constant	0.395***	0.598***	0.557***	0.549***	0.433***	0.318***	0.399***	0.260***	0.482***	0.458***
	(0.039)	(0.029)	(0.045)	(0.031)	(0.038)	(0.039)	(0.038)	(0.044)	(0.046)	(0.013)
Year fixed effects	✓	1	1	1	1	✓	✓	1	1	1
Mean DepVar	0.45	0.76	0.65	0.71	0.62	0.46	0.51	0.54	0.61	0.59
R ²	0.02	0.04	0.02	0.03	0.03	0.04	0.07	0.05	0.03	0.03
N	8,472	8,914	8,713	9,120	9,286	8,775	8,742	8,611	9,191	7,9824

Notes: The table shows estimation results for inflation literacy. Standard errors clustered at the PSU level in parentheses. *p < 0.10, ***p < 0.05, ****p < 0.01. Data Source: OeNB Euro Survey.

Table A5.1. OLS estimates of having savings on financial literacy: Specification I

					Having savin	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
All three correct	-0.037	0.027	0.046	0.142***	0.084*	0.113***	0.158***	0.026	-0.022	0.071***
	(0.046)	(0.051)	(0.041)	(0.037)	(0.045)	(0.042)	(0.038)	(0.047)	(0.042)	(0.015)
Age	-0.019***	-0.002	-0.001	0.007	0.017**	0.002	0.001	-0.002	0.003	-0.000
	(0.006)	(0.009)	(0.007)	(0.007)	(0.007)	(800.0)	(800.0)	(0.006)	(800.0)	(0.002)
Age squared	0.000***	0.000	0.000	-0.000	-0.000**	-0.000	-0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.009	-0.043	-0.022	0.073***	0.008	-0.038	-0.007	-0.035	-0.045*	-0.011
	(0.033)	(0.033)	(0.031)	(0.024)	(0.032)	(0.031)	(0.031)	(0.022)	(0.024)	(0.010)
Education (ref: primary ar	nd lower secondary)									
Upper secondary	0.097**	0.091	0.110*	0.226***	0.069	0.131***	0.111***	0.053	0.072**	0.100***
	(0.039)	(0.060)	(0.063)	(0.059)	(0.056)	(0.049)	(0.040)	(0.051)	(0.033)	(0.015)
Tertiary	0.187***	0.383***	0.286***	0.339***	0.168**	0.199***	0.168***	0.231***	0.196***	0.244***
	(0.055)	(0.067)	(0.066)	(0.071)	(0.069)	(0.062)	(0.053)	(0.068)	(0.044)	(0.019)
Marital status (ref: marrie	d)									
Single	-0.067	-0.02 I	0.003	-0.066	-0.067	0.056	0.017	-0.045	-0.032	-0.026
	(0.050)	(0.061)	(0.051)	(0.042)	(0.045)	(0.063)	(0.046)	(0.053)	(0.054)	(0.017)
Separated	-0.007	-0.036	-0.003	-0.160***	0.016	-0.075	-0.053	-0.067	-0.016	-0.048**
	(0.065)	(0.059)	(0.058)	(0.051)	(0.050)	(0.093)	(0.063)	(0.064)	(0.049)	(0.020)
Widow	-0.014	-0.158**	-0.036	-0.024	0.071	-0.015	-0.040	0.044	0.097*	-0.007
	(0.044)	(0.064)	(0.072)	(0.083)	(0.066)	(0.060)	(0.058)	(0.064)	(0.055)	(0.020)

Table A5.1. (Continued)

					Having saving	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
ncome (ref: income: 1st	quartile)									
Income: refused	0.023	-0.037	0.097	0.133	0.102	-0.249	-0.065	0.024	0.186***	0.049*
	(0.063)	(0.087)	(880.0)	(0.089)	(0.085)	(0.259)	(0.074)	(0.072)	(0.055)	(0.025)
Income: 2nd quartile	0.071	-0.053	0.101	0.034	0.128*		0.033	-0.004	0.039	0.038
	(0.079)	(0.094)	(0.064)	(0.074)	(0.067)		(0.075)	(0.061)	(0.048)	(0.024)
Income: 3rd quartile	0.116	-0.032	0.174**	0.114	0.105	-0.184	0.072	0.056	0.175***	0.109*
	(0.077)	(0.097)	(0.070)	(0.072)	(0.076)	(0.267)	(0.070)	(0.062)	(0.061)	(0.024)
Income: 4th quartile	0.262***	0.080	0.297***	0.181**	0.293***	-0.176	0.189**	0.096	0.294***	0.198*
	(0.076)	(0.091)	(0.068)	(0.076)	(0.080)	(0.259)	(0.076)	(0.063)	(0.055)	(0.024)
Employment status (ref:	working)									
Retired	-0.106*	-0.032	-0.023	-0.064	0.083	0.045	-0.025	-0.043	-0.037	-0.028
	(0.056)	(180.0)	(0.062)	(0.061)	(0.060)	(0.064)	(0.066)	(0.048)	(0.056)	(0.020)
Not employed	-0.140***	-0.00 I	-0.174***	-0.062	0.089	-0.103**	0.012	0.055	-0.107**	-0.066*
	(0.042)	(0.057)	(0.050)	(0.056)	(0.065)	(0.048)	(0.065)	(0.052)	(0.041)	(0.017)
Self-employed	0.087	0.124**	0.177***	0.116***	0.309***	0.094	0.204***	0.233***	0.256***	0.171*
	(0.101)	(0.057)	(0.045)	(0.041)	(0.068)	(0.061)	(0.051)	(0.068)	(0.075)	(0.020)
Had income shock	-0.050	-0.112***	0.002	-0.121**	-0.070*	-0.027	-0.159***	-0.042	-0.042	-0.063*
	(0.035)	(0.042)	(0.041)	(0.047)	(0.040)	(0.041)	(0.042)	(0.032)	(0.042)	(0.014)
Number of children	-0.036*	-0.00 I	-0.018	0.007	-0.036	0.039*	-0.034	0.014	-0.011	-0.005
	(0.022)	(0.027)	(0.023)	(0.024)	(0.022)	(0.024)	(0.025)	(0.024)	(0.018)	(0.008)
Own house	0.110	0.065	-0.060	0.074**	0.048	0.128**	0.154***	-0.025	0.009	0.069*
	(0.070)	(0.067)	(0.054)	(0.035)	(0.047)	(0.053)	(0.043)	(0.054)	(0.063)	(0.017)

Table A5.1. (Continued)

					Having savin	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Constant	0.626***	0.215	0.180	0.047	-0.309*	0.675**	0.070	0.288	-0.050	0.015
	(0.182)	(0.273)	(0.192)	(0.166)	(0.165)	(0.334)	(0.218)	(0.176)	(0.221)	(0.078)
Region fixed effects	✓	1	✓	✓	1	1	1	1	✓	✓
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R^2	0.13	0.16	0.16	0.24	0.13	0.14	0.23	0.12	0.15	0.19
N	877	905	987	960	964	966	923	993	992	8567

Notes: The table shows estimation results for having savings. Standard errors clustered at the PSU level in parentheses. *p < 0.10, ***p < 0.05, ****p < 0.01. Data Source: OeNB Euro Survey.

Table A5.2. OLS estimates of having savings on financial literacy: Specification 2

	0 0	,	'							
					Having savin	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Total number correct	0.008	0.023	0.030	0.075***	0.039*	0.060***	0.074***	0.021	-0.024	0.038**
	(0.020)	(0.023)	(0.019)	(0.021)	(0.022)	(0.018)	(0.019)	(0.019)	(0.021)	(0.007)
Age	−0.020***	-0.002	-0.00 I	0.008	0.016**	0.001	0.001	-0.002	0.004	-0.000
	(0.006)	(0.009)	(0.007)	(0.007)	(0.007)	(0.008)	(800.0)	(0.006)	(800.0)	(0.002)
Age squared	0.000***	0.000	0.000	-0.000	-0.000**	0.000	-0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.008	-0.041	-0.022	0.072***	0.004	-0.035	-0.003	-0.034	-0.045*	-0.010
	(0.033)	(0.033)	(0.031)	(0.024)	(0.032)	(0.030)	(0.030)	(0.022)	(0.024)	(0.010)
Education (ref: primary an	d lower secondary)									
Upper secondary	0.095**	0.087	0.111*	0.209***	0.071	0.130***	0.102**	0.051	0.073**	0.098**
	(0.039)	(0.061)	(0.062)	(0.060)	(0.056)	(0.048)	(0.041)	(0.051)	(0.032)	(0.015)
Tertiary	0.187***	0.376***	0.287***	0.321***	0.167**	0.190***	0.167***	0.224***	0.196***	0.241***
	(0.055)	(0.068)	(0.066)	(0.072)	(0.069)	(0.062)	(0.053)	(0.069)	(0.043)	(0.019)
Marital status (ref: married	d)									
Single	-0.066	-0.02 I	0.003	-0.069*	-0.067	0.050	0.029	-0.044	-0.030	-0.026
	(0.049)	(0.061)	(0.051)	(0.041)	(0.044)	(0.062)	(0.046)	(0.053)	(0.054)	(0.017)
Separated	-0.013	-0.038	-0.006	-0.161***	0.014	-0.088	-0.052	-0.07I	-0.014	-0.049**
	(0.065)	(0.059)	(0.058)	(0.050)	(0.050)	(0.094)	(0.064)	(0.064)	(0.049)	(0.020)
Widow	-0.012	-0.159**	-0.034	-0.019	0.064	-0.015	-0.033	0.041	0.094*	-0.007
	(0.044)	(0.064)	(0.072)	(0.082)	(0.066)	(0.060)	(0.058)	(0.064)	(0.055)	(0.020)

Table A5.2. (Continued)

					Having saving	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Income (ref: income: 1st	quartile)									
Income: refused	0.020	-0.037	0.089	0.129	0.093	-0.244	-0.067	0.021	0.187***	0.048*
	(0.062)	(0.087)	(880.0)	(0.089)	(0.085)	(0.258)	(0.075)	(0.072)	(0.056)	(0.025)
Income: 2nd quartile	0.068	-0.059	0.096	0.026	0.121*		0.027	-0.00 I	0.039	0.034
	(0.078)	(0.094)	(0.065)	(0.074)	(0.067)		(0.077)	(0.062)	(0.048)	(0.024)
Income: 3rd quartile	0.113	-0.033	0.170**	0.114	0.096	-0.177	0.068	0.056	0.175***	0.108**
	(0.076)	(0.097)	(0.070)	(0.071)	(0.075)	(0.266)	(0.072)	(0.062)	(0.060)	(0.024)
Income: 4th quartile	0.259***	0.077	0.294***	0.173**	0.278***	-0.171	0.191**	0.093	0.297***	0.195**
	(0.075)	(0.091)	(0.068)	(0.076)	(0.080)	(0.258)	(0.077)	(0.064)	(0.055)	(0.024)
Employment status (ref:	working)									
Retired	-0.110*	-0.029	-0.023	-0.058	0.079	0.037	-0.040	-0.04I	-0.038	-0.029
	(0.057)	(180.0)	(0.062)	(0.060)	(0.060)	(0.064)	(0.066)	(0.048)	(0.056)	(0.020)
Not employed	-0.139***	-0.001	-0.170***	-0.055	0.094	-0.092*	0.014	0.052	-0.106**	-0.064**
	(0.042)	(0.056)	(0.050)	(0.054)	(0.065)	(0.049)	(0.064)	(0.051)	(0.041)	(0.017)
Self-employed	0.075	0.122**	0.176***	0.126***	0.310***	0.097	0.204***	0.238***	0.260***	0.172**
	(0.105)	(0.057)	(0.045)	(0.041)	(0.068)	(0.060)	(0.050)	(0.068)	(0.075)	(0.020)
Had income shock	-0.046	-0.111***	0.005	-0.119**	-0.065	-0.027	-0.154***	-0.040	-0.043	-0.061**
	(0.035)	(0.042)	(0.041)	(0.048)	(0.042)	(0.041)	(0.042)	(0.032)	(0.041)	(0.014)
Number of children	-0.035	-0.00 I	-0.019	0.007	-0.035	0.037	-0.03 I	0.014	-0.011	-0.005
	(0.022)	(0.027)	(0.023)	(0.024)	(0.022)	(0.024)	(0.025)	(0.024)	(0.018)	(0.008)
Own house	0.110	0.064	-0.06 I	0.070**	0.052	0.122**	0.155***	-0.022	0.014	0.069**
	(0.070)	(0.067)	(0.054)	(0.035)	(0.047)	(0.054)	(0.043)	(0.054)	(0.065)	(0.017)

Table A5.2. (Continued)

					Having savin	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Constant	0.622***	0.187	0.143	-0.042	-0.330*	0.633*	-0.013	0.256	-0.020	-0.035
	(0.184)	(0.274)	(0.196)	(0.167)	(0.168)	(0.332)	(0.219)	(0.177)	(0.224)	(0.079)
Region fixed effects	✓	✓	✓	✓	✓	✓	✓	1	✓	1
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R ²	0.13	0.16	0.16	0.24	0.13	0.14	0.23	0.12	0.15	0.19
N	877	905	987	960	964	966	923	993	992	8567

Table A5.3. OLS estimates of having savings on financial literacy: Specification 3

					Having savin	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Interest correct	0.008	0.092**	0.047	0.100***	0.051	0.147***	0.070	0.062*	-0.023	0.069***
	(0.038)	(0.043)	(0.038)	(0.031)	(0.043)	(0.034)	(0.042)	(0.033)	(0.044)	(0.013)
Inflation correct	-0.021	-0.060	-0.002	0.120***	0.052	0.017	0.094**	0.011	-0.04 I	0.015
	(0.036)	(0.048)	(0.037)	(0.041)	(0.046)	(0.037)	(0.044)	(0.034)	(0.040)	(0.014)
Risk correct	0.039	0.011	0.045	0.009	0.014	0.011	0.062*	-0.010	-0.010	0.027**
	(0.034)	(0.040)	(0.035)	(0.043)	(0.033)	(0.037)	(0.033)	(0.033)	(0.034)	(0.012)
Age	-0.020****	-0.003	-0.00 I	0.008	0.016**	0.000	0.001	-0.00 I	0.004	-0.000
	(0.006)	(0.009)	(0.007)	(0.007)	(0.007)	(800.0)	(0.008)	(0.006)	(0.008)	(0.002)
Age squared	0.000***	0.000	0.000	-0.000	-0.000**	0.000	-0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.005	-0.040	-0.022	0.074***	0.003	-0.03 I	-0.003	-0.03 I	-0.045*	-0.010
	(0.033)	(0.032)	(0.031)	(0.024)	(0.032)	(0.030)	(0.030)	(0.022)	(0.024)	(0.010)
Education (ref: primary	and lower secondary)									
Upper secondary	0.094**	0.094	0.111*	0.213***	0.069	0.116**	0.102**	0.051	0.072**	0.098***
	(0.039)	(0.061)	(0.063)	(0.059)	(0.057)	(0.049)	(0.041)	(0.051)	(0.032)	(0.015)
Tertiary	0.185***	0.384***	0.285***	0.326***	0.165**	0.170***	0.168***	0.221***	0.195***	0.241***
	(0.055)	(0.069)	(0.066)	(0.072)	(0.070)	(0.064)	(0.053)	(0.068)	(0.044)	(0.019)
Marital status (ref: marr	ried)									
Single	-0.064	-0.023	0.005	-0.064	-0.069	0.046	0.029	-0.042	-0.029	-0.026
	(0.049)	(0.061)	(0.052)	(0.041)	(0.044)	(0.062)	(0.046)	(0.052)	(0.054)	(0.017)

Table A5.3. (Continued)

					Having saving	gs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Separated	-0.016	-0.036	-0.005	-0.160***	0.013	-0.09 I	-0.053	-0.068	-0.013	−0.049*°
	(0.064)	(0.059)	(0.058)	(0.050)	(0.050)	(0.093)	(0.064)	(0.064)	(0.050)	(0.020)
Widow	-0.013	-0.162**	-0.034	-0.018	0.062	-0.024	-0.033	0.041	0.095*	-0.008
	(0.044)	(0.064)	(0.072)	(0.080)	(0.066)	(0.060)	(0.058)	(0.064)	(0.056)	(0.020)
Income (ref: income: 1st	quartile)									
Income: refused	0.016	-0.039	0.092	0.134	0.095	-0.297	-0.068	0.011	0.190***	0.047*
	(0.060)	(0.088)	(0.088)	(0.089)	(0.085)	(0.257)	(0.075)	(0.073)	(0.056)	(0.025)
Income: 2nd quartile	0.062	-0.062	0.096	0.029	0.121*		0.027	-0.002	0.039	0.034
	(0.079)	(0.094)	(0.065)	(0.074)	(0.067)		(0.077)	(0.061)	(0.048)	(0.024)
Income: 3rd quartile	0.107	-0.03 I	0.170**	0.118*	0.097	-0.228	0.067	0.052	0.177***	0.108*
	(0.075)	(0.098)	(0.070)	(0.070)	(0.075)	(0.266)	(0.072)	(0.062)	(0.061)	(0.024)
Income: 4th quartile	0.249***	0.079	0.294***	0.181**	0.280***	-0.229	0.191**	0.087	0.299***	0.195**
	(0.075)	(0.092)	(0.068)	(0.076)	(0.079)	(0.257)	(0.078)	(0.064)	(0.056)	(0.024)
Employment status (ref:	working)									
Retired	-0.106*	-0.029	-0.028	-0.06 I	0.075	0.038	-0.04 I	-0.041	-0.036	-0.029
	(0.056)	(0.081)	(0.062)	(0.061)	(0.060)	(0.064)	(0.067)	(0.048)	(0.056)	(0.020)
Not employed	-0.142***	-0.008	-0.171***	-0.058	0.092	-0.099**	0.015	0.045	-0.104**	−0.065*°
	(0.042)	(0.056)	(0.050)	(0.055)	(0.065)	(0.049)	(0.065)	(0.051)	(0.042)	(0.017)
Self-employed	0.074	0.118**	0.176***	0.117***	0.308***	0.087	0.204***	0.238***	0.262***	0.172*
	(0.106)	(0.057)	(0.045)	(0.041)	(0.068)	(0.059)	(0.051)	(0.068)	(0.076)	(0.020)
Had income shock	-0.043	−0.105 **	0.004	-0.122**	-0.064	-0.036	-0.155***	-0.035	-0.043	-0.060*
	(0.035)	(0.042)	(0.041)	(0.048)	(0.042)	(0.040)	(0.042)	(0.033)	(0.041)	(0.014)

Table A5.3. (Continued)

					Having savin	ıgs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Number of children	-0.033	-0.002	-0.018	0.009	-0.036	0.037	-0.03 I	0.014	-0.010	-0.006
	(0.022)	(0.027)	(0.023)	(0.023)	(0.022)	(0.023)	(0.025)	(0.025)	(0.018)	(0.008)
Own house	0.110	0.066	-0.057	0.076**	0.050	0.120**	0.157***	-0.020	0.012	0.069***
	(0.071)	(0.065)	(0.054)	(0.035)	(0.047)	(0.054)	(0.043)	(0.054)	(0.064)	(0.017)
Constant	0.629***	0.215	0.148	-0.069	-0.327*	0.710**	-0.015	0.242	-0.023	-0.036
	(0.184)	(0.271)	(0.196)	(0.171)	(0.168)	(0.331)	(0.220)	(0.175)	(0.226)	(0.079)
Region fixed effects	✓	1	1	✓	1	✓	1	1	1	1
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R ²	0.13	0.17	0.16	0.24	0.14	0.15	0.23	0.12	0.15	0.20
N	877	905	987	960	964	966	923	993	992	8567

Table A6.1. OLS estimates of being financially vulnerable on financial literacy: Specification I

				Fin	ancially vulne	rable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
All three correct	-0.054	-0.102**	-0.163***	-0.148***	-0.004	-0.05 I	-0.088**	-0.093**	-0.022	-0.086***
	(0.054)	(0.044)	(0.038)	(0.035)	(0.039)	(0.043)	(0.034)	(0.044)	(0.035)	(0.013)
Age	-0.003	-0.009	-0.002	-0.011	-0.020***	-0.013*	-0.003	-0.009	-0.02 I***	-0.011**
	(0.006)	(0.009)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.002)
Age squared	0.000	0.000	0.000	0.000	0.000***	0.000*	0.000	0.000*	0.000***	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.033	0.027	-0.017	-0.007	0.013	0.065**	-0.064**	0.026	-0.009	-0.003
	(0.032)	(0.030)	(0.029)	(0.026)	(0.030)	(0.030)	(0.029)	(0.029)	(0.025)	(0.010)
Education (ref: primary a	nd lower secondary)									
Upper secondary	-0.083*	-0.040	-0.009	-0.151***	-0.044	-0.081*	-0.093**	-0.007	-0.089**	-0.069**
	(0.043)	(0.061)	(0.060)	(0.044)	(0.051)	(0.044)	(0.040)	(0.056)	(0.038)	(0.015)
Tertiary	-0.158***	-0.088	-0.134**	-0.268***	-0.220***	-0.176***	-0.202***	-0.243***	-0.220***	-0.199**
	(0.058)	(0.067)	(0.067)	(0.051)	(0.062)	(0.057)	(0.053)	(0.069)	(0.043)	(0.019)
Marital status (ref: marrie	ed)									
Single	0.139**	0.103*	0.006	0.068	0.079*	0.019	0.114**	0.032	0.074	0.066**
	(0.055)	(0.060)	(0.046)	(0.046)	(0.046)	(0.053)	(0.044)	(0.057)	(0.055)	(0.017)
Separated	0.036	0.029	0.059	0.130***	0.042	0.022	0.098	0.105	0.021	0.066**
	(0.069)	(0.068)	(0.057)	(0.049)	(0.050)	(0.091)	(0.064)	(0.065)	(0.051)	(0.019)
Widow	0.106**	0.067	0.060	0.025	0.023	-0.046	0.092	0.089	0.034	0.044**
	(0.053)	(0.070)	(0.064)	(0.063)	(0.061)	(0.051)	(0.056)	(0.058)	(0.068)	(0.020)

Table A6.1. (Continued)

				Fin	ancially vulne	rable			·	
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Income (ref: income: 1st	t quartile)									
Income: refused	-0.096	-0.058	-0.188**	-0.311***	-0.196***	0.098	-0.074	-0.149*	-0.036	-0.138**
	(0.069)	(0.092)	(0.078)	(0.076)	(0.075)	(0.082)	(0.064)	(0.080)	(0.064)	(0.024)
Income: 2nd quartile	-0.170**	-0.115	-0.127**	-0.139**	-0.054		-0.153**	0.062	-0.127**	-0.098**
	(0.074)	(0.092)	(0.064)	(0.063)	(0.053)		(0.061)	(0.059)	(0.060)	(0.022)
Income: 3rd quartile	-0.263***	-0.018	-0.239***	-0.097	-0.093	0.131	-0.173***	0.057	-0.100	-0.135**
	(0.082)	(0.091)	(0.068)	(0.065)	(0.070)	(0.081)	(0.065)	(0.059)	(0.064)	(0.023)
Income: 4th quartile	-0.374***	-0.056	-0.292***	-0.278***	-0.297***	0.072	-0.286***	-0.010	-0.226***	-0.240**
	(0.078)	(0.094)	(0.070)	(0.069)	(0.073)	(0.079)	(0.065)	(0.057)	(0.063)	(0.023)
Employment status (ref:	working)									
Retired	0.135**	0.335***	0.038	0.236***	0.134**	0.151**	0.097*	-0.003	0.096	0.111**
	(0.057)	(0.074)	(0.060)	(0.053)	(0.065)	(0.066)	(0.057)	(0.056)	(0.068)	(0.021)
Not employed	0.278***	0.355***	0.368***	0.202***	0.089	0.454***	0.197***	0.141**	0.411***	0.300**
	(0.053)	(0.055)	(0.048)	(0.058)	(0.061)	(0.044)	(0.049)	(0.055)	(0.051)	(0.018)
Self-employed	-0.280***	0.066	-0.127**	-0.110**	-0.087	0.044	0.028	-0.058	-0.113**	-0.062***
	(0.057)	(0.059)	(0.053)	(0.044)	(0.066)	(0.057)	(0.046)	(0.066)	(0.054)	(0.019)
Had income shock	0.073*	0.096**	0.038	0.117***	0.111***	0.118***	0.107***	0.091***	0.122***	0.095**
	(0.043)	(0.042)	(0.038)	(0.042)	(0.040)	(0.034)	(0.035)	(0.035)	(0.039)	(0.013)
Number of children	0.010	-0.056**	-0.023	-0.025	0.010	-0.015	0.034	-0.014	-0.004	-0.008
	(0.022)	(0.026)	(0.022)	(0.022)	(0.020)	(0.018)	(0.021)	(0.024)	(0.021)	(0.007)
Own house	-0.088	-0.115*	0.013	0.005	0.036	-0.084	-0.163***	-0.024	-0.077	-0.049**
	(0.072)	(0.068)	(0.042)	(0.036)	(0.046)	(0.052)	(0.045)	(0.058)	(0.053)	(0.017)

Table A6.1. (Continued)

				Fina	ancially vulne	rable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Constant	0.738***	0.434*	0.748***	1.037***	1.068***	0.737***	0.830***	0.788***	1.005***	0.882***
	(0.160)	(0.226)	(0.175)	(0.200)	(0.187)	(0.276)	(0.203)	(0.197)	(0.217)	(0.075)
Region fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R ²	0.24	0.29	0.20	0.37	0.24	0.23	0.28	0.19	0.34	0.24
N	834	864	969	870	935	968	900	938	965	8243

Table A6.2. OLS estimates of being financially vulnerable on financial literacy: Specification 2

	<u> </u>		,	<u>'</u>						
				Fina	ancially vulne	rable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Total number correct	-0.044**	-0.056***	-0.096***	-0.070***	-0.012	-0.034*	-0.056***	-0.043**	0.001	−0.049**
	(0.020)	(0.020)	(0.018)	(0.018)	(0.018)	(0.018)	(0.015)	(0.018)	(0.018)	(0.006)
Age	-0.003	-0.008	-0.002	-0.011*	-0.020***	-0.012*	-0.003	-0.009	-0.022***	-0.011**
	(0.006)	(0.009)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(800.0)	(0.007)	(0.002)
Age squared	0.000	0.000	0.000	0.000	0.000***	0.000*	0.000	0.000*	0.000***	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.033	0.024	-0.014	-0.008	0.013	0.064**	-0.068**	0.026	-0.009	-0.003
	(0.031)	(0.030)	(0.029)	(0.026)	(0.030)	(0.030)	(0.030)	(0.029)	(0.025)	(0.010)
Education (ref: primary and	d lower secondary)									
Upper secondary	-0.082*	-0.030	-0.017	-0.138***	-0.044	-0.078*	-0.084**	-0.006	-0.090**	-0.066**
	(0.042)	(0.061)	(0.061)	(0.045)	(0.051)	(0.044)	(0.040)	(0.055)	(0.038)	(0.015)
Tertiary	-0.159***	-0.078	-0.142**	−0.252***	-0.218***	−0.169***	-0.190***	-0.237***	-0.222***	-0.195**
	(0.058)	(0.067)	(0.068)	(0.053)	(0.062)	(0.058)	(0.052)	(0.070)	(0.042)	(0.019)
Marital status (ref: married	i)									
Single	0.138**	0.107*	0.006	0.071	0.080*	0.023	0.110**	0.033	0.075	0.067**
	(0.055)	(0.061)	(0.045)	(0.047)	(0.046)	(0.052)	(0.043)	(0.057)	(0.055)	(0.017)
Separated	0.036	0.033	0.069	0.134***	0.041	0.029	0.100	0.112*	0.018	0.067**
	(0.071)	(0.068)	(0.057)	(0.049)	(0.050)	(0.091)	(0.063)	(0.064)	(0.051)	(0.019)
Widow	0.103*	0.069	0.054	0.023	0.023	-0.046	0.090	0.094	0.036	0.043**
	(0.053)	(0.071)	(0.064)	(0.064)	(0.061)	(0.051)	(0.055)	(0.059)	(0.069)	(0.020)

Table A6.2. (Continued)

				Fina	ancially vulne	rable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Income (ref: income: 1st	quartile)									
Income: refused	-0.102	-0.048	−0.164***	-0.312***	-0.195**	0.095	-0.07 I	-0.142*	-0.037	−0.136*°
	(0.068)	(0.094)	(0.080)	(0.076)	(0.075)	(0.082)	(0.062)	(180.0)	(0.064)	(0.024)
Income: 2nd quartile	-0.161**	-0.101	-0.112*	−0.130**	-0.055		-0.147**	0.054	-0.128**	−0.094*°
	(0.073)	(0.094)	(0.065)	(0.064)	(0.054)		(0.061)	(0.060)	(0.060)	(0.022)
Income: 3rd quartile	-0.260***	-0.009	-0.228***	-0.096	-0.092	0.128	-0.166**	0.056	-0.104	−0.133*
	(0.081)	(0.093)	(0.068)	(0.063)	(0.071)	(180.0)	(0.065)	(0.059)	(0.064)	(0.023)
Income: 4th quartile	-0.373***	-0.040	-0.285***	-0.27I***	-0.294***	0.069	-0.278***	-0.008	-0.230***	-0.235*
	(0.078)	(0.097)	(0.070)	(0.070)	(0.073)	(0.079)	(0.065)	(0.058)	(0.063)	(0.023)
Employment status (ref:	working)									
Retired	0.141**	0.327***	0.039	0.228***	0.134**	0.154**	0.106*	-0.004	0.097	0.112*
	(0.057)	(0.076)	(0.060)	(0.053)	(0.064)	(0.065)	(0.056)	(0.055)	(0.068)	(0.021)
Not employed	0.273***	0.359***	0.357***	0.197***	0.090	0.447***	0.197***	0.145***	0.411***	0.298*
	(0.053)	(0.055)	(0.048)	(0.059)	(0.061)	(0.044)	(0.049)	(0.055)	(0.051)	(0.018)
Self-employed	-0.282***	0.067	-0.125**	-0.123***	-0.086	0.040	0.026	-0.068	-0.113**	-0.065*
	(0.053)	(0.058)	(0.054)	(0.044)	(0.066)	(0.058)	(0.046)	(0.066)	(0.054)	(0.019)
Had income shock	0.067	0.090**	0.031	0.116***	0.108***	0.117***	0.100***	0.090**	0.124***	0.092*
	(0.043)	(0.041)	(0.037)	(0.043)	(0.040)	(0.034)	(0.035)	(0.035)	(0.039)	(0.013)
Number of children	0.010	-0.055**	-0.022	-0.025	0.010	-0.013	0.034	-0.015	-0.004	-0.007
	(0.022)	(0.026)	(0.022)	(0.022)	(0.020)	(0.018)	(0.021)	(0.024)	(0.021)	(0.007)
Own house	-0.087	-0.115*	0.017	0.005	0.037	-0.079	-0.162***	-0.028	-0.081	-0.048*
	(0.070)	(0.068)	(0.043)	(0.036)	(0.046)	(0.053)	(0.044)	(0.058)	(0.053)	(0.017)

Table A6.2. (Continued)

				Fina	ancially vulne	rable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Constant	0.786***	0.468**	0.862***	1.113***	1.083***	0.755***	0.883***	0.847***	1.004***	0.943***
	(0.161)	(0.228)	(0.175)	(0.205)	(0.190)	(0.278)	(0.201)	(0.197)	(0.216)	(0.075)
Region fixed effects	✓	1	1	1	✓	✓	✓	1	1	1
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R ²	0.24	0.29	0.21	0.37	0.24	0.23	0.28	0.20	0.34	0.25
N	834	864	969	870	935	968	900	938	965	8243

Table A6.3. OLS estimates of being financially vulnerable on financial literacy: Specification 3

				Fin	ancially vulne	rable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Interest correct	0.002	-0.072**	-0.093**	-0.101***	-0.023	-0.022	-0.034	-0.048	-0.018	-0.051**
	(0.037)	(0.035)	(0.037)	(0.038)	(0.039)	(0.037)	(0.037)	(0.036)	(0.035)	(0.012)
Inflation correct	-0.005	-0.027	-0.128***	-0.085**	0.022	-0.046	-0.104**	-0.03 I	0.072*	-0.032**
	(0.035)	(0.037)	(0.035)	(0.040)	(0.039)	(0.032)	(0.040)	(0.033)	(0.037)	(0.012)
Risk correct	-0.141***	-0.059*	-0.068**	-0.023	-0.030	-0.035	-0.035	-0.048	-0.05 I	-0.063**
	(0.035)	(0.032)	(0.031)	(0.036)	(0.033)	(0.032)	(0.030)	(0.035)	(0.032)	(0.011)
Age	-0.003	-0.008	-0.002	-0.011*	-0.020***	-0.012*	-0.002	-0.009	-0.022***	-0.011**
	(0.006)	(0.009)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.007)	(0.002)
Age squared	0.000	0.000	0.000	0.000	0.000***	0.000*	0.000	0.000*	0.000***	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.040	0.024	-0.013	-0.009	0.008	0.064**	-0.068**	0.027	-0.006	-0.003
	(0.031)	(0.030)	(0.029)	(0.026)	(0.030)	(0.030)	(0.029)	(0.029)	(0.025)	(0.010)
Education (ref: primary	and lower secondary)									
Upper secondary	-0.080*	-0.032	-0.019	-0.141***	-0.049	-0.080*	-0.083**	-0.007	-0.085**	-0.067**
	(0.042)	(0.061)	(0.063)	(0.045)	(0.051)	(0.045)	(0.040)	(0.055)	(0.038)	(0.015)
Tertiary	−0.155 ***	-0.079	-0.146**	-0.256***	-0.227***	-0.170***	-0.189***	-0.236***	-0.216***	-0.195**
	(0.057)	(0.068)	(0.069)	(0.053)	(0.062)	(0.059)	(0.052)	(0.070)	(0.042)	(0.019)
Marital status (ref: mar	ried)									
Single	0.130**	0.108*	0.009	0.067	0.078*	0.022	0.110**	0.033	0.070	0.067**
	(0.053)	(0.061)	(0.045)	(0.047)	(0.046)	(0.052)	(0.043)	(0.056)	(0.055)	(0.017)
Separated	0.034	0.031	0.071	0.134***	0.038	0.030	0.103	0.112*	0.017	0.067**
	(0.072)	(0.068)	(0.058)	(0.049)	(0.051)	(0.091)	(0.064)	(0.064)	(0.051)	(0.019)

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				Fin	ancially vulne	erable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Widow	0.104*	0.068	0.055	0.025	0.021	-0.047	0.091*	0.095	0.029	0.043**
	(0.053)	(0.071)	(0.063)	(0.063)	(0.061)	(0.051)	(0.055)	(0.059)	(0.067)	(0.020)
ncome (ref: income: 1st	t quartile)									
Income: refused	-0.097	-0.049	-0.157*	-0.311***	-0.192**	0.081	-0.067	-0.140*	-0.044	−0.136*
	(0.065)	(0.094)	(180.0)	(0.075)	(0.075)	(0.090)	(0.062)	(180.0)	(0.064)	(0.024)
Income: 2nd quartile	-0.157**	-0.101	-0.111*	-0.132**	-0.055		-0.147**	0.054	-0.127**	−0.093*
	(0.070)	(0.093)	(0.065)	(0.062)	(0.054)		(0.062)	(0.060)	(0.059)	(0.022)
Income: 3rd quartile	-0.250***	-0.012	-0.227***	-0.099	-0.09 I	0.115	-0.166**	0.055	-0.107	-0.133*
	(0.078)	(0.093)	(0.068)	(0.063)	(0.070)	(0.090)	(0.065)	(0.060)	(0.064)	(0.023)
Income: 4th quartile	-0.362***	-0.042	-0.284***	-0.277***	-0.296***	0.055	-0.278***	-0.007	-0.235***	-0.235**
	(0.076)	(0.097)	(0.070)	(0.070)	(0.073)	(0.090)	(0.066)	(0.058)	(0.063)	(0.023)
Employment status (ref:	working)									
Retired	0.138**	0.326***	0.036	0.229***	0.127*	0.155**	0.109*	-0.004	0.090	0.111*
	(0.057)	(0.076)	(0.060)	(0.053)	(0.066)	(0.065)	(0.055)	(0.056)	(0.067)	(0.021)
Not employed	0.283***	0.361***	0.356***	0.198***	0.088	0.447***	0.195***	0.145***	0.404***	0.298*
	(0.052)	(0.055)	(0.048)	(0.058)	(0.061)	(0.044)	(0.049)	(0.055)	(0.051)	(0.018)
Self-employed	−0.280***	0.068	-0.126**	-0.119***	-0.086	0.039	0.027	-0.068	-0.118**	-0.065**
	(0.051)	(0.058)	(0.054)	(0.043)	(0.066)	(0.058)	(0.046)	(0.066)	(0.053)	(0.019)
Had income shock	0.057	0.088**	0.030	0.117***	0.110***	0.116***	0.101***	0.089**	0.119***	0.092*
	(0.042)	(0.042)	(0.037)	(0.044)	(0.040)	(0.034)	(0.035)	(0.035)	(0.039)	(0.013)
Number of children	0.005	-0.055**	-0.02 I	-0.026	0.011	-0.013	0.033	-0.014	-0.006	-0.008
	(0.022)	(0.026)	(0.022)	(0.022)	(0.020)	(0.018)	(0.021)	(0.024)	(0.021)	(0.007)

Table A6.3. (Continued)

				Fina	ancially vulne	erable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Own house	-0.088	-0.114*	0.021	0.001	0.036	-0.079	-0.166***	-0.027	-0.074	-0.047***
	(0.070)	(0.068)	(0.043)	(0.036)	(0.046)	(0.053)	(0.044)	(0.058)	(0.053)	(0.017)
Constant	0.775***	0.454**	0.865***	1.124***	1.088***	0.771***	0.880***	0.844***	1.012***	0.940***
	(0.161)	(0.227)	(0.175)	(0.206)	(0.188)	(0.282)	(0.198)	(0.197)	(0.216)	(0.075)
Region fixed effects	✓	✓	1	✓	✓	1	1	✓	1	1
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R ²	0.25	0.30	0.22	0.37	0.24	0.23	0.28	0.20	0.35	0.25
N	834	864	969	870	935	968	900	938	965	8243

Table A7.1. Robustness analysis of having savings on financial literacy: Specification I

					Having sav	ings				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
All three correct	-0.071	0.011	0.055	0.126***	0.083*	0.097**	0.160***	0.021	-0.032	0.064***
	(0.051)	(0.053)	(0.041)	(0.036)	(0.046)	(0.044)	(0.034)	(0.046)	(0.041)	(0.015)
Age	-0.020***	-0.002	-0.00 I	0.006	0.015**	0.001	0.001	-0.002	0.003	-0.00 I
	(0.006)	(0.009)	(0.007)	(0.006)	(0.007)	(800.0)	(800.0)	(0.007)	(0.007)	(0.002)
Age squared	0.000***	0.000	0.000	-0.000	-0.000*	0.000	-0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.000	-0.047	-0.027	0.061**	0.003	-0.039	-0.008	-0.039*	-0.046*	-0.013
	(0.033)	(0.032)	(0.031)	(0.025)	(0.032)	(0.031)	(0.030)	(0.022)	(0.024)	(0.010)
Education (ref: primary and lower secondary)										
Upper secondary	0.086**	0.066	0.117*	0.224***	0.059	0.123**	0.109***	0.033	0.069**	0.092***
	(0.039)	(0.061)	(0.062)	(0.056)	(0.057)	(0.049)	(0.041)	(0.049)	(0.031)	(0.015)
Tertiary	0.188***	0.350***	0.266***	0.344***	0.161**	0.197***	0.168***	0.199***	0.198***	0.233***
	(0.056)	(0.067)	(0.067)	(0.068)	(0.067)	(0.061)	(0.052)	(0.067)	(0.043)	(0.019)
Marital status (ref: married)										
Single	-0.075	-0.032	-0.006	-0.07I*	-0.062	0.051	0.005	-0.043	-0.023	-0.028
	(0.046)	(0.062)	(0.051)	(0.039)	(0.045)	(0.062)	(0.046)	(0.054)	(0.055)	(0.017)
Separated	-0.012	-0.029	-0.005	-0.139**	0.029	-0.073	-0.029	-0.07 I	-0.009	-0.042**
	(0.062)	(0.058)	(0.057)	(0.053)	(0.050)	(0.095)	(0.063)	(0.064)	(0.049)	(0.019)
Widow	-0.019	-0.156**	-0.039	-0.016	0.077	-0.004	-0.033	0.047	0.101*	-0.004
	(0.044)	(0.061)	(0.071)	(0.078)	(0.067)	(0.060)	(0.059)	(0.064)	(0.056)	(0.020)

Table A7.1. (Continued)

					Having savi	ngs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Income (ref: income: 1st quartile)										
Income: refused	0.034	-0.056	0.083	0.120	0.132	-0.176	-0.096	0.025	0.164***	0.048*
	(0.061)	(0.089)	(0.092)	(0.088)	(0.082)	(0.234)	(0.076)	(0.071)	(0.056)	(0.025)
Income: 2nd quartile	0.049	-0.064	0.095	0.024	0.130*		0.009	0.003	0.040	0.036
	(0.080)	(0.092)	(0.065)	(0.072)	(0.067)		(0.078)	(0.058)	(0.046)	(0.024)
Income: 3rd quartile	0.105	-0.045	0.163**	0.103	0.123*	-0.127	0.059	0.051	0.164***	0.104**
	(0.074)	(0.099)	(0.070)	(0.071)	(0.072)	(0.242)	(0.073)	(0.060)	(0.059)	(0.024)
Income: 4th quartile	0.243***	0.048	0.289***	0.170**	0.307***	-0.117	0.154*	0.097	0.281***	0.190**
	(0.074)	(0.092)	(0.068)	(0.072)	(0.076)	(0.234)	(0.078)	(0.060)	(0.055)	(0.024)
Employment status (ref: working)										
Retired	-0.122**	-0.027	-0.019	-0.068	0.078	0.043	-0.018	-0.037	-0.039	-0.029
	(0.055)	(0.079)	(0.063)	(0.060)	(0.059)	(0.064)	(0.064)	(0.048)	(0.054)	(0.020)
Not employed	-0.137***	0.004	-0.167***	-0.064	0.098	-0.100**	0.012	0.055	-0.102**	-0.065**
	(0.041)	(0.056)	(0.050)	(0.056)	(0.065)	(0.049)	(0.066)	(0.051)	(0.040)	(0.017)
Self-employed	0.043	0.109*	0.164***	0.095**	0.319***	0.096	0.187***	0.227***	0.269***	0.165**
	(0.103)	(0.058)	(0.046)	(0.040)	(0.071)	(0.060)	(0.051)	(0.069)	(0.073)	(0.020)
Had income shock	-0.036	-0.114***	-0.007	-0.113**	-0.064	-0.013	-0.160***	-0.045	-0.048	-0.057**
	(0.036)	(0.043)	(0.042)	(0.044)	(0.039)	(0.040)	(0.041)	(0.032)	(0.040)	(0.014)
Number of children	-0.038*	-0.007	-0.013	0.009	-0.032	0.034	-0.037	0.014	-0.006	-0.005
	(0.022)	(0.026)	(0.023)	(0.023)	(0.022)	(0.024)	(0.024)	(0.025)	(810.0)	(0.008)
Own house	0.108	0.062	-0.041	0.067*	0.046	0.112**	0.130***	-0.018	0.003	0.067**
	(0.066)	(0.065)	(0.051)	(0.037)	(0.046)	(0.051)	(0.044)	(0.055)	(0.059)	(0.017)

Table A7.1. (Continued)

					Having savi	ngs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Interviewer age	0.003**	0.003	0.001	0.003	0.006**	0.004**	-0.000	0.002	0.001	0.002***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	-0.107**	-0.086	-0.065	0.036	0.016	-0.025	-0.126**	0.014	-0.14 7 **	-0.055***
	(0.049)	(0.091)	(0.077)	(0.066)	(0.056)	(0.053)	(0.051)	(0.051)	(0.064)	(0.021)
Interviewer worked for OeNB Euro	-0.164**	-0.212**	-0.204***	0.052	0.019	0.005	0.061	-0.097	-0.006	-0.060**
Survey before 2022	(0.072)	(0.104)	(0.063)	(0.065)	(0.059)	(0.075)	(0.073)	(0.062)	(0.052)	(0.024)
Interview sequence	-0.000	0.002	-0.00 I	0.000	-0.003	0.001	-0.004	-0.002	-0.004	-0.001
	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.001)
Interviewer: respondent residence poor or	-0.112**	-0.129*	-0.018	-0.157***	-0.044	-0.067	-0.128***	-0.185***	-0.074*	-0.100***
very poor	(0.049)	(0.067)	(0.063)	(0.054)	(0.059)	(0.054)	(0.048)	(0.041)	(0.039)	(0.018)
Constant	0.737***	0.380	0.374*	-0.126	-0.558***	0.530	0.194	0.314	0.094	0.072
	(0.188)	(0.312)	(0.221)	(0.183)	(0.191)	(0.344)	(0.225)	(0.204)	(0.250)	(0.084)
Region fixed effects	✓	✓	✓	1	✓	✓	✓	/	1	1
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R ²	0.15	0.17	0.17	0.26	0.15	0.14	0.25	0.14	0.17	0.20
N	877	905	987	960	964	966	923	993	992	8567

Table A7.2. Robustness analysis of having savings on financial literacy: Specification 2

					Having sav	ings				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Total number correct	-0.008	0.016	0.035*	0.070***	0.036	0.052***	0.070***	0.022	-0.030	0.034***
	(0.020)	(0.023)	(0.020)	(0.020)	(0.022)	(0.019)	(0.018)	(0.019)	(0.020)	(0.007)
Age	-0.021***	-0.002	-0.001	0.006	0.014**	0.000	0.001	-0.002	0.003	-0.001
	(0.006)	(0.009)	(0.007)	(0.006)	(0.007)	(800.0)	(800.0)	(0.007)	(0.007)	(0.002)
Age squared	0.000***	0.000	0.000	-0.000	-0.000*	0.000	-0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.002	-0.045	-0.028	0.061**	-0.001	-0.036	-0.006	-0.038*	-0.046*	-0.012
	(0.033)	(0.032)	(0.031)	(0.025)	(0.031)	(0.030)	(0.030)	(0.022)	(0.024)	(0.010)
Education (ref: primary and lower secondary)										
Upper secondary	0.083**	0.063	0.118*	0.207***	0.061	0.123**	0.102**	0.030	0.069**	0.090***
	(0.040)	(0.062)	(0.061)	(0.056)	(0.057)	(0.048)	(0.042)	(0.050)	(0.031)	(0.015)
Tertiary	0.187***	0.344***	0.268***	0.326***	0.161**	0.188***	0.171***	0.192***	0.197***	0.230***
	(0.056)	(0.069)	(0.066)	(0.068)	(0.068)	(0.061)	(0.052)	(0.068)	(0.043)	(0.019)
Marital status (ref: married)										
Single	-0.075	-0.033	-0.005	-0.076*	-0.063	0.046	0.019	-0.042	-0.022	-0.028
	(0.046)	(0.062)	(0.051)	(0.038)	(0.045)	(0.062)	(0.046)	(0.054)	(0.055)	(0.017)
Separated	-0.020	-0.030	-0.008	-0.142***	0.027	-0.083	-0.029	-0.075	-0.008	-0.044**
	(0.063)	(0.058)	(0.056)	(0.053)	(0.050)	(0.095)	(0.064)	(0.064)	(0.049)	(0.020)
Widow	-0.018	−0.157 **	-0.036	-0.012	0.071	-0.005	-0.026	0.044	0.097*	-0.003
	(0.044)	(0.061)	(0.071)	(0.077)	(0.066)	(0.060)	(0.059)	(0.065)	(0.056)	(0.020)

Table A7.2. (Continued)

					Having savi	ngs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Income (ref: income: 1st quartile)										
Income: refused	0.027	-0.055	0.074	0.113	0.123	-0.175	-0.096	0.021	0.166***	0.046*
	(0.060)	(0.089)	(0.092)	(0.087)	(0.082)	(0.235)	(0.078)	(0.071)	(0.057)	(0.025)
Income: 2nd quartile	0.049	-0.069	0.090	0.015	0.123*		0.003	0.005	0.039	0.032
	(0.080)	(0.092)	(0.065)	(0.072)	(0.067)		(0.080)	(0.059)	(0.046)	(0.024)
Income: 3rd quartile	0.104	-0.046	0.159**	0.101	0.115	-0.122	0.055	0.050	0.164***	0.103***
	(0.074)	(0.099)	(0.070)	(0.070)	(0.072)	(0.244)	(0.075)	(0.060)	(0.059)	(0.024)
Income: 4th quartile	0.241***	0.046	0.286***	0.161**	0.293***	-0.115	0.158**	0.094	0.283***	0.187***
	(0.073)	(0.093)	(0.069)	(0.072)	(0.077)	(0.236)	(0.079)	(0.060)	(0.055)	(0.024)
Employment status (ref: working)										
Retired	-0.124**	-0.024	-0.020	-0.064	0.074	0.037	-0.035	-0.034	-0.039	-0.030
	(0.055)	(0.079)	(0.063)	(0.060)	(0.059)	(0.064)	(0.065)	(0.048)	(0.055)	(0.020)
Not employed	-0.137***	0.004	-0.163***	-0.058	0.103	-0.090*	0.014	0.053	-0.102**	-0.063***
	(0.041)	(0.056)	(0.051)	(0.055)	(0.066)	(0.049)	(0.066)	(0.051)	(0.040)	(0.017)
Self-employed	0.031	0.108*	0.163***	0.103**	0.319***	0.099	0.190***	0.231***	0.273***	0.167***
	(0.106)	(0.058)	(0.045)	(0.040)	(0.072)	(0.060)	(0.050)	(0.068)	(0.073)	(0.020)
Had income shock	-0.034	-0.114***	-0.005	-0.112**	-0.060	-0.014	-0.156***	-0.042	-0.049	-0.055*** ¹
	(0.035)	(0.043)	(0.042)	(0.045)	(0.040)	(0.040)	(0.042)	(0.032)	(0.040)	(0.014)
Number of children	-0.036*	-0.007	-0.014	0.008	-0.03 I	0.032	-0.035	0.015	-0.006	-0.005
	(0.022)	(0.026)	(0.023)	(0.023)	(0.022)	(0.024)	(0.024)	(0.025)	(0.018)	(0.008)
Own house	0.109	0.061	-0.04 I	0.061	0.049	0.108**	0.134***	-0.014	0.007	0.067**
	(0.066)	(0.065)	(0.051)	(0.037)	(0.046)	(0.052)	(0.044)	(0.055)	(0.061)	(0.017)

Table A7.2. (Continued)

					Having savi	ngs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Interviewer age	0.003*	0.003	0.001	0.003	0.006**	0.003*	-0.00 I	0.002	0.001	0.002**
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	-0.101**	-0.082	-0.056	0.045	0.010	-0.024	-0.106**	0.010	-0.148**	-0.054**
	(0.049)	(0.091)	(0.077)	(0.065)	(0.055)	(0.053)	(0.051)	(0.051)	(0.064)	(0.020)
Interviewer worked for OeNB Euro	-0.160**	-0.210**	-0.206***	0.052	0.018	0.006	0.056	-0.103	-0.006	-0.061**
Survey before 2022	(0.071)	(0.103)	(0.063)	(0.064)	(0.058)	(0.075)	(0.073)	(0.063)	(0.052)	(0.024)
Interview sequence	-0.000	0.002	-0.00 I	0.000	-0.003	0.001	-0.004	-0.00 I	-0.004	-0.00 I
	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.001)
Interviewer: respondent residence poor or	-0.118**	-0.125*	-0.018	-0.157***	-0.043	-0.066	-0.127***	-0.184***	-0.076*	-0.099***
very poor	(0.049)	(0.066)	(0.063)	(0.055)	(0.060)	(0.054)	(0.048)	(0.041)	(0.039)	(0.018)
Constant	0.753***	0.353	0.330	-0.224	-0.569***	0.506	0.112	0.295	0.126	0.030
	(0.190)	(0.313)	(0.224)	(0.185)	(0.194)	(0.343)	(0.227)	(0.205)	(0.250)	(0.085)
Region fixed effects	✓	✓	1	1	✓	✓	✓	1	1	1
Mean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
R ²	0.15	0.17	0.18	0.26	0.15	0.15	0.25	0.14	0.17	0.20
N	877	905	987	960	964	966	923	993	992	8567

					Having sav	ings				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Interest correct	-0.018	0.090**	0.066*	0.110***	0.050	0.140***	0.065	0.062*	-0.037	0.068***
	(0.037)	(0.040)	(0.037)	(0.031)	(0.043)	(0.036)	(0.041)	(0.033)	(0.043)	(0.013)
Inflation correct	-0.028	-0.07 I	-0.010	0.100**	0.051	0.008	0.088**	0.012	-0.036	0.008
	(0.036)	(0.046)	(0.036)	(0.042)	(0.045)	(0.039)	(0.043)	(0.034)	(0.041)	(0.014)
Risk correct	0.028	0.001	0.048	-0.000	0.009	0.010	0.060*	-0.008	-0.017	0.024**
	(0.036)	(0.039)	(0.036)	(0.039)	(0.033)	(0.036)	(0.032)	(0.033)	(0.033)	(0.012)
Age	-0.021***	-0.003	-0.002	0.006	0.014**	-0.000	0.001	-0.002	0.003	-0.00 I
	(0.006)	(0.009)	(0.007)	(0.006)	(0.007)	(800.0)	(0.008)	(0.007)	(0.007)	(0.002)
Age squared	0.000***	0.000	0.000	-0.000	-0.000*	0.000	-0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	0.000	-0.045	-0.028	0.063**	-0.002	-0.03 I	-0.005	-0.035	-0.046*	-0.012
	(0.033)	(0.032)	(0.031)	(0.025)	(0.031)	(0.030)	(0.030)	(0.022)	(0.024)	(0.010)
Education (ref: primary and lower secondary)										
Upper Secondary	0.082**	0.070	0.119*	0.210***	0.058	0.110**	0.102**	0.031	0.069**	0.090***
	(0.040)	(0.062)	(0.062)	(0.056)	(0.058)	(0.049)	(0.042)	(0.050)	(0.030)	(0.015)
Tertiary	0.185***	0.352***	0.266***	0.331***	0.158**	0.165***	0.171***	0.190***	0.196***	0.230***
	(0.056)	(0.069)	(0.066)	(0.068)	(0.069)	(0.062)	(0.052)	(0.068)	(0.043)	(0.019)
Marital status (ref: married)										
Single	-0.074	-0.035	-0.003	-0.070*	-0.065	0.043	0.018	-0.039	-0.020	-0.028*
	(0.046)	(0.062)	(0.052)	(0.038)	(0.045)	(0.062)	(0.046)	(0.053)	(0.055)	(0.017)

Table A7.3. (Continued)

					Having sav	ings				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Separated	-0.022	-0.028	-0.007	-0.141***	0.026	-0.085	-0.030	-0.07 I	-0.007	-0.044**
	(0.062)	(0.058)	(0.056)	(0.053)	(0.050)	(0.094)	(0.064)	(0.064)	(0.049)	(0.019)
Widow	-0.019	−0.159 **	-0.037	-0.013	0.069	-0.013	-0.026	0.044	0.097*	-0.004
	(0.044)	(0.061)	(0.072)	(0.075)	(0.066)	(0.060)	(0.059)	(0.064)	(0.057)	(0.020)
Income (ref: income: 1st quartile)										
Income: refused	0.024	-0.059	0.075	0.116	0.126	-0.233	-0.097	0.012	0.168***	0.046*
	(0.059)	(0.090)	(0.091)	(880.0)	(180.0)	(0.234)	(0.078)	(0.071)	(0.057)	(0.025)
Income: 2nd quartile	0.045	-0.074	0.089	0.019	0.123*		0.003	0.004	0.039	0.032
	(0.081)	(0.093)	(0.065)	(0.072)	(0.067)		(0.080)	(0.058)	(0.046)	(0.024)
Income: 3rd quartile	0.098	-0.047	0.157**	0.104	0.117	-0.178	0.055	0.047	0.164***	0.103*
	(0.073)	(0.101)	(0.070)	(0.070)	(0.072)	(0.244)	(0.075)	(0.060)	(0.059)	(0.024)
Income: 4th quartile	0.234***	0.046	0.286***	0.169**	0.295***	-0.177	0.158**	0.088	0.284***	0.188*
	(0.074)	(0.094)	(0.069)	(0.072)	(0.076)	(0.235)	(0.080)	(0.061)	(0.056)	(0.024)
Employment status (ref: working)										
Retired	-0.119**	-0.024	-0.029	-0.067	0.069	0.038	-0.035	-0.034	-0.039	-0.029
	(0.055)	(0.080)	(0.063)	(0.059)	(0.059)	(0.064)	(0.065)	(0.048)	(0.055)	(0.019)
Not employed	-0.139***	-0.003	-0.164***	-0.064	0.102	-0.096*	0.015	0.046	−0.100 **	-0.063**
	(0.041)	(0.056)	(0.050)	(0.055)	(0.066)	(0.049)	(0.066)	(0.050)	(0.040)	(0.017)
Self-employed	0.032	0.103*	0.161***	0.095**	0.318***	0.085	0.190***	0.231***	0.275***	0.167*
	(0.107)	(0.058)	(0.046)	(0.041)	(0.072)	(0.058)	(0.051)	(0.068)	(0.073)	(0.020)
Had income shock	-0.03 I	-0.107**	-0.006	-0.115**	-0.059	-0.025	-0.156***	-0.037	-0.049	-0.055*
	(0.036)	(0.043)	(0.042)	(0.044)	(0.041)	(0.039)	(0.042)	(0.032)	(0.040)	(0.014)

					Having savi	ngs				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Number of children	-0.034	-0.007	-0.013	0.010	-0.032	0.032	-0.034	0.015	-0.005	-0.006
	(0.022)	(0.026)	(0.023)	(0.022)	(0.022)	(0.024)	(0.024)	(0.025)	(810.0)	(0.008)
Own house	0.109	0.062	-0.038	0.068*	0.047	0.111**	0.135***	-0.013	0.005	0.067*
	(0.067)	(0.063)	(0.051)	(0.037)	(0.046)	(0.053)	(0.044)	(0.055)	(0.060)	(0.017)
Interviewer age	0.003*	0.003	0.001	0.003	0.006**	0.003	-0.00 I	0.002	0.001	0.002*
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	-0.099**	-0.082	-0.052	0.047	0.011	-0.043	-0.106**	0.008	-0.148**	-0.054*
	(0.049)	(0.092)	(0.077)	(0.064)	(0.055)	(0.058)	(0.052)	(0.052)	(0.065)	(0.020)
Interviewer worked for OeNB Euro	-0.162**	-0.206**	-0.215***	0.048	0.014	0.007	0.057	-0.104	-0.006	−0.063*°
Survey before 2022	(0.071)	(0.100)	(0.062)	(0.063)	(0.058)	(0.075)	(0.073)	(0.063)	(0.052)	(0.024)
Interview sequence	-0.000	0.002	-0.002	0.000	-0.003	0.001	-0.004	-0.00 I	-0.004	-0.001
	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.001)
Interviewer: respondent residence poor or	-0.115**	-0.134**	-0.020	-0.159***	-0.043	-0.058	-0.126***	-0.182***	-0.076*	−0.099*°
very poor	(0.049)	(0.066)	(0.063)	(0.056)	(0.060)	(0.054)	(0.047)	(0.041)	(0.039)	(0.018)
Constant	0.765***	0.359	0.335	-0.246	-0.565***	0.611*	0.109	0.284	0.126	0.028
	(0.192)	(0.307)	(0.222)	(0.192)	(0.192)	(0.342)	(0.229)	(0.203)	(0.251)	(0.084)
Region fixed effects	✓	✓	/	✓	✓	✓	1	1	1	1
1ean DepVar	0.30	0.44	0.55	0.69	0.40	0.47	0.52	0.27	0.28	0.44
12	0.15	0.18	0.18	0.26	0.15	0.16	0.25	0.14	0.17	0.20
V	877	905	987	960	964	966	923	993	992	8567

Table A8.1. Robustness analysis of being financially vulnerable on financial literacy: Specification I

All d	Bosnia and Herzegovina	Bulgaria		Czech		NI J				
All al			Croatia	Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
All three correct	-0.024	-0.085*	-0.165***	-0.155***	-0.006	-0.073*	-0.093***	-0.076*	-0.029	-0.086***
	(0.057)	(0.045)	(0.040)	(0.035)	(0.039)	(0.043)	(0.034)	(0.045)	(0.037)	(0.013)
Age	-0.003	-0.011	-0.002	-0.011*	−0.020 ***	-0.012*	-0.003	-0.011	-0.020***	-0.011***
	(0.006)	(800.0)	(0.007)	(0.006)	(0.007)	(0.007)	(0.007)	(800.0)	(0.007)	(0.002)
Age squared	0.000	0.000*	0.000	0.000	0.000***	0.000*	0.000	0.000*	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.061*	0.031	-0.015	-0.006	0.012	0.074**	-0.064**	0.032	-0.002	-0.000
	(0.033)	(0.031)	(0.030)	(0.026)	(0.031)	(0.030)	(0.029)	(0.029)	(0.025)	(0.010)
Education (ref: primary and lower secondary)										
Upper secondary	-0.088*	-0.022	-0.02 I	-0.147***	-0.036	-0.072*	-0.085**	0.002	-0.079**	-0.062***
	(0.045)	(0.060)	(0.060)	(0.044)	(0.053)	(0.042)	(0.039)	(0.059)	(0.037)	(0.015)
Tertiary	-0.168***	-0.074	-0.120*	-0.262***	-0.212***	-0.153***	-0.187***	-0.215***	−0.209 ***	-0.190***
	(0.059)	(0.065)	(0.068)	(0.049)	(0.064)	(0.056)	(0.052)	(0.072)	(0.041)	(0.019)
Marital status (ref: married)										
Single	0.133**	0.084	0.014	0.069	*080.0	0.016	0.109**	0.032	0.084	0.067***
	(0.054)	(0.060)	(0.045)	(0.046)	(0.047)	(0.051)	(0.044)	(0.055)	(0.054)	(0.017)
Separated	0.025	0.021	0.067	0.114**	0.044	0.005	0.089	0.120*	0.021	0.062***
	(0.070)	(0.065)	(0.057)	(0.047)	(0.052)	(0.090)	(0.065)	(0.063)	(0.050)	(0.019)
Widow	0.098*	0.057	0.073	0.023	0.032	-0.044	0.087	0.087	0.039	0.041**
	(0.057)	(0.069)	(0.063)	(0.060)	(0.062)	(0.051)	(0.056)	(0.058)	(0.067)	(0.020)

				F	inancially vulr	nerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Income (ref: income: 1st quartile)										
Income: refused	-0.102	-0.044	-0.172**	-0.311***	-0.190**	0.252***	-0.043	-0.150*	-0.007	-0.130**
	(0.070)	(0.089)	(0.082)	(0.077)	(0.077)	(0.092)	(0.065)	(0.083)	(0.067)	(0.024)
Income: 2nd quartile	−0.159**	-0.113	-0.122*	-0.134**	-0.060		-0.135**	0.051	-0.117*	-0.094**
	(0.074)	(0.088)	(0.063)	(0.064)	(0.055)		(0.061)	(0.062)	(0.063)	(0.022)
Income: 3rd quartile	-0.246***	-0.008	-0.237***	-0.092	-0.094	0.243***	-0.161**	0.056	-0.084	-0.129**
	(0.082)	(0.086)	(0.069)	(0.063)	(0.071)	(0.087)	(0.065)	(0.060)	(0.066)	(0.023)
Income: 4th quartile	-0.355***	-0.036	-0.292***	-0.268***	-0.299***	0.202**	-0.263***	0.004	-0.206***	-0.23 I**
	(0.079)	(0.091)	(0.068)	(0.068)	(0.073)	(0.088)	(0.064)	(0.059)	(0.064)	(0.023)
Employment status (ref: working)										
Retired	0.149***	0.333***	0.035	0.226***	0.133**	0.155**	0.105*	0.001	0.088	0.110**
	(0.056)	(0.074)	(0.058)	(0.052)	(0.064)	(0.065)	(0.056)	(0.055)	(0.065)	(0.021)
Not employed	0.286***	0.348***	0.356***	0.184***	0.086	0.453***	0.199***	0.139**	0.401***	0.298**
	(0.055)	(0.055)	(0.048)	(0.057)	(0.061)	(0.044)	(0.049)	(0.055)	(0.050)	(0.018)
Self-employed	-0.222***	0.070	-0.119**	-0.108***	-0.089	0.059	0.033	-0.072	-0.105*	-0.058**
	(0.056)	(0.059)	(0.053)	(0.044)	(0.067)	(0.056)	(0.047)	(0.066)	(0.053)	(0.019)
Had income shock	0.060	0.081*	0.040	0.115***	0.112***	0.134***	0.105***	0.085**	0.105***	0.093**
	(0.041)	(0.042)	(0.038)	(0.042)	(0.040)	(0.034)	(0.036)	(0.034)	(0.038)	(0.013)
Number of children	0.011	-0.060**	-0.029	-0.026	0.009	-0.020	0.032	-0.010	-0.005	-0.008
	(0.020)	(0.026)	(0.022)	(0.022)	(0.021)	(0.018)	(0.021)	(0.024)	(0.020)	(0.007)

Table A8.1. (Continued)

				F	inancially vulr	nerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Own house	-0.072	-0.107	0.006	-0.000	0.035	-0.112**	-0.151***	-0.035	-0.054	-0.047***
	(0.070)	(0.067)	(0.043)	(0.036)	(0.046)	(0.056)	(0.045)	(0.057)	(0.052)	(0.017)
Interviewer age	-0.002	0.002	-0.003**	0.002	0.000	0.005***	0.001	-0.004***	0.002	0.000
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	0.146***	0.105	0.078	0.012	-0.03 I	-0.024	-0.004	-0.146***	-0.001	0.015
	(0.041)	(0.073)	(0.060)	(0.052)	(0.050)	(0.051)	(0.045)	(0.047)	(0.050)	(0.018)
Interviewer worked for OeNB Euro	0.077	-0.03 I	0.223***	-0.147*	-0.02 I	0.078	-0.000	0.010	0.028	0.028
Survey before 2022	(0.053)	(880.0)	(0.050)	(0.087)	(0.050)	(0.063)	(0.062)	(0.059)	(0.045)	(0.020)
Interview sequence	-0.00 I	-0.002	-0.00 I	0.002	0.002	0.001	-0.004	0.002	-0.005	0.000
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)	(0.003)	(0.001)
Interviewer: respondent residence poor or	0.005	0.125**	-0.057	0.053	0.036	0.069	0.102**	0.109**	0.180***	0.075***
very poor	(0.069)	(0.054)	(0.058)	(0.037)	(0.063)	(0.050)	(0.049)	(0.047)	(0.036)	(0.017)
Constant	0.656***	0.300	0.657***	1.065***	1.062***	0.375	0.801***	1.046***	0.852***	0.817***
	(0.175)	(0.268)	(0.174)	(0.242)	(0.192)	(0.306)	(0.202)	(0.219)	(0.213)	(0.080)
Region fixed effects	✓	1	/	✓	✓	1	1	1	1	1
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R ²	0.26	0.30	0.22	0.38	0.24	0.25	0.28	0.21	0.36	0.24
N	834	864	969	870	935	968	900	938	965	8243

Table A8.2. Robustness analysis of being financially vulnerable on financial literacy: Specification 2

				F	inancially vulr	nerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Total number correct	-0.036*	-0.049**	-0.098***	-0.072***	-0.013	-0.048**	-0.060***	-0.03 I*	0.001	-0.049**
	(0.019)	(0.020)	(0.018)	(0.018)	(810.0)	(0.019)	(0.015)	(0.018)	(0.018)	(0.006)
Age	-0.003	-0.010	-0.002	-0.011*	-0.020***	-0.011*	-0.003	-0.011	-0.020***	-0.011***
	(0.006)	(0.009)	(0.007)	(0.006)	(0.007)	(0.007)	(0.007)	(800.0)	(0.007)	(0.002)
Age squared	0.000	0.000*	0.000	0.000*	0.000***	0.000	0.000	0.000*	0.000***	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.059*	0.029	-0.011	-0.006	0.012	0.072**	-0.068**	0.032	-0.002	-0.00 I
	(0.033)	(0.031)	(0.029)	(0.026)	(0.030)	(0.030)	(0.029)	(0.029)	(0.025)	(0.010)
Education (ref: primary and lower secondary)										
Upper secondary	-0.088**	-0.014	-0.030	-0.134***	-0.035	-0.068	-0.076*	0.003	-0.081**	-0.060***
	(0.044)	(0.060)	(0.062)	(0.045)	(0.054)	(0.043)	(0.039)	(0.059)	(0.037)	(0.015)
Tertiary	-0.170***	-0.066	-0.12 9 *	-0.248****	-0.210***	-0.142**	-0.173***	-0.212***	-0.211***	-0.186***
	(0.059)	(0.066)	(0.069)	(0.051)	(0.064)	(0.057)	(0.052)	(0.072)	(0.041)	(0.019)
Marital status (ref: married)										
Single	0.133**	0.088	0.013	0.073	*180.0	0.021	0.105**	0.034	0.084	0.068***
	(0.054)	(0.061)	(0.044)	(0.047)	(0.047)	(0.051)	(0.044)	(0.055)	(0.054)	(0.017)
Separated	0.027	0.025	0.077	0.119**	0.043	0.014	0.092	0.125**	0.018	0.064***
	(0.071)	(0.065)	(0.057)	(0.047)	(0.052)	(0.090)	(0.065)	(0.062)	(0.050)	(0.019)
Widow	0.095*	0.058	0.066	0.021	0.032	-0.043	0.085	0.090	0.042	0.040**
	(0.057)	(0.069)	(0.063)	(0.061)	(0.062)	(0.051)	(0.056)	(0.058)	(0.067)	(0.020)

Table A8.2. (Continued)

				F	inancially vuli	nerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Income (ref: income: 1st quartile)										
Income: refused	-0.106	-0.035	-0.147*	-0.311***	-0.189**	0.258***	-0.038	-0.145*	-0.009	-0.128**
	(0.070)	(0.090)	(0.083)	(0.077)	(0.077)	(0.092)	(0.063)	(0.083)	(0.067)	(0.024)
Income: 2nd quartile	-0.152**	-0.102	-0.107*	-0.123*	-0.060		-0.126**	0.045	-0.119*	-0.089**
	(0.073)	(0.088)	(0.064)	(0.065)	(0.055)		(0.060)	(0.062)	(0.063)	(0.022)
Income: 3rd quartile	-0.244***	-0.00 I	-0.226***	-0.089	-0.093	0.246***	-0.152**	0.055	-0.088	-0.127**
	(0.082)	(0.088)	(0.068)	(0.061)	(0.071)	(0.087)	(0.065)	(0.060)	(0.065)	(0.023)
Income: 4th quartile	-0.354***	-0.023	-0.285***	-0.260***	-0.296***	0.207**	-0.255***	0.005	-0.211***	-0.226**
	(0.079)	(0.093)	(0.069)	(0.069)	(0.073)	(0.088)	(0.065)	(0.060)	(0.063)	(0.023)
Employment status (ref: working)										
Retired	0.154***	0.326***	0.038	0.218***	0.133**	0.159**	0.116**	-0.000	0.090	0.112**
	(0.057)	(0.076)	(0.058)	(0.052)	(0.064)	(0.064)	(0.055)	(0.055)	(0.065)	(0.020)
Not employed	0.282***	0.352***	0.345***	0.180***	0.087	0.443***	0.199***	0.142**	0.402***	0.295**
	(0.055)	(0.054)	(0.048)	(0.057)	(0.061)	(0.044)	(0.049)	(0.055)	(0.050)	(0.018)
Self-employed	-0.227***	0.071	-0.115**	-0.119***	-0.088	0.055	0.030	-0.079	-0.105*	-0.061**
	(0.052)	(0.059)	(0.053)	(0.043)	(0.066)	(0.056)	(0.046)	(0.067)	(0.053)	(0.019)
Had income shock	0.056	0.076*	0.035	0.115***	0.108***	0.136***	0.097***	0.085**	0.106***	0.090**
	(0.042)	(0.042)	(0.037)	(0.043)	(0.040)	(0.034)	(0.035)	(0.035)	(0.039)	(0.013)
Number of children	0.011	-0.060**	-0.027	-0.025	0.009	-0.018	0.031	-0.010	-0.006	-0.008
	(0.021)	(0.026)	(0.023)	(0.022)	(0.021)	(0.018)	(0.021)	(0.024)	(0.021)	(0.007)
Own house	-0.072	-0.107	0.008	0.002	0.036	-0.108*	-0.151***	-0.037	-0.059	-0.046**
	(0.069)	(0.068)	(0.044)	(0.036)	(0.046)	(0.056)	(0.044)	(0.057)	(0.052)	(0.017)

Table A8.2. (Continued)

				F	inancially vulr	nerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Interviewer age	-0.002	0.002	-0.003**	0.001	0.001	0.005***	0.001	-0.004**	0.001	0.000
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	0.143***	0.101	0.057	0.003	-0.034	-0.022	-0.024	-0.144***	0.004	0.013
	(0.042)	(0.071)	(0.057)	(0.052)	(0.049)	(0.051)	(0.044)	(0.046)	(0.050)	(0.018)
Interviewer worked for OeNB Euro	0.066	-0.032	0.226***	-0.143	-0.019	0.077	0.000	0.017	0.028	0.030
Survey before 2022	(0.052)	(0.085)	(0.051)	(0.087)	(0.049)	(0.060)	(0.062)	(0.059)	(0.046)	(0.020)
Interview sequence	-0.000	-0.002	-0.00 I	0.002	0.002	0.001	-0.004	0.002	-0.005	0.000
·	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)	(0.003)	(0.001)
Interviewer: respondent residence poor or	0.002	0.119**	-0.058	0.059	0.034	0.068	0.108**	0.108**	0.178***	0.073**
very poor	(0.069)	(0.053)	(0.057)	(0.038)	(0.064)	(0.051)	(0.049)	(0.047)	(0.036)	(0.017)
Constant	0.686***	0.331	0.776***	1.163***	1.076***	0.376	0.867***	1.076***	0.860***	0.874**
	(0.173)	(0.270)	(0.177)	(0.245)	(0.195)	(0.305)	(0.200)	(0.218)	(0.209)	(0.079)
Region fixed effects	✓	✓	✓	✓	✓	1	1	1	✓	✓
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51
R ²	0.26	0.30	0.24	0.37	0.24	0.25	0.29	0.21	0.36	0.25
N	834	864	969	870	935	968	900	938	965	8243

Table A8.3. Robustness analysis of being financially vulnerable on financial literacy: Specification 3

				F	inancially vulr	nerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Interest correct	0.008	-0.063*	-0.108***	-0.105***	-0.026	-0.037	-0.038	-0.030	-0.011	-0.051**
	(0.035)	(0.035)	(0.038)	(0.038)	(0.041)	(0.037)	(0.037)	(0.036)	(0.034)	(0.012)
Inflation correct	0.005	-0.019	-0.116***	-0.082*	0.024	-0.060*	-0.108***	-0.029	0.069*	-0.032**
	(0.034)	(0.037)	(0.034)	(0.042)	(0.040)	(0.032)	(0.040)	(0.032)	(0.037)	(0.012)
Risk correct	-0.135***	-0.055*	-0.071**	-0.027	-0.03 I	-0.046	-0.039	-0.032	-0.053*	-0.064**
	(0.035)	(0.033)	(0.030)	(0.036)	(0.033)	(0.032)	(0.030)	(0.035)	(0.031)	(0.011)
Age	-0.003	-0.010	-0.00 I	-0.012*	-0.020***	-0.011*	-0.003	-0.011	-0.021***	-0.011**
	(0.006)	(0.009)	(0.007)	(0.006)	(0.007)	(0.007)	(0.007)	(0.008)	(0.007)	(0.002)
Age squared	0.000	0.000*	0.000	0.000*	0.000***	0.000	0.000	0.000*	0.000***	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.062*	0.028	-0.010	-0.007	0.007	0.073**	-0.068**	0.032	0.000	-0.001
	(0.033)	(0.031)	(0.030)	(0.026)	(0.030)	(0.030)	(0.029)	(0.029)	(0.025)	(0.010)
Education (ref: primary and lower secondary)										
Upper secondary	-0.085*	-0.015	-0.033	-0.137***	-0.041	-0.070	-0.074*	0.003	-0.076**	-0.060**
	(0.044)	(0.060)	(0.063)	(0.045)	(0.053)	(0.043)	(0.040)	(0.058)	(0.037)	(0.015)
Tertiary	-0.167***	-0.066	-0.134*	-0.251***	-0.220***	-0.143**	-0.172***	-0.212***	-0.205***	-0.186**
	(0.058)	(0.066)	(0.070)	(0.051)	(0.064)	(0.057)	(0.051)	(0.073)	(0.040)	(0.019)

Table A8.3. (Continued)

				F	inancially vul	nerable				
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Marital status (ref: married)										
Single	0.127**	0.089	0.016	0.069	0.079*	0.020	0.105**	0.034	0.080	0.068**
	(0.052)	(0.061)	(0.044)	(0.047)	(0.046)	(0.051)	(0.044)	(0.055)	(0.054)	(0.017)
Separated	0.026	0.023	0.079	0.119**	0.041	0.015	0.095	0.125**	0.016	0.063**
	(0.073)	(0.065)	(0.057)	(0.047)	(0.053)	(0.090)	(0.065)	(0.062)	(0.051)	(0.019)
Widow	0.096*	0.058	0.067	0.023	0.031	-0.045	0.085	0.090	0.036	0.040**
	(0.057)	(0.069)	(0.063)	(0.061)	(0.062)	(0.051)	(0.055)	(0.058)	(0.066)	(0.019)
Income (ref: income: 1st quartile)										
Income: refused	-0.102	-0.037	-0.141*	-0.310***	-0.185**	0.242**	-0.034	-0.145*	-0.017	-0.128**
	(0.067)	(0.090)	(0.084)	(0.076)	(0.076)	(0.103)	(0.062)	(0.084)	(0.068)	(0.024)
Income: 2nd quartile	-0.147**	-0.102	-0.106	-0.126*	-0.060		-0.126**	0.045	-0.118*	-0.089** <u></u>
	(0.071)	(0.088)	(0.064)	(0.063)	(0.055)		(0.061)	(0.062)	(0.063)	(0.022)
Income: 3rd quartile	-0.234***	-0.005	-0.224***	-0.092	-0.091	0.231**	-0.152**	0.055	-0.09 I	−0.12 7 **
	(0.079)	(0.087)	(0.069)	(0.061)	(0.071)	(0.097)	(0.065)	(0.061)	(0.066)	(0.023)
Income: 4th quartile	-0.344***	-0.025	-0.284***	-0.266***	-0.298***	0.192*	-0.255***	0.005	-0.216***	-0.226**
	(0.077)	(0.093)	(0.069)	(0.069)	(0.074)	(0.100)	(0.065)	(0.060)	(0.064)	(0.023)
Employment status (ref: working)										
Retired	0.146***	0.325***	0.037	0.219***	0.126*	0.160**	0.119**	-0.000	0.083	0.110**
	(0.056)	(0.076)	(0.059)	(0.052)	(0.065)	(0.064)	(0.055)	(0.055)	(0.065)	(0.020)

Table A8.3. (Continued)

				F	inancially vulr	nerable				
-	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total
Not employed	0.287***	0.354***	0.344***	0.182***	0.085	0.443***	0.198***	0.142**	0.395***	0.295**
	(0.054)	(0.054)	(0.048)	(0.056)	(0.061)	(0.044)	(0.049)	(0.055)	(0.050)	(0.018)
Self-employed	-0.230***	0.072	-0.116**	-0.116***	-0.088	0.054	0.031	-0.079	-0.110**	-0.061**
	(0.049)	(0.059)	(0.053)	(0.043)	(0.067)	(0.057)	(0.046)	(0.067)	(0.052)	(0.019)
Had income shock	0.048	0.075*	0.034	0.115***	0.110***	0.134***	0.098***	0.085**	0.102***	0.090**
	(0.041)	(0.043)	(0.037)	(0.043)	(0.040)	(0.034)	(0.035)	(0.035)	(0.038)	(0.013)
Number of children	0.006	-0.060**	-0.027	-0.026	0.009	-0.018	0.030	-0.010	-0.008	-0.008
	(0.021)	(0.026)	(0.023)	(0.022)	(0.021)	(810.0)	(0.021)	(0.024)	(0.021)	(0.007)
Own house	-0.074	-0.105	0.011	-0.002	0.035	-0.107*	-0.155***	-0.05 I −0.05 I	-0.05 I	-0.046**
	(0.068)	(0.067)	(0.044)	(0.036)	(0.046)	(0.057)	(0.044)	(0.057)) (0.052)	(0.017)
Interviewer age	-0.001	0.002	-0.003**	0.001	0.001	0.005***	0.001	−0.004**	0.001	0.000
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Interviewer female	0.140***	0.102	0.057	0.002	-0.040	-0.027	-0.025	−0.144***	-0.003	0.013
	(0.041)	(0.071)	(0.057)	(0.052)	(0.051)	(0.051)	(0.045)	(0.047)	(0.050)	(0.018)
Interviewer worked for OeNB Euro	0.075	-0.032	0.226***	-0.141	-0.019	0.075	-0.003	0.017	0.028	0.030
Survey before 2022	(0.051)	(0.085)	(0.051)	(0.087)	(0.049)	(0.061)	(0.062)	(0.059)	(0.044)	(0.020)
Interview sequence	0.000	-0.002	-0.001	0.002	0.002	0.001	-0.004	0.002	-0.005	0.000
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)	(0.003)	(0.001)
Interviewer: respondent residence poor or	-0.001	0.121**	-0.059	0.061	0.034	0.069	0.107**	0.108**	0.180***	0.073**
very poor	(0.068)	(0.053)	(0.058)	(0.039)	(0.064)	(0.051)	(0.049)	(0.047)	(0.050) -0.110** (0.052) 0.102*** (0.038) -0.008 (0.021) -0.051 (0.052) 0.001 (0.002) -0.003 (0.050) 0.028 (0.044) -0.005 (0.003)	(0.017)

Table A8.3. (Continued)

		Financially vulnerable											
	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Hungary	North Macedonia	Poland	Romania	Serbia	Total			
Constant	0.659***	0.320	0.774***	1.176***	1.085***	0.398	0.865***	1.075***	0.868***	0.869***			
	(0.174)	(0.271)	(0.177)	(0.244)	(0.195)	(0.313)	(0.200)	(0.219)	(0.212)	(0.079)			
Region fixed effects	✓	1	1	1	✓	✓	1	1	1	1			
Mean DepVar	0.53	0.41	0.48	0.52	0.50	0.56	0.41	0.67	0.50	0.51			
R ²	0.27	0.30	0.24	0.37	0.24	0.25	0.29	0.21	0.36	0.25			
N	834	864	969	870	935	968	900	938	965	8243			