The Importance of Financial Education

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Torino, December 1, 2022
Topics I will cover

1. Data on financial literacy from the US and Italy
2. Financial literacy is too low
3. Fintech is not a substitute for financial literacy
4. We need more financial education: we are not ready!
Financial literacy is too low
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.

- 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 since 2016 on a representative sample of Americans (age 18+).
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 National Standards for Finlit).

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
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 the year.
- Don’t know
- Refuse to answer

Results:
Correct 54%
Incorrect 21%
Don’t Know 26%
No Answer 1%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).
Financial literacy: A failing grade

% of P-Fin Index questions answered correctly

Distribution of correct answers to P-Fin Index questions

- 22-28 correct (76%-100%) - 18%
- 15-21 correct (51%-75%) - 33%
- 8-14 correct (26%-50%) - 26%
- 0-7 correct (<26%) - 23%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).
Financial (il)literacy is holding steady: 2017-2022

% of P-Fin Index questions answered correctly

<table>
<thead>
<tr>
<th>Year</th>
<th>0-7 correct (&lt;26%)</th>
<th>8-14 correct (26%-50%)</th>
<th>15-21 correct (51%-75%)</th>
<th>22-28 correct (76%-100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>20%</td>
<td>32%</td>
<td>35%</td>
<td>16%</td>
</tr>
<tr>
<td>2018</td>
<td>21%</td>
<td>28%</td>
<td>35%</td>
<td>16%</td>
</tr>
<tr>
<td>2019</td>
<td>20%</td>
<td>27%</td>
<td>35%</td>
<td>18%</td>
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<tr>
<td>2020</td>
<td>17%</td>
<td>30%</td>
<td>33%</td>
<td>20%</td>
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<tr>
<td>2021</td>
<td>20%</td>
<td>28%</td>
<td>34%</td>
<td>18%</td>
</tr>
<tr>
<td>2022</td>
<td>23%</td>
<td>26%</td>
<td>33%</td>
<td>18%</td>
</tr>
</tbody>
</table>

What do people know the most and the least

% of P-Fin questions answered correctly

- Borrowing: 60%
- Saving: 58%
- Consuming: 52%
- Go-to info sources: 49%
- Earning: 48%
- Investing: 47%
- Insuring: 45%
- Comprehending risk: 36%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).
How much people know about “Calculated risk”?  

Which of the following indicates the highest probability of getting a particular disease?  

- There is a one-in-twenty chance of getting the disease  
- 2% of the population will get the disease  
- 25 out of every 1,000 people will get the disease  
- Don’t know  
- Refuse to answer  

Results:  
Correct 28%  
Incorrect 19%  
Don’t Know 53%  
No Answer 0%  

Demographic variation: Women and knowledge

% of P-Fin questions answered correctly

Women: 45%
Men: 55%

Distribution of correct answers to P-Fin questions

- 22-28 correct: Women 12%, Men 25%
- 15-21 correct: Women 33%, Men 33%
- 8-14 correct: Women 29%, Men 23%
- 0-7 correct: Women 26%, Men 19%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).
Large variation in financial literacy across demographics

<table>
<thead>
<tr>
<th>demographic</th>
<th>% of P-Fin questions answered correctly</th>
</tr>
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<tbody>
<tr>
<td>Less than HS</td>
<td>31%</td>
</tr>
<tr>
<td>High school</td>
<td>38%</td>
</tr>
<tr>
<td>Some college</td>
<td>49%</td>
</tr>
<tr>
<td>College degree</td>
<td>65%</td>
</tr>
<tr>
<td>HH income</td>
<td></td>
</tr>
<tr>
<td>&lt; $25k</td>
<td>30%</td>
</tr>
<tr>
<td>$25k-$49k</td>
<td>38%</td>
</tr>
<tr>
<td>$50k-$99k</td>
<td>51%</td>
</tr>
<tr>
<td>$100k-plus</td>
<td>60%</td>
</tr>
<tr>
<td>Employed</td>
<td>53%</td>
</tr>
<tr>
<td>Retired</td>
<td>52%</td>
</tr>
<tr>
<td>Unemployed/</td>
<td>37%</td>
</tr>
</tbody>
</table>

Source: TIAA Institute-GFLEC Personal Finance Index (2022).
Financial literacy is linked to positive personal finance outcomes.

People who are financially literate are:

- less likely to be financially fragile
- less likely to overdraw checking accounts
- more likely to plan for retirement
- more likely to invest in the stock market
- less likely to have problems with debt
A simple measure of the cost of financial illiteracy

People spend an average of 7h per week thinking about and dealing with financial issues and problems. An average of 3h per week occur at work.

Source: TIAA Institute-GFLEC Personal Finance Index (2022).
What we learn from data and research

- Very low levels of financial literacy
  - Do not take financial literacy for granted even in rich countries

- Financial illiteracy is widespread
  - Need interventions that can be scaled up to see changes at the aggregate level

- Large heterogeneity across demographic subpopulations
Special report on Fin-tech

Millennial Financial Literacy and Fin-tech Use: Who Knows What in the Digital Era
New Insights from the 2018 P-Fin Index

Paul J. Yakobswski, TIAA Institute
Annamarie Lendari, The George Washington University School of Business and Global Financial Literacy Excellence Center (GFLEC)
Andrew Hadler, The George Washington University School of Business and Global Financial Literacy Excellence Center (GFLEC)

% of P-Fin questions answered correctly

- Millennials: 44%
- U.S. adults: 50%
Fin-tech activities

How often (never, sometimes, frequently) do you use your smartphone to do the following:

**Transactional activities:**
- Deposit checks into a bank account
- Send or receive money from friends, family or other individuals
- Pay for a product or service in person at a store, gas station, or restaurant, i.e., making mobile payments
- Pay bills

**Informational activities:**
- Track the amount you spend and what you spend it on
- Compare prices or product features when shopping
- Check your credit score
- Get personalized investment advice
Millennial Fin-tech activities

% of Millennials using their smartphone to...

**Transactional**
- Pay bills: 33% Frequently, 35% Sometimes, 68% Total
- Deposit Checks: 26% Frequently, 32% Sometimes, 58% Total
- Send/receive money: 19% Frequently, 35% Sometimes, 53% Total
- Mobile payment: 14% Frequently, 26% Sometimes, 40% Total

**Informational**
- Comparison Shop: 37% Frequently, 44% Sometimes, 82% Total
- Track Spending: 34% Frequently, 34% Sometimes, 67% Total
- Check Credit Score: 14% Frequently, 34% Sometimes, 47% Total
- Get Investment Advice: 4% Frequently, 13% Sometimes, 17% Total

Across age: The use of Fin-tech activities are more common among older than younger Millennials.

Little or no consistent variation by demographics or financial literacy in fintech use.

Fin-tech activities (which vary in purpose and nature) attract different users with different needs and economic circumstances.

Source: 2018 P-Fin Index
### Fin-tech and personal finance outcomes

<table>
<thead>
<tr>
<th>Mobile payment</th>
<th>Track spending</th>
</tr>
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<tbody>
<tr>
<td><img src="chart1.png" alt="Bar chart" /></td>
<td><img src="chart2.png" alt="Bar chart" /></td>
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- Millennials who make mobile payments are more likely to overdraw their checking account.
- Significant difference even when controlling for demographic factors (such as gender, income, education, employment status).
- Track spending is expected to improve cash flow management, but users are not less likely to overdraw their checking account (difference is not statistically significant).
- Just correlation, but no causality measured: We cannot say whether fin-tech use increases the likelihood of poorer personal finance practices.

Source: 2018 P-Fin Index
Role of financial literacy

Respondents who use mobile payments and are financially literate are much less likely to overdraw their checking accounts.
New data from Italy

- Panel data set: 2020-2022
- Large sample: 5000 observations
- Data on financial, insurance and pension literacy and measure of financial well-being

Collected to inform the work of the Italian Financial Education Committee
The Big Three

“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?”

“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…”

“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.*”
How much do Italians know?

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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<tbody>
<tr>
<td></td>
<td>44.6%</td>
<td>41.5%</td>
<td>44.3%</td>
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Financial literacy across demographic groups
We are not ready
Research says that financial education works

Financial education affects financial knowledge and downstream behaviors

Tim Kaiser * 1, Anna Maria Lusardi 1, 2, Lukas Menkhoff 1 2, Carly Urban 2 3

Abstract

We study the rapidly growing literature on the causal effects of financial education programs in a meta-analysis of 76 randomized experiments with a total sample size of over 160,000 individuals. Many of these experiments are published in top economics and finance journals. The evidence shows that financial education programs have, on average, positive causal treatment effects on financial knowledge and downstream financial behaviors. Treatment effects are economically meaningful in size, similar to those realized by educational interventions in other domains, and robust to accounting for publication bias in the literature. We also discuss the cost-effectiveness of financial education interventions.
We need more financial education

Large and scalable programs are needed to change the statistics

1. Financial education in the workplace (for the adults)
2. Financial education in school and college

We need to make financial education mandatory
Defined Contribution Plans and the Challenge of Financial Illiteracy

Posted by Jill E. Fisch (University of Pennsylvania Law School), Annamaria Lusardi (George Washington University), and Andrea Hasler (George Washington University), on Friday, June 14, 2019.

Tags: 401(k), Corporate liability, ERISA, Information asymmetries, Investor protection, Liability standards, Retirement plans

More from: Andrea Hasler, Annamaria Lusardi, Jill Fisch

Editor's Note: Jill Fisch is the Saul A. Fox Distinguished Professor of Business Law and Co-Director, Institute for Law and Economics at the University of Pennsylvania Law School; Andrea Hasler is Assistant Research Professor in Financial Literacy at the George Washington University School of Business; and Annamaria Lusardi is the Endowed Chair of Economics and Accountancy at the George Washington University School of Business. This post is based on their recent article, forthcoming in the Cornell Law Review.
Thank you!

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