Building a Financial Literacy Foundation

Prof. Annamaria Lusardi
Faculty Director, IFDM
G53 Network Rising Scholars, July 17, 2026

Stanford | Initiative for Financial Decision-Making

If George Washington had set aside $1 in a trust fund earning 8% (the average rate of return of stocks over the past 200 years) on the first day of his presidency in 1789, **how much would his heirs have today?**

A. $240
B. $1,200
C. $120,000
D. $1,200,000
E. More?

$83,450,713

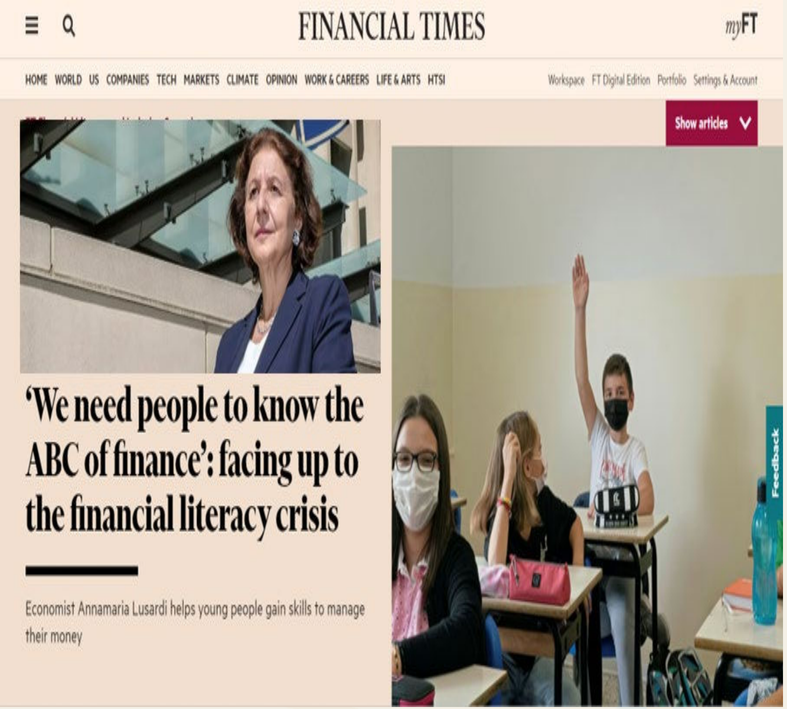
Why is financial literacy important?

- Greater longevity, wealth building should start early in life
- Changes in the pension system: People are in charge of their financial security after retirement
- Increase in the cost of education
- Changes in the labor market: Gig economy and STEM
- Changes in financial markets: Complexity of financial instruments, including new ones and easy access to credit
- Fintech and AI

Need a rigorous approach to financial decision-making

How equipped are people to make financial decisions?

- There was no data on financial literacy, but we have added this information in national surveys
- About 20 years ago, I started measuring financial literacy using 3 simple questions.
- The results are striking and speak of the importance of looking closely at how people make decisions
- Thanks to OECD's PISA, we have also data on financial literacy among high school students



Learning from data

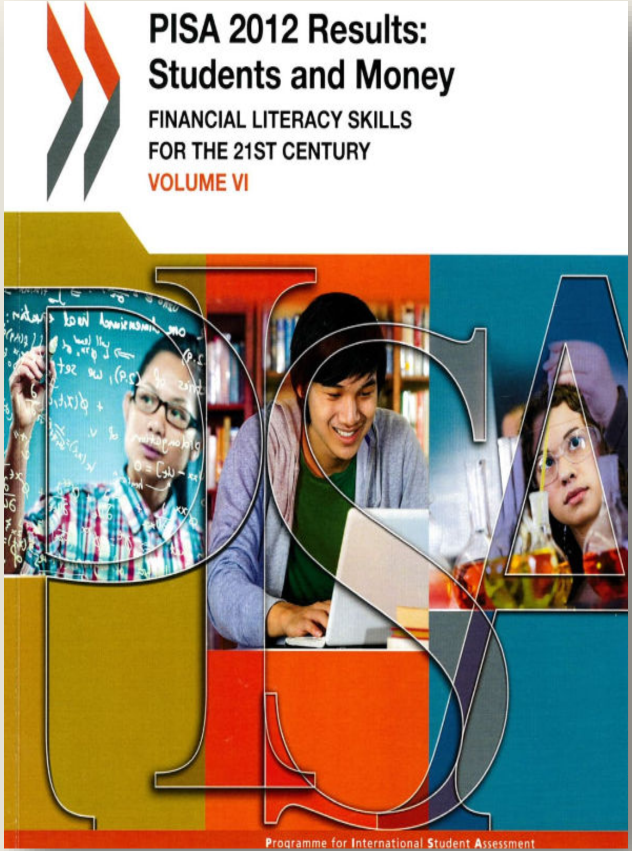
The data is important because:

- **It can inform teaching**

- It can inform policy

- It can inform parents and others interested in improving financial literacy

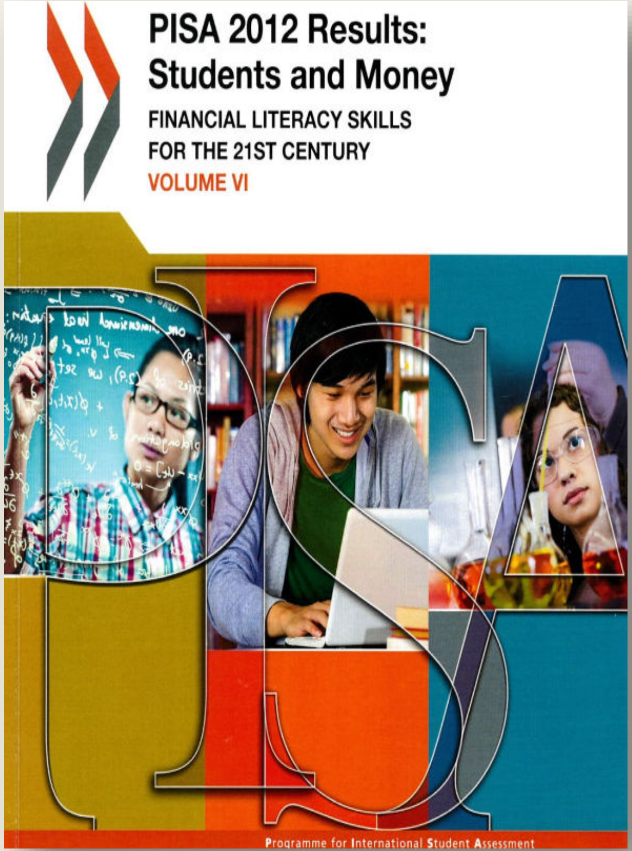
Financial literacy was added to PISA in 2012



Definition of financial literacy in PISA:

*Financial literacy is knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order **to make effective decisions** across a range of financial contexts, to improve the **financial well-being of individuals** and **society**, and **to enable participation in economic life.***

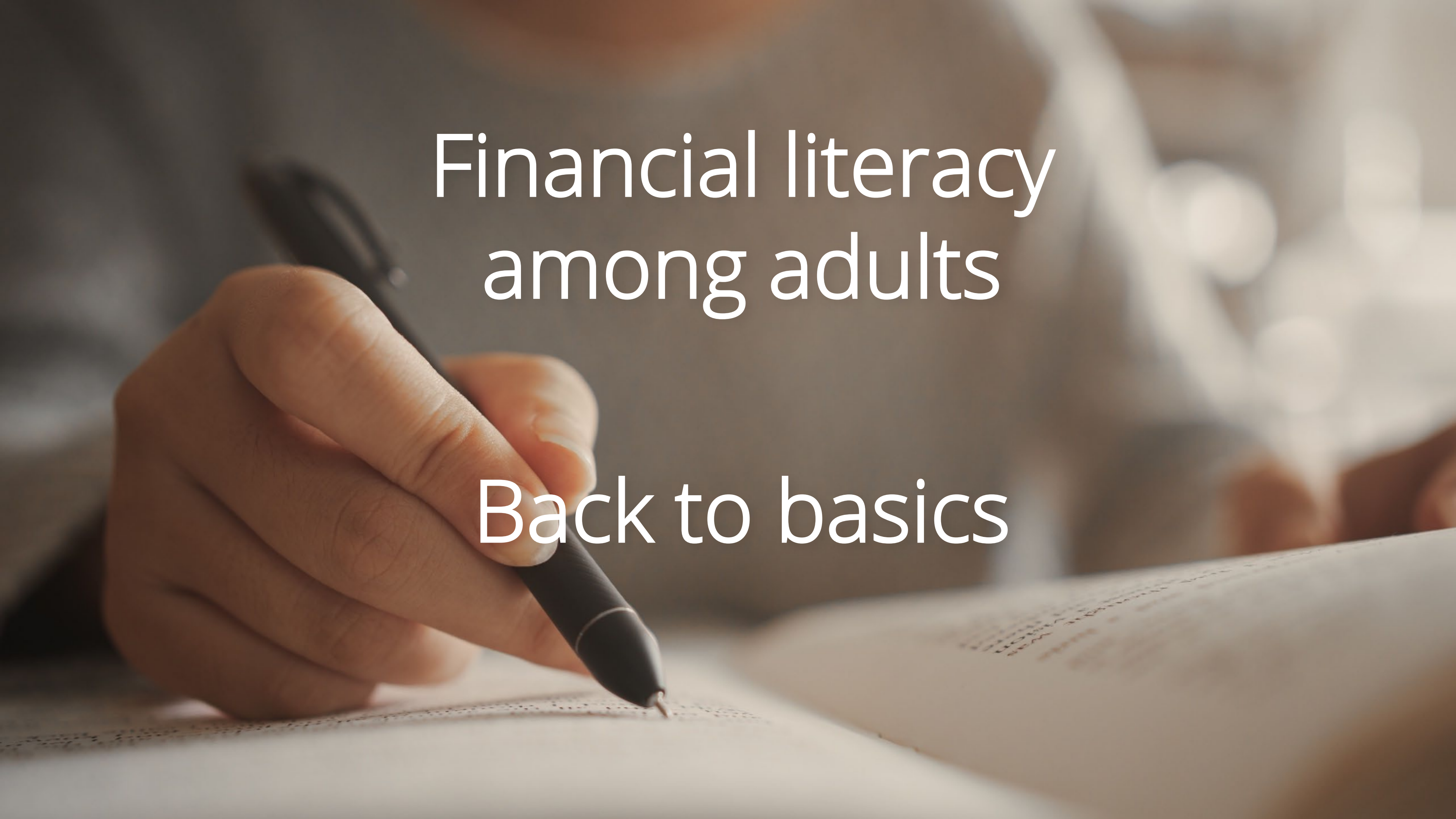
Financial literacy was added to PISA in 2012, cont.



Overall, many high school students around the world are not financially literate (there are 1-5 levels in PISA)

In the US, high school students score at the OECD average and only 9.4% are at level 5 or above in 2012 and 13.5% in 2022 (about 1 in 5 students are in level 1 or below)

One of the most important determinants of financial literacy is family's socio-economic background (education and wealth of the family)



Financial literacy among adults

Back to basics

Measuring financial literacy: The ABCs of personal finance

These are the questions I designed jointly with Olivia Mitchell, known as the "Big Three."

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?"
   - [x] More than $102
   - [ ] Exactly $102
   - [ ] Less than $102
   - [ ] Don't know (DK)
   - [ ] 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
   - [x] Less than today
   - [ ] Don't know (DK)
   - [ ] 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
   - [x] False
   - [ ] Don't know (DK)
   - [ ] Refuse to answer

Recent evidence on financial literacy

Distribution of responses across the U.S. population
(2024 National Financial Capability Study)

	Responses			
	Correct	Incorrect	DK	Refuse
Interest rate	69.3%	13.6%	16.4%	0.7%
Inflation	58.2%	18.5%	22.5%	0.8%
Risk diversif.	41.3%	10.6%	47.5%	0.6%

NB: Less than 1/3 (28%) correctly answer all 3 questions. Close to 1/2 do not know about risk diversification. See Lusardi and Streeter (2023).

Learning from data

- Financial literacy is strikingly low even among the adults
- It cannot be taken from granted, even in countries with well developed financial markets
- Risk is what people know the least

See “Financial literacy and financial well-being: Evidence from the US.” Lusardi and Streeter, July 2023

Some research findings about the young (age: 23-28 in 2007-2008)

- In the US, young people who are financially literate are disproportionally white males from college-educated families.
- Financial literacy can be linked to the wealth of parents when young people (age: 23-28) were growing up (they were 12-17)
- Being financially literate is a privilege enjoyed by few who learned it at the dinner table.
- Similar findings in PISA

the journal of consumer affairs

Full Access

Financial Literacy among the Young

ANNAMARIA LUSARDI, OLIVIA S. MITCHELL, VILSA CURTO

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Find it @ Stanford

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An extended test

Started our own data collection in 2017

- Designed an index of personal finance knowledge: TIAA Institute – GFLEC Personal Finance Index (*P-Fin Index*)

- Data is collected each year (in January)

- We can focus on specific areas of interest

Measuring personal finance knowledge

- The TIAA-Institute-GFLEC Personal Finance Index (P-Fin Index) is an annual measure of knowledge and understanding which enable sound financial decision-making and effective management of personal finances among U.S. adults.
- The 28 questions of the P-Fin Index, covering 8 topics, relate to common financial situations that individuals encounter
- In addition to personal finance knowledge, it provides information on financial well-being indicators.
- Data is now collected on a representative sample of about 3,500 respondents (age 18+)

- 2017 — Hispanic
- 2018 — Millennial
- 2019 — African American
- 2020 — Women
- 2021 — Five Generation
- 2022 — Longevity Literacy measure
- 2023 — Longevity Literacy measure 2.0
- 2024 — Retirement Planning measures
- 2025 — Retirement fluency
- 2026 — **A Decade of Data: 10th anniversary**

What is unique: 8 functional areas of personal finance

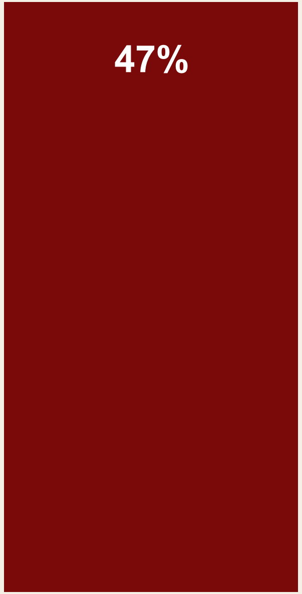
The index is based on responses to **28 questions**, with three or four questions for each of the eight functional areas (from the National Standards for Financial Literacy).

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

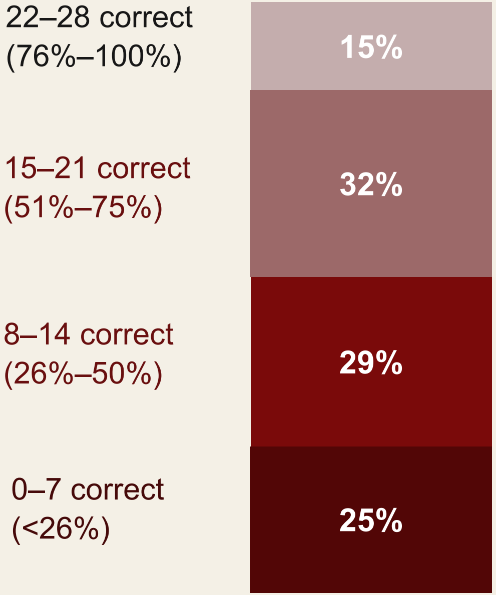
1. Earning
2. Saving
3. Consuming
4. Investing
5. Borrowing
6. Insuring
7. Comprehending risk
8. Go-to information sources

Financial literacy: A failing grade

% of P-Fin Index questions answered correctly

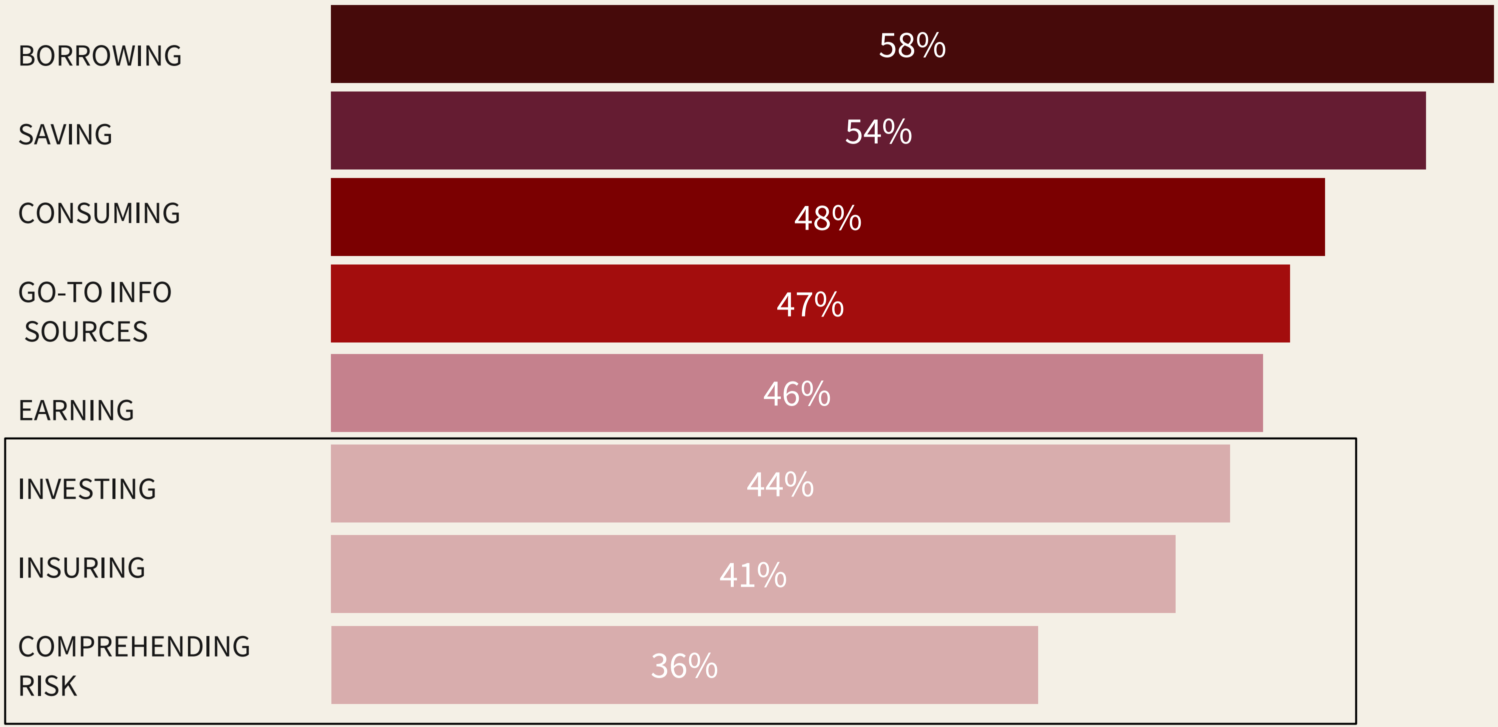


Distribution of correct answers to *P-Fin Index* questions



Source: TIAA Institute-GFLEC Personal Finance Index (2026).

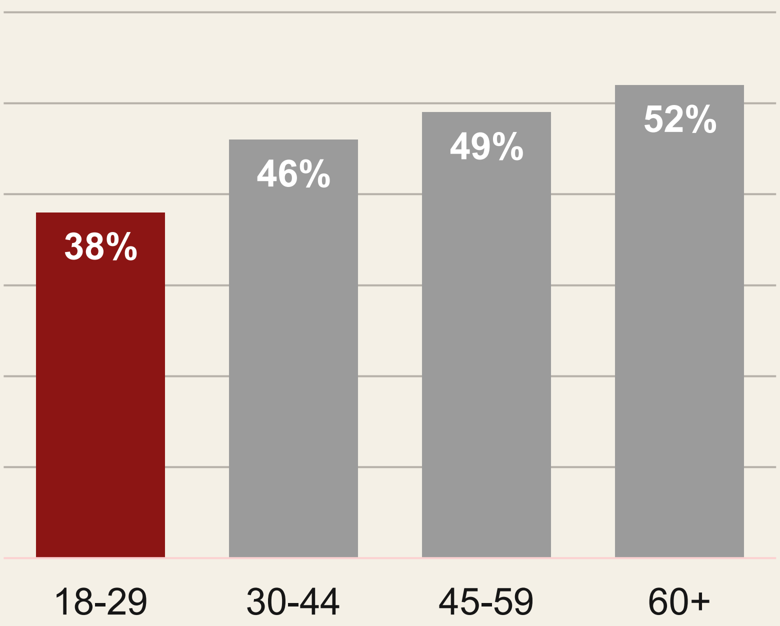
What do people know the most and the least?



Source: TIAA Institute-GFLEC Personal Finance Index (2026)

The young are the least knowledgeable

% of P-Fin Index questions answered correctly



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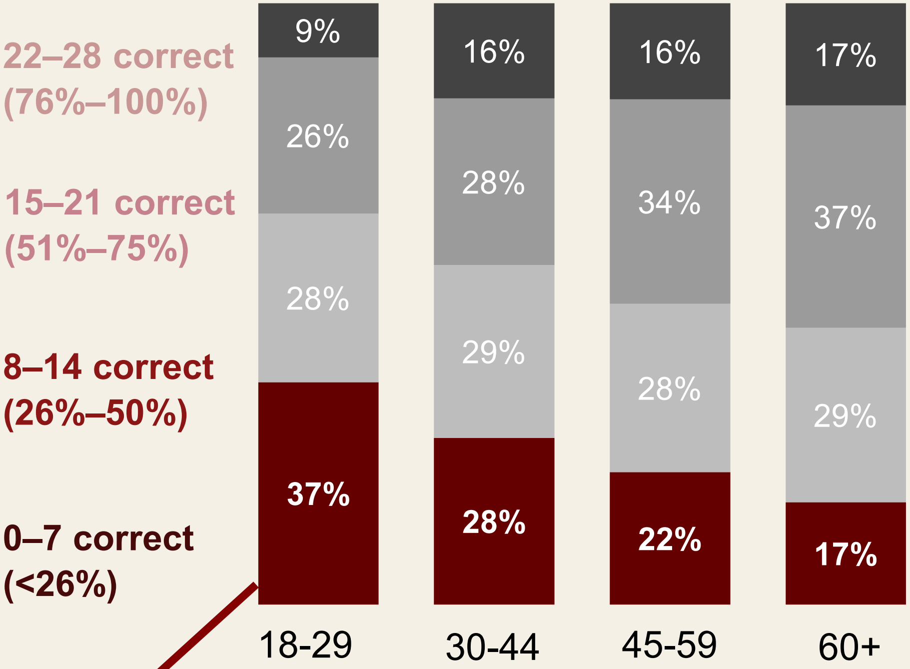
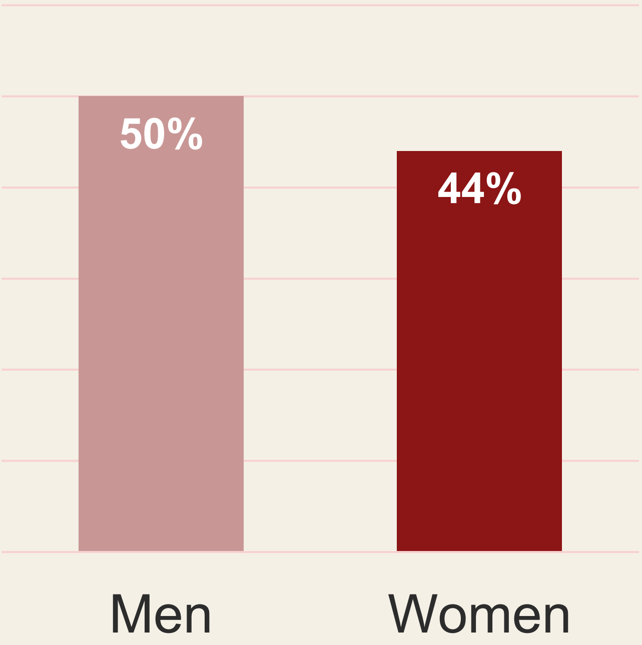


For the young, those with low scores are the largest single segment of the distribution, with significantly smaller shares reaching higher score ranges.

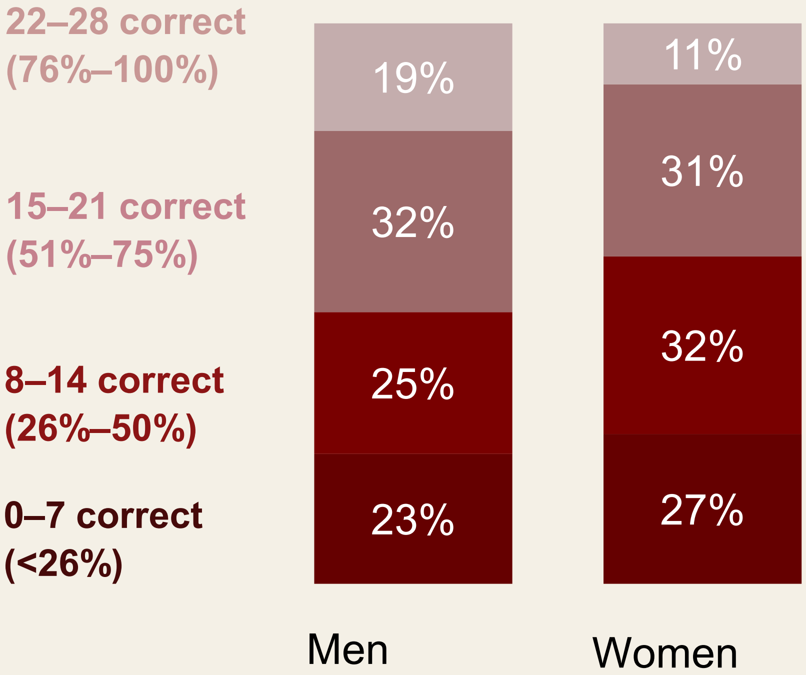
Source: TIAA Institute-GFLEC Personal Finance Index (2026).

Gaps in financial knowledge: Women and men

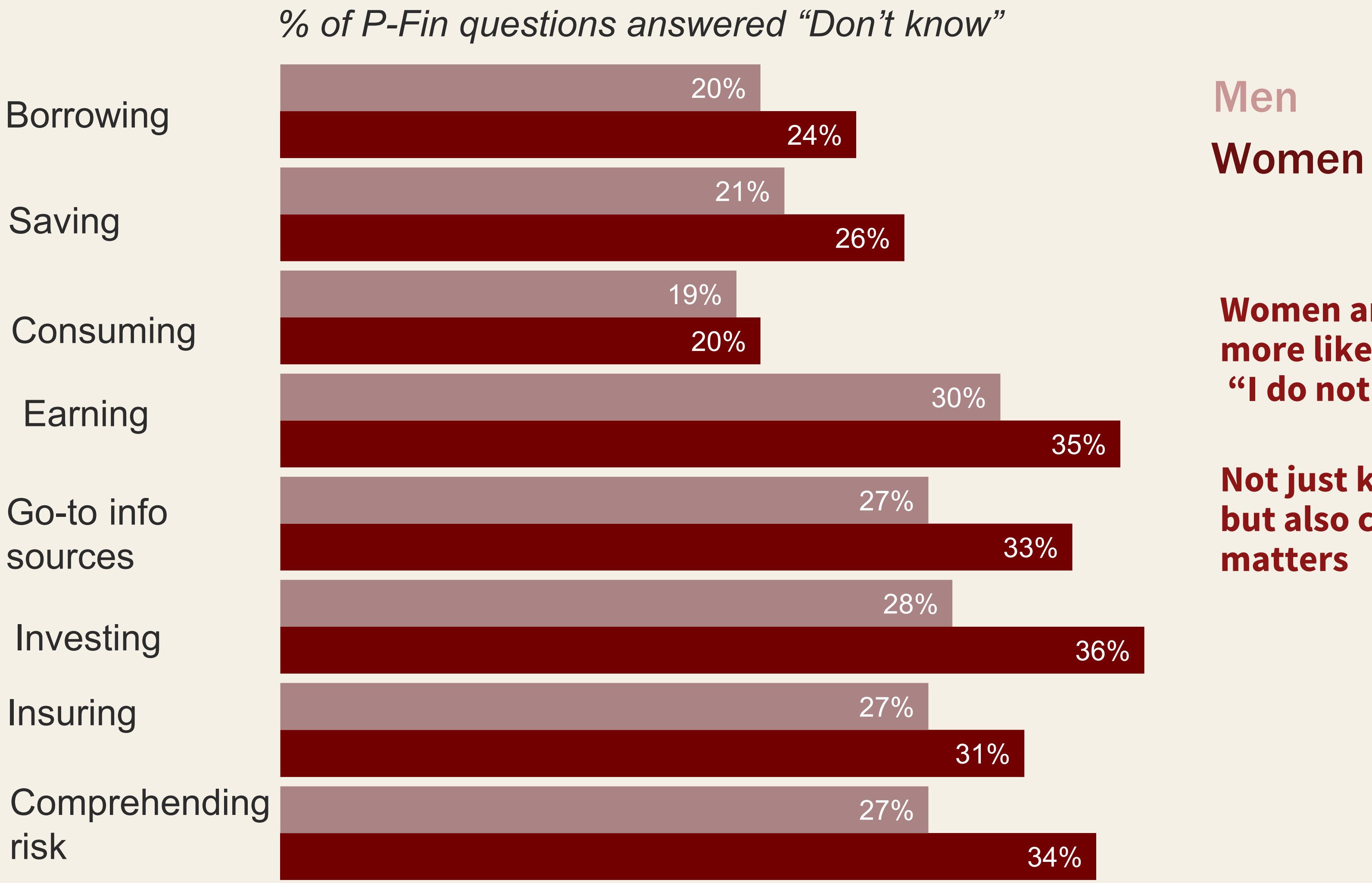
% of P-Fin Index questions answered correctly



Distribution of correct answers to P-Fin Index questions



Source: TIAA Institute-GFLEC Personal Finance Index (2026).



Women are much more likely to say "I do not know"

Not just knowledge but also confidence matters

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 using the Big Three.

- 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.
- About 1/3 of the gender difference can be explained by confidence.
- Both knowledge and confidence matter for financial behavior (investing in the stock market)

Bucher-Koenen, Alessie, Lusardi and van Rooij, 2025, “Fearless woman: Financial literacy, confidence and stock market participation.” Published in *Management Science, 2024*

informs.
https://pubsonline.informs.org/journal/mnsc

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Fearless Woman: Financial Literacy, Confidence, and Stock Market Participation

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Abstract. Women are less financially literate than men, and it has been difficult to determine whether this gap reflects a lack of knowledge or, rather, a lack of confidence. To address this important research question, we designed two survey modules that enable us to calculate the extent to which confidence matters for both financial literacy and behavior. We developed and estimated a model that provides a new measure of financial literacy and disentangles confidence from knowledge. We find that confidence accounts for about 30% of the gender difference in financial literacy. Moreover, both financial knowledge and confidence are linked to stock market participation. We also provide researchers with a method to account for confidence in regressions.

History: Accepted by Bo Becker, finance.

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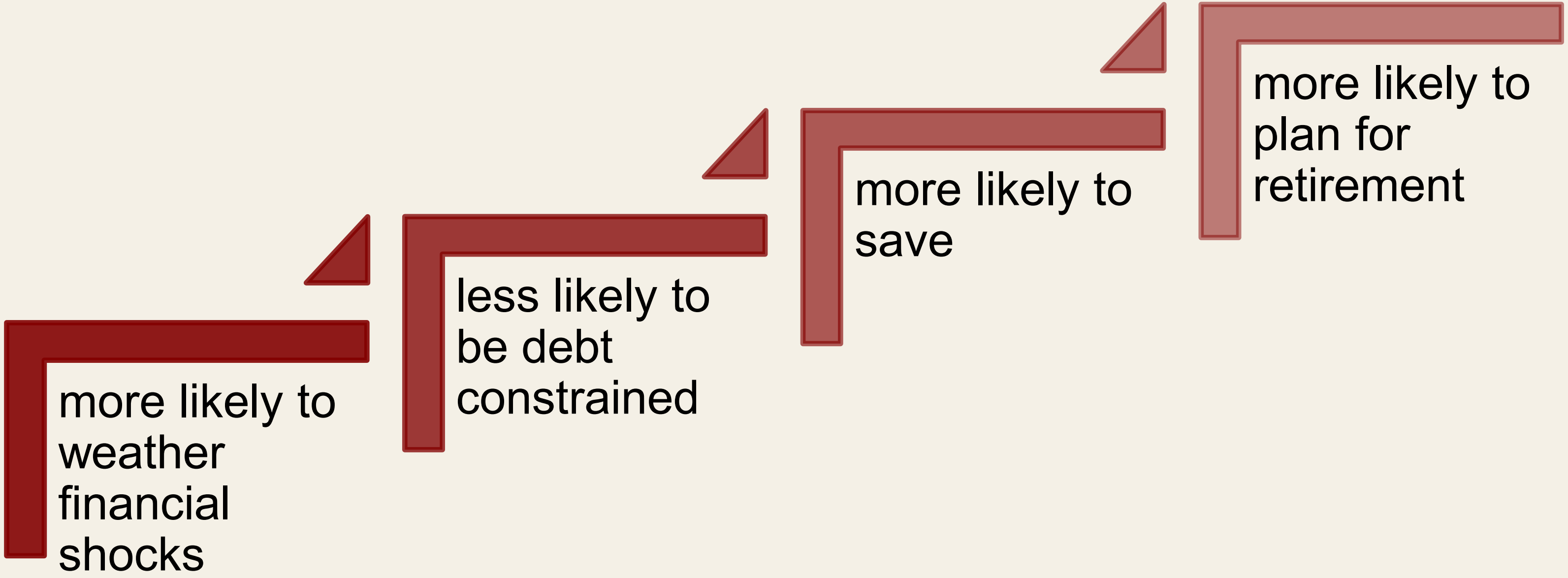
Supplemental Material: The online appendix and data files are available at https://doi.org/10.1287/mnsc.2023.00425.

Keywords: financial knowledge • gender gap • measurement error • financial behavior

Linking knowledge to behavior: Financial literacy matters



Source: TIAA Institute-GFLEC Personal Finance Index (2026)

P-Fin 8 - Shorter index replicating the P-Fin Index

1. **Mark's salary has increased over the past two years. What would be a plausible reason for this?**
   A. The number of workers with Mark's skills increased where he lives and works
   B. New technology reduced the demand for workers with Mark's skills
   C. Mark completed several training courses at a local college
   D. Don't know

2. **A household budget cannot be used for which of the following?**
   A. To track household financial assets
   B. To plan for necessary household expenses
   C. To plan household discretionary spending
   D. Don't know

3. **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?**
   A. She can afford to buy fewer things at the end of the year
   B. She can afford to buy more things at the end of the year
   C. It's not clear whether she can afford to buy more things or fewer things at the end of the year
   D. Don't know

4. **Which statement about investing is correct?**
   A. Investing in the stock of a single company is typically safer than investing in a mutual fund that holds shares of many companies in multiple industries
   B. Investing in a mutual fund that holds shares of many companies in multiple industries is typically safer than investing in the stock of a single company
   C. Investing in the stock of a single company and investing in a mutual fund that holds shares of many companies in multiple industries are typically equally safe
   D. Don't know

5. **José owes $1,000 on a loan that has an interest rate of 20% per year compounded annually. If he makes no payments on the loan, at this interest rate, how many years will it take for the amount he owes to double?**
   A. Less than 5 years
   B. 5 to 10 years
   C. More than 10 years
   D. Don't know

6. **Katherine is a single 25-year-old worker who is in good health. What type of insurance coverage is she most likely to need in the near term?**
   A. Life insurance
   B. Disability insurance
   C. Long-term care insurance
   D. Don't know

7. **Lottery A pays a prize of $200 and the chance of winning is 5%. Lottery B pays a prize of $90,000 and the chance of winning is 0.01%. Expected winnings are greater in which lottery?**
   A. Lottery A
   B. Lottery B
   C. They are equal
   D. Don't know

8. **Which of the following appears to be inappropriate investment advice for the respective individual?**
   A. A stock index fund to a 30-year-old worker saving for retirement
   B. A bond fund to a 60-year-old worker for some of her retirement savings
   C. A stock fund that invests in small start-up businesses to a 75-year-old retiree
   D. Don't know

Big Three and P-Fin Index (full index and P-Fin 8)

- The findings in the full P-Fin Index replicate the findings provided by the Big Three
- If you do not have room for many questions, the Big Three are a good proxy for financial literacy
- The P-Fin 8 is more extensive and contains questions measuring the concepts in the Big Three

Using data and research to build a personal finance course: We need a rigorous approach to financial decision-making

Teaching Personal Finance

- I have been teaching Personal Finance since 2011 at both the undergraduate and graduate level
- Since 2020, we have been teaching Personal Finance at Stanford too
- It has become one of the most popular elective courses at Stanford
- We offer it several times a year, including in the Summer term

Personal Finance at Stanford University

- The course is data and research-based
- We have several research projects about teaching personal finance in college
- We are assessing the effectiveness of personal finance teaching (and with AI) in collaboration with two universities that have a lot of students

Personal finance course

Personal finance topics we cover in our courses

1. The basics of personal finance
2. Accounting for households
3. Life-cycle model of saving
4. Debt management
5. FICO score and its determinants

Personal finance course, cont.

Personal finance topics we cover in our courses, cont.

6. Home, car, and other purchases
7. Investing in education
8. Investing in financial markets
9. Investing, taxes and employer benefits
10. Insurance and retirement planning

My book

- I wrote a personal finance book in Italian
- It was to complete my work as Director of the Italian Financial Education Committee in charge of designing a national strategy for financial literacy
- It summarizes my lectures at Stanford
- Useful to teach personal finance in college but also high school

Some considerations

- Topics: Follow the standards and requirements as well
- Important to go from easy to difficult (have investing and insurance later in the course)
- There is an order to follow in making financial decisions, for example cannot start with investing
- There are many differences among students, take them into account

Objectives of the course

- Manage finances with confidence
- Empower students to take advantage of the opportunities offered by the markets, the government and employers
- Provide a framework for financial decision-making
- Help students achieve their objectives

Things I include in my lectures

- Always start the lectures with a story
- I use data and statistics from Big Three and P-Fin Index to motivate what we do in class (these statistics are now available to everyone)
- I use data from FRED to show behavior of interest rates, saving, debt, stock market, and so on over time
- I always do calculations: in finance, we must be precise (and it is easy to use financial calculators)
- I have a slide on “mistakes people make”
- I use videos (normally toward the end of the lecture) for additional explanations
- Over time, we have designed tools to help students in their understanding

Why did I study personal finance?

Because of my parents who talked to me about money

According to statistics, I am the least likely to be an expert on personal finance.

But we can change the statistics and this is one of the purposes of the course!

The power of storytelling

Compound Interest

Learn how Michelle and Dave make a small fortune from their wedding gift, simply by understanding the power of interest compounding.

Read the story >

Inflation

Learn how a plaid shirt inspires Lisa to save more for the future by making her realize the eroding power of inflation.

Read the story >

Risk Diversification

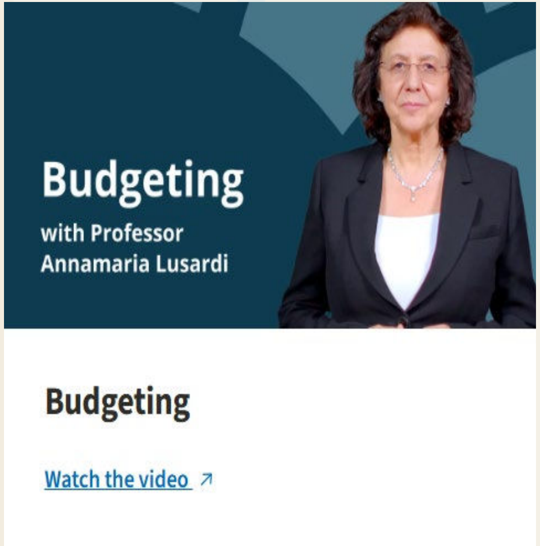
Learn how Kate convinces her husband, Sam, not to put all their eggs in one basket.

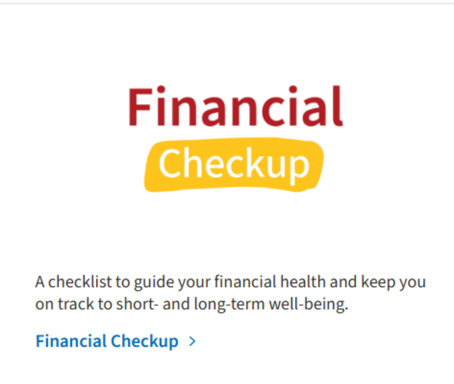
Read the story >

https://ifdm.stanford.edu/the-big-three/stories

More resources we have available on our webpage

- Data visualization (finlit data)
- Financial calculators
- Short videos
- Financial health check-up





Personal Finance Teacher Training Institute

JULY 13-17, 2026 · STANFORD UNIVERSITY

Personal Finance Teacher Training Institute

This page was built just for the Personal Finance Teacher Training Institute.
The tools we had already designed are posted on the IFDM Resource Hub.
Eventually the two will be merged, but for now, please use both.

Foundations USED THROUGHOUT THE WEEK

The Big Three →
The three questions that anchor the week: take the quiz, read the explanations, and see the stories.

TVM Calculator →
The five-key financial calculator behind every money question this week: N, I/Y, PV, PMT, and FV. Enter any four and solve for the fifth.

Financial Literacy Data →
How U.S. adults score across eight functional areas, drilled down by gender and generation.

Financial Checklist →
The Seven Elements of Good Financial Health as a seven-question self-assessment.

Network of personal finance teachers

We are building a network of personal finance teachers. **Please contact us at Stanfordifdm@stanford.edu**

Stanford | Initiative for Financial Decision-Making

Annual Teaching Personal Finance Conference

Business case for personal finance education

- **It is a win-win for everyone**
- Courses filled up instantly and one can teach the course over the years
- Administrators benefit from financially literate students/alumni
- Parents want this education for their children
- Alumni are very favorable and willing to support it

Education can be extended beyond students

Continuing studies course for adults

Stanford | Continuing Studies

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Most Classes Begin Mar 30

0

Quick Links

FA = Fall
SP = Spring
WI = Winter
SU = Summer

Wednesdays, 6:00 - 7:30 pm (PT) • 8 weeks • January 21 - March 11

Join us on campus or online!

Making financial decisions is harder than ever before. The financial landscape is evolving rapidly, financial products are increasingly complex, and risk is everywhere. Whether you want to build wealth, avoid costly mistakes, or plan more effectively for the future, this course will give you the tools and confidence to take control of your personal finances.

Developed through the Stanford Initiative for Financial Decision-Making, this course draws on years of rigorous research and offers evidence-based strategies for navigating today's financial choices. Professor Annamaria Lusardi, one of the world's leading experts on financial literacy, will use lectures, data analyses, case studies, and even humor to help you master the core concepts that underpin financial security—from saving to investing, from managing debt to protecting against risks. Guest speakers will also share their expertise and experiences. The course will also equip you with practical ways to share these lessons and empower those around you, including family members.

Stanford | Initiative for Financial Decision-Making

Policy and programs

National strategy for financial literacy in Italy

I chaired the Italian Committee for Financial Education in charge of the national strategy for financial literacy

Supported a law mandating financial education in school

Evaluation of effectiveness:

"**Financial Education at Scale: Experimental Evidence on a National Information Campaign**" with Alessia Sconti, Tim Kaiser et al., 2024.

Impacting policy

Our new work in progress:

- Financial literacy: Why should central banks care

Working with global leaders

Working with former UK premier, Rishi Sunak, to measure financial literacy in the UK and promote financial education

New findings available here: The Richmond Project: Spotlight on Financial Literacy

Like water in an ecosystem

We need to provide wide access to financial education so that people can be more financially resilient and financially secure. **Financial literacy is like water in an ecosystem, it is needed to grow and flourish.**

For more information, please visit us at

https://ifdm.stanford.edu/