

Financial Literacy and Education in the Digital Era: Evidence and Recommendations

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3rd International Seminar on Financial Education,
Central Bank of Chile, October 17, 2023



Financial literacy: The 21st century skill



Financial literacy is like reading and writing

As it was not possible in the past to participate to society without being able to read and write, so it is not possible to thrive in today's economy without being financially literate.

Why financial literacy is more important than ever

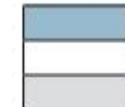
- **Digital technologies** have made financial services and products more accessible, but also more complex.
- People, in particular the young, shoulder **greater responsibility** than previous generations.
- Today's youth are exposed to **financial risks** spawned by longer life expectancy, a decrease in welfare and occupational benefits, and uncertain economic and job prospects.
- The pandemic, inflation, and the wars add **new risks**.

Financial Literacy among Youth: Global Findings



The most recent data on financial literacy for 15-year-old students (2018 PISA)

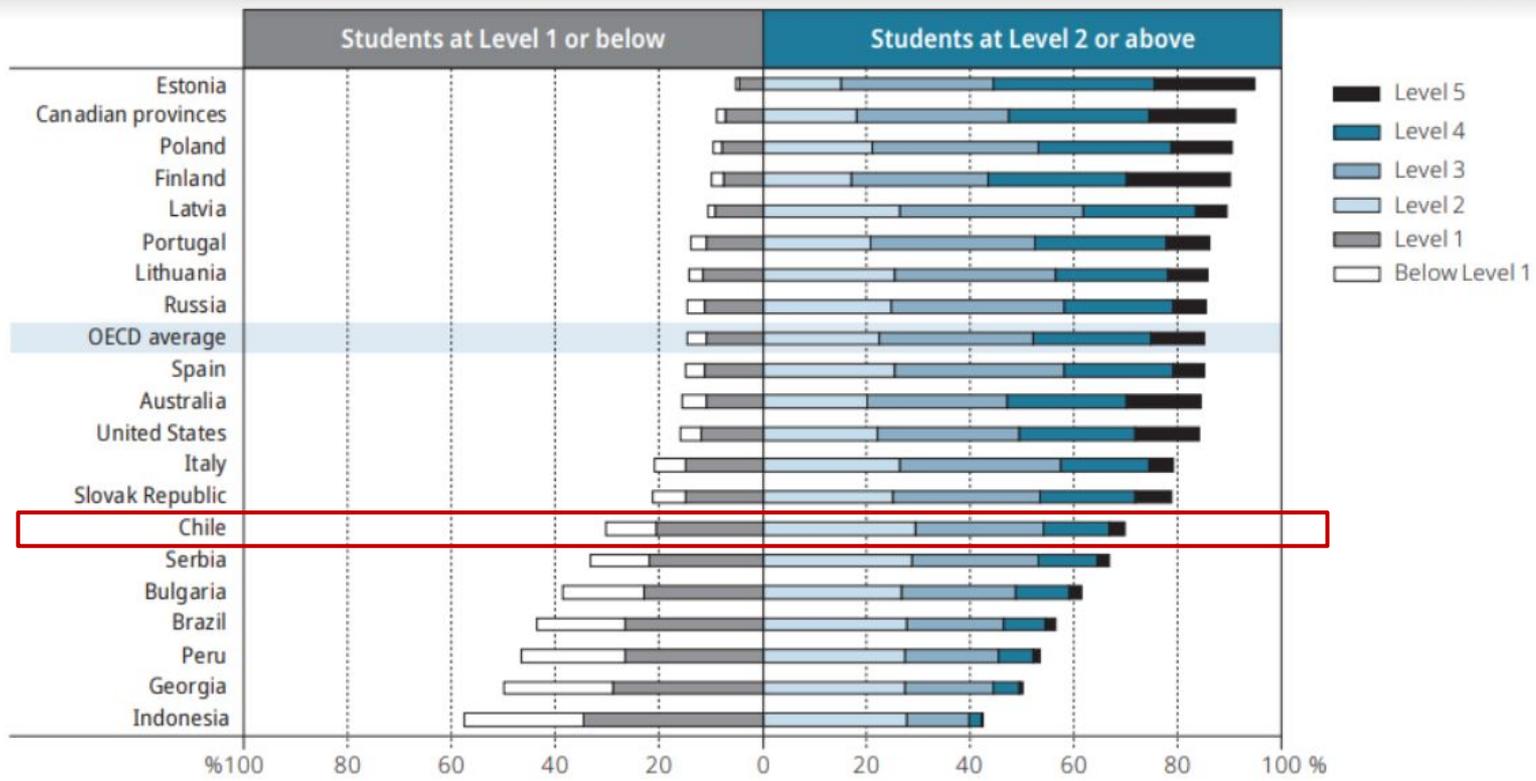
	Mean score in PISA 2018	"Share of low achievers (below Level 2)"	"Share of top performers (Level 5)"	Relative score ¹ after accounting for performance in mathematics and reading
	Mean score	%	%	Mean score
OECD average	505	14.7	10.5	2
Estonia	547	5.3	19.0	16
Finland	537	9.9	19.9	14
Canadian provinces	532	8.8	16.7	4
Poland	520	9.5	11.8	-3
Australia	511	15.6	14.1	4
United States	506	16.0	12.4	5
Portugal	505	14.0	8.3	1
Latvia	501	10.6	6.1	1
Lithuania	498	14.2	7.7	7
Russia	495	14.4	6.3	-1
Spain	492	15.0	5.7	m
Slovak Republic	481	21.2	7.2	-9
Italy	476	20.9	4.5	-17
Chile	451	30.2	3.0	5
Serbia	444	33.2	2.5	-15
Bulgaria	432	38.5	2.4	-10
Brazil	420	43.6	1.9	12
Peru	411	46.4	1.4	-3
Georgia	403	49.8	0.7	-3
Indonesia	388	57.4	0.3	-3


 Above the OECD Average
 In line with the OECD Average
 Below the OECD Average

Source: PISA 2018

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Low and high performers in financial literacy



Countries and economies are ranked in descending order of the percentage of students who performed at or above Level 2.

Source: PISA 2018

Who knows the least across countries

Financial literacy is particularly low among:

- **disadvantaged** students (low socio-economic background families)
- **immigrant** background
- **girls** (in some countries)



Financial Literacy among the Young in the U.S.



Started our own data collection in the U.S. 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)
- Focus on topics that can inform programs, solutions, and policy

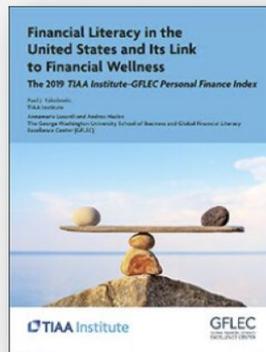


Seven years of P-Fin Index data (2017-2023)

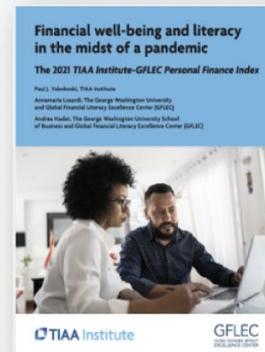
2017



2019



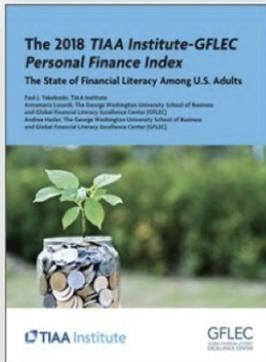
2021



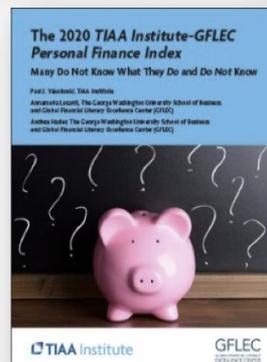
2023



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 (from 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

Knowledge about inflation

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?

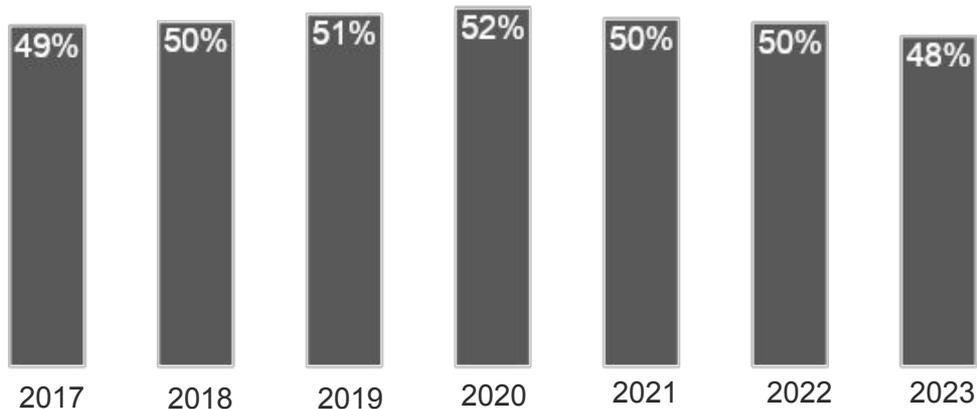
- She can afford to buy fewer things at the end of the year.
- She can afford to buy more things at the end of the year.
- It's not clear whether she can afford to buy more things or fewer things at the end of year.
- Don't know
- Refuse to answer

Results:

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

Financial literacy is low and holding steady

Percentage of P-Fin Index questions answered correctly



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

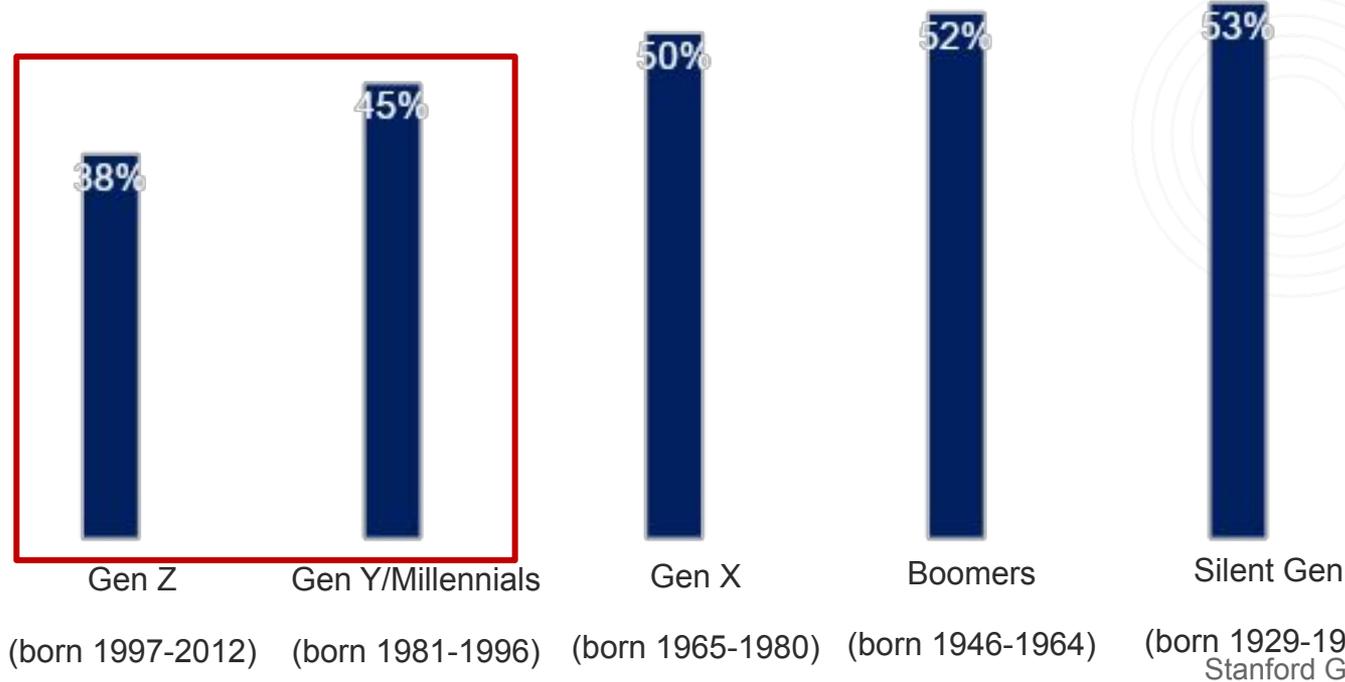
On average, only 14 out of 28 questions were answered correctly.

This is a failing grade!



Financial literacy is lowest among the young

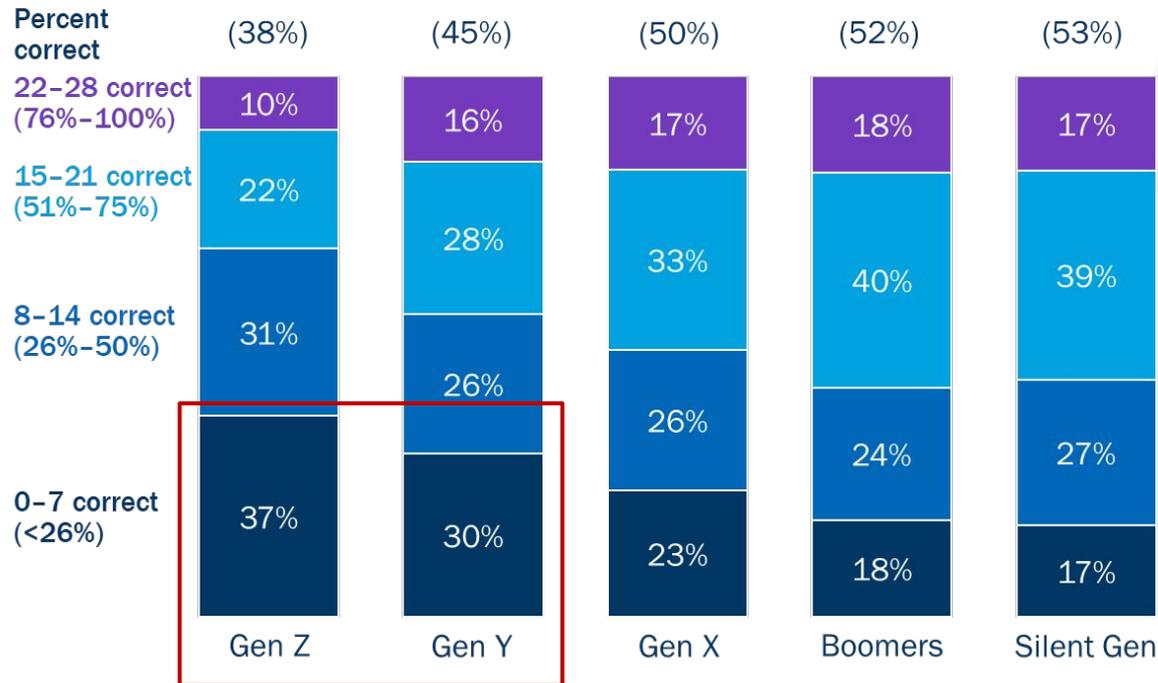
Percentage of P-Fin Index questions answered correctly



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

The least financially literate are most common among the young

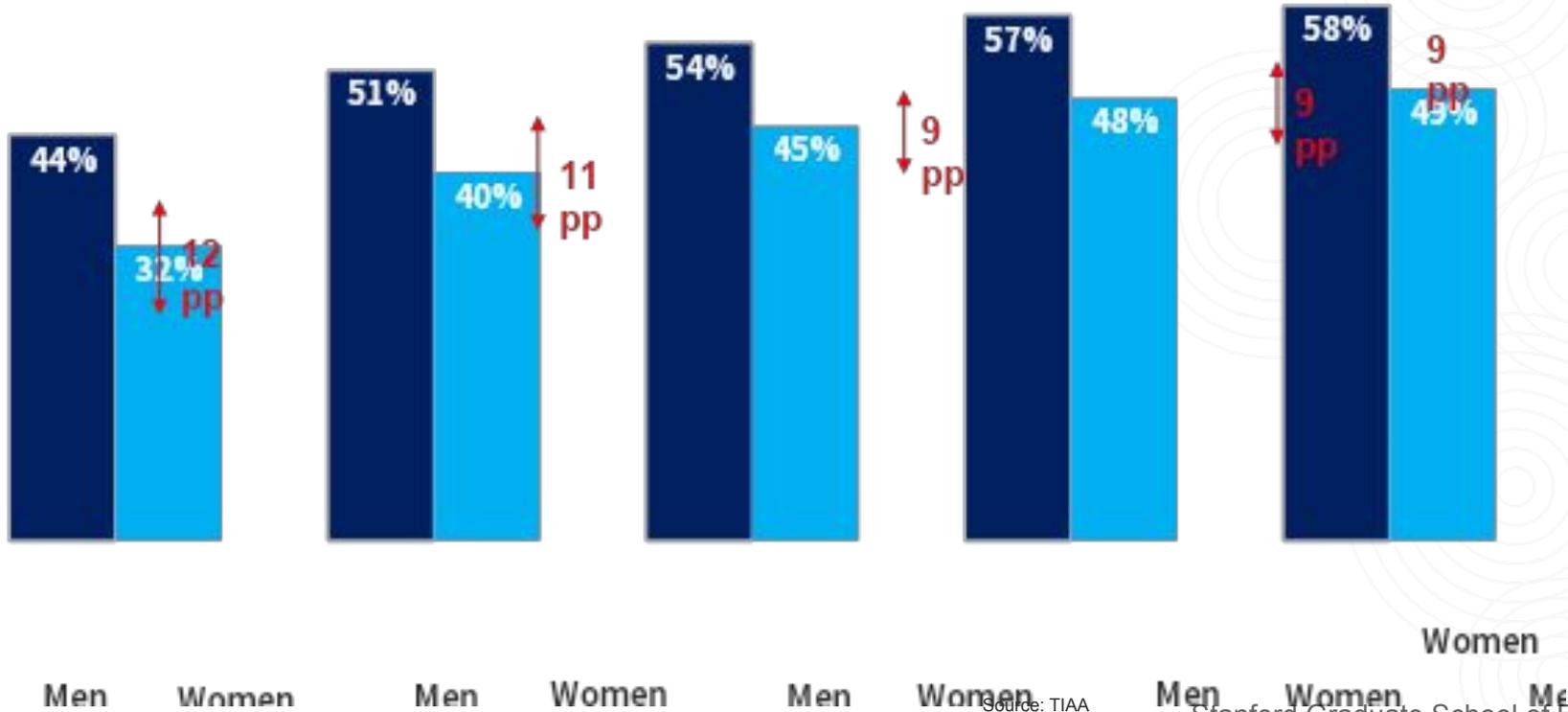
Distribution of correct answers to *P-Fin Index* questions



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

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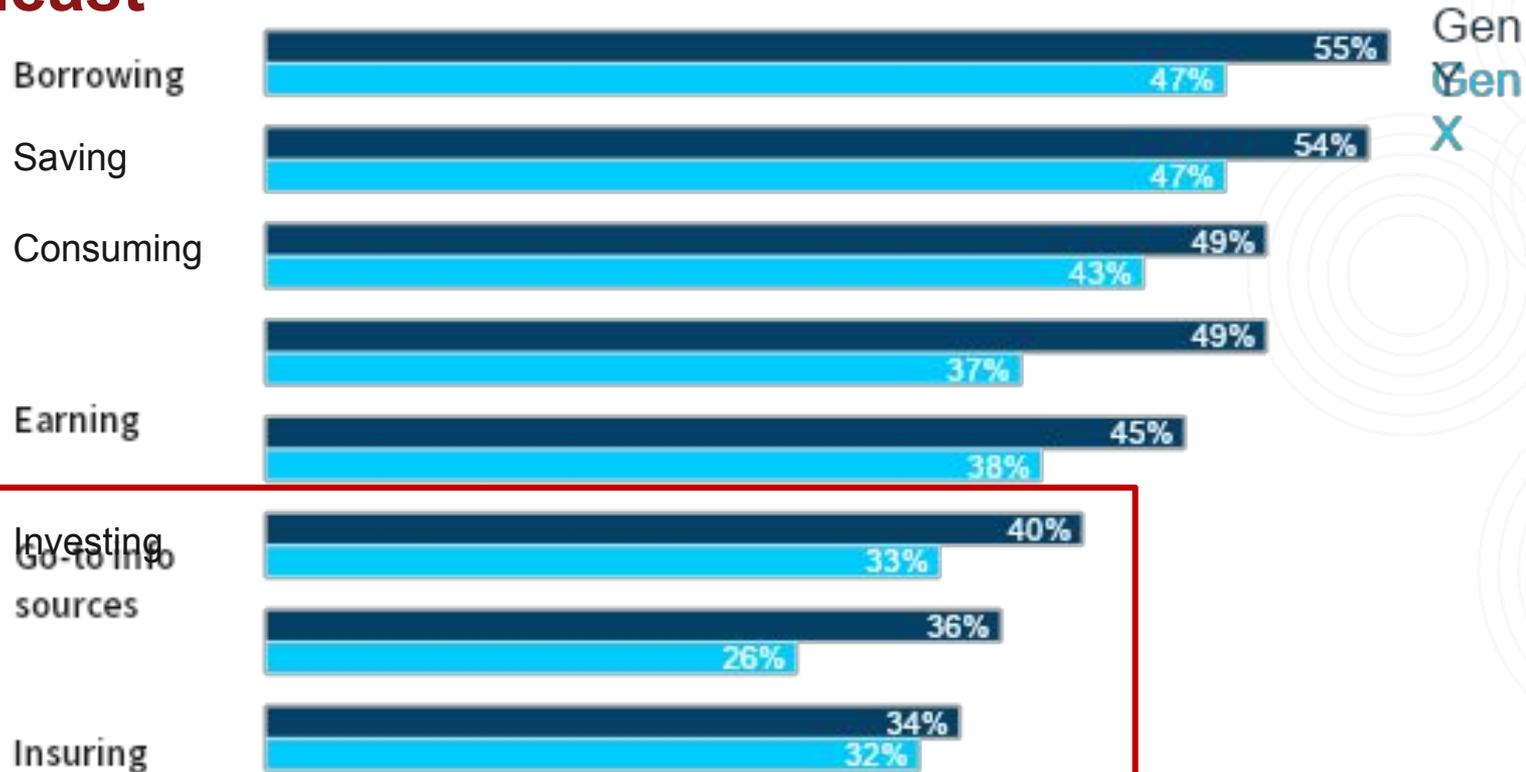
The gender gap is largest among the young



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

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What the young know the most and the least



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

Millennial Fintech Report

Millennial Financial Literacy and Fin-tech Use: Who Knows What in the Digital Era

New Insights from the 2018 *P-Fin Index*

Paul J. Yakoboski, TIAA Institute

Annamaria Lusardi, The George Washington University School of Business
and Global Financial Literacy Excellence Center (GFLEC)

Andrea Hasler, The George Washington University School of Business
and Global Financial Literacy Excellence Center (GFLEC)



Fintech activities

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

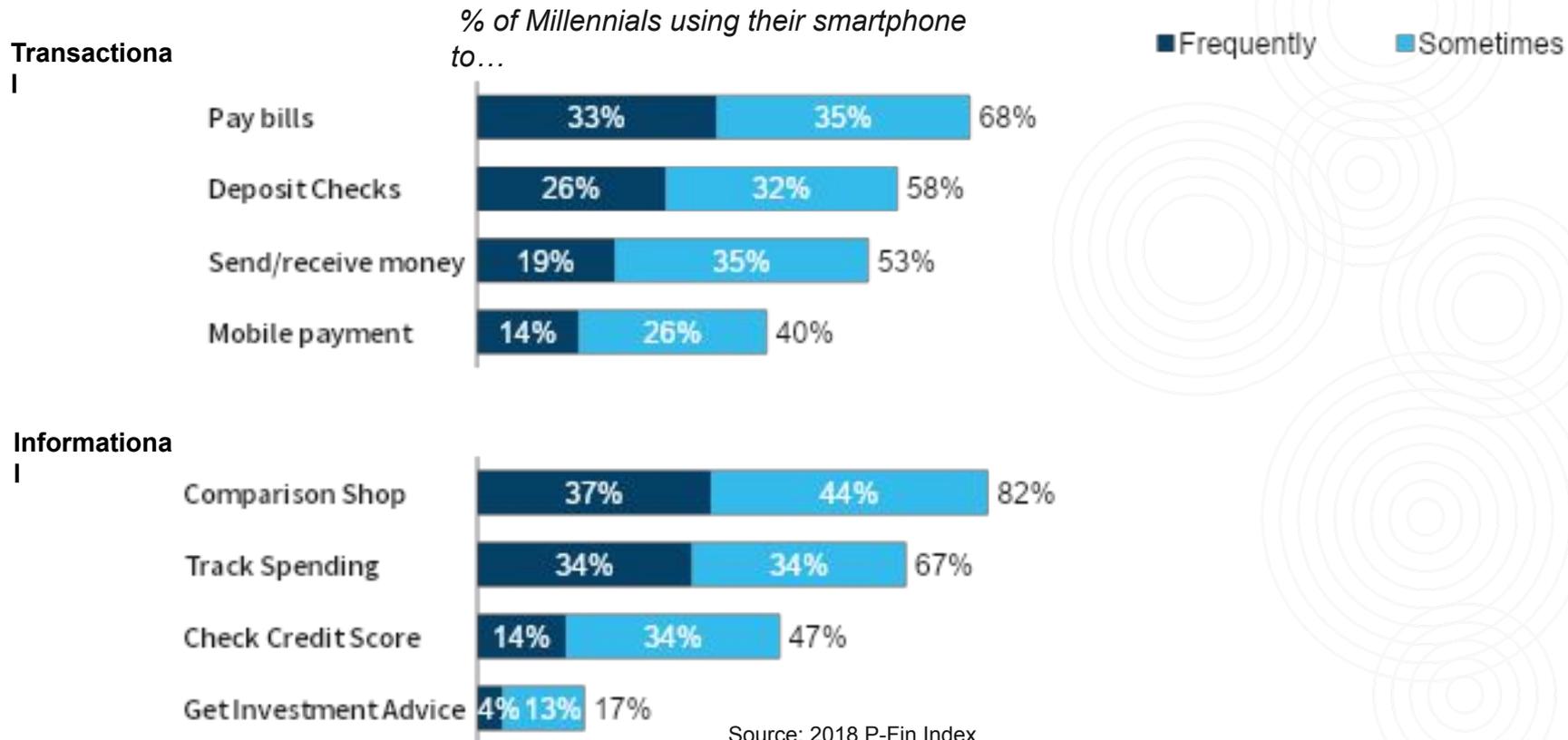
Transactional activities:

- 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:

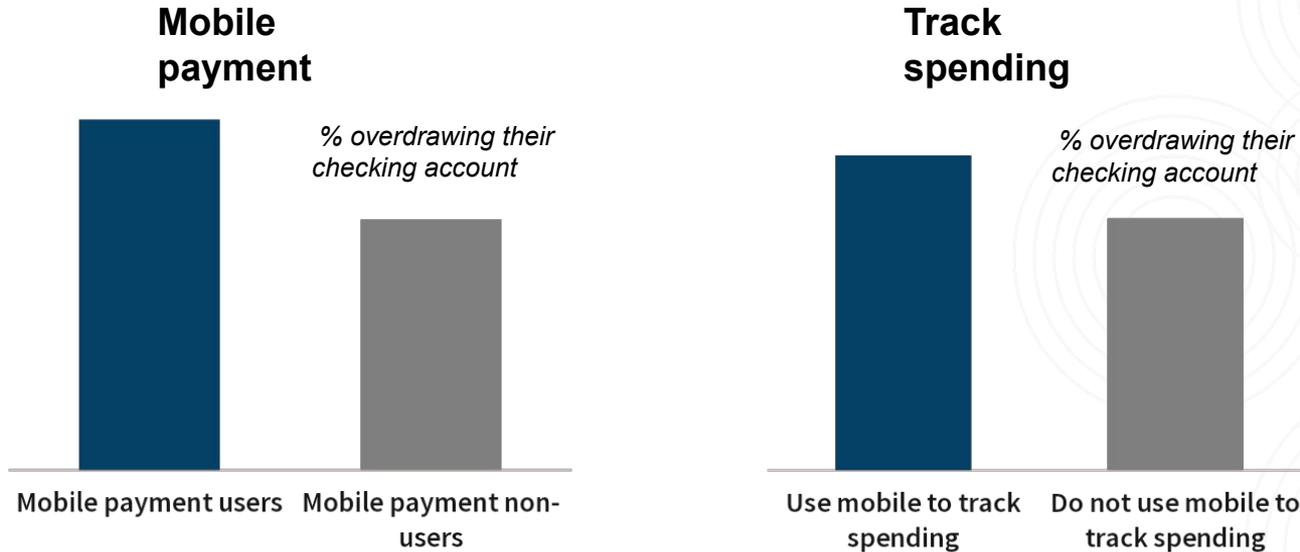
- Track the amount you spend and what you spend it on
- Compare prices or product features when shopping
- Check your credit score
- Get personalized investment advice

Millennial fintech activities



Source: 2018 P-Fin Index

Fin-tech and personal finance outcomes

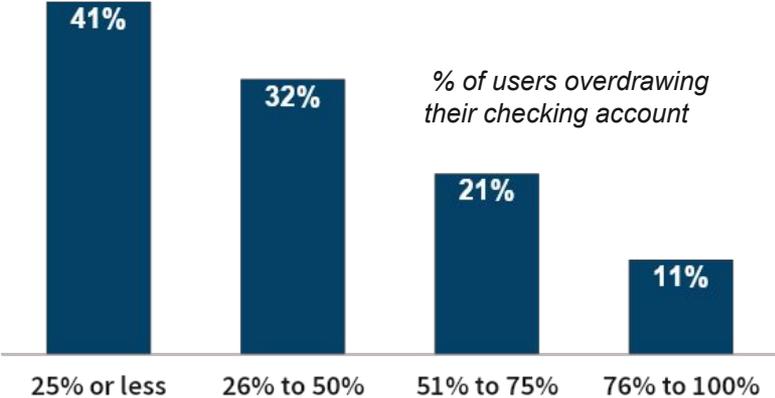


Source: 2018
P-Fin Index

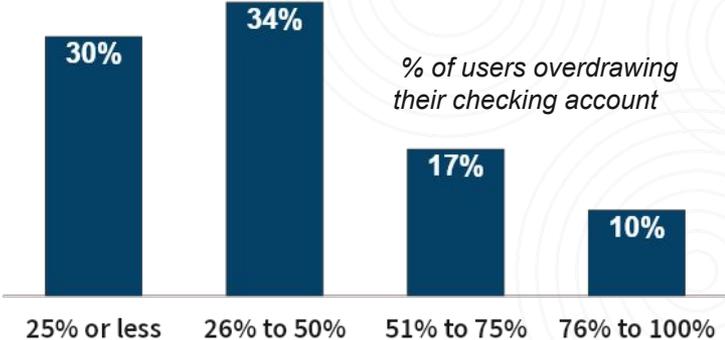
- Millennials who make mobile payments are more likely to overdraw their checking account.
- Track spending is expected to improve cash flow management, but users are not less likely to overdraw their checking account (difference is not statistically significant).

Role of financial literacy

Mobile payment



Track spending



Source: 2018 P-Fin Index

Financial Education and Policy Recommendations



Financial education works: Our world-wide meta-analysis of financial education programs



Journal of Financial Economics

Available online 3 October 2021

In Press, Corrected Proof



Financial education affects financial knowledge and downstream behaviors

Tim Kaiser ^a, Annamaria Lusardi ^b, Lukas Menkhoff ^c, Carly Urban ^d

Show more

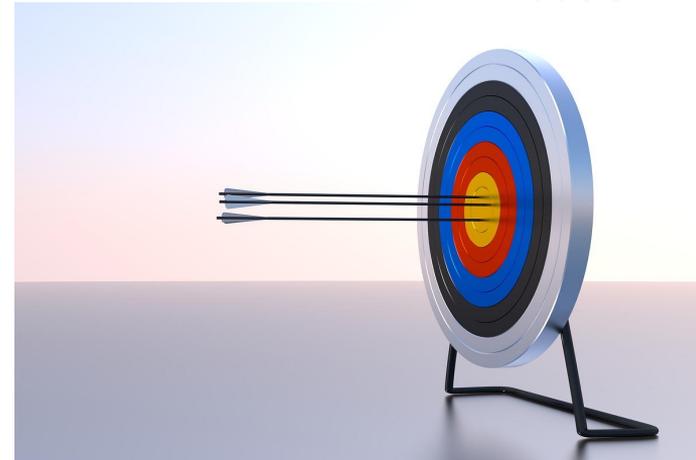
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<https://doi.org/10.1016/j.jfineco.2021.09.022>

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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.



<https://gflec.org/metaanalysis/>

More on the meta-analysis

Our study includes **76** randomized controlled trials from **33** countries with over **160,000** individuals across the lifespan.



Financial education works in both developed and developing countries. It is also **cost-effective**.

From the first issue of the Journal of Financial Literacy and Wellbeing



- Veronica Frisanco examined the evidence of financial education in Peru
- Financial education affects not just the students but also the parents, in particular in disadvantaged families

Financial education in school is critically important

We need financial education in school to change these statistics



1. Rigorous education
2. Access to every student
3. Cost-effective

A case for making financial education mandatory!

Where to start



- **Policy makers must invest in young people!**
- There are guidelines to develop effective financial education programs for students.
- It is not mission impossible. For example, Portugal made financial education mandatory in schools in 2018.

Financial competence framework for children and youth



Launch of the financial competence framework (FinComp) for children and youth

*Jointly developed by
the European Commission and the OECD-INFE*

Hybrid conference
Thierry Stoll, SPA 2
02 October 2023
10.00 – 12.30 CET

#FinComp

- This topic is gaining momentum
- EU Commission together with OECD launched a financial competence framework to facilitate teaching to the young

Financial literacy: a shield to protect against shocks

“Financial knowledge not only enables us to cope with crises but, in a fast-changing world, it allows us to better plan for tomorrow.”



At the event “Why Should Young Europeans Care about Finance and Taxation?” organized by European Parliament’s Committee on Economic and Monetary Affairs (Econ) and Subcommittee on Tax Matters (Fisc). October, 2022. https://www.europarl.europa.eu/cmsdata/255907/1b.%20Statement_Lusardi.pdf

Financial education should continue in college

- Teaching personal finance to Stanford students
- Can be used as a laboratory to test new curricula
- Can serve as a springboard to scale compelling curriculum online to a wide variety of constituents and ensure as much access as possible for effective distribution



Our teaching personal finance conference

Stanford | Institute for Economic
Policy Research (SIEPR)

Stanford | Department of Economics
SCHOOL OF HUMANITIES AND SCIENCES

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GLOBAL FINANCIAL LITERACY
EXCELLENCE CENTER

Teaching Personal Finance Conferences

Stanford University | Upcoming Online Conference: October 6, 2023

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More information about the 2023 program [here](#).



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Financial literacy: The 21st century skill

Everyone deals with finance, and finance is sufficiently complex that we cannot leave it to individuals to learn on their own!

Financial literacy: A vision for the future

What is the future we want to build?



THANK YOU!

**For more information visit
www.gflec.org**

