



MEASURING FINANCIAL LITERACY AND FINANCIAL INCLUSION IN CROATIA – 2023



HRVATSKA NARODNA BANKA



HANFA

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GAME CHANGERS



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METHODOLOGY

Method, sample and objectives

TYPE OF RESEARCH AND DURATION OF FIELDWORK

- Quantitative research
- F2F CAPI (computer-assisted personal survey)
- Duration of fieldwork: from 2 do 21 March 2023

SAMPLE

- 18-79 years of age
- Nationally representative in terms of age, gender, region, the size of settlement and education.
- N = 1630 for gross sample, the response rate of 61.3%, for the final sample with N = 1000.

RESEARCH OBJECTIVES

- Research on financial literacy, financial inclusion and digital financial literacy of Croatian citizens
- Collect information on financial behaviour, financial attitudes and financial knowledge of Croatian citizens

Sample structure

Gender	Female	51%
	Male	49%
Age	18 – 19 years of age	2%
	20 – 29 years of age	15%
	30 – 39 years of age	17%
	40 – 49 years of age	17%
	50 – 59 years of age	18%
	60 – 69 years of age	21%
Level of education	70 – 79 years of age	10%
	Primary school	22%
	Secondary school	56%
Monthly household income	Higher education	21%
	Up to 796 euro	28%
	From 796 to 1,327 euro	10%
	More than 1327 euro	26%
	Does not know / Does not want to answer	37%

Zagreb and surrounding areas (counties): City of Zagreb, Zagreb County
Northern Croatia (counties): Krapina-Zagorje, Varaždin, Kopriivnica-Križevci, Bjelovar-Bilogora, Virovitica-Podravina, Međimurje
Slavonia (counties): Požega-Slavonia, Brod-Posavina, Osijek-Baranja, Vukovar-Srijem
Banovina, Kordun and Lika (counties): Sisak-Moslavina, Karlovac, Lika-Senj
Croatian Littoral and Istria (counties): Primorje-Gorski Kotar, Istria
Dalmatia (counties): Zadar, Šibenik-Knin, Split-Dalmatia, Dubrovnik-Neretva

N=1,000

The data are **weighted** by gender, age, region, the size of settlement and education in order to better represent the general population of the Republic of Croatia.

Differences between subgroups were tested at the **95% confidence level**.

Size of settlement	Less than 3,000 inhabitants	41%
	From 3,000 to 15,000 inhabitants	15%
	From 15,000 to 100,000 inhabitants	20%
	From 100,000 to 1,000,000 inhabitants	24%
Region	Zagreb and surrounding areas	27%
	Northern Croatia	17%
	Slavonia	15%
	Banovina, Kordun and Lika	8%
	Istria, Croatian Littoral and Gorski Kotar	12%
	Dalmatia	20%



FINANCIAL LITERACY

Components of financial literacy

Financial knowledge



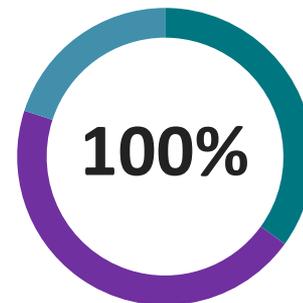
Financial behaviour



Approach to spending money



Financial literacy



4 tasks and 1 question determining the level of understanding of basic economic concepts
A maximum of 7 points

15 questions determining conscientiousness and methodical management of one's own finances
A maximum of 9 points

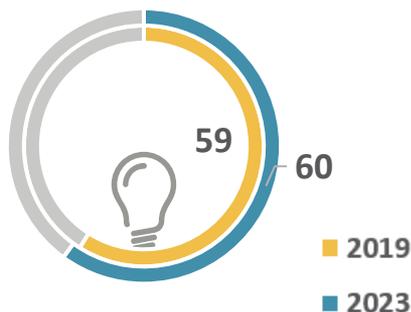
2 claims determining the tendency to spend money instead of saving it
A maximum of 4 points

A combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being.*
A maximum of 20 points

*OECD definition (2022), *OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion 2022* (p. 6) - [link](#)

Financial literacy of Croatian citizens

Average financial literacy



12.0/20.0

The average score of Croatian citizens is **12 out of 20 points, or 60%** of the total points. Compared to 2019, there is no significant difference.

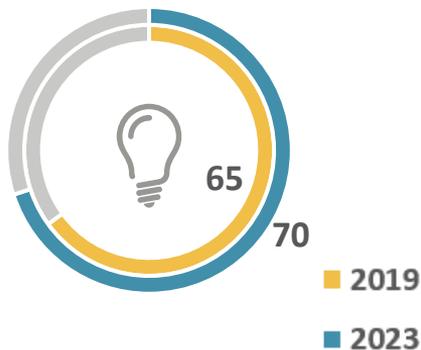
What are the inter-group differences?

- The age group consisting of people under 19 years of age is the age group that achieved the lowest score (**10.9**), while the highest score was achieved by the age groups 40-49 (**12.4**) and 50-59 (**12.3**).
- Primary school education (**11.2**) vs. higher education (**13.1**).
- Household income lower than 796 euro (**11.3**) vs. Income higher than 796 euro (**12.6**).
- By the size of settlement, respondents from settlements with less than 3,000 inhabitants achieved the lowest score (**11.4**), while the inhabitants of the three largest cities achieved the highest score (**12.8**).
- In terms of region, Northern Croatia achieved the lowest score (**10.6**), while Zagreb and surrounding areas achieved the highest score (**12.8**), followed by Slavonia, Banovina, Kordun and Lika (**12.5**).

Financial knowledge of Croatian citizens

Financial knowledge

(percentage of achieved points out of the possible number of points)



4.91/7.0

The average score of Croatian citizens is **4.91 out of 7 points, or 70%** of the total points.

Compared to 2019, this score represents a significant increase.

What are the inter-group differences?

- By age, people under 20 years of age (**4.4**) and people older than 70 years of age (**4.2**) achieved the lowest scores, while people ranging from 40 to 49 years of age (**5.1**).
- Primary school education (**4.5**) vs. higher education (**5.4**).
- Household income lower than 796 euro (**4.5**) vs. income higher than 796 euro (**5.2**).
- Respondents from settlements with less than 3,000 inhabitants achieved the lowest score (**4.5**), while the inhabitants of settlements with more than 100,000 inhabitants achieved the highest score (**5.5**).
- In terms of region, Northern Croatia achieved the lowest score (**4.3**), while Zagreb and surrounding areas achieved the highest score (**5.4**).

Financial knowledge of Croatian citizens

95% (75% in 2019) of citizens are aware of the impact of inflation on everyday life, and **75% (61% in 2019)** are able to solve a task involving inflation – **this extraordinarily high increase in knowledge relating to tasks involving inflation, compared to 2019, is most probably a result of the current economic context.**

86% (88% in 2019) of respondents understood the task requiring the understanding of the concept of loan interest. This result represents a slight decrease compared to 2019.

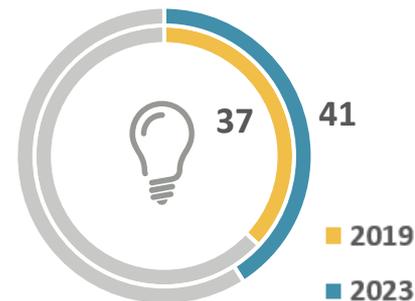
59% (63% in 2019) of citizens know how to calculate the simple interest. This result represents a slight decrease compared to 2019.

32% (36% in 2019) of citizens know how to calculate the compound interest, which also represents a slight decrease compared to 2019.

76% (74%) of citizens are aware of the fact that high risks are associated with potentially high earnings. This result represents a slight increase compared to 2019.

74% (64%) of citizens are aware of the benefits of diversification for the purpose of risk protection. Compared to 2019, this result represents a significant increase.

High level of financial knowledge



41%

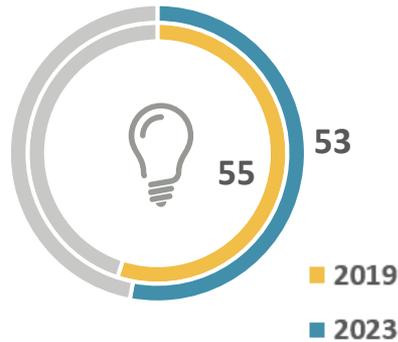
41% achieved the score of 6 or 7, which is considered a **high level of financial knowledge** according to the OECD.

This result represents a slight increase compared to 2019.

Financial behaviour of Croatian citizens

What are the inter-group differences?

Financial behaviour



4.73/9.0

The average score of Croatian citizens is **4.73 out of 9 points, or 53%** of the total points. Compared to 2019, there is no significant difference.

- Men achieved a lower score than women (**4.5 vs. 4.9**).
- People under 19 years of age achieved the lowest score (**4.4**), while respondents ranging in age from 40 to 49 years of age achieved the highest (**4.9**) score.
- Respondents who completed higher education achieved a higher score (**5.1**) than respondents who completed primary school or secondary school (**4.6**).
- The lowest household income (**4.5**) vs. the highest income (**5.0**).
- Respondents from settlements with less than 15,000 inhabitants achieved the lowest score (**4.6**), while respondents from settlements with 15,000-100,000 achieved the highest score (**5.0**).
- Northern Croatia (**4.2**) and Dalmatia (**4.4**) achieved the lowest scores, while Slavonia (**5.4**) and Zagreb and surrounding areas (**5.0**) achieved the highest scores.

Financial behaviour of Croatian citizens

91% of citizens make day-to-day decisions on their own money by themselves or with someone else

86% of citizens always or often pay their bills on time

70% of citizens always or often carefully consider the purchase before buying something

68% keep a close personal watch on their financial affairs

63% of citizens personally manage household finances and run a household budget

56% of citizens keep track of their spending

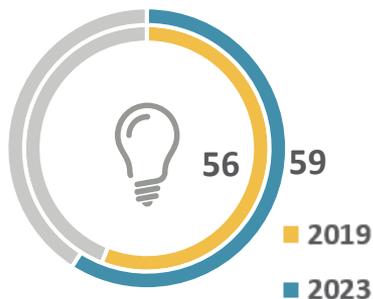
55% of citizens keep money for bills separate from day-to-day spending money

47% of citizens set long-term financial goals and strive to achieve them

Croatian citizens' attitudes towards money

What are the inter-group differences?

Approach to money



2.37/4.0

The average score of Croatian citizens is **2.37 out of 4 points, or 59%** of the total points. Compared to 2019, this score represents a slight increase.

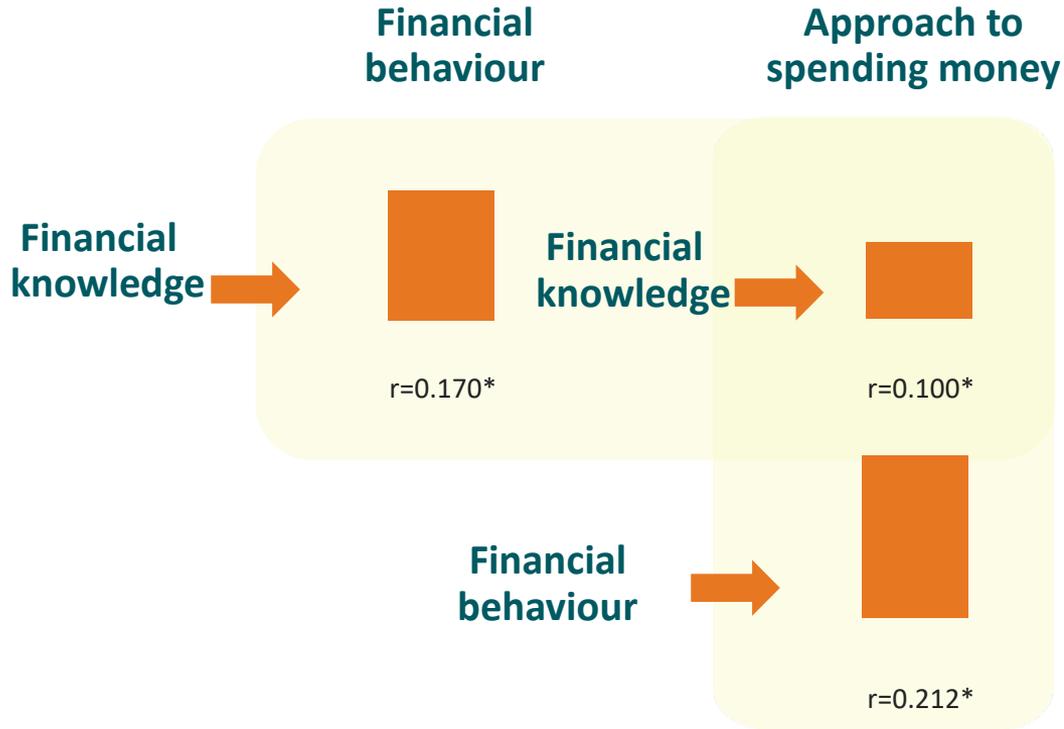
- People under 19 years of age achieved the lowest score (**2.0**), while citizens ranging in age from 50 to 59 years of age achieved the highest score (**2.6**).
- Primary school education (**2.1**) in relation to higher education (**2.6**).
- In terms of region, Northern Croatia, Istria, Croatian Littoral and Gorski Kotar achieved the lowest score (**2.1**), while Banovina, Kordun and Lika achieved the highest score (**2.7**).

Attitudes used to measure the approach to money:

25% of citizens live for today without thinking about the future, while **43%** of citizens do the contrary.

33% of citizens prefer to spend money today than save for the long-term, while **34%** of citizens prefer the contrary.

Relationship between components of financial literacy



Financial behavior is correlated with financial knowledge to a lesser extent and with the personal approach to spending money to a somewhat greater extent.

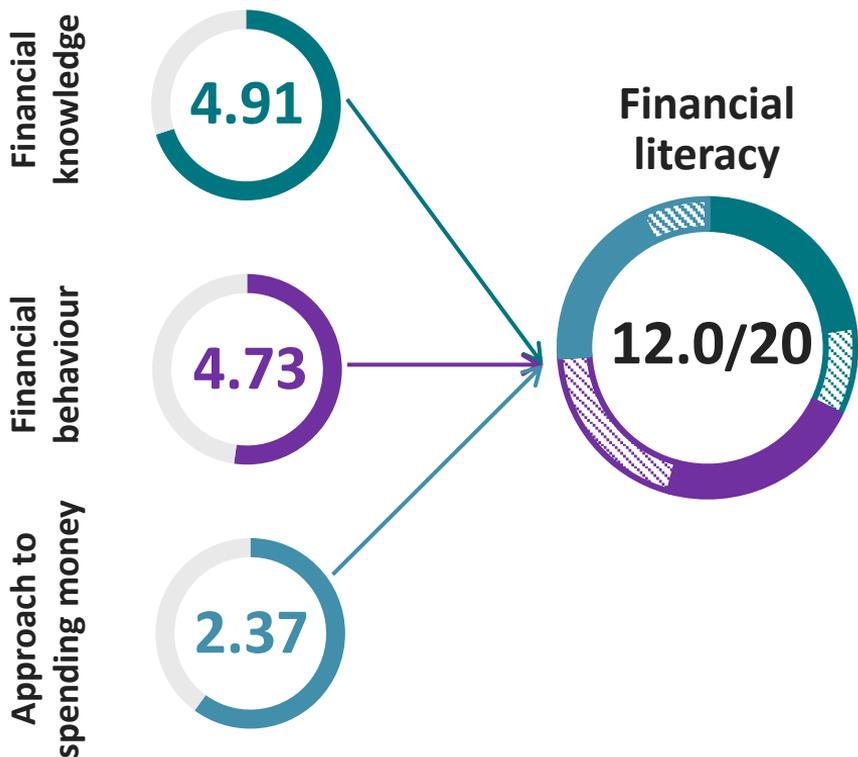
Even though they are statistically significant, the correlation coefficients are low.

This means that components of financial literacy are relatively independent of each other.

r - Pearson correlation coefficient - indicates the tendency of the results towards covariance in different components. The possible range of the coefficient is from -1 to 1.

* The correlation coefficient is statistically significant at the level of 5%

Overall results



All three indicators of financial literacy leave room for improvement

The results on the scale of financial knowledge stand out the most in terms of positive results

- The weakest results are those on the financial behaviour scale
- However, all three indicators leave room for improvement
- Special focus should be placed on the education of:
 - The youngest and the oldest respondents
 - Respondents with the lowest levels of education
 - Respondents whose household income levels are the lowest



DIGITAL FINANCIAL LITERACY

Components of DIGITAL financial literacy

Knowledge



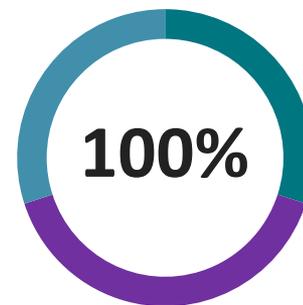
Behaviour



Attitudes



Digital financial literacy



3 questions related to knowledge of digital technologies.
A maximum of 3 points

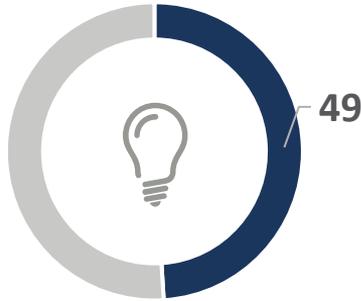
4 questions related to behaviour in the digital world.
A maximum of 4 points

3 statements determining “smart” attitudes related to behaviour in the digital world.
A maximum of 3 points

A combination of knowledge, behaviour and attitudes.
A maximum of 10 points

DIGITAL financial literacy – OVERALL

Digital financial literacy



4.87/10.0

The average score of Croatian citizens is **4.87 out of 10 points, or 49%** of the total points.

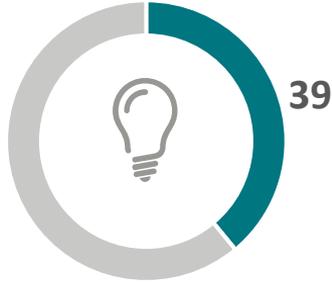
What are the inter-group differences?

- The age groups that achieved the best overall score are the ones ranging from 20 to 49 years of age (**5.4 – 5.5**). Persons older than 70 years of age achieved the weakest score (**3.0**).
- Primary school education (**3.5**) vs. higher education (**5.8**).
- The lowest household income (**4.1**) vs. the highest income (**5.7**).
- By settlement site, respondents from settlements with less than 3,000 inhabitants achieved the lowest score (**4.5**), while respondents from settlements with 15,000 to 100,000 inhabitants achieved the highest score (**5.3**).
- In terms of region, Northern Croatia achieved the lowest score (**4.2**), while Istria, Croatian Littoral and Gorski Kotar achieved the highest score (**5.5**).

DIGITAL financial literacy – KNOWLEDGE

Knowledge

(percentage of points achieved out of the total number of points)



1.18/3.0

The average score of Croatian citizens is **1.18 out of 3 points**, of **39%** of the total points.

What are the inter-group differences?

- The oldest respondents, between 70 and 79 years of age, achieved the lowest score (**0.6**). Respondents aged 60-69 years of age achieved the score that is similar to the average (**1.1**).
- Primary school education (**0.8**) vs. higher education (**1.4**).
- The lowest household income (**1.0**) vs. the highest income (**1.5**).

What was being measured?

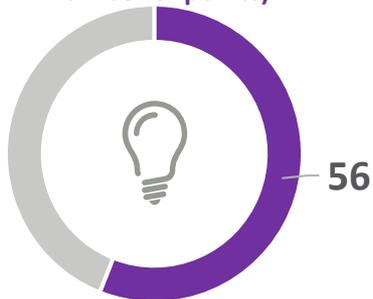
- **38%** of citizens know that a digital financial contract does not require the signing of a paper contract to be considered valid
- **46%** of citizens know that personal data they share publicly online may be used to target them with personalised commercial or financial offers
- **35%** of citizens know that crypto-currencies do not have the same legal tender as banknotes and coins

DIGITAL financial literacy – BEHAVIOUR

What are the inter-group differences?

Behaviour

(percentage of points achieved out of the total number of points)



- The youngest respondents achieved the highest score (**2.7**). The score falls as the age rises, and the oldest respondents (70-79 years of age) achieved the lowest score (**1.6**).
- Primary school education (**1.7**) vs. higher education (**2.6**).
- The lowest household income (**1.9**) vs. the highest income (**2.5**).

What was being measured?

- **90%** of citizens do not share passwords/PINs of their bank account with close friends
- **However, as much as 52%** of citizens do not regularly change passwords at all at the websites they use for online shopping and personal finance
- **88%** of citizens never share information about their personal finances publicly on the internet
- **As few as 22%** of citizens always check before buying a financial product online whether the provider is regulated in Croatia

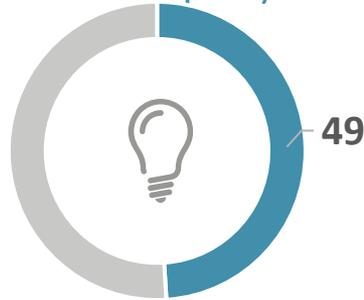
2.22/4.0

The average score of Croatian citizens is **2.22 out of 4 points, or 56%** of the total points.

DIGITAL financial literacy – ATTITUDES

What are the inter-group differences?

Attitudes
(percentage of points achieved out of the total number of points)



- By age, respondents in age groups 20-29 and 40-49 years of age achieved the highest score (**1.7**), while the oldest respondents (70-79 years of age) achieved the lowest score (**0.9**).
- Primary school education (**1.0**) in relation to higher education (**1.8**).
- The lowest household income (**1.2**) vs. the highest income (**1.7**).
- Northern Croatia (**1.1**) vs. Istria, Croatian Littoral and Gorski Kotar (**1.8**).

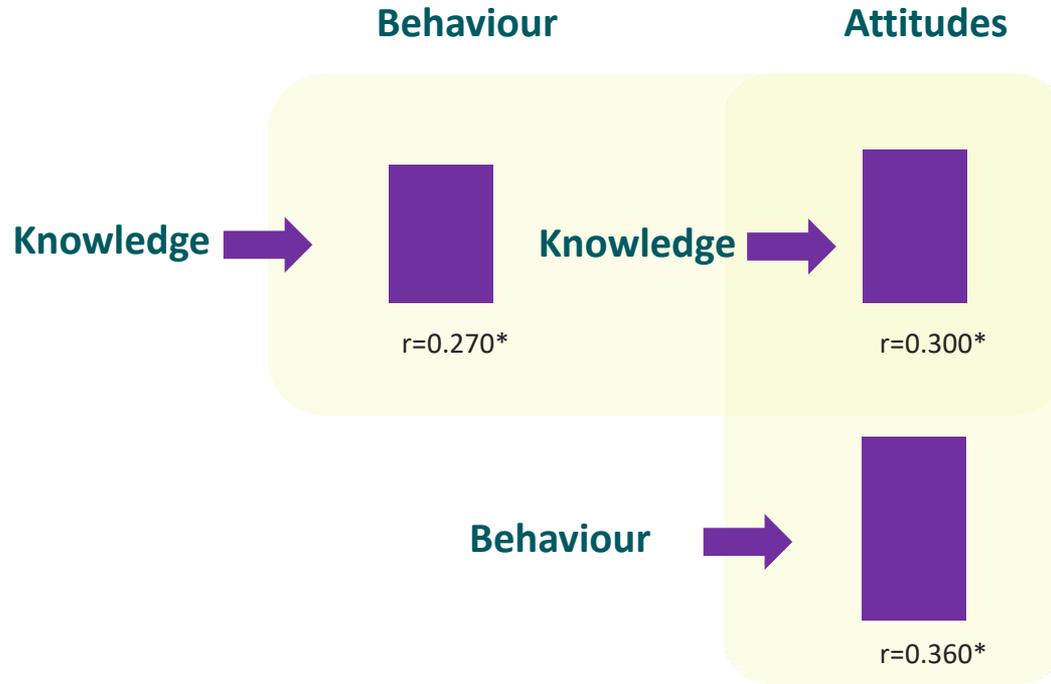
What was being measured?

1.47/3.0

The average score of Croatian citizens is **1.5 out of 3 points**, or **49%** of the total points.

- **32%** of citizens do not agree at all that it is safe to shop online using public Wi-Fi networks
- **40%** of citizens agree completely that it is important to pay attention to the security of a website before making a transaction online (e.g. https, or certificate)
- **46%** of citizens do not agree at all that it is important to read the terms and conditions when buying something or contracting a service online

Relationship between components of DIGITAL financial literacy



Behaviour in the digital world is correlated with knowledge to a lesser extent than with attitudes.

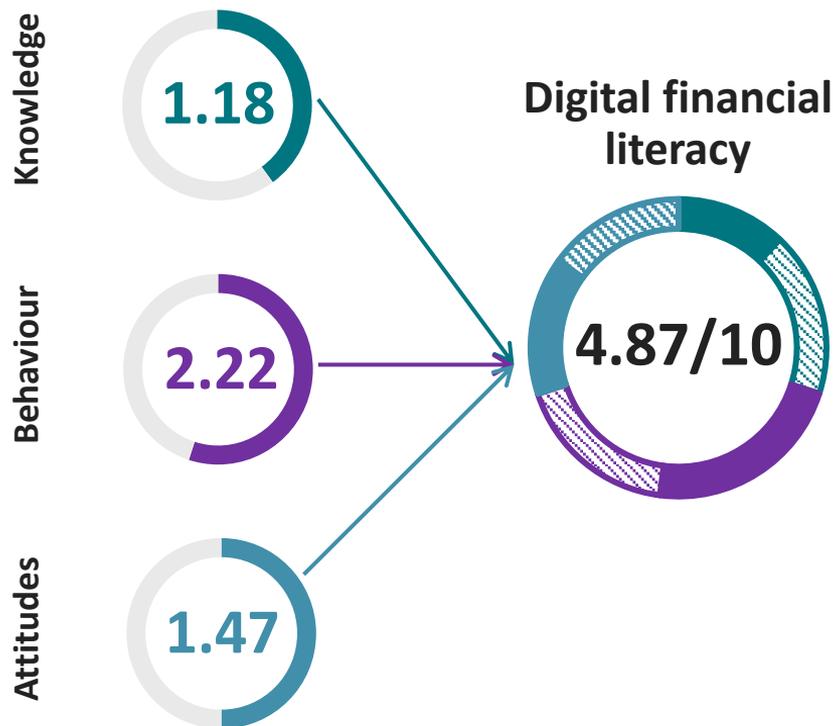
Although they are statistically significant, the correlation coefficients are weak.

The correlation between the components of digital literacy is slightly higher than the correlation between the components of general financial literacy, but the detected pattern is similar.

r - Pearson correlation coefficient - indicates the tendency of the results towards covariance in different components. The possible range of the coefficient is from -1 to 1.

* The correlation coefficient is statistically significant at the level of 5%

Overall results



All three indicators of digital financial literacy leave room for improvement

- The best results are those on the behaviour scale
- The worst results are those on the knowledge scale
- All three indicators leave plenty of room for improvement
- Special focus should be placed on the education of:
 - The oldest respondents (70+)
 - Respondents with lower levels of education
 - Respondents with lower household income levels

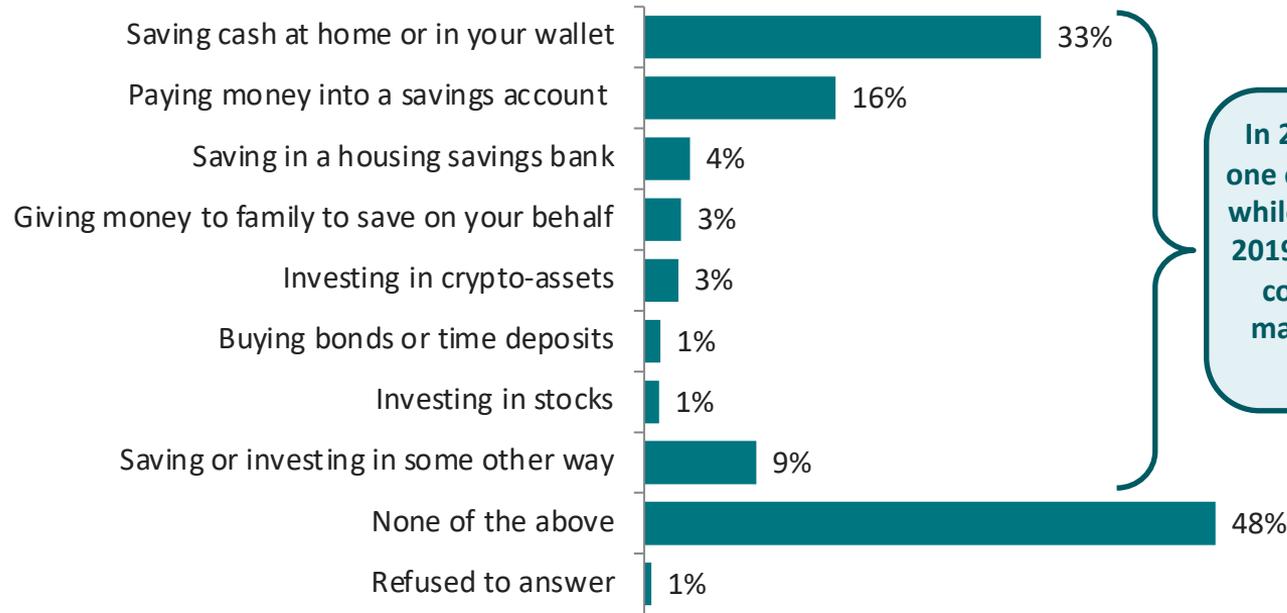


MANAGEMENT OF FINANCES AND PREPARATIONS FOR RETIREMENT

About a half of citizens use at least one form of active saving

Only 51% of citizens save using at least one of the specified methods. A third of citizens save money by keeping money at home or in their wallet, and only a sixth of them deposit it into a savings account. Citizens who do not save actively most often have completed primary school education, their household income is lower than 796 euro, and are older than 70 years of age. In terms of region, respondents from Northern Croatia and Dalmatia save more infrequently than respondents from other regions.

Active saving



In 2023, 51% of respondents use one or more forms of active saving, while 68% of respondents did so in 2019. The decrease is most likely a consequence of more adverse macroeconomic situation when compared to 2019.

QF2. Do you do any of the following for yourself or your household?

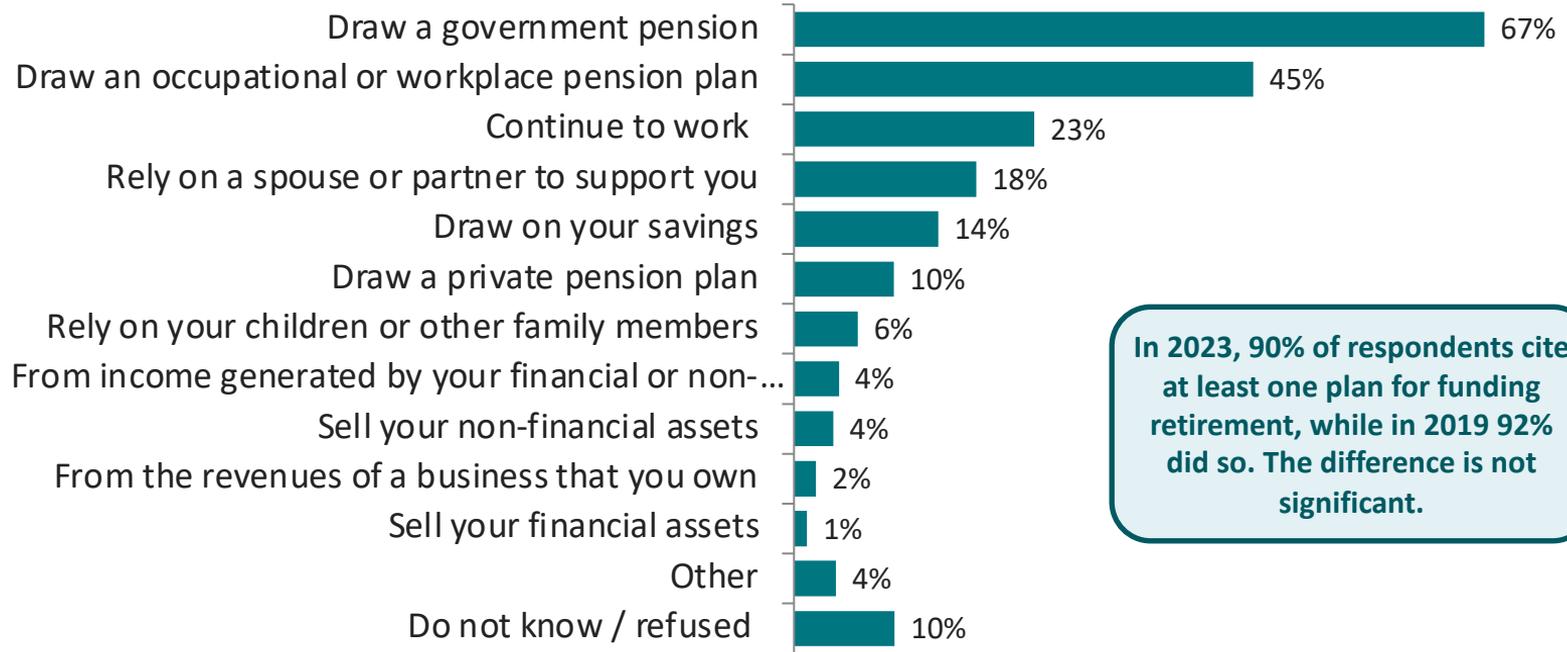
QF3. In the past 12 months have you been [personally] saving money in any of the following ways, whether or not you still have the money?

Sample: N=1000

The majority of citizens have at least an outline plan for funding retirement

Even though it is mandatory, **2/3 of citizens rely on the government pension as the source of income in retirement, while 45% of citizens rely on an occupational or workplace pension plan.** As few as 10% of citizens cite private pension plans as the source of income. As many as 23% of citizens plan to work in retirement. About 10% of citizens in the 30-39 age group still have no plan for retirement income, and the share of such people in the 40 to 60 age group is about 7-8 percent.

Plans for retirement income



In 2023, 90% of respondents cite at least one plan for funding retirement, while in 2019 92% did so. The difference is not significant.

QF9. And how will you – or do you – fund your retirement?

*The sample used to calculate the arithmetic means changes depending on the option, because only respondents who responded in the range of 1-5 on the scale of assessing the confidence in retirement plans were taken into account for the calculation. (1= the greatest confidence)

Perception of confidence in own retirement plans

Confidence in own retirement plans increases with age, and persons older than 50 years of age are much more confident than younger persons. Confidence also increases in case of higher education levels and monthly income level. Respondents from settlements with more than 100,000 inhabitants think their plans are elaborated well more often. In terms of region, respondents from Zagreb and surrounding areas are the most confident, followed by respondents from Slavonia and Dalmatia. The share of citizens who think they do not have plans that are elaborated well (36%) or who have no plan at all (30%) is the greatest in Banovina, Kordun and Lika.

INSTITUTIONAL PENSION PLANS:



ONE-OFF CASH INJECTIONS



FAMILIAL SOLIDARITY



WORK, RENT AND BUSINESS ACTIVITY:



Citizens relying on government pension and occupational or workplace pension plans, familial solidarity and work in retirement report a lower level of confidence.

*Respondents provided their answers using the 1 to 5 scale where 1 means "very confident", while 5 means "not at all confident" in terms of having done a good job of making financial plans for their retirement. Therefore, the lower average means higher confidence.

QF8. How confident are you that you have done a good job of making financial plans for your retirement?

*The sample used to calculate the arithmetic means changes depending on the option, because only respondents who responded in the range of 1-5 on the scale of assessing the confidence in retirement plans were taken into account for the calculation. (1= the greatest confidence)



FINANCIAL PRODUCTS AND SERVICES

Knowledge and use of financial products

Includes products such as: current and giro-account, housing savings, life and non-life insurance, voluntary private pension plans, various types of loans and the like. In total, 18 products have been tested.

98% of citizens are aware of at least one product

88% of citizens stated that they use at least one financial product. Others have not provided an answer, or claim they do not use any product (mostly the oldest and the youngest respondents)

54% of citizens chose / contracted a financial product in the last two years

41% of citizens ask for detailed information before contracting financial services, but as many as **26%** of citizens have contracted financial products without considering the alternatives

57% of citizens state that information from friends, family or acquaintances influenced their decision on product choice. Citizens who used independent sources of information were significantly fewer in number – **25%** of citizens used a price comparison website, **8%** of citizens used the services of an independent financial advisor, and almost no one used specialist sources of information

Knowledge of financial products increases proportionally with the level of education and monthly income

Use of financial products is also strongly correlated not only with the level of education and income, but also with age – middle-aged citizens use products the most

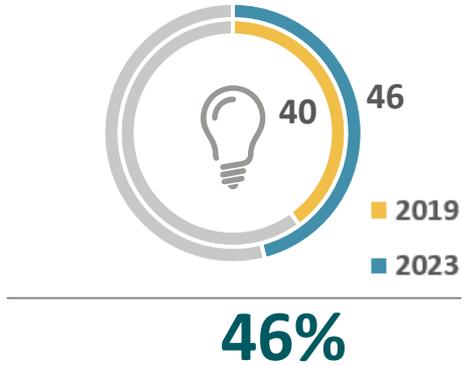


FINANCIAL RESILIENCE OF CITIZENS

Every other citizen is not able to cover unexpected expenses in the amount of their monthly income, and about two thirds (68%) of households could cover living expenses for only 3 months or less after losing the main source of income

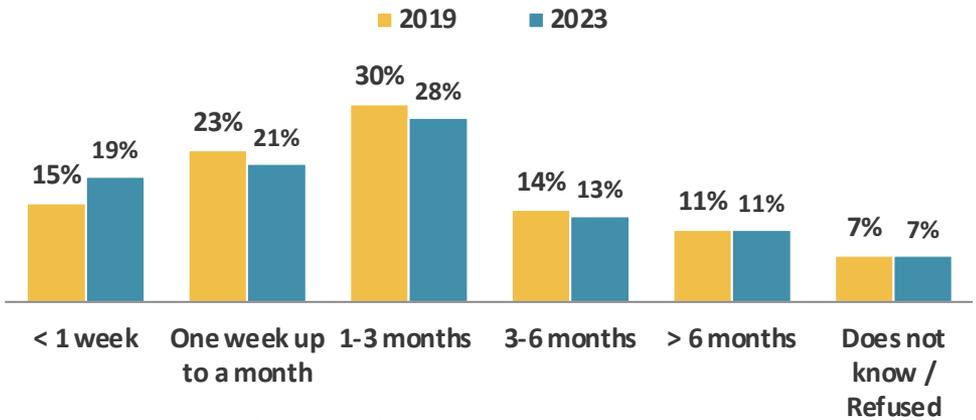
The ability to cover unexpected expenses increases proportionally not only with the level of income, but also with the level of education, which is in line with the expectations. Compared to 2019, the percentage of citizens who can withstand an expenditure shock increased. The level of education and monthly income also significantly extent the period of time over which a household may withstand the loss of the main source of income.

Expenditure shock (% of respondents who could withstand it)



Less than half of the citizens would be able to cover the expenses in the amount of their monthly income

The period over which respondents could cover living expenses after the loss of the main source of income



QF4. If you, personally, faced a major expense today – equivalent to your own monthly income – would you be able to pay it without borrowing the money or asking family or friends to help?

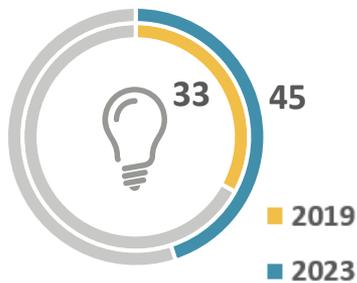
QF13. If you lost your main source of household income today, how long could your household continue to cover your living expenses without borrowing any money or moving house?

Sample: N=1000

Covering living expenses is an issue for almost half of the citizens

Respondents with lower levels of education and household income are affected to a significantly greater extent. People with the lowest income also have more limited options in a situation when they have to make ends meet, so they more often resorted to reducing spending and foregoing a part of their spending. Overtime work is most often used between the ages of 20 and 49 and among respondents from settlements with 3,000 to 15,000 inhabitants.

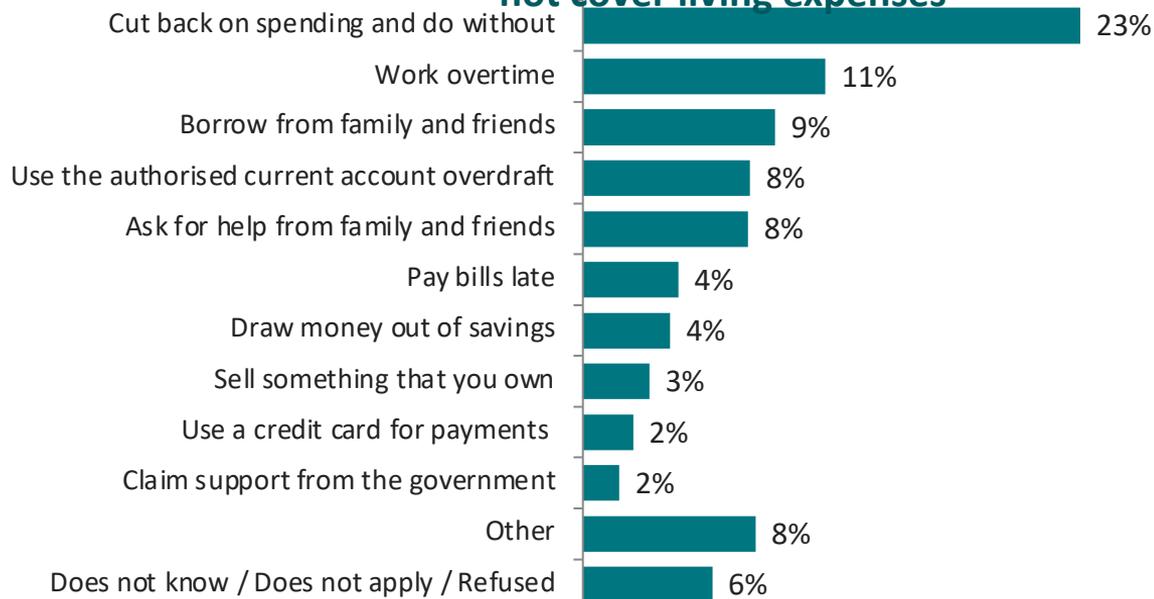
In the last 12 months there were times when income did not cover the living expenses



45%

Due to the deterioration of the economic situation in the last four years, there has been a significant increase in the share of citizens whose income at times did not cover their living expenses in the last year.

The ways in which citizens make ends meet in a situation when income does not cover living expenses



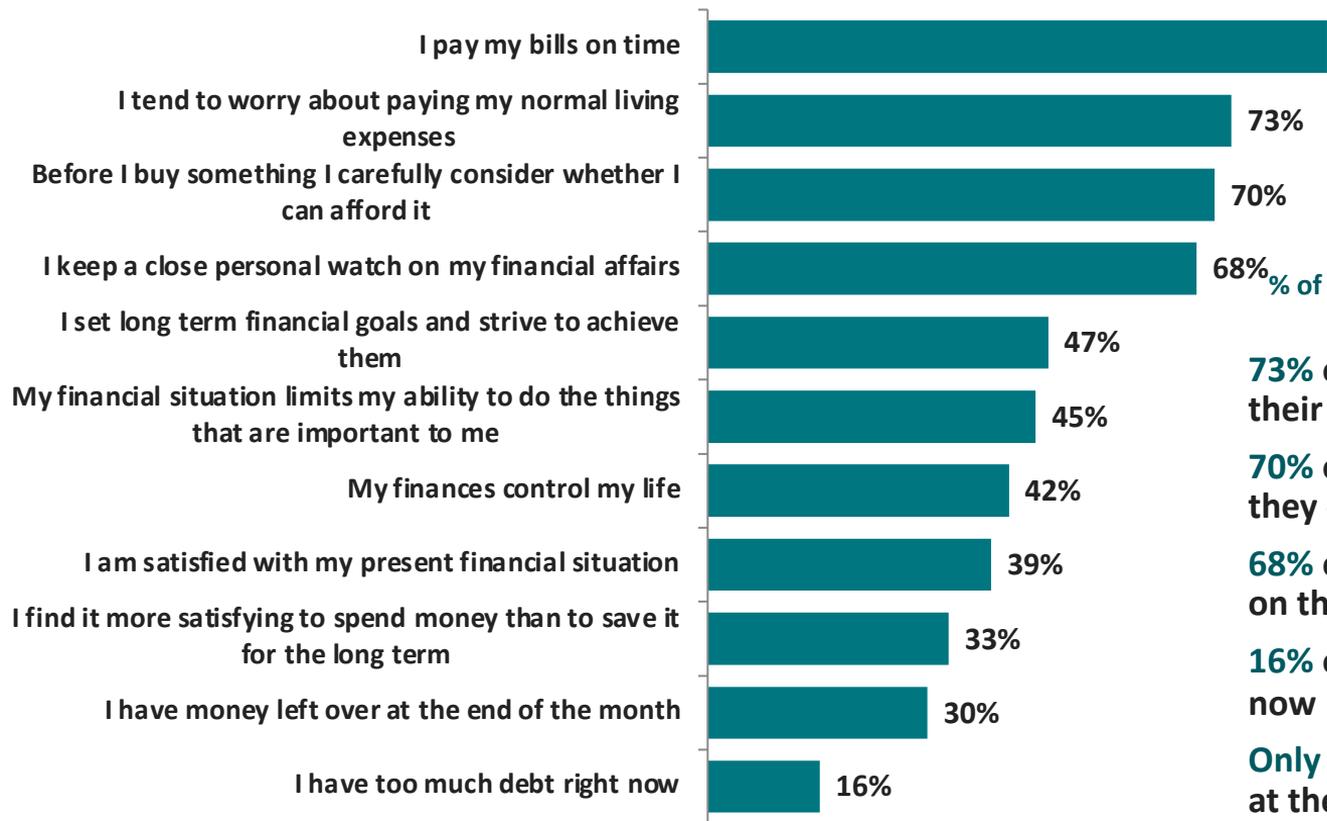
QF11. Sometimes people find that their income does not quite cover their living expenses. In the last 12 months, has this happened to you, personally?

QF12. What did you do to make ends meet the last time this happened? Percentages are calculated from the total sample (N=1000)



ATTITUDES TOWARDS SAVING AND SPENDING

Citizens generally pay their bills on time and are not inclined to accumulate debt



Attitudes towards saving and spending

% of answers "Completely" + "I agree somewhat" or "Always" + "Often"

73% of citizens tend to worry about paying their normal living expenses

70% of citizens carefully consider whether they can afford it before buying something

68% of citizens keep a close personal watch on their financial affairs

16% of citizens have too much debt right now

Only 30% of citizens have money left over at the end of the month always or often

QS1. I am now going to read out some statements. I would like to know how much you personally agree or disagree with each of the statements. (TOP 2 = Completely + I agree somewhat; BOTTOM 2 = Completely + I disagree somewhat)

QS2. And how often would you say the following statements apply to you? (TOP 2 = Always + Often; BOTTOM 2 = Rarely + Never)

Total sample N=1000, **Sample for individual statements does not contain respondents who refused to answer