

Financial Literacy Gaps and Inflation: Lessons from Seven Years of P-Fin Index Data

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Topics I will cover

- 1 ▶ Personal finance knowledge: a new measure.
And a focus on inflation
- 2 ▶ Gaps in financial knowledge
- 3 ▶ Financial knowledge and its link to financial wellbeing

The importance of data and measurement

- ▶ Data is the new currency
- ▶ A guide for program and policy
- ▶ A financial check-up

Measuring financial literacy: The ABCs of personal finance (Lusardi & Mitchell, NBER wp n. 31145, April 2023)

These are the questions I designed jointly with Olivia Mitchell, known as the “Big Three.”
One question is about inflation

The Big Three

1. “Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?”
 - More than \$102
 - Exactly \$102
 - Less than \$102
 - Don't know
 - Refuse to answer
2. “Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, with the money in this account, would you be able to buy...”
 - More than today
 - Exactly the same as today
 - Less than today
 - Don't know
 - Refuse to answer
3. “Do you think the following statement is true or false? Buying a single company stock usually provides a safer return than a stock mutual fund.”
 - True
 - False
 - Don't know
 - Refuse to answer

Measuring personal finance knowledge

- The TIAA-Institute-GFLEC Personal Finance Index (P-Fin Index) is an annual barometer of knowledge and understanding which enable sound financial decision-making and effective management of personal finances among U.S. adults.
- The P-Fin Index relates to common financial situations that individuals encounter and can be viewed as a gauge of “working knowledge.”
- In addition to personal finance knowledge it provides information on financial well-being indicators.
- Data is collected on a representative sample of about 3,500 respondents (age 18+).
- Data collection started at the end of 2016.

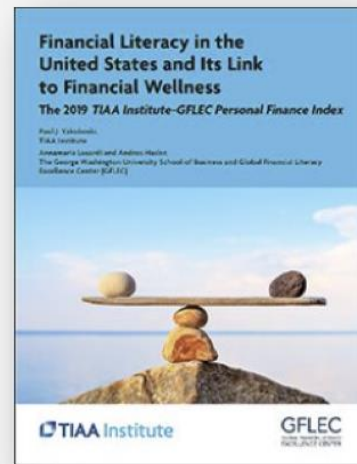


Seven years of P-Fin Index data (2017-2023)

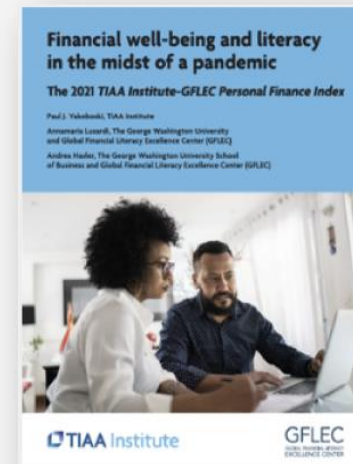
2017



2019



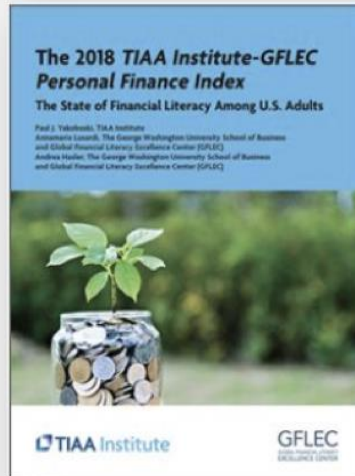
2021



2023



2018



2020



2022



What is unique: 8 functional areas of personal finance

The index is based on responses to 28 questions, with three or four questions for each of the eight functional areas:

The *P-Fin Index*'s 28 questions cover eight functional areas:

- 1. Earning**
- 2. Saving**
- 3. Consuming**
- 4. Investing**
- 5. Borrowing**
- 6. Insuring**
- 7. Comprehending risk**
- 8. Go-to information sources**

An example question

Anna saves \$500 each year for 10 years and then stops saving additional money. At the same time, Charlie saves nothing for 10 years but then receives a \$5,000 gift which he decides to save. If both Anna and Charlie earn a 5% return each year, who will have more money in savings after 20 years?

- Anna
- Charlie
- Anna and Charlie will have the same amount
- Don't know
- Refuse to answer

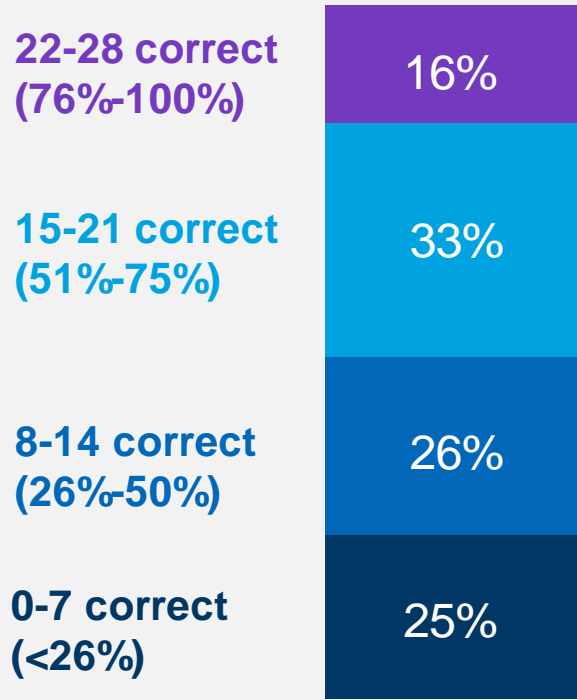
Results:	
Correct	47%
Incorrect	28%
Don't Know	25%
No Answer	0%

Financial literacy: A failing grade

% of P-Fin Index questions answered correctly



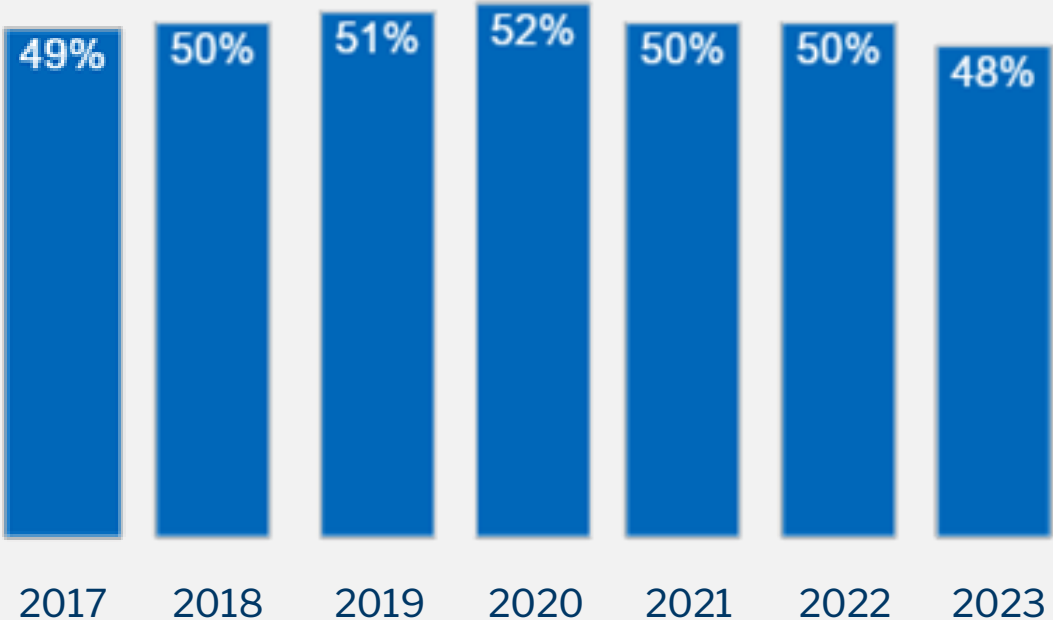
Distribution of correct answers to P-Fin Index questions



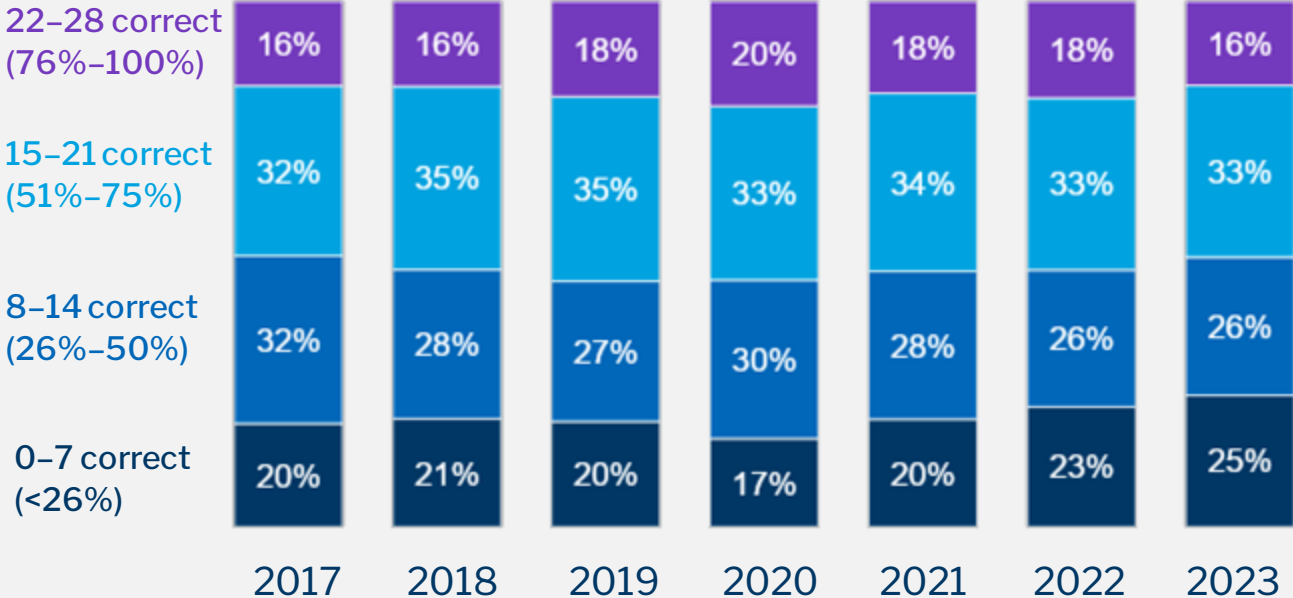
Source: TIAA Institute-GFLEC Personal Finance Index (2023).

Financial (il)literacy is holding steady: 2017-2023

% of P-Fin Index questions answered correctly



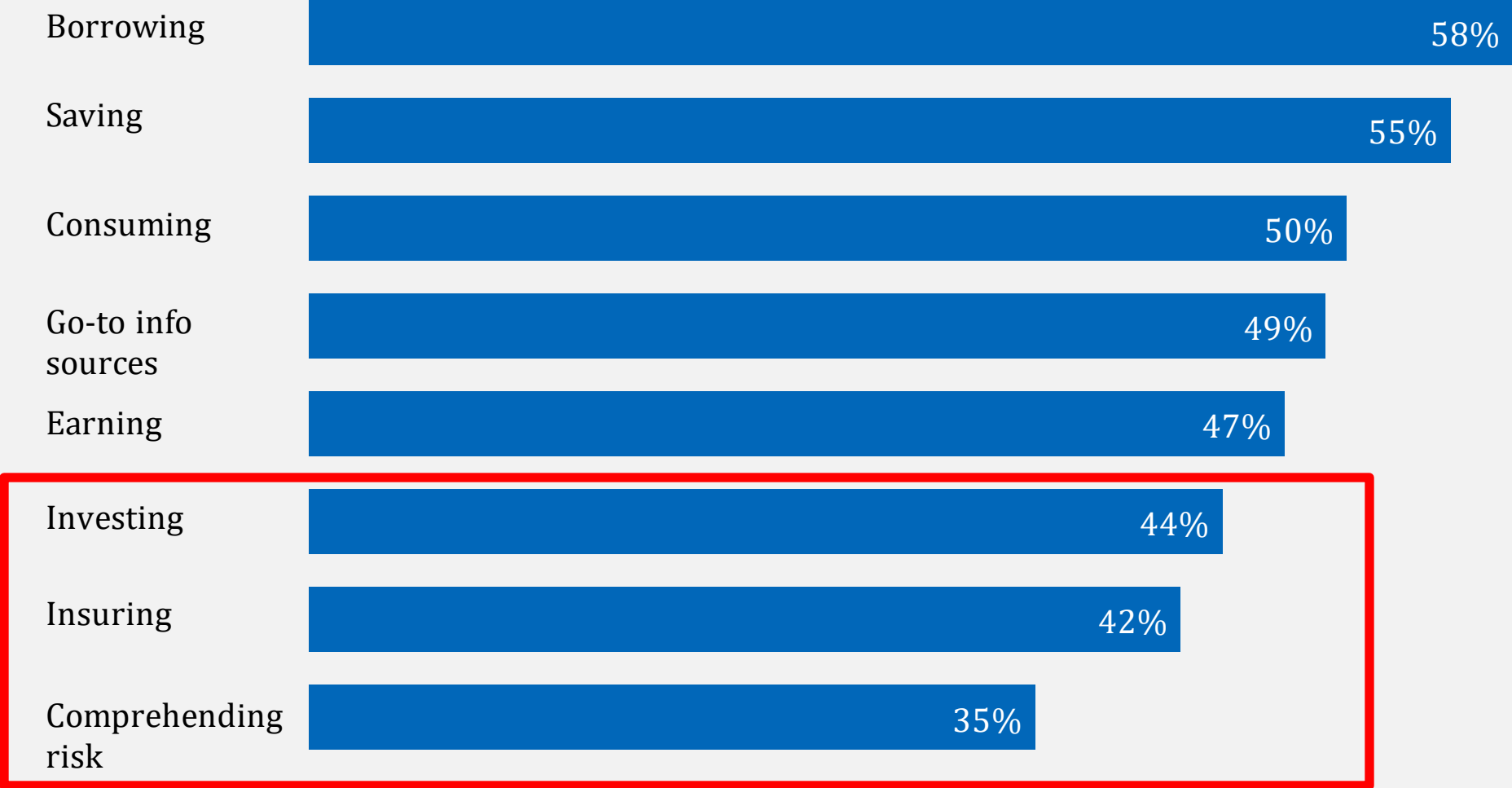
Distribution of correct answers to P-Fin questions



Source: TIAA Institute-GFLEC Personal Finance Index (2017-2023).

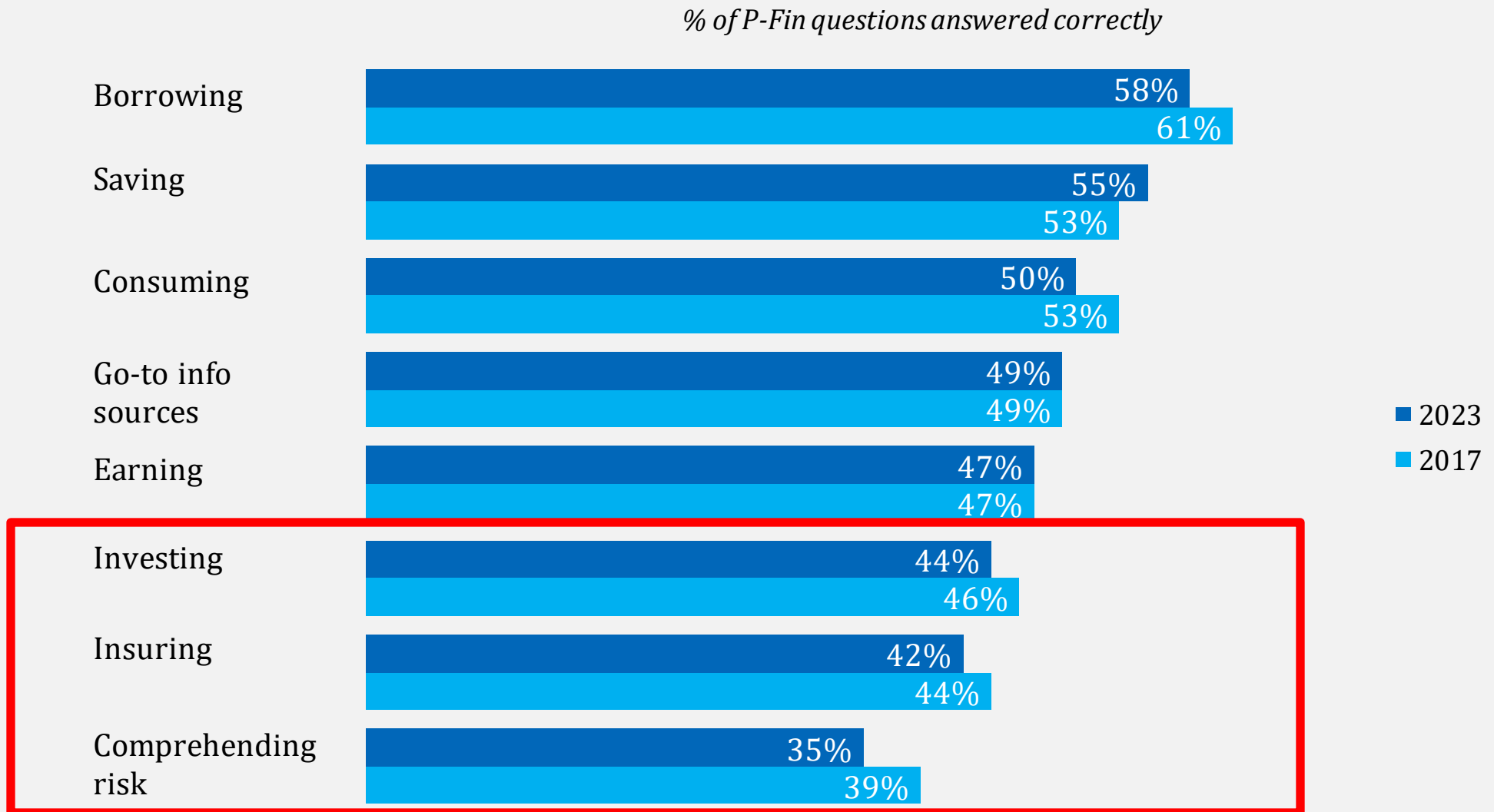
What do people know the most and the least

% of P-Fin questions answered correctly



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

How knowledge has changed over time



Source: TIAA Institute-GFLEC Personal Finance Index (2017, 2023).

Zooming in: Inflation knowledge

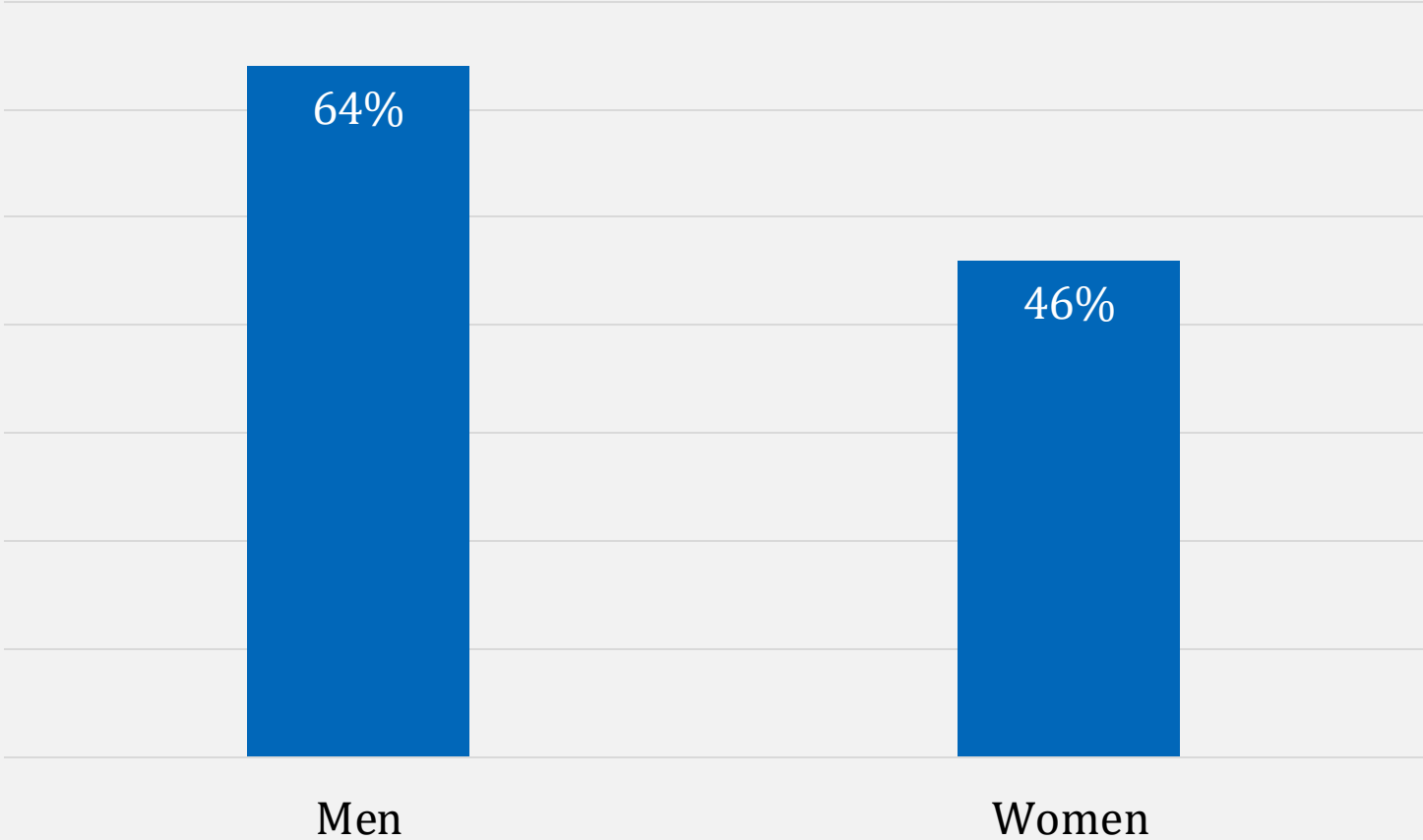
Akiko has \$1,000 in savings that earns a 2% rate of return over the course of the year. The inflation rate during the year is 3%. Which statement is true?

- She can afford to buy fewer things at the end of the year
- She can afford to buy more things at the end of the year
- It's not clear whether she can afford to buy more things or fewer things at the end of year
- Don't know
- Refuse to answer

Results:	
Correct	55%
Incorrect	17%
Don't Know	27%
No Answer	1%

Inflation knowledge, by gender

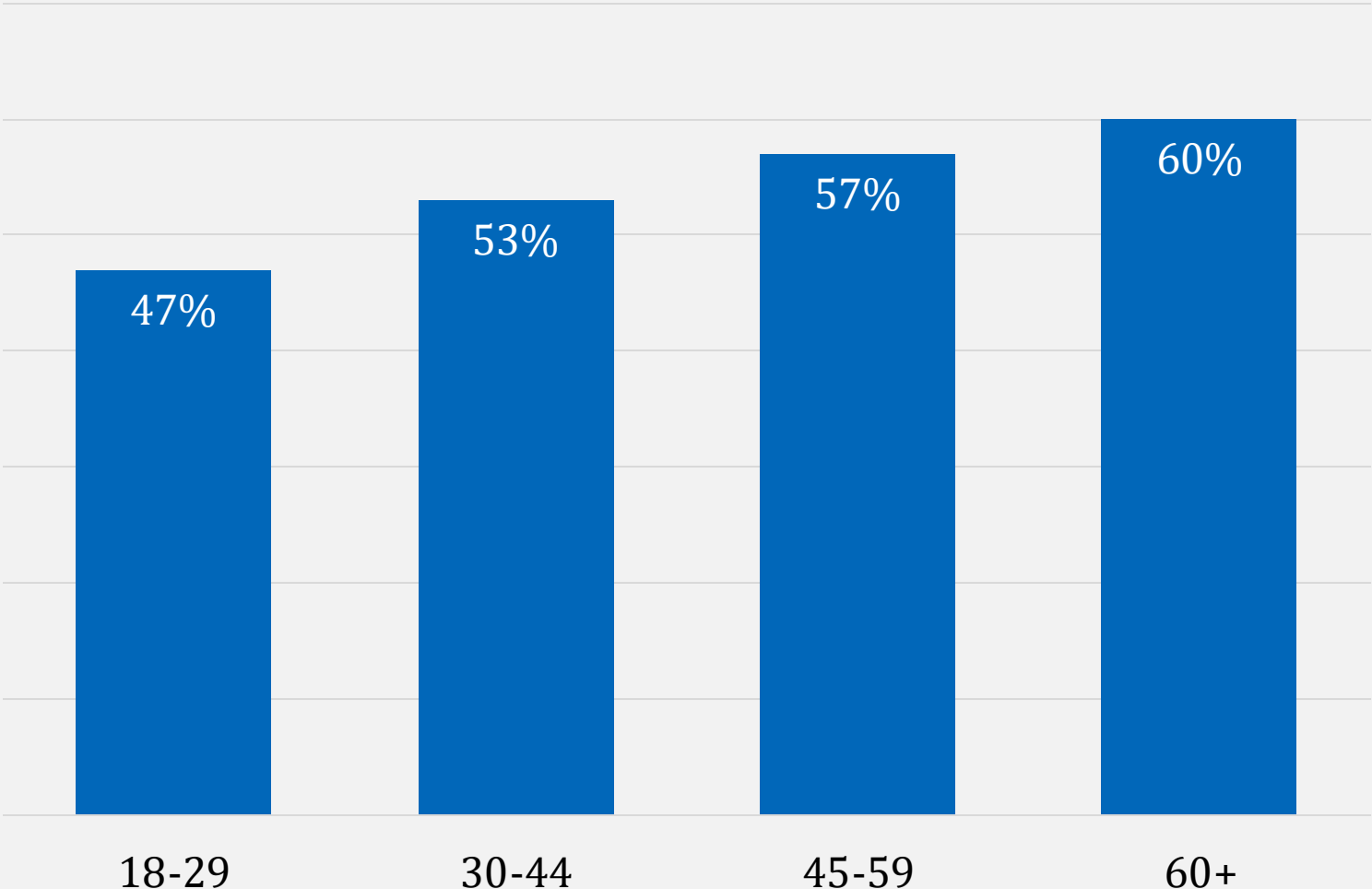
% who answered inflation question correctly



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

Inflation knowledge, by age

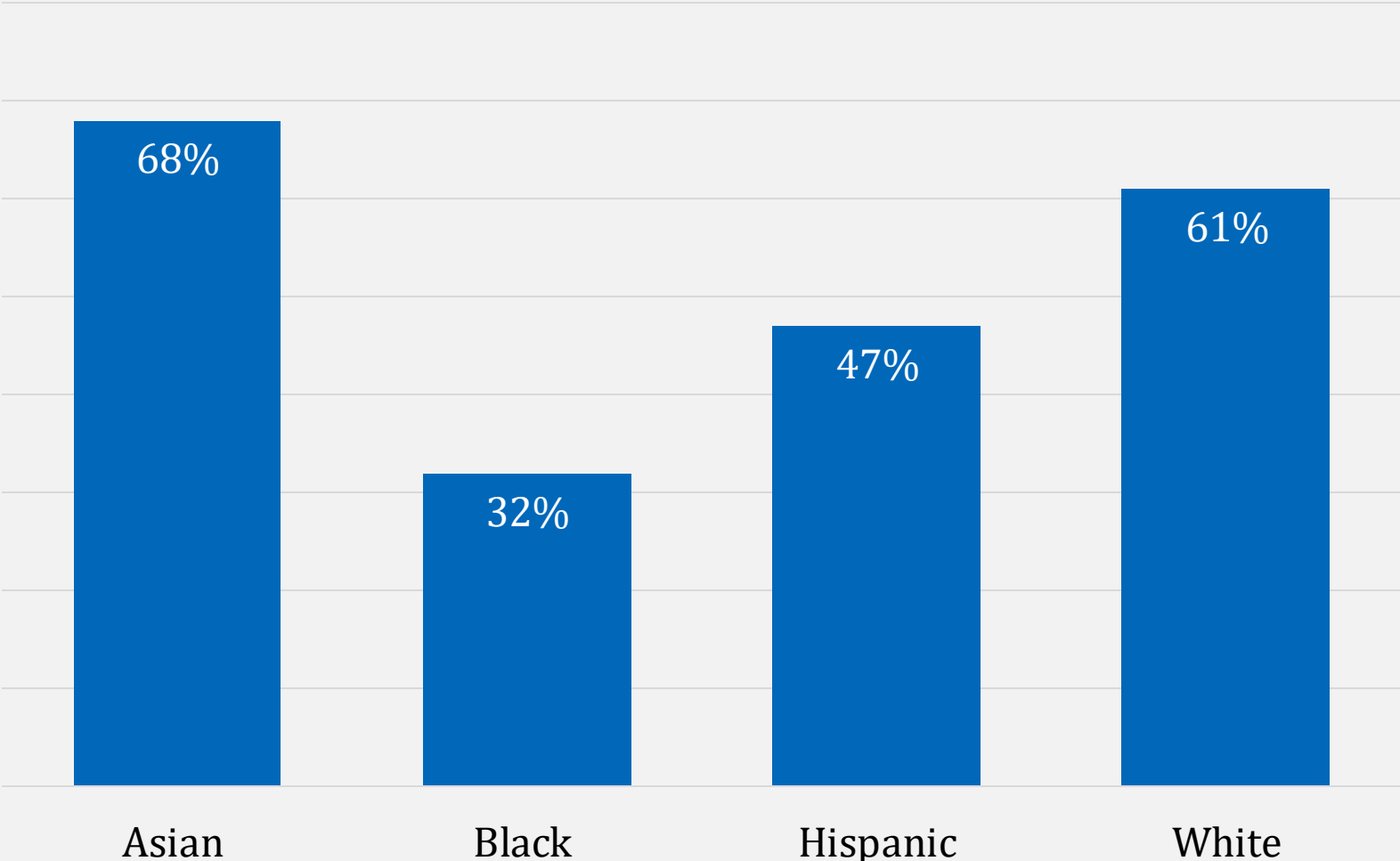
% who answered inflation question correctly



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

Inflation knowledge, by race/ethnicity

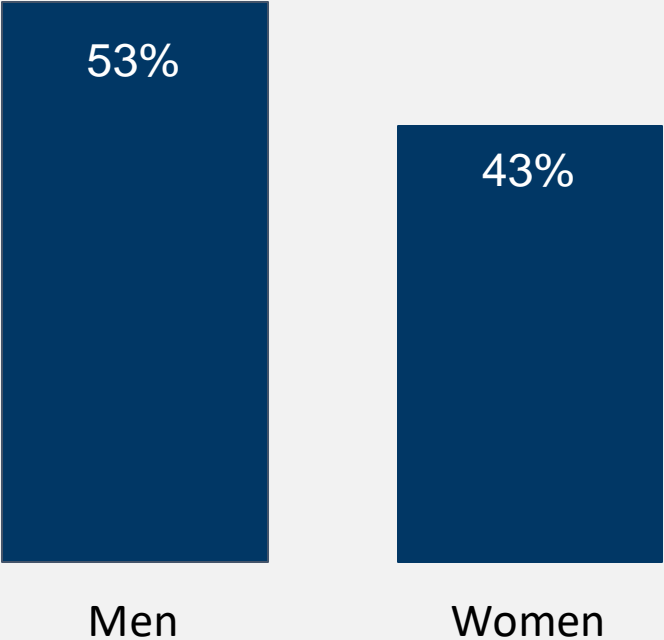
% who answered inflation question correctly



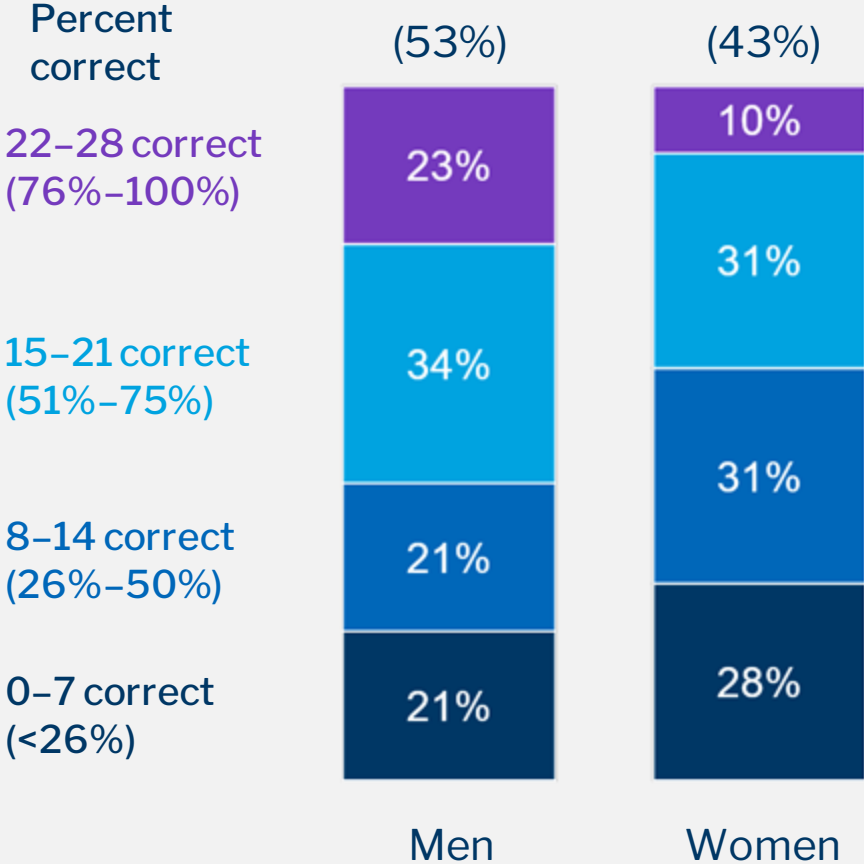
Source: TIAA Institute-GFLEC Personal Finance Index (2023).

Financial knowledge gaps: Women and men

% of P-Fin Index questions answered correctly

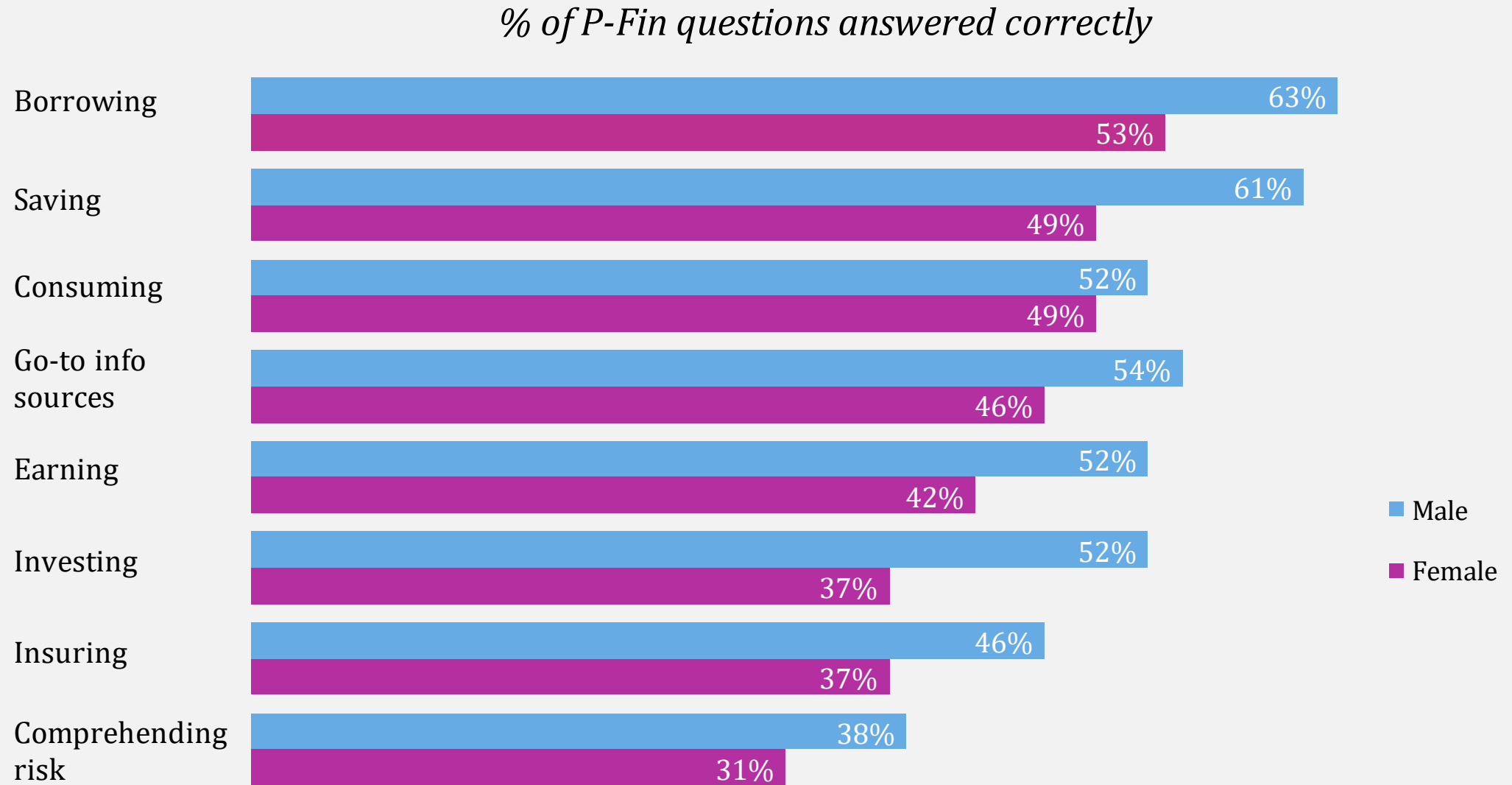


Distribution of correct answers to P-Fin questions



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

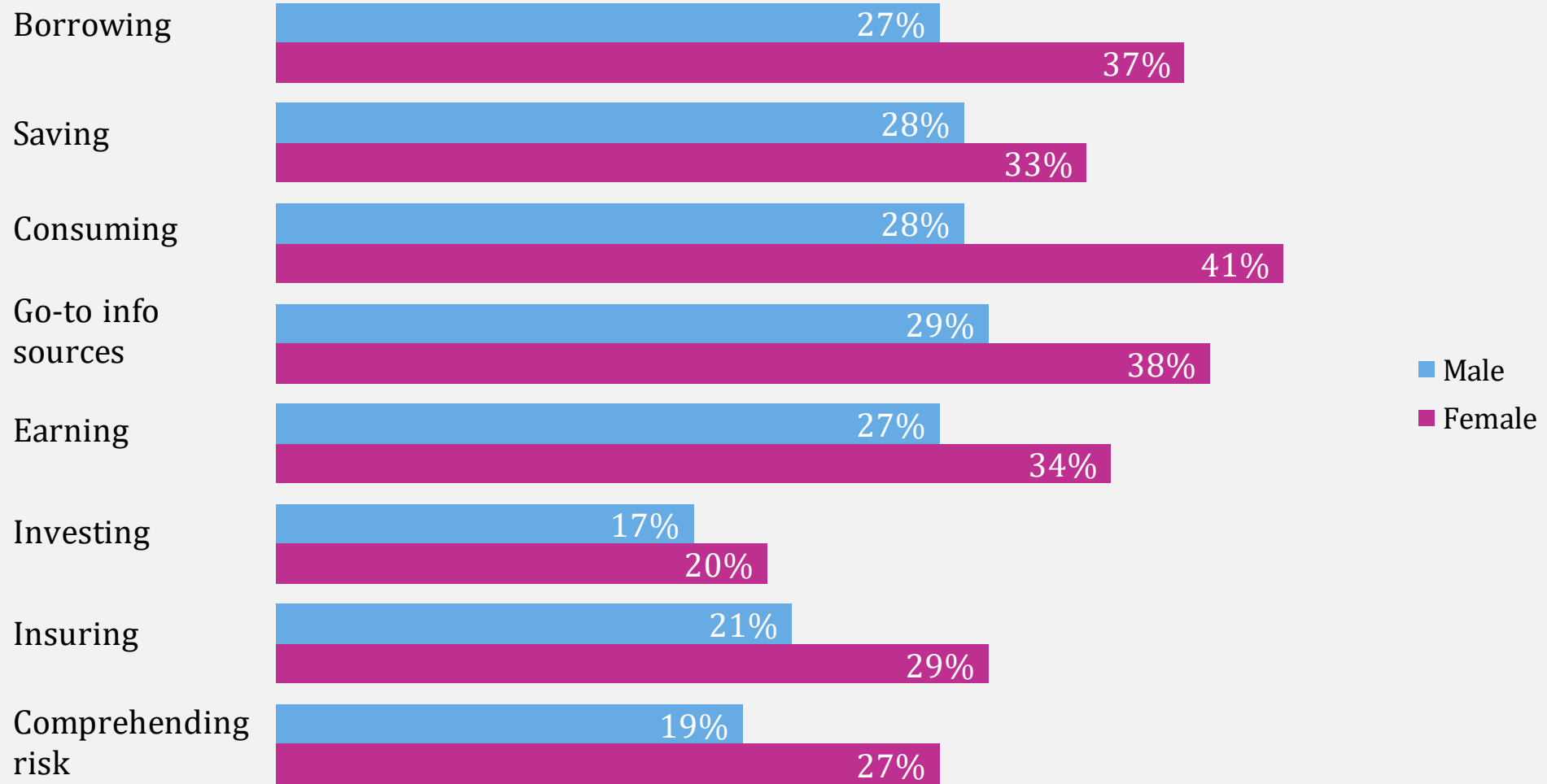
Gender gap in each topic..



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

..and in answering “Do not know”

% of P-Fin questions answered with "don't know"



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

Fearless Woman: Financial Literacy and Stock Market Participation



Tabea Bucher-Koenen (ZEW, U of Mannheim)

Rob Alessie (U of Groningen)

Annamaria Lusardi (The George Washington
University and GFLEC)

Maarten van Rooij (DNB)

Focusing on gender differences

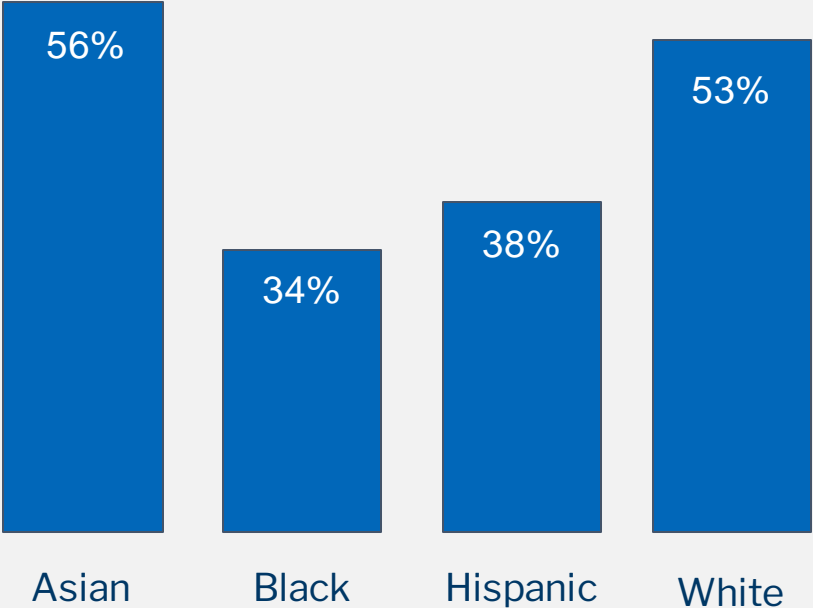
What happens if we take away the “do not know” option?

This is what we did in a project with data from the Dutch Central Bank .

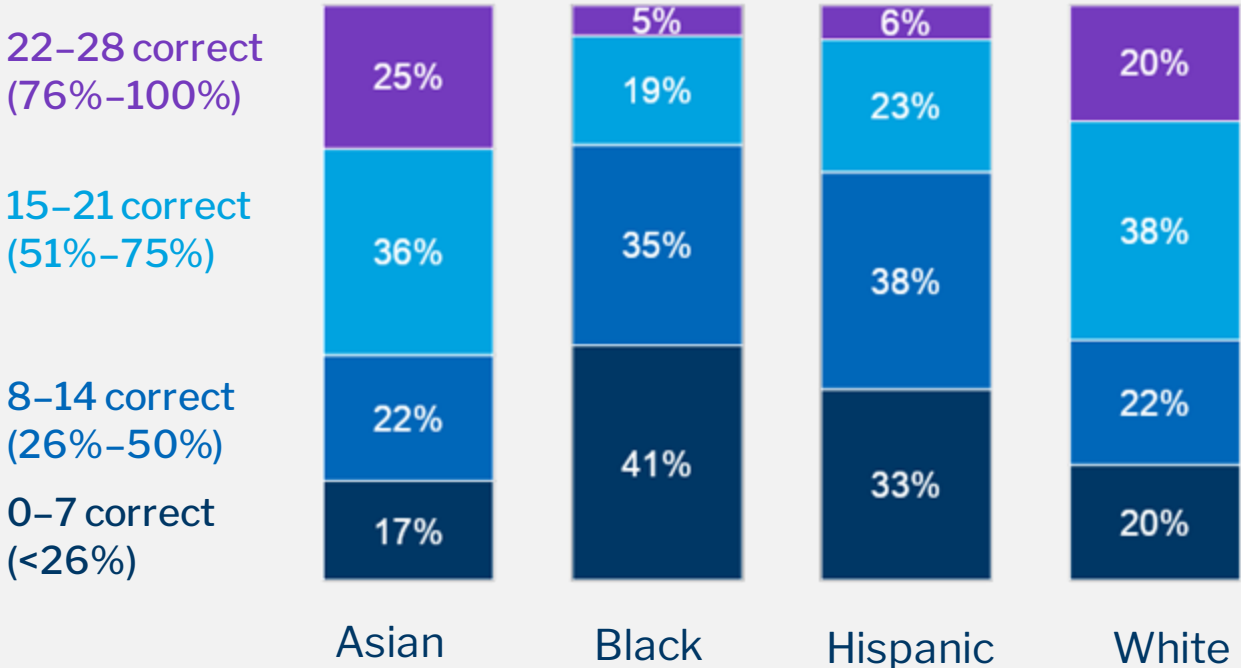
- The gender difference shrinks but does not go away
- Women know more than they think they do, but they are not confident about their knowledge
- Both knowledge and confidence matter for financial behavior (investing in the stock market)

Gaps in financial knowledge: Racial/Ethnic groups

% of P-Fin Index questions answered correctly



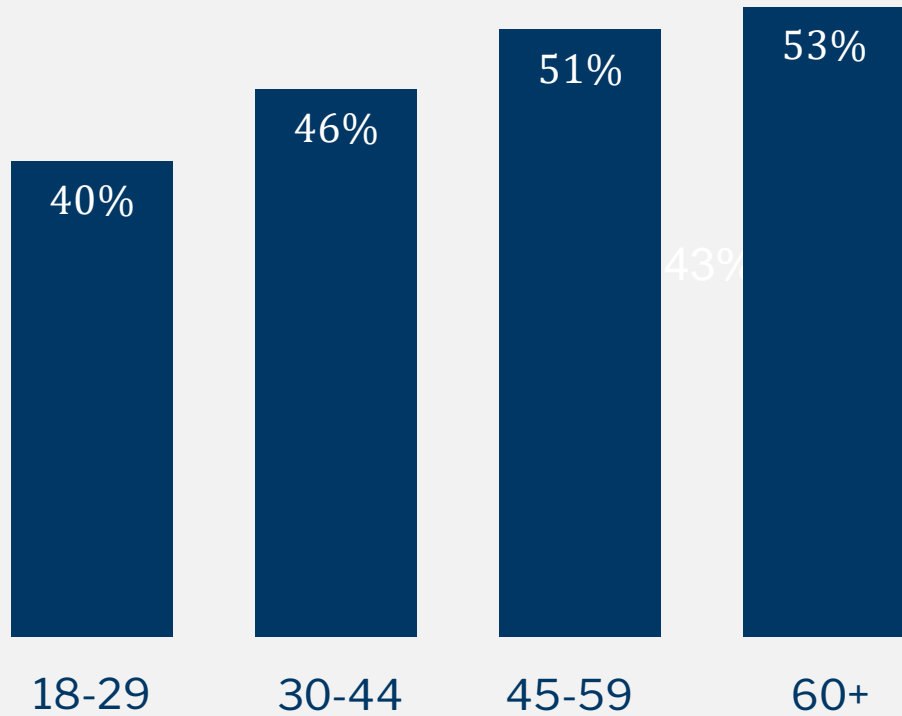
Distribution of correct answers to P-Fin Index questions



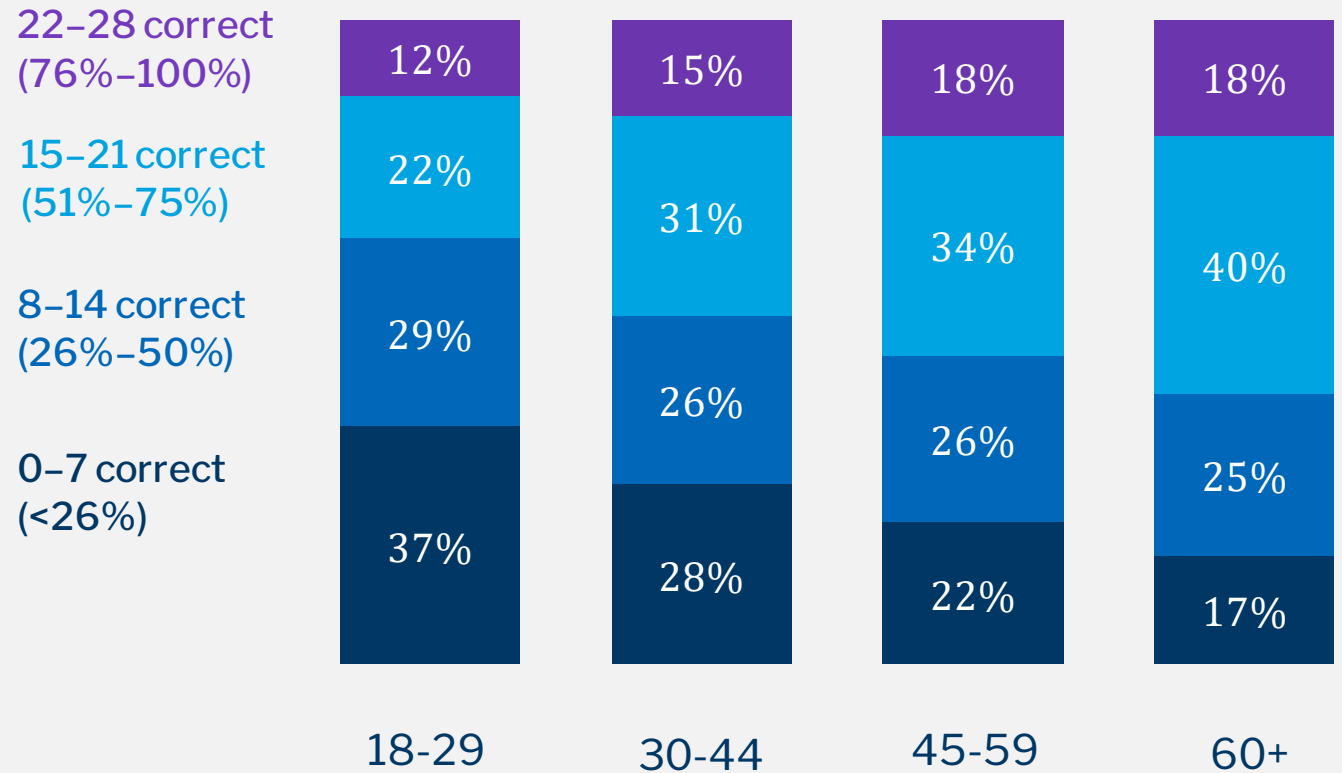
Source: TIAA Institute-GFLEC Personal Finance Index (2023).

Gaps in financial knowledge: Age groups/cohorts

% of P-Fin Index questions answered correctly



Distribution of correct answers to P-Fin questions

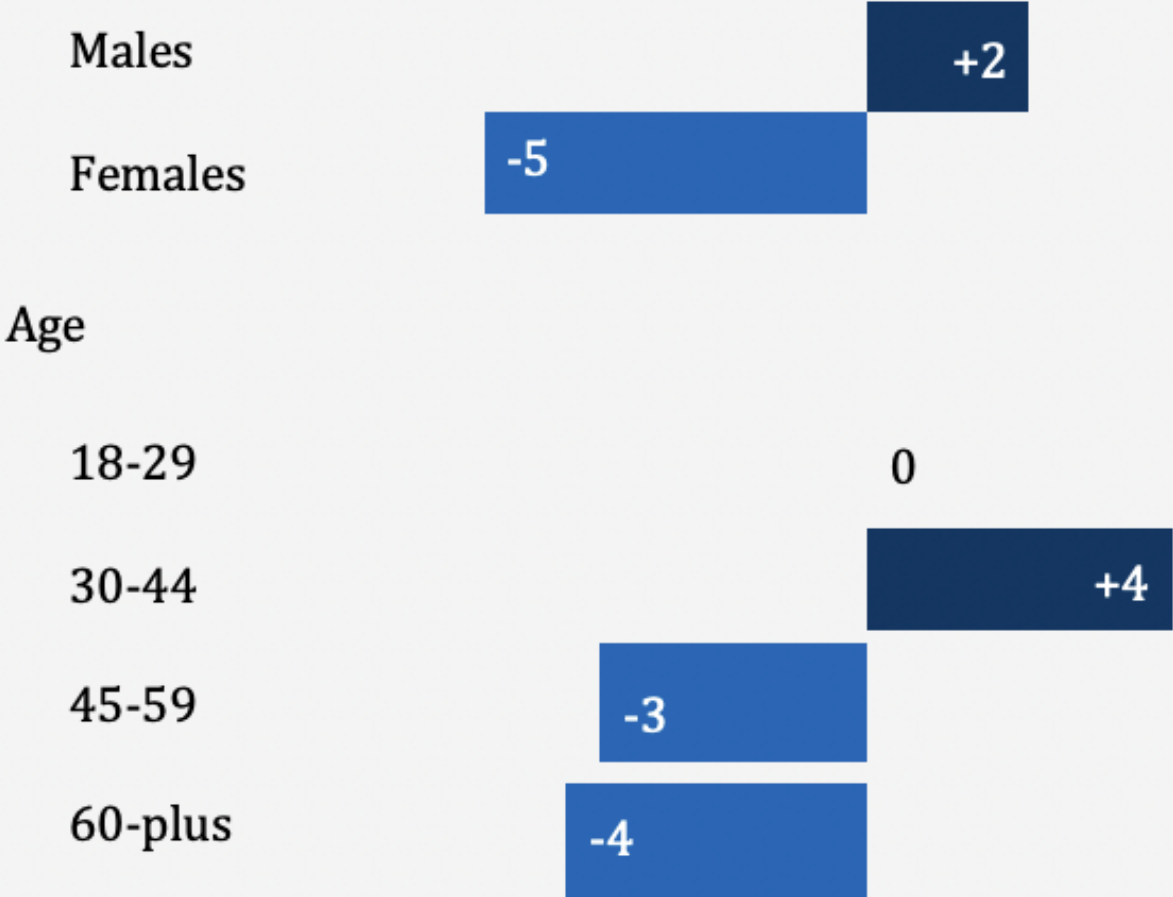


The P-Fin index and the Big Three

- Similar findings
 - Low levels of financial literacy
- Comprehending risk
 - Risk is a difficult concept to grasp
- Many do not know responses
 - They provide useful information
- Gaps in financial literacy
 - Similar findings

Where changes happened over time: Toward an unequal path

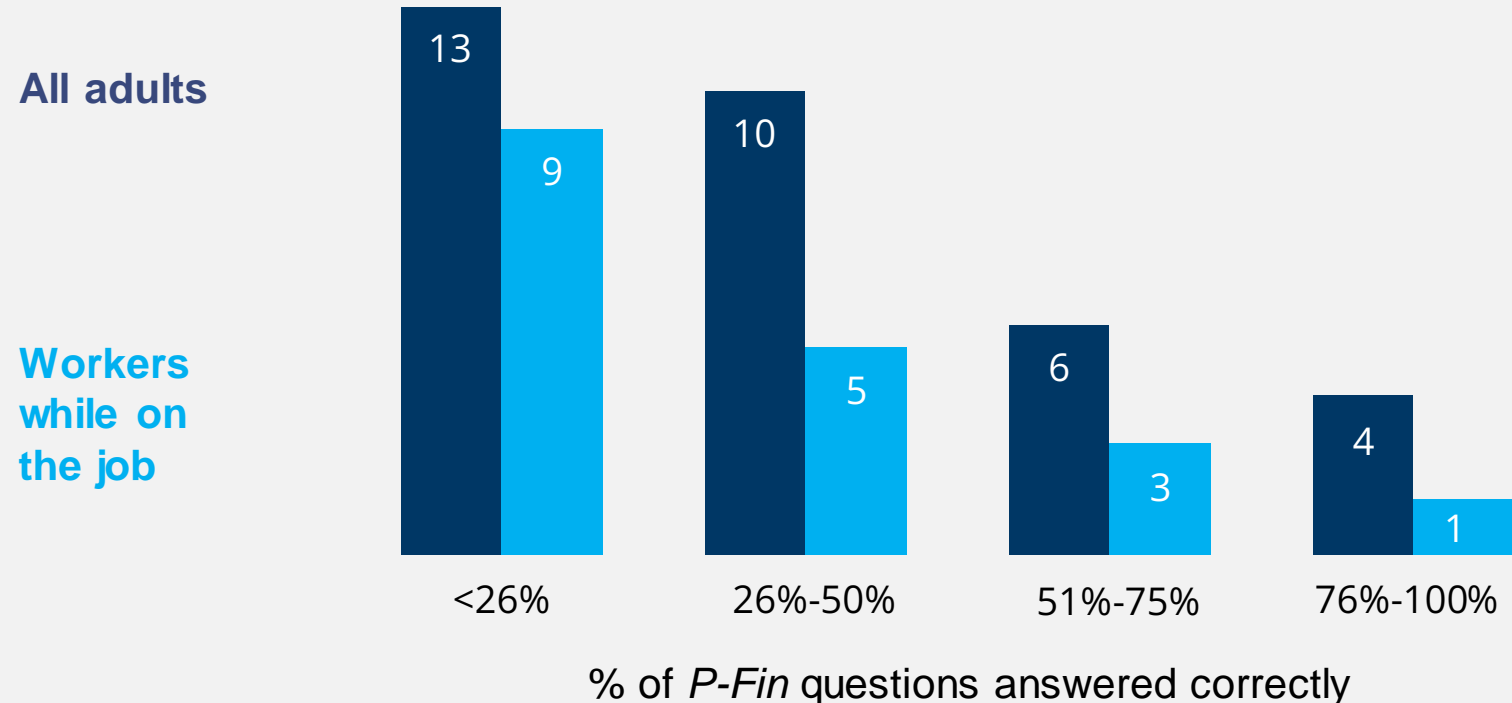
% point change in P-Fin questions answered correctly, 2017 to 2023



Source: TIAA Institute-GFLEC Personal Finance Index (2017, 2023).

A simple measure of the cost of financial illiteracy (Lusardi et al., JAPP, 2023)

Average hours per week spent thinking about and dealing with issues and problems related to personal finances



People spend an average of 8h per week thinking about and dealing with financial issues and problems. An average of 4h per week occur at work.

Turning to financial wellbeing

Measuring financial fragility (Lusardi, Schneider and Tufano, BPEA, 2011)

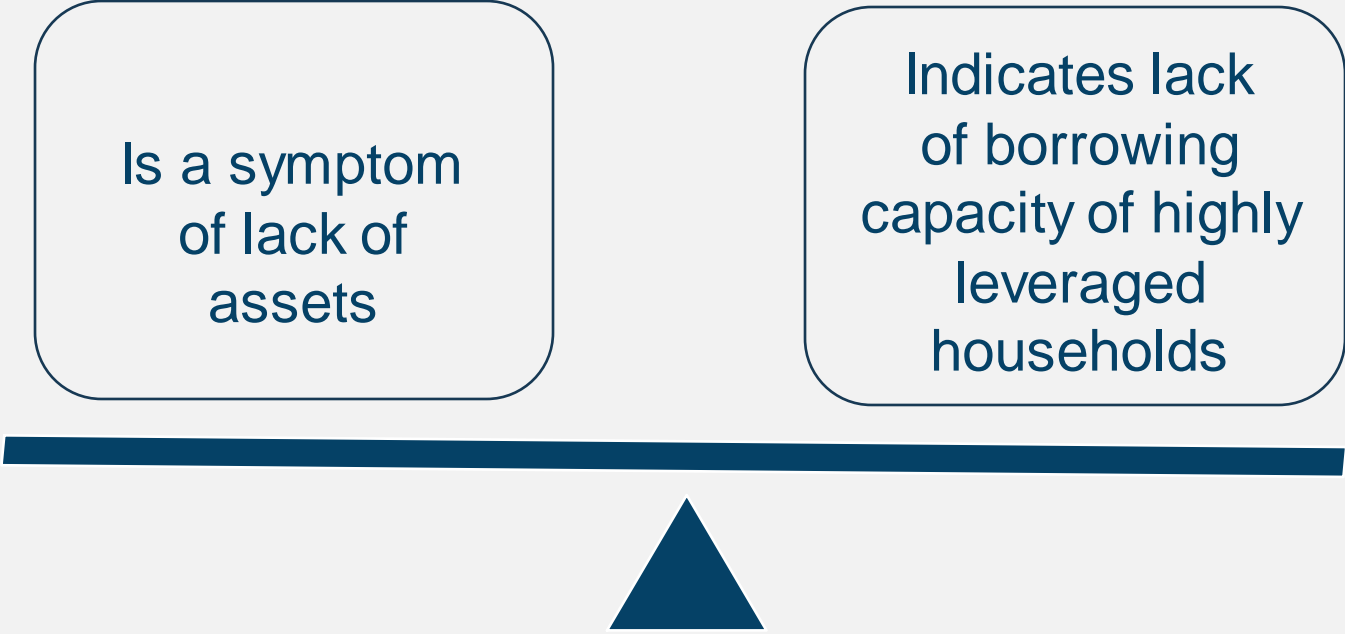
How **confident** are you that you could **come up with \$2,000** if an unexpected need arose **within the next month**?

- I am certain I could come up with the full \$2,000.
- I could probably come up with \$2,000.
- I could probably not come up with \$2,000.
- I am certain I could not come up with \$2,000.
- Don't know.
- Prefer not to say.



People with these responses are classified as financially fragile

Financial fragility: what does it measure?



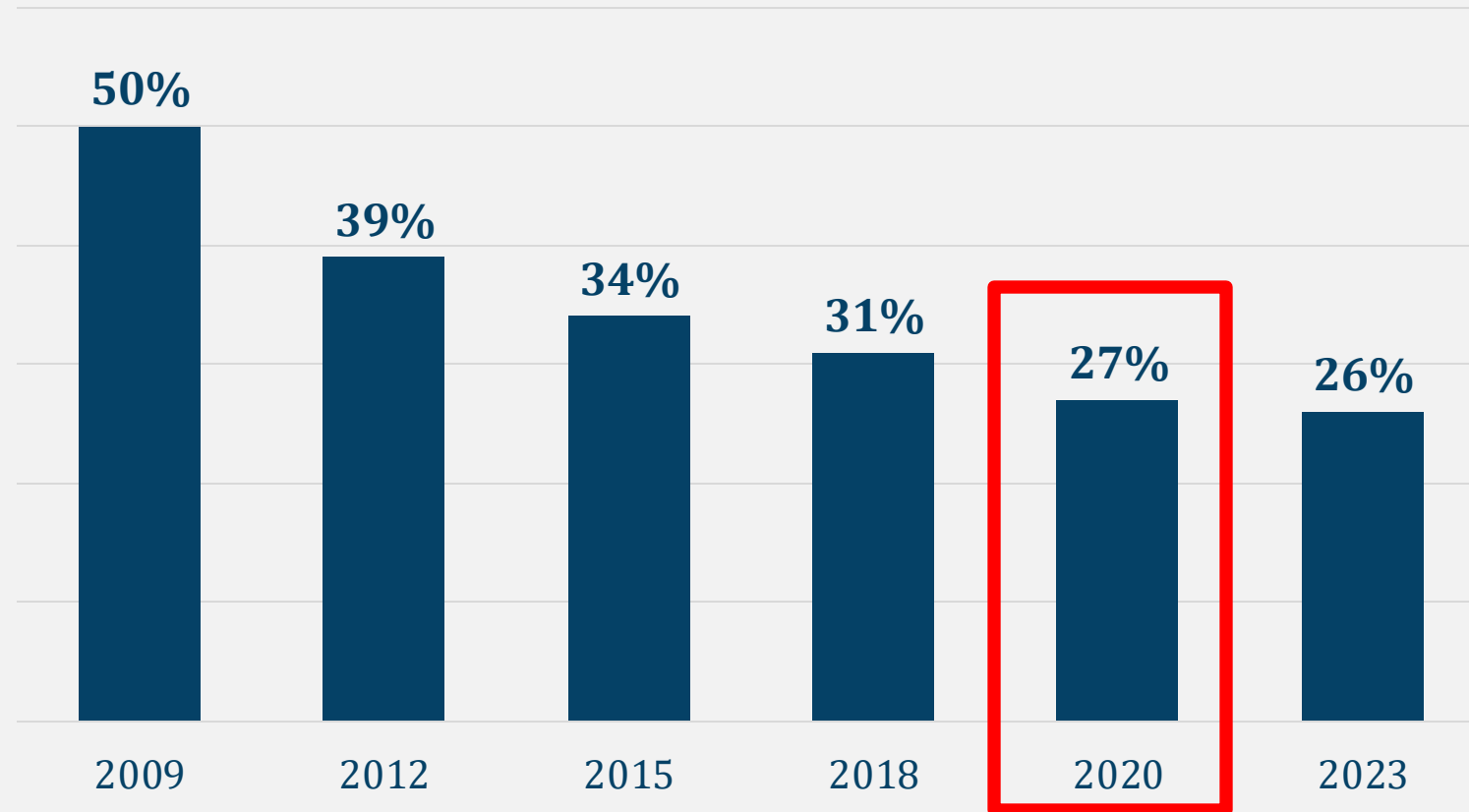
Is a symptom
of lack of
assets

Indicates lack
of borrowing
capacity of highly
leveraged
households

Financial fragility in America before and after the pandemic



Financial fragility over time



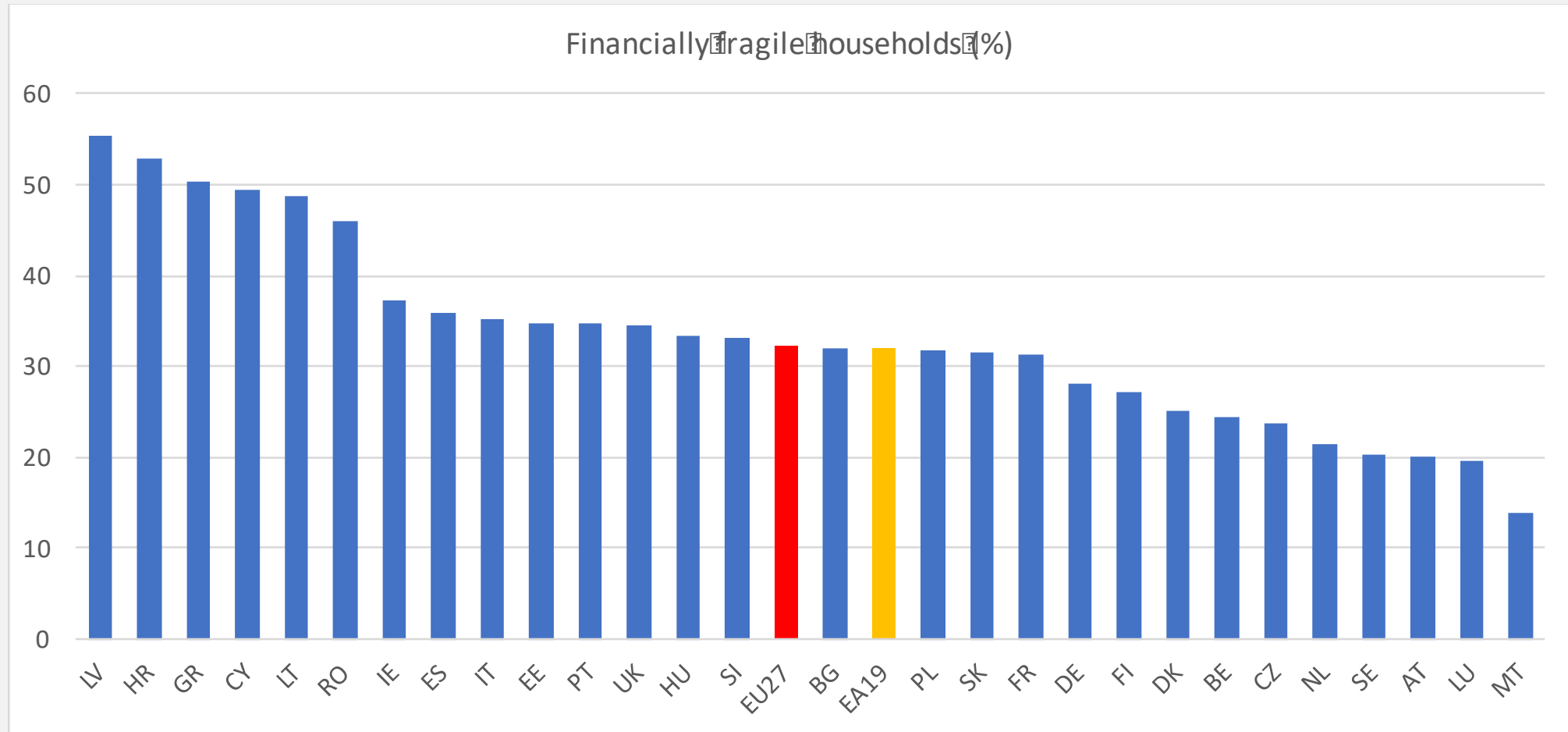
Source: 2009 TNS data, 2012, 2015 and 2018 NFCS data, 2020 & 2023 P-Fin data

Financial fragility in America

Long lines at the food banks at the start of the pandemic!



Similar findings in Europe: About 30% cannot face a shock (2018 data) (Demertzis, Domínguez-Jiménez and Lusardi, 2020)

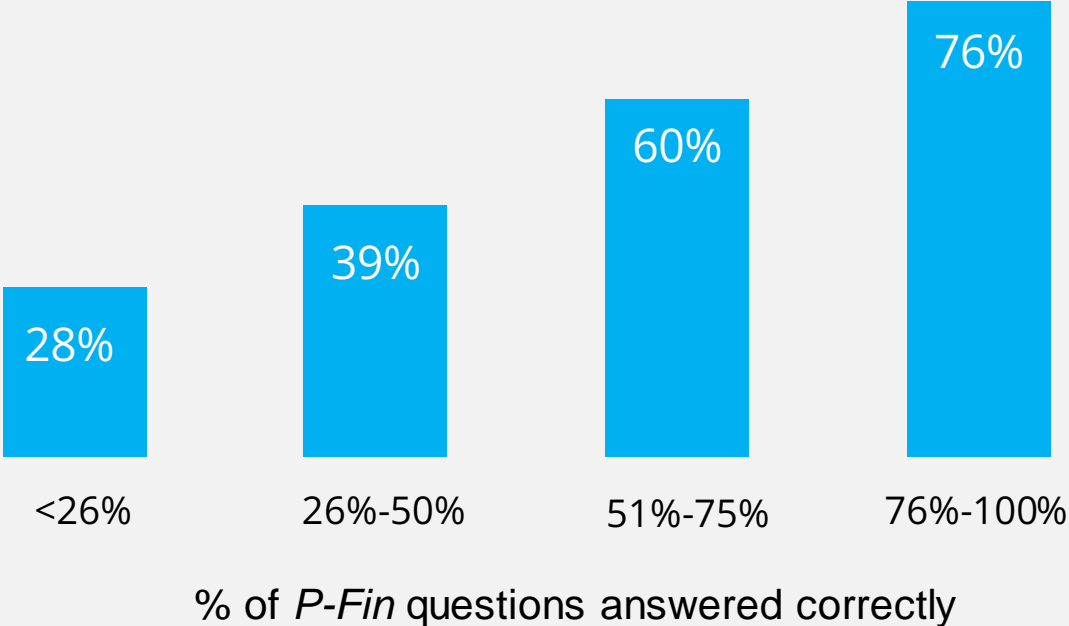


Source: EU-SILC 2018

Financial literacy and financial fragility

% who could certainly come up with \$2,000 if an unexpected need arose within the next month

Those with greater financial literacy are less likely to be financially fragile.



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

The relationship between financial resilience (being able to cope) and financial literacy

	Model 1 <i>Financial Resilience</i>	Model 2 <i>Financial Resilience</i>	Model 3 <i>Financial Resilience</i>
>50% of P-Fin questions correct	0.063*** (0.018)		
Total # of questions correct		0.006*** (0.001)	
Was offered financial education			0.008 (0.016)
Demographic Controls	Yes	Yes	Yes
Observations	3,289	3,289	3,289
R-squared	0.180	0.184	0.177

Source: TIAA Institute-GFLEC Personal Finance Index (2023).

The relationship between retirement planning and financial literacy

	Model 1 <i>Retirement planning</i>	Model 2 <i>Retirement planning</i>	Model 3 <i>Retirement planning</i>
>50% of P-Fin questions correct	0.127*** (0.023)		
Total # of questions correct		0.011*** (0.002)	
Was offered financial education			0.114*** (0.021)
Demographic Controls	Yes	Yes	Yes
Observations	2,477	2,477	2,477
R-squared	0.158	0.165	0.157

Source: TIAA Institute-GFLEC Personal Finance Index (2023); non-retirees.

The effects of inflation

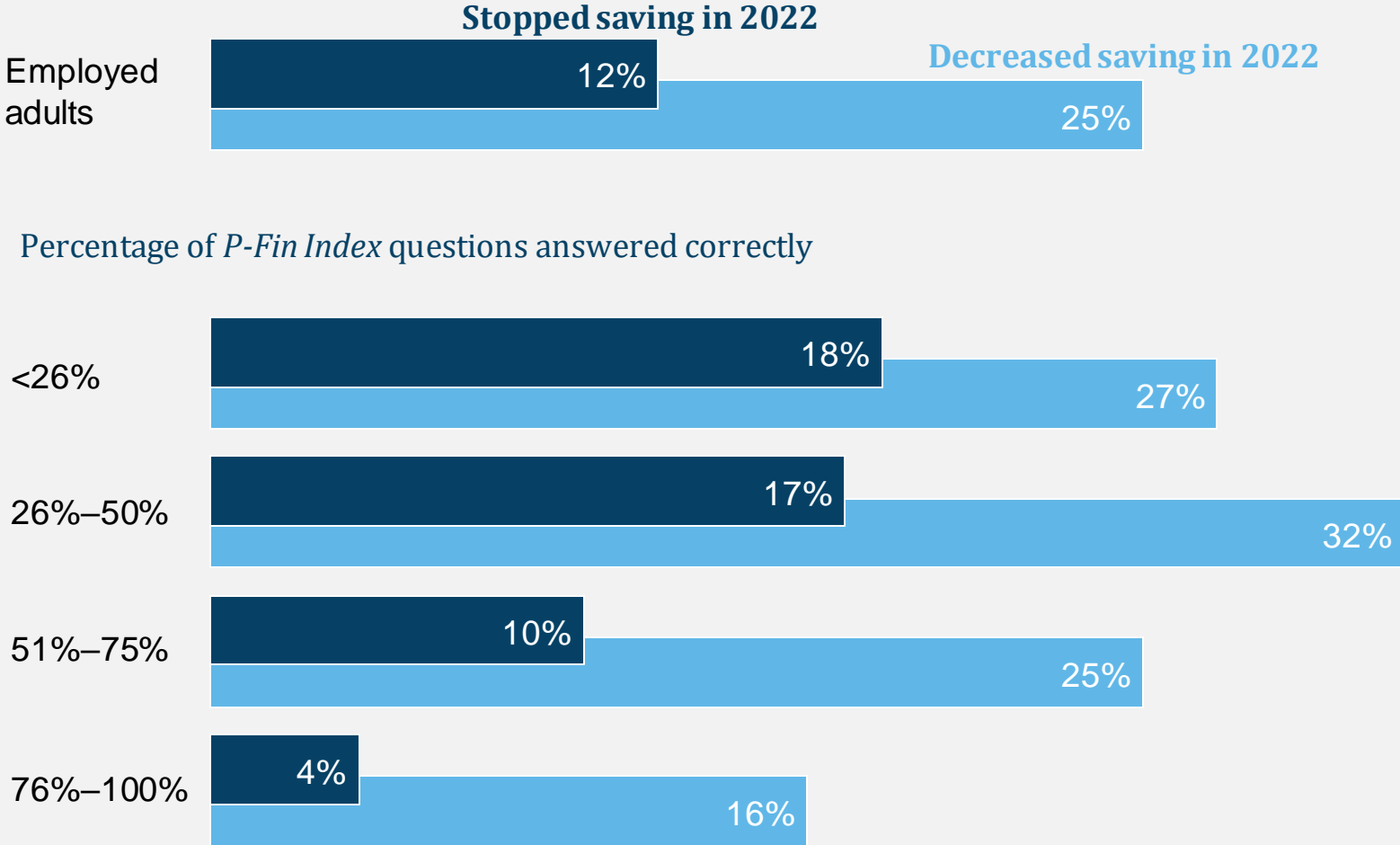
Did you (and your [spouse]/[partner]) decrease the amount you were saving for retirement in 2022 because of inflation's impact on your finances?

- Yes
- No
- Refuse to answer

Did you (and your [spouse]/[partner]) stop saving for retirement in 2022 because of inflation's impact on your finances?

- Yes
- No
- Refuse to answer

Financial literacy and the impact of inflation on retirement saving



Source: TIAA Institute-GFLEC Personal Finance Index (2023).

What we have learned

- Need to improve levels of financial literacy
 - Levels of knowledge are critically low
- Some topics are particularly complex
 - Risk and risk diversification
- Gaps across demographic subpopulations
 - One size does not fit all
- Increasing financial wellbeing
 - Financial knowledge matters too



**Using research and data for teaching,
programs, and policy**

Personal Finance course at the George Washington University

- Personal Finance courses for all students
- Extensive coverage of risk and risk management
- Paying attention to gender differences in financial literacy
- Use the P-Fin Index data in every class to motivate and illustrate the topic



Research-based workplace financial education programs

Our workplace financial wellness webpage describes the financial wellness programs we have designed based on our research

<http://gflec.org/initiatives/workplace-financial-wellness>



A national strategy for financial literacy in Italy



I chair the Italian Committee for Financial Education in charge of designing a national strategy for financial literacy.

We did many initiatives all based on research and data. We started collecting data after the pandemic to be able to have more targeted initiatives

We provide guidelines for financial education for young and adults.

We are evaluating a national campaign.

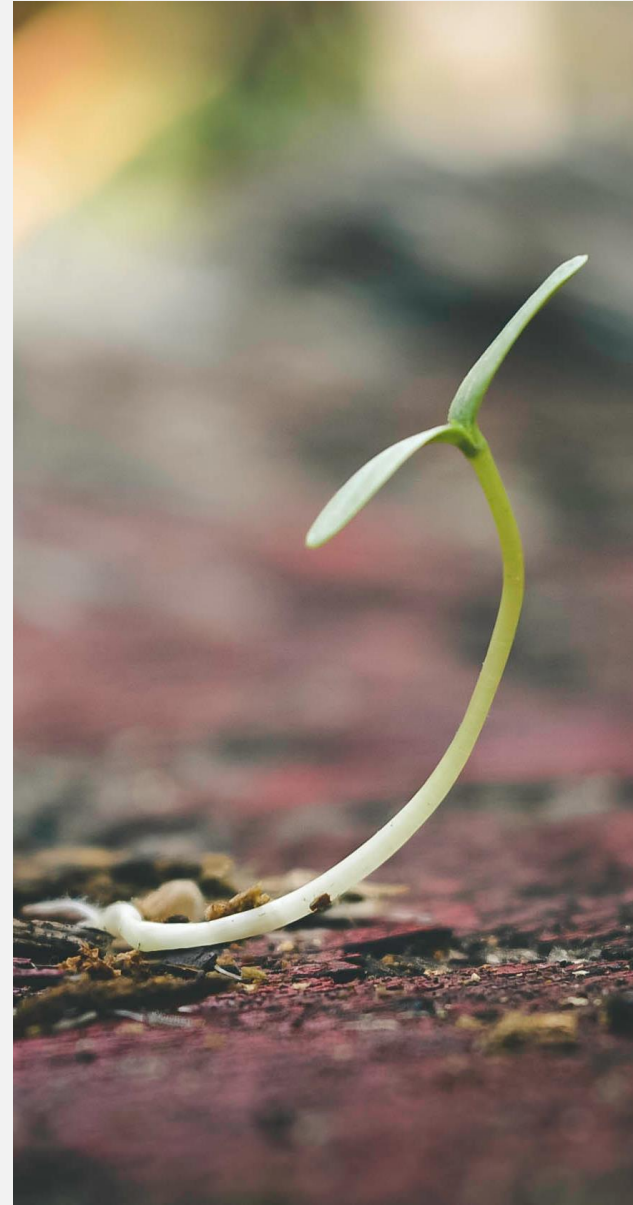
Data collection in Italy since 2020 (4th wave available)



Financial literacy is like water in an ecosystem

Financial literacy is an essential component. It is the foundation (like water). Without financial literacy, the ecosystem does not flourish.

We need to provide access to financial knowledge so that people can be more financially resilient and financially secure.



Thank you!

For more info visit www.gflec.org.

Follow us on social media and stay informed.

If you have any questions, please send them to alusardi@gwu.edu.