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L. Gębski¹, O. Druhov²
¹ Szkoła Główna Handlowa w Warszawie,
² Lviv Polytechnic National University

ORCID: ¹0000-0002-5370-3987 ; ²0000-0003-1987-187X

BEHAVIOR OF POLISH CONSUMERS ON THE FINANCIAL MARKET IN THE LIGHT OF RESEARCH RESULTS IN THE CENTRAL AND EASTERN EUROPE

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Purpose – Financial literacy plays an increasingly important role in the formation of vital skills of the population. The ability to correctly understand and use financial services is already an integral part of the knowledge of an adult. Because of this, measuring the level of financial literacy plays an important social role.

The aim of this article is to analyze market behavior and consumer knowledge on the financial market in the light of scientific achievements and own research. The authors examine the actual level of financial knowledge of Polish consumers and analyze the mistakes made by consumers.

Design/methodology/approach – In the article, the authors reviewed the literature and the most important studies on financial knowledge and consumer behavior in the financial market in Poland and Ukraine – in the context of the pan-European OECD/INFE study. Then, the authors presented their own study of Polish consumers. The results of the survey conducted on a representative group of consumers were subjected to statistical analysis to detect relationships and correlations. Pearson's χ^2 non-parametric test was used to examine the relationship between two variables measured on a qualitative scale. The strength of the relationship is calculated based on Cramer's V coefficient. The study conducted by the authors allowed them to formulate conclusions.

Findings – Hypotheses were formulated regarding consumer behavior on the financial market. They were examined and confirmed by the results of the study. Consumers tend to overestimate their own financial competence and knowledge in this area. They also remain uncritical towards their mistakes. They also succumb to behavioral cognitive errors. As a result, decisions and choices made on the financial market are not always rational.

Practical implications – The results of these studies are interesting for people and bodies responsible for consumer protection on the financial market. The awareness of the low – actual – level of knowledge and the tendency to make cognitive errors put in a new light the foundations of the policy in the field of institutional consumer protection (the postulate of increasing the level of protection) and the assessment of the economic education system (it is insufficient)

Originality/value – This article presents new and unique results of a survey of a representative group of consumers. The survey was one of the first – on a European scale – to aim not only to

collect consumers' declarations regarding their financial knowledge, but also to critically verify the answers obtained.

Keywords: Consumer behaviors, Consumer protection, Financial literacy, Economic education

Paper type: research paper.

Problem statement

The article addresses an important issue: financial knowledge of consumers and their behavior on the financial market. From a research perspective, financial knowledge is a very important area that directly affects the effectiveness of institutional consumer protection on the financial market. Inability or errors made in connection with the use of financial products and services lead to the social exclusion of individual consumers and the lack of financial well-being of their households. The authors refer to the results of their own research and local and international studies on financial literacy. The leading contribution of this article is an original study on financial literacy conducted in Poland in January 2024. Respondents took part in a study checking their knowledge of financial concepts, financial products and services, experience in using credit and savings products, and answered questions checking their actual financial literacy. The results show that the declared level of financial knowledge is high, and consumers commonly use financial products and services. Nevertheless, certain patterns of irresponsible financial behavior were revealed, as well as a lack of practical knowledge and necessary skills. The most important recommendation regarding the directions of further research is to constantly monitor the level of financial knowledge of consumers and search for optimal financial education programs, otherwise the widespread and safe use of financial products and services will not be possible.

Analysis of recent research and publications. The concept of financial literacy includes several components – financial knowledge referring directly to the knowledge and understanding of economic concepts and categories, and a practical element consisting in an individual's skills to use financial products and services. In the scientific dimension, it is a very broad and interdisciplinary area of research because consumer attitudes are important not only for economics, but also for psychology and sociology. In the social context, a consensus has already been reached on the fundamental importance of financial education for financial inclusion, and consequently social inclusion. This is due to the fact that in practice it is increasingly difficult to use infrastructure and fulfill shopping needs without actively reaching for financial services (Feghali et al., 2021; Ozili, 2020). Financial exclusion, regardless of whether it is the result of self-exclusion or lack of access to financial products and services, eliminates the consumer from many areas of socio-economic activity (Eldomiatty et al., 2020)

Courchane and Zorn developed a model describing the relationship between financial knowledge, financial experience and credit score. In this model, knowledge was an explanatory variable of financial experience, while experience determined the credit score (Courchane & Zorn, 2005). Another problem remains the measurement of financial knowledge, which [relies on having several key skills (Lusardi & Mitchell, 2023). Elementary financial knowledge allows calculating and interpreting results in terms of interest rates. In order to obtain results that are understandable, the consumer should have the ability to interpret inflation and its consequences. The third competence of the consumer, affecting his safety on the financial market, is the ability to practically diversify risk.

Scientific works on the formation of consumer attitudes most often describe the processes occurring in the development of young people and children during school education, because then the learning process is most effective. Therefore, the main emphasis is placed on the universality of economic education from the earliest stages (Amagir et al. 2018, Polewka, 2024). An important source of consumer behavior patterns is the family. This is where the practical component of financial literacy is naturally transmitted. It is also a source of differences in attitudes towards consumption itself and the functions of financial products and services. A comparative analysis of consumer socialization in families from individualistic cultures of Western Europe and collectivist cultures of Eastern Europe shows a different approach to these issues (Rose et al., 2003). Western European consumerism promotes familiarization with

financial products and services, which are a natural and necessary tool for making purchases. In Eastern European countries, most frequently consumers reach for loans when they are unable to finance the purchase from their available financial reserves.

Some authors also draw attention to the growing importance of the concept of conscious consumption, which can be seen in conscious purchasing decisions that take into account a wide range of aspects (Garai-Fodor, 2023). Awareness is certainly "being informed", i.e. knowledge of consumer rights and the mechanisms of marketing tools (Naim, 2023; Szmigin et al., 2009). It is also associated not only with awareness of one's own needs but, for example, recognizing health and the environment as values and making them a factor in making purchasing decisions – choosing healthy and environmentally friendly products and services (Budrin et al., 2024).

Recent studies and publications emphasize the growing role of behavioral and cognitive factors in consumers decision-making processes (Pitthan & De Witte, 2024). They are being introduced into behaviorally based financial education programs, i.e. when financial education also teaches how to make good financial decisions and what factors can interfere with making good decisions. In practice, they show that learning about biases can improve financial knowledge (Compen et al., 2021). Heuristics serve as simplifications of reality and facilitate decision-making but they can also lead to inconsistent behavior and can be significantly harmful in financial decisions with long-term consequences.

The environment in which financial decisions are made is often characterized by high complexity and uncertainty. This context causes investors and consumers to sometimes place their intuition above the rationality postulated by contemporary economic theories (Gomes et al., 2021; Zindel et al., 2014).

The literature on behavioral finance shows that individuals are not always rational. Irrational individuals are more likely to imitate others and avoid losses rather than seek gains. They also believe in their abilities and explain errors with heuristics and behavioral biases (Chowk et al. 2016). Behavioral biases are not necessarily negative. In some circumstances, they can lead to quite good outcomes (Gerth et al. 2021). However, they are common and affect both consumers with high levels of financial literacy and those who lack this knowledge.

Hypothesis formulation and presentation of goals

Numerous recent studies confirm that Polish consumers, like other residents of Central and Eastern Europe, are aware of basic economic concepts and categories. However, they make many mistakes and their practical financial behaviors often contradict the declared level of knowledge. On the one hand, this may be the result of low effectiveness of financial education – which would potentially be relatively easy to change. However, their behavior reveals numerous cognitive errors that fall into the domain of behavioral finance – and in such a situation the problem may turn out to be much more complicated.

Therefore, at the beginning of 2024, a survey of Polish consumers was conducted to verify the level of their financial knowledge and to identify errors and practices that may pose a threat to them on the financial market.

The study was conducted on a group of 1007 consumers living in both large cities and small towns and villages. The selection of respondents ensured a proportion of people of different ages, family status and different levels of education appropriate to the population structure.

In addition to questions regarding knowledge of economic concepts, the study also included questions:

- verifying the declared level of knowledge;
- verifying practical knowledge of financial products and financial market institutions;
- verifying the occurrence of basic cognitive errors such as: framing effect, mental accounting, or supposedly irrelevant factors.

The research hypotheses formulated in this study included:

H1. Consumers overestimate their own level of financial knowledge

H2. Consumers remain uncritical of their lack of knowledge and the lack of familiarity with the rules of the financial market

H3. Consumers, regardless of their level of knowledge, education, family status and place of residence, often rely on intuition in the financial market and are subject to cognitive errors

Research methods

The following statistical tests were used:

1. Pearson's χ^2 test: a non-parametric test used to examine the relationship between two variables measured on a qualitative scale. A statistically significant result of $p < 0.05$ indicates a relationship between the variables. Pearson's χ^2 coefficient is calculated from this formula:

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

where χ^2 = chi squared; O_i = observed value; E_i = expected value

Where O_i is the observed number and E_i is the expected number. The strength of the relationship is calculated based on Cramer's V coefficient:

$$V = \frac{\sqrt{\chi^2}}{n \cdot \min(r-1, k-1)}$$

where V is between 0 and 1 and the closer it is to 0, the more independent variables we are in; n – is the number of observations; r – is the number of levels of one variable; k- is the number of levels of the second variable.

Where n is the number of observations; r is the number of levels of one variable, and k is the number of levels of the second variable.

The choice of Pearson test for this study was made because it helps to create detailed profiles of respondents, revealing their various characteristics and behaviors. It facilitates the analysis of correlations between different variables. It also enables segmentation of respondents based on their characteristics. Finally, it enables a more detailed examination of the mutual influences between variables.

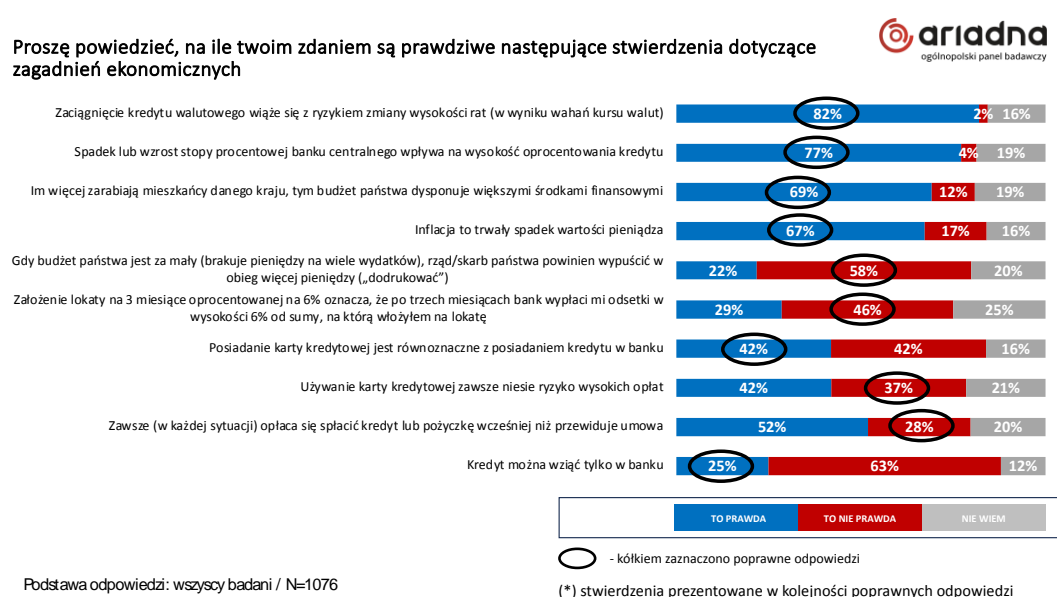
Presentation of the main material

The largest cross-sectional studies of consumer financial competence in Europe were conducted on behalf of the OECD (OECD/INFE 2016, 2020). They covered areas such as financial knowledge, financial behavior and financial attitude. The results indicate an increase in the financial competence of Poles over the years 2016-2020. In the second study – conducted in 2020 – Polish consumers scored 13 out of 21 possible points. This means that 62.1 % of the population feel competent in the field of finance and management. This is a result that is only slightly behind the leaders of the ranking. In 2016, Poles scored 11.6 points. The highest result in the 2020 ranking was obtained by residents of Slovenia (14.7 points), where, according to the respondents, 70 % of the population has financial knowledge and skills. Austria came in second with a result of 14.4 points (68 % of the population is financially competent). The worst places in the ranking in terms of financial competence were taken by consumers from Italy (11.1 points) and Romania (11.2 points). In the study of financial attitudes, Polish consumers performed poorly – only 2.6/5 points in total, indicating that Polish consumers focus on current financial needs. The lack of a long-term perspective was quite common. The study also confirmed significant overconfidence. Rutecka-Góra (2020) drew attention to the overestimation of personal competences by respondents in relation to actual knowledge, resulting from the study. In 2020, a study on payment habits was conducted (Kotkowski, Dulinicz & Maciejewski, 2021), which showed that women are more financially included than men (90.7 % of women had a payment account, compared to 86.1 % of men). At the same time, 11.5 % of adult Poles declared they did not have a bank account.

Professor Dominika Maison has made a significant contribution to understanding the attitudes of Polish consumers. As part of her #JacyPolacy series of studies, she analyzed the financial behavior of Poles and their knowledge in this area (2024). The study was conducted on a representative group of 1,076 consumers. Maison's study shows, for example, that most Poles are aware and know that taking out a loan in foreign currency carries the risk of changing the amount of installments. This is probably due to the problem of repaying mortgage loans taken out in CHF and EUR, which has been repeatedly raised in the media (this was a serious problem in the entire region of Central and Eastern Europe). The study showed that in the case of objective knowledge, there are large differences in its level between the older and younger generations. People over 55 have greater financial knowledge.

Diagram

Dominika Maison's research on consumers (2023)



Source: https://www.linkedin.com/posts/dominika-maison_wiedza-ekonomiczna-polaków-activity-7155467065988898816-eYFN/?originalSubdomain=pl (accessed Feb 2024)

Only 46 % of respondents were able to correctly calculate the interest rate on a bank deposit. For 42 %, having and using a credit card is not equivalent to having a loan/revolving credit line in a bank. Maison's research indicates that 86 % of Poles believe that lessons on economic and financial knowledge should be a mandatory element of school education. Although most of the respondents were unable to calculate the interest rate on a bank deposit, only 1/3 of them believed that they had little knowledge of financial topics.

Research in this area has been conducted in Poland many times. Observations and analyses were shared by Grzesiuk (Grzesiuk et al., 2019) and Pawlak, who examined possible links between financial knowledge and political views on economic issues (Pawlak, 2020). Jagoda Gola studied the financial behavior of households (Gola & Smyczek, 2019). In 2019, Świąćka and her team examined the level of financial knowledge among high school students in Poland. The results indicated a good or even very good level of financial knowledge among young people in Poland – 45.3 % received at least an average grade, and 43.8 % received a good result (Świąćka et al., 2020).

Analyses have shown that the level of financial knowledge – defined as knowledge of concepts, categories, and financial products and services – is relatively high. Consumers know and understand the

main concepts. However, in tests of practical skills that are most important on the financial market, people perform much worse.

From the standpoint of analyzing the level of financial literacy and financial behavior in Poland, the results of similar studies in Ukraine are interesting. The USAID project "Transformation of the financial sector" in cooperation with the National Bank of Ukraine during the study "Financial literacy, financial inclusion, and financial well-being in Ukraine in 2021" (National Bank of Ukraine, 2021) found out that over the past three years, the index of financial literacy of Ukrainians increased in 2021 to 12.3 points compared to 11.6 points in 2018.

This was the second study of the level of financial awareness of Ukrainians conducted according to the methodology of the International Financial Education Network of the Organization for Economic Cooperation and Development (OECD).

"At the beginning of 2020, the National Bank of Ukraine received a mandate to organize work and implement measures to increase the level of financial literacy of the population. Compared to other countries, according to the index of financial literacy, Ukraine is on the same level as Bulgaria and Croatia, leaving behind Georgia (12.1 points), Romania (11.2 points) and even Italy (11.1 points).

All index components have improved: financial knowledge, financial behavior, and attitudes toward financial issues. At the same time, the potential for growth remains significant. This year's figure is only 58 % of the maximum value within the scope of the study, which reaches 21 points, and is less than the minimum target level recommended by the OECD (14 points).

The highest level of financial literacy was recorded among Ukrainians aged 25–34 (12.7 points) and 30–59 (12.6 points). The least financially literate are young people aged 18-19 (10.1 points) and people over 60 (11.6 points).

In Ukraine, the general index of financial literacy did not show differences by gender – Ukrainian men and women are equally knowledgeable in financial matters (12.3 and 12.2 points, respectively). However, there is a direct relationship between the level of financial literacy and the availability of education: the higher the level of education, the higher the financial literacy score. The total score of Ukrainians with secondary special education (technical school) is 11.9 points, with higher education – 13.3 points.

Separately, it should be noted that the gap in the level of financial literacy between residents of villages and cities has increased. If in 2018 the financial literacy index was at approximately the same level, then the index is currently 12.6 points for respondents from the city and 11.8 points for the village.

The results of a recent study in Ukraine, as well as data from the OECD in other countries, confirm that the use of modern information technologies will help accelerate the growth of financial literacy. The difference in the level of financial awareness between users and non-users is 2.5 points (12.4 and 9.9 points, respectively).

The application of financial knowledge in practice also has a positive effect on increasing financial competencies: using financial services, controlling income and expenses, financial planning, and savings. For example, about 80 % of Ukrainians are familiar with five financial products.

The study showed that Ukrainians are more focused on short-term plans and spending than on saving money. Every fifth Ukrainian feels confident in their future pension provision. The population with the lowest incomes relies more on a pension from the state, while those with higher incomes rely more on savings, continuing work even after reaching retirement age or using other sources of financing. 79 % of Ukrainians believe that children should be taught to manage their money at school.

Other scientific studies on the financial literacy of Ukrainians provide valuable information on the level of financial literacy in Ukraine and its impact on personal finance management:

1. The study "Financial Education in Ukraine: Current Status and Challenges" (2017) conducted by Oksana Kravchenko PhD from Kyiv National University. The aim of the study was to assess the level of financial literacy of adult Ukrainians and analyze the challenges associated with improving financial literacy. The respondents had a good knowledge of basic concepts such as interest and saving. The study

showed that the level of practical financial literacy in Ukraine is relatively low, especially in the area of more advanced topics such as investments and risk management. In conclusion, the authors pointed to the need to strengthen financial education and develop programs that can better prepare Ukrainians to manage their finances.

2. The study “Financial Education among Ukrainian Youth: A Survey of High School Students” (2018) conducted by Yuriy Melnyk PhD from Lviv University. The aim of the analysis was to investigate the level of financial literacy among high school students in Ukraine. High school students demonstrated basic financial literacy but had limited understanding of more advanced topics such as loans and investments.

3. The study “The Impact of Financial Education on Financial Behavior in Ukraine” (2019) by Natalia Pirozhkova PhD from Kharkov University. The author undertook to assess the impact of financial education programs on the financial behavior of households in Ukraine. Households that participated in financial education programs managed their finances better, avoided excessive debt, and saved more than those that did not participate in the program. The study highlighted the importance of financial education in improving the financial stability of households.

2. Research on consumers' financial knowledge of Poles

The survey (PAPI & CAWI) contained 23 questions divided into three sections:

- questions regarding basic data (9 questions) regarding statistical and profile issues,
- questions from the scope of financial knowledge (6 questions) referring to declarative knowledge of concepts, categories and financial products and services,
- questions examining behavioral aspects and actual knowledge and practical experience in using financial products and services (8 questions).

The study involved N = 1002 people, and the statistical distribution of the research group was maintained in accordance with the demographic profile from the National Census conducted in 2021 (GUS) – table 1.

In the first part of the study (see table 2), consumers were asked about their knowledge of basic economic concepts. As many as 87.9 % of respondents declared that they knew and more or less understood the concept of interest rate as the price of money. 10.9 % had heard of the concept of interest rate, but did not understand the mechanism by which it translates into the cost of money. The concept of annual percentage rate (APR/RRSO) was known and understood declaratively by 20 % of respondents, while 37.1 % stated that they had heard of this concept, but did not fully understand what it means and in what context it should be used. Almost 38 % of respondents stated that they understood the principles and mechanisms causing interest rate fluctuations and their relationship with the cost of credit. A further 36.7 % stated that they understood the mechanism of variable interest rates on loans, but did not know what factors influence these changes. The fact that excessive debt is a big burden on the household budget in terms of repayment (a question that could be answered more than once) was mentioned by 50.3 % of respondents. A total of 88.2 % understood this concept as a situation in which income is not sufficient to repay loans on an ongoing basis. Over 56 % of Polish consumers believed that consumer bankruptcy is a chance to get out of the debt trap and have a "new beginning". It was interesting that 55.9 % believed that consumer bankruptcy is the result of carelessness in managing personal finances and, in fact, the overly indebted are themselves responsible for this fact. Consumer bankruptcy is an embarrassing situation – this was the opinion of 41 % of respondents.

The next part of the study was an attempt to verify the financial behavior of consumers in practice and to identify behavioral cognitive errors influencing the preferences of the respondents.

The first question in this group verified the behavioral preferences of consumers from the perspective of managing cash flows in the household budget. The time value of money was compared with two different loan repayment scenarios. The question used the example of a simple free loan (interest rate 0 %), which could be repaid in 12 equal monthly installments (12 x PLN 100) or as a lump sum payable at the end of the loan period (PLN 1,200 after 12 months). The majority of respondents (73.2 %) would prefer

to repay the loan in installments over 12 months, because "it would be more convenient for the household budget", while only 12.7 % would choose a one-time repayment of the entire debt. For 14.1 % of people, the method of loan repayment did not matter, because they only compared the amounts of repayments.

Table 1

Distribution and characteristics of the sample (N=1002)

Variable/Question	Description	N	%
How old are you ?	less than 25	212	21.2%
	25 - 40	277	27.6%
	41 - 60	279	27.8%
	more than 60	234	23.4%
What is your education level?	primary education	473	47.2%
	secondary education	306	30.5%
	high education	223	22.3%
Where do you live?	village or small town (<50'000 inhabitants)	393	39.4%
	medium city	340	34.0%
	big city (>100'000 inhabitants)	269	26.8%
What your household looks like?	I live alone	194	19.4%
	We are a childless couple	325	32.5%
	We live with children younger than 15 years old	237	23.6%
	We live with children older than 15 years	192	19.2%
	I am a student or someone else supports me	54	5.3%
How financial decisions are made in your household?	I make financial decisions independently	307	30.6%
	I make financial decisions together with my partner	416	41.5%
	I make financial decisions, but I consult people I trust in this area	215	21.5%
	I do not participate in financial decisions - they are made by my partner/parents	64	6.4%
Have you ever used any type of loans?	Yes, I am repaying the loan now or have repaid it in the past	613	61.4%
	No, I am not paying off now nor I have never used it in the past	389	38.6%
Have you ever used consumer credit to purchase goods or services?	Yes, I bought something financing the purchase with a consumer loan	387	38.6%
	No, I have never bought anything using consumer credit to finance the purchase	409	40.8%
	No, I have never purchased anything using consumer credit and I do not want to use credit in the future	206	20.6%
How do you earn money?	I have a fixed salary	852	85.2%
	I have variable income (temporary contracts, commissions...)	150	14.8%
Do you have a bank account?	Yes	986	98.4%

Source: own research

Table 2

Knowledge and understanding of principal financial concepts			
Variable/Question	Description	N	%
Interest rate as the cost of money	I know and understand the concept of interest rate as the cost of money	493	49.2%
	I know and more or less understand the concept of interest rate as the cost of money	388	38.7%
	I heard but I don't understand interest rate mechanism as the cost of money	109	10.9%
	I refuse to answer the question	12	1.2%
APRC (RRSO)	I know, understand and know what the APRC (RRSO) is for	200	20.0%
	I more or less know, understand and know what the APRC (RRSO) is for	368	36.7%
	I've heard of it, but I don't understand the calculation mechanism and I can't practically interpret the APRC (RRSO) value	217	21.7%
	I refuse to answer the question	36	3.6%
Variable interest rate on the loan	I understand the rules and mechanisms that cause changes in the loan interest rate	381	38.0%
	I understand the principle of variable interest rate on a loan, but I don't understand what influences it	368	36.7%
	I do not know or understand the mechanisms that cause changes in loan interest rates	217	21.7%
	I refuse to answer the question	36	3.6%
Over-indebtedness*	This is a situation in which the current repayment of loans is a heavy burden on the household budget	504	50.6%
	This is a situation in which my income is not sufficient to repay loans on an ongoing basis	884	88.7%
	This is a situation in which I have to take out new loans to repay the previous ones	253	25.4%
Consumer bankruptcy*	Consumer bankruptcy is a chance to get out of the debt trap and for a "new beginning".	563	56.2%
	Consumer bankruptcy implies the risk of losing assets to creditors	395	39.4%
	Consumer bankruptcy is the result of carelessness in managing personal finances	560	55.9%
	Consumer bankruptcy is an embarrassing situation (I would like to avoid it)	411	41.1%

* - more than one answer accepted

Source: own research

Consumers do not understand the essence and meaning of the concept of the annual percentage rate (APRC/RRSO), which is a key tool for comparing credit products in the European Union. Only 25 % of respondents correctly answered the question. As many as 60 % admitted that they did not know or that it did not matter to them.

Responsibility and prudence recommended when concluding financial agreements and susceptibility to external suggestions were examined by the third question. Only 37.8 % of respondents stated that they always read loan agreements very carefully, ask questions and try to negotiate their content. Almost 36 % of people admitted that they only read the most important points in the agreements, but not always, because they only ask the seller about matters that concern them. The answers provided by a bank representative or credit intermediary were considered sufficient to sign a credit agreement. 14.1 % of respondents do not

read credit agreements because they are unable to effectively negotiate their content, and 6.8 % admitted that they only occasionally read what they sign.

Table 3

Consumer behavior on the financial market – verification questions			
Variable/Question	Description	N	%
You finance the purchase of a new laptop with an installment loan. The bank offers two 0% interest loans: A) repaid once after 12 months in the amount of PLN 1,200 B) repaid in 12 equal monthly installments of PLN 100 each	Which loan is more advantageous for me from the perspective of the household budget?		
	"A" because I only pay it off after a year	133	13.3%
	"B" because it is easier for me to spend PLN 100 at a time than PLN 1,200	744	74.4%
	it doesn't matter - the important thing is that in both cases I will spend the same amount	125	12.3%
You finance the purchase of a new laptop with an installment loan. The bank offers two 0% interest loans: A) repaid once after 12 months in the amount of PLN 1,200 B) repaid in 12 equal monthly installments of PLN 100 each	Which loan is cheaper for me from APRC/RRSO perspective ?		
	Both are identical	250	25.0%
	The loan that I repay in one lump sum of PLN 1,200 after a year is more beneficial	152	15.2%
	I dont know exacly	480	48.0%
Before signing the loan agreement, do you read its content carefully?	it doesn't matter - I will spend the same amount	120	12.0%
	I always read loan agreements before I sign them	378	37.8%
	I only read the most important points and ask the seller about the rest	361	36.0%
	I don't read loan agreements - they are long, boring and I don't understand them...	141	14.1%
	Only sometimes I inspect them - but you can't negotiate them anyway, so why do it...	68	6.8%
	I refuse to answer this question	54	5.3%

Source: own research

Table 4

Relationship of financial market behavior with social characteristics						
Place of residence		Village or small town			City	V
			Town			
I always read credit agreements carefully I only read the most important points in agreements, but not always I don't read credit agreements Sometimes I browse the contents, but sometimes I don't Other		31.1%	34.4%	51.9%	0.17	
		37.0%	42.1%	27.0%		
		19.1%	13.2%	7.8%		
		7.7%	7.4%	4.8%		
		5.1%	2.9%	8.5%		
Household		Single		Couple with children	Other	V
		Childless couple				
I always read credit agreements carefully I only read the most important points in agreements, but not always I don't read credit agreements Sometimes I browse the contents, but sometimes I don't Other		38.7%	30.2%	40.7%	5.4%	0.13
		29.9%	39.6%	38.0%	20.4%	
		16.5%	19.1%	11.0%	0.0%	
		10.3%	6.5%	5.4%	7.4%	
		4.6%	4.6%	4.9%	14.8%	

V - Cramer's V strength of relationship

It is worth emphasizing that for 36 % of respondents, the recommendation of the person selling the loan (bank advisor/loan broker) is important. They are influenced by suggestion and for them such an opinion is a sufficient reason to refrain from reading the contract.

Responsible credit behavior was much more often declared by city dwellers (51.9 %) and families with children (40.7 %). These respondents read contracts and make informed decisions (see Table 4).

The next group of questions in the survey concerned knowledge of practical aspects of the functioning of the financial market. Respondents were asked about the deposit guarantee system, the increasingly popular purchase credit system (BNPL) and entities offering the most popular payment system on the Polish market, BLIK (see Table 5).

Table 5

Proactiucal knowlege of financial products & services		
Question	Possible answers	Distribution
I have funds in my bank account and, as I understand it, they are covered by the Bank Guarantee Fund deposit guarantee system up to the amount of EUR 100,000?	Definitely YES, deposits in all banks operating in Poland are covered by the BFG guarantee up to the amount of EUR 100,000	31.2%
	It seems to me that all deposits in all banks operating in Poland are covered by the BFG guarantee up to the amount of EUR 100,000	48.2%
	Definitely NO - there are foreign banks operating on the Polish market whose deposits are not covered by the BFG guarantee system	10.2%
	I don't know and I don't know the regulations in this area	10.4%
BNPL (Buy Now Pay Later)	I know what it is - I used it	10.7%
	I know what it is but I haven't used this service	29.8%
	I've heard of BNPL but I don't know how it works	23.5%
	I haven't heard of BNPL, but I don't know how it works	36.0%
BLIK is it	The product/service of PKO BP bank - consisting on innovative way of payment using mobile telephone	11.5%
	This is a FinTech product	25.0%
	The name of the service offered by VISA International	4.7%
	I do not know exactly	58.8%

Source: own research

In relation to the deposit guarantee system provided by the Bank Guarantee Fund, 48.2 % of respondents believe that all banks offering products in Poland are covered by the deposit guarantee system. Only 10.2 % of people in Poland know that funds deposited in branches of foreign banks are not covered by the deposit guarantee system guaranteed by the Bank Guarantee Fund.

The BNPL (Buy Now Pay Later) system was known and used by 10.7 % of respondents, while 29.7 % of people knew this financial product but had no practical experience with it. As many as 23.5 % had heard of BNPL, but did not know how it worked, and 36.1 % admitted that they did not know what it was or how it worked. As a result, 7 % of respondents believed that BNPL required the customer to pay the entire deferred payment for a product or service at once, and only 24.1 % knew that the customer could spread the deferred payment into installments or repay the entire amount without incurring credit costs.

The BLIK mobile payment system was launched in Poland on February 9, 2015 and allows smartphone users to make cashless payments in stationary or online stores, withdraw and deposit cash at ATMs, and make transfers to a phone number, as well as generate checks with a digital code. At the end of the first quarter of 2024, the number of active BLIK users exceeded 16.5 million. Only 25.0 % of people knew that BLIK is a financial market institution (FinTech) – a “technological payment institution offering a payment service under the name BLIK”. Of the respondents, 11.4 % believed that it is the own product of Bank PKO BP, consisting of an innovative form of payment by phone, and 4.7 % believed that it is the name of an innovative payment service belonging to the VISA International system. 58.9 % of people did not have precise knowledge about who the payment operator in the BLIK system is.

Conclusions

The surveyed consumers tend to overestimate their level of knowledge. Ascribing positive traits to themselves that in reality we do not have (in this case knowledge) is a type of the fundamental attribution error – the halo effect. In practice, however, the study showed large discrepancies between one's own perception and the actual state of affairs. Questions checking knowledge confirmed H.1. (Consumers overestimate their own level of financial knowledge). Consumers do not understand concepts such as APRC/RRSO, do not know the mechanisms influencing the change in the price of credit and do not compare credit products – succumbing to the influence of behavioral factors. H.2. (Consumers remain uncritical of their lack of knowledge and the lack of familiarity with the rules of the financial market) was also confirmed. Despite the fact that Poles widely use financial services – as many as 98.4 % of respondents declared that they have a bank account, and 61.2 % use or have used various forms of credit in the past (mortgage or consumer credit). Nearly 39 % of respondents used consumer credit to purchase goods and services. Only 20.6 % of them stated that they had not used consumer credit and definitely did not intend to do so in the future. Their knowledge is superficial and not confirmed in practice. Only 10.2 % of respondents knew that foreign banks (e.g. Revolut) or branches of foreign banks are not covered by the guarantee system of the Bank Guarantee Fund. Consumers did not know which institutions offer them financial products and services (question about BLIK) and had problems with the practical application of knowledge about RRSO/APRC when comparing credit offers. On the one hand, nearly 60 % of respondents stated that they knew and understood the concept of RRSO/APRC, while only 25 % correctly answered the question on this issue. The study confirmed that Poles do not act fully responsibly when entering into credit agreements – they do not read the agreements they sign. Only about 40 % of respondents read contracts before signing them – mainly people with higher education (60.5 %) and economics students (70 %). Only 27.5 % of people with primary education and 25.7 % with secondary education stated that they are willing to read the details of credit contracts before signing them. H.3. (Consumers, regardless of their level of knowledge, education, family status and place of residence, often rely on intuition in the financial market and are subject to cognitive errors) is also confirmed by the results of the study. The vast majority of consumers participating in the study in Poland (85 %) achieve . This makes it easier to manage the household budget based on intuitive principles of mental accounting, without the need for consumers to have economic and financial knowledge. In this context, discipline, accumulating buffer savings and avoiding exposure to the risk of a variable interest rate are key. Anchoring Bias is an example of heuristics consisting in attaching oneself to a certain value/parameters resulting from previous experiences despite the emergence of new information – it influences inattentive reading of contracts. Consumers succumb to suggestions from sellers, whom they consider to be authorities, and when

comparing credit offers, they discount future payments hyperbolically in a way that is inconsistent with the logic of the effective interest rate. One theoretical explanation may be behavioural prospect theory (Schlinger, 2009), which is related to the framing effect (Tversky & Kahneman 1981; McElroy & Seta, 2003) – how the situational context changes the criteria based on which consumers form their opinions. In theoretical models, the method of presenting a financial offer is irrelevant, because a rational consumer makes a choice only on the basis of known and measurable objective criteria. In practice, however, I am aware that how the offer is presented may influence the choices made. Therefore, the ethics of salespeople and their manner of presentation are crucial when it comes to the actual purchase of financial and investment products.

In the light of rational choice theory (Hausman, 1995), people make decisions in such a way as to maximize their utility. They therefore choose a set of goods and services that are available and will provide them with maximum utility – understood individually. According to the principles of neoclassical economics, when making a decision, consumers have full information about what they intend to buy and are able to estimate both transaction costs and potential benefits. Therefore, their expectations regarding the product are rational. Thaler points out that often supposedly irrelevant factors (Thaler 2015 [NYT]), previously considered marginal, can significantly affect both the financial decisions made and the level of satisfaction with these decisions. Here, one can cite, for example, the potentially disastrous – although strongly opinion-forming – influence of unprofessional or unethical financial advisors, such as Internet influencers or sales made by persuasive telemarketers.

When interpreting the results of the study, one should remember that the respondents were declaring their knowledge and describing their behavior in an area that has been widely covered in the media. We cannot rule out that the anonymous respondents may have been tempted to attribute to themselves characteristics that they do not have in practice, but are consistent with social expectations. Taking this into account, it can be expected that due to the anonymous form of the survey, a maximum of 2–3 % of respondents could have provided data that was inconsistent (showing them in a more favourable light) with reality.

Consumer research reveals many cognitive errors committed by customers of financial institutions. Lack of diligence, short-sightedness and overoptimism exacerbate the risk of making suboptimal financial decisions. Although declarative knowledge of financial concepts may be high, the practical skills needed when choosing financial products and services are still lacking.

The survey of consumers' financial knowledge also shows that there is a significant educational gap between cities and small towns or villages. Credit behaviour is shaped by the social environment, role models, and not only the nominal level of knowledge. Consumers tend not to read contracts before signing them, do not understand even basic concepts and economic categories (e.g., RRSO/APRC) and do not show much interest in comparing the features of individual financial products.

Prospects for further research

Improvement of financial literacy level requires further outreach work not only to boost awareness of economic issues, but also develop practical skills and promote responsible consumption behavior. Otherwise, the consumer protection system will remain only partially effective and will not ensure the safe and widespread use of services offered by the financial market.

Researchers should regularly conduct comparative studies on levels of financial literacy, with particular emphasis on practical consumer behavior on the financial market. The emerging differences between national results will not only serve to indicate levels of financial literacy but may also illustrate the effectiveness of particular educational systems and thereby generate recommendations for designing local programs to improve economic and financial awareness among all age and social groups.

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¹Варшавська школа економіки, м. Варшава (Польща),
²Національний університет “Львівська політехніка”,
кафедра менеджменту організації,
lgebski@sgh.waw.pl,
Oleksii.O.Druhov@lpnu.ua

**ПОВЕДІНКА ПОЛЬСЬКИХ СПОЖИВАЧІВ НА ФІНАНСОВОМУ РИНКУ У СВІТЛІ
РЕЗУЛЬТАТІВ ДОСЛІДЖЕНЬ У ЦЕНТРАЛЬНІЙ ТА СХІДНІЙ ЄВРОПІ**

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Вміння правильно розуміти і користуватись фінансовими послугами вже є невід’ємною частиною знань дорослої людини. Мета статті – аналіз ринкової поведінки та знань споживачів на фінансовому ринку у світлі наукових досягнень та власних досліджень. Автори досліджують фактичний рівень фінансових знань польських споживачів та аналізують помилки споживачів. У статті автори зробили огляд літератури та найважливіших досліджень фінансових знань та поведінки споживачів на фінансовому ринку в Польщі та Україні – у контексті загальноєвропейського дослідження OECD/INFE. У статті також застосовано статистичний аналіз для визначення рівня фінансової грамотності на поведінку споживачів на фінансовому ринку.

Ключові слова: поведінка споживачів, захист прав споживачів, фінансова грамотність, економічна освіта.