

# Aiming High: The Power of Financial Education

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The George Washington University School of Business and GFLEC Italian Financial Education Committee

Rio de Janeiro, October 10, 2019



#### Three topics

> Financial literacy

**2** > The impact of financial literacy

3 > Financial education



#### To get started

A number:

1/3



#### To get started

#### 1/3

- People who know the ABC of personal finance, even in a country with well-developed financial markets.
- How many people know the basics, even after having made many financial decisions.



#### Financial literacy: the ABC of personal finance

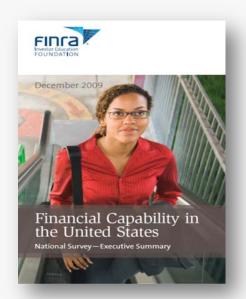
#### The Big Three

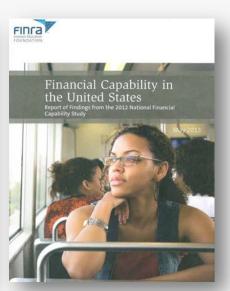
- 1. "Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?"
- 2. "Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, with the money in this account, would you be able to buy..."
- 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."

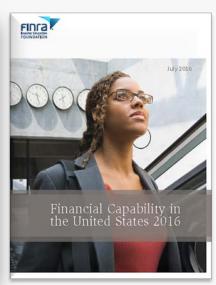
- ☐ Exactly \$102
- ☐ Less than \$102
- □ Don't know
- □ Refuse to answer
- ☐ More than today
- ☐ Exactly the same as today
- ✓ Less than today
- Don't know
- □ Refuse to answer
- □ True
- Don't know
- □ Refuse to answer

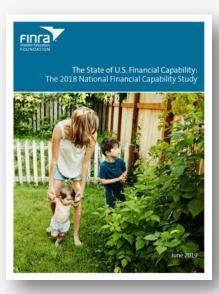


### The US National Financial Capability Study (NFCS), from 2009 to 2018.







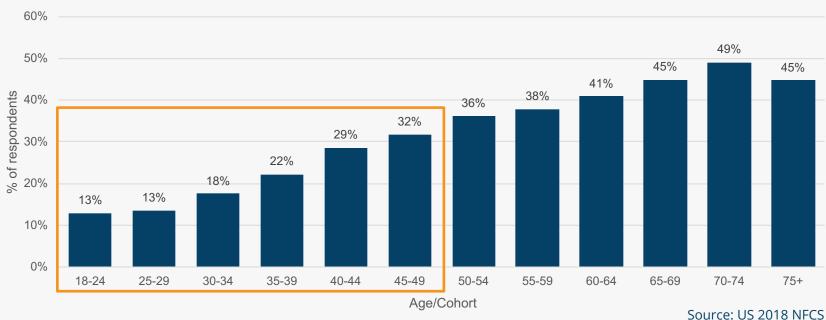


We collaborated with FINRA Foundation to design survey questions and analyze the data.



#### Low financial literacy over time and age (NFCS 2018)



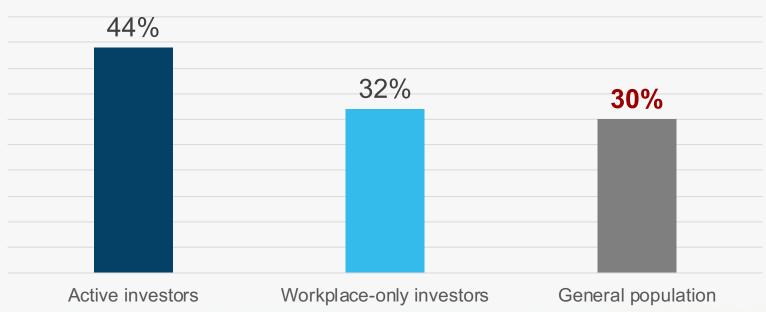


About 1/3 of Americans know these 3 basic concepts by age 50 even though many financial decisions are made well before that age



#### Financial literacy among investors - Our new report released today!





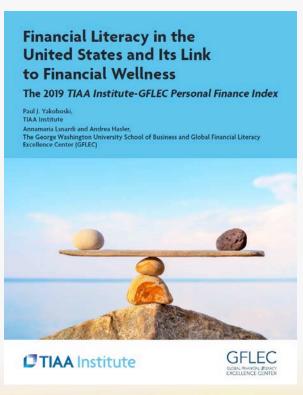


#### **TIAA Institute – GFLEC Personal Finance Index (P-fin Index)**

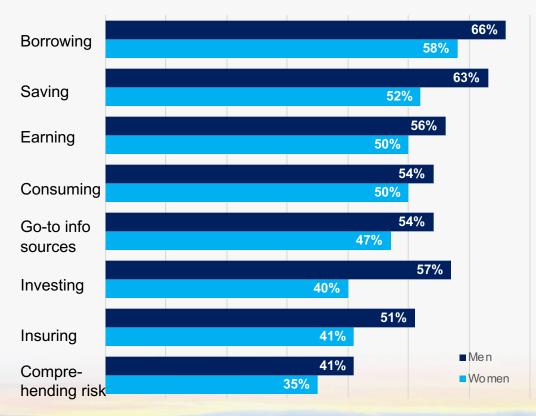
2017 2018 2019







#### P-fin Index: 28 questions covering 8 topics



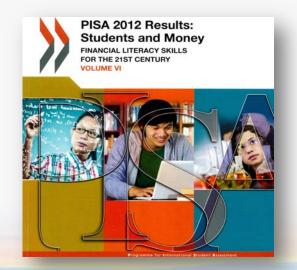
Source: P-Fin 2019



### Turning to the young: OECD Programme for International Student Assessment (PISA)

Are students well prepared for future challenges? Can they analyze, reason and communicate effectively? Do they have the capacity to continue learning throughout life?

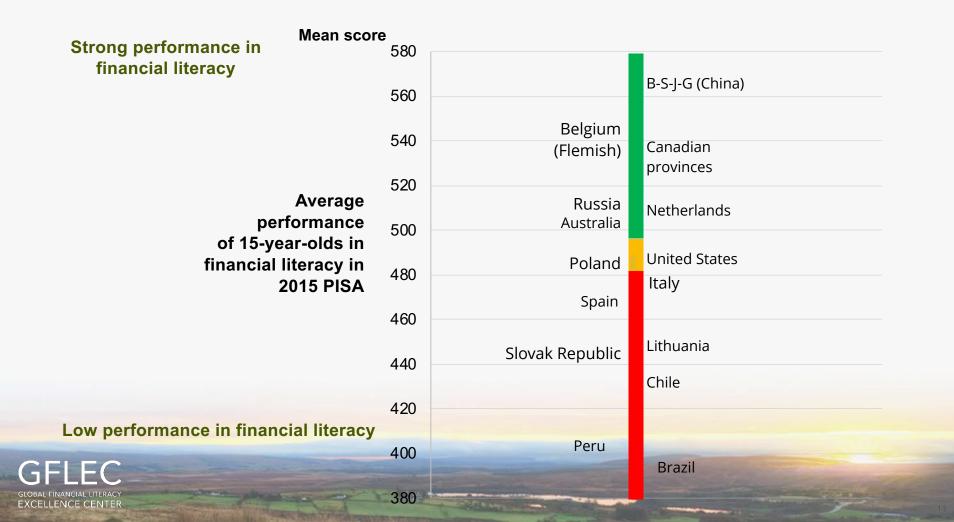




Since 2000, every three years the OECD Programme for International Student Assessment (PISA) answers these questions and more. It assesses to what extent students near the end of compulsory education have acquired some of the knowledge and skills essential for full participation in society.



#### **Average performance of 15-year-olds in financial literacy (2015 PISA)**



#### **Looking deeper into financial literacy**

20%

One in five students are at level 1, they have no/insufficient financial knowledge

- Financial knowledge strongly related to the socio-economic background of their family
- Gender differences start early in life, e.g. Italy

Large diff. among students



#### **Urgent need for financial education**

These numbers are not our destiny

- Changing the statistics
- Building a better future
- The ecosystem



#### **Building an ecosystem**

#### We need many components

- Financial literacy is an essential one
- It is the foundation (like water)
- It matters





#### Topic 2

Where is the deepest impact?



#### The powerful effect of financial literacy



- Lusardi, Michaud and Mitchell (2017), Optimal Financial Knowledge and Wealth Inequality," Journal of Political Economy, 2017.
- Consider a life cycle model of saving with financial literacy, where financial literacy affects the return on savings.
- Financial literacy is an important determinant of wealth and wealth inequality
- Important finding: 30-40% of U.S. retirement wealth inequality can be attributed to difference in financial knowledge



#### A financial check-up

A (simplified) check-up to understand if people are doing well





# Measuring financial fragility (one component of the check up)

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.

From Lusardi and Tufano, BPEA, 2011



#### Who is financially fragile?

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

From Lusardi and Tufano, BPEA, 2011



#### Financial fragility: What this measure does

Is a symptom of lack of assets

Indicates lack
of borrowing
capacity of highly
leveraged
households





# Many Americans are financially fragile: 31% in the US population in 2018 (2018 NFCS data)

#### Millennials (age 18-35)

• 35% of Millennials are financially fragile





#### Women

• 36% of American women are financially fragile vs. 25% of men



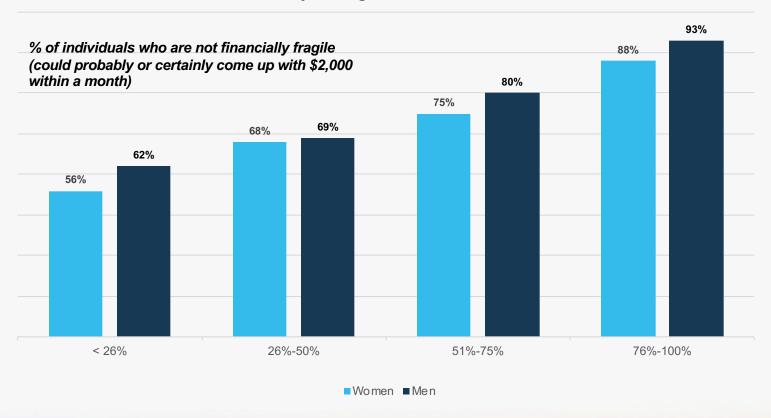
#### Financial literacy helps build financial resilience



Those who are able to answer the "Big 3" questions are less likely to be fragile



#### P-fin Index: Financial literacy is again linked to financial resilience.



% of *P-Fin* questions answered correctly



Topic 3

Finance education: aiming high



#### **Building the pump to spread the water (finlit)**

Using research to buid effective programs

- Financial literacy levels are low
  - Need to improve knowledge of the ABCs of personal finance
- The young are an important target and can use time in their favor
  - Start in school and also programs in the workplace, in particular for Millennials
- Programs targeted to women
  - Vulnerable groups but can have a «multiplier» effect



#### Given widespread financial illiteracy

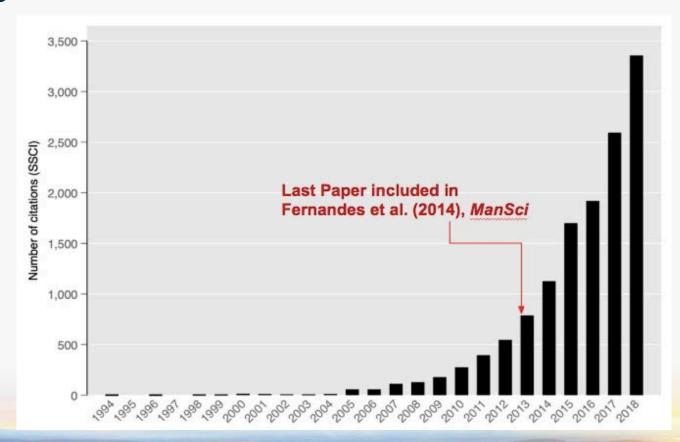
#### **Need for large and scalable programs**

- Financial education in school
- Financial wellness programs in the workplace
- Financial education in the community (libraries, museums, theaters, other places where people go to learn)

Need the entire ecosystem to be engaged



## What does the evidence say? Citations to the term "financial literacy" over time





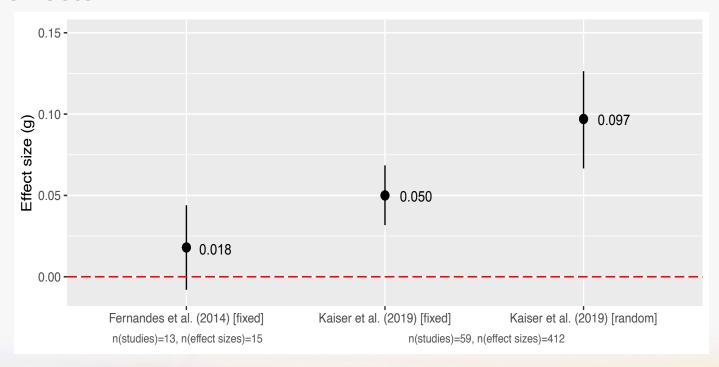
## A new meta-analysis (Kaiser, Lusardi, Menkhoff, Urban (2019)

We have reviewed the financial education work that has been done so far

- We first reviewed the studies in Fernandes et al. (2014)
- We used the most rigorous evaluation only
- We have looked at the statements most quoted about the Fernandes et al. (2014) paper



# Comparison the new evidence to the result in Fernandes et al. (2014). Recent papers show larger effects





## A statement most quoted from the Fernandes et al (2014) paper

Fernandes et al. (2014): "Intervention to improve financial literacy explains only 0.1% of the variance in financial behavior studied"

 This measure creates the illusion of miniscule effects, when they can be economically significant. "Variance explained" is a misleading concept

#### Consider the following example:

Median effect of structured pedagogy interventions in developing countries = 0.13 SD units. (Evans et al. 2019)

In the Fernandes et al. (2014) metric: this intervention explains 0.36% of the variance in learning outcomes.

Seems small?

Evans et al. (2019) report that this effect = ~0.6 years of "business as usual schooling" Economically, this effect appears to be large



#### Summary of take-aways from new meta-analysis

- 1) Recent work shows clear evidence of positive effects of financial education on financial behaviors (+knowledge)
  - Statistical effect size is <u>at least twice as large</u> as the effect in Fernandes et al. (2014)
  - It may be up to five times as large (when allowing for between-study heterogeneity in true effects)
  - Robust to a lot of different approaches to meta-analysis and even when accounting for publication selection for statistical significance
- 2) Policy recommendations should be based on economic effect sizes, not statistical effect sizes
- 3) No strong evidence of "rapid decay"



#### Given widespread financial illiteracy

Need the entire ecosystem to be engaged.

**Everyone can contribute to improving financial literacy.** 

Small initiatives can scale up



### Fast Lane initiative at GFLEC: Promote financial education in high school

- Provides research-based guidance and support for (1) students, (2) teachers, (3) school administrators, (4) parents/guardians, (5) policy makers, and (6) community members
- Making sure young people are on the fast lane to financial prosperity





#### **Girl Rising financial literacy curriculum**

- Financial literacy curriculum to promote economic empowerment for young girls
- Curriculum includes lesson plans for children in upperelementary, middle school, and high school





#### Personal finance course at the George Washington University

- Personal Finance courses for undergraduate and graduate students
- Extensive coverage of risk and risk management
- Paying attention to gender differences in financial literacy
- Material available for free on our website





#### **Olympics of Economics and Finance in Italy**

Together with the Italian Department of Education, we instituted the Olympics of Economics and Finance

- Junior high school students
- Schools across the country participated
- Winners: female and male students also from poorer regions

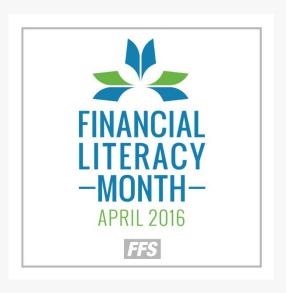
We can change the statistics!



#### Financial literacy month: the ecosystem at work









# Financial literacy month in Italy, 2<sup>nd</sup> edition (October 2019)

- We have about 600 events in the calendar
- Covering all regions of Italy and many cities
- Cover all groups of interest: young, women, old, small entrepreneurs, migrants..
- Grand opening this year in Milan with "finance in the theater"





#### Advice for public policy: Toward a new ecosystem

#### For policy-makers

- Policy makers should focus on wellbeing
- Add financial literacy among indicators of well-being
- Toward a more inclusive society





#### Meeting Italy's President: Sergio Mattarella

Our "return" to the work on financial education in Italy







Public policy: A quote from one of the U.S. Founding Fathers

# "An investment in knowledge pays the best interest."

Benjamin Franklin



#### Aiming high

The question about financial education is:

Which future do we want to build?







# Thank you!

