

# 2015 IOSCO STP - Investor Education and Protection: The Major Challenges Ahead



## A GLOBAL PERSPECTIVE ON FINANCIAL LITERACY

Annamaria Lusardi

The George Washington University School of Business  
Academic Director, Global Financial Literacy Excellence Center (GFLEC)

# **Financial Literacy: The best line of defense**

**“Well-informed consumers, who can serve as their own advocates, are one of the best lines of defense against the proliferation of financial products and services that are unsuitable, unnecessarily costly, or abusive.”**

**—*Ben Bernanke, Former Fed Chairman***

# The growing importance of financial literacy

## A new economic landscape

### Major changes in many markets and institutions

#### ➤ Changes in pension systems

- More individual and private accounts

#### ➤ Changes in labor markets

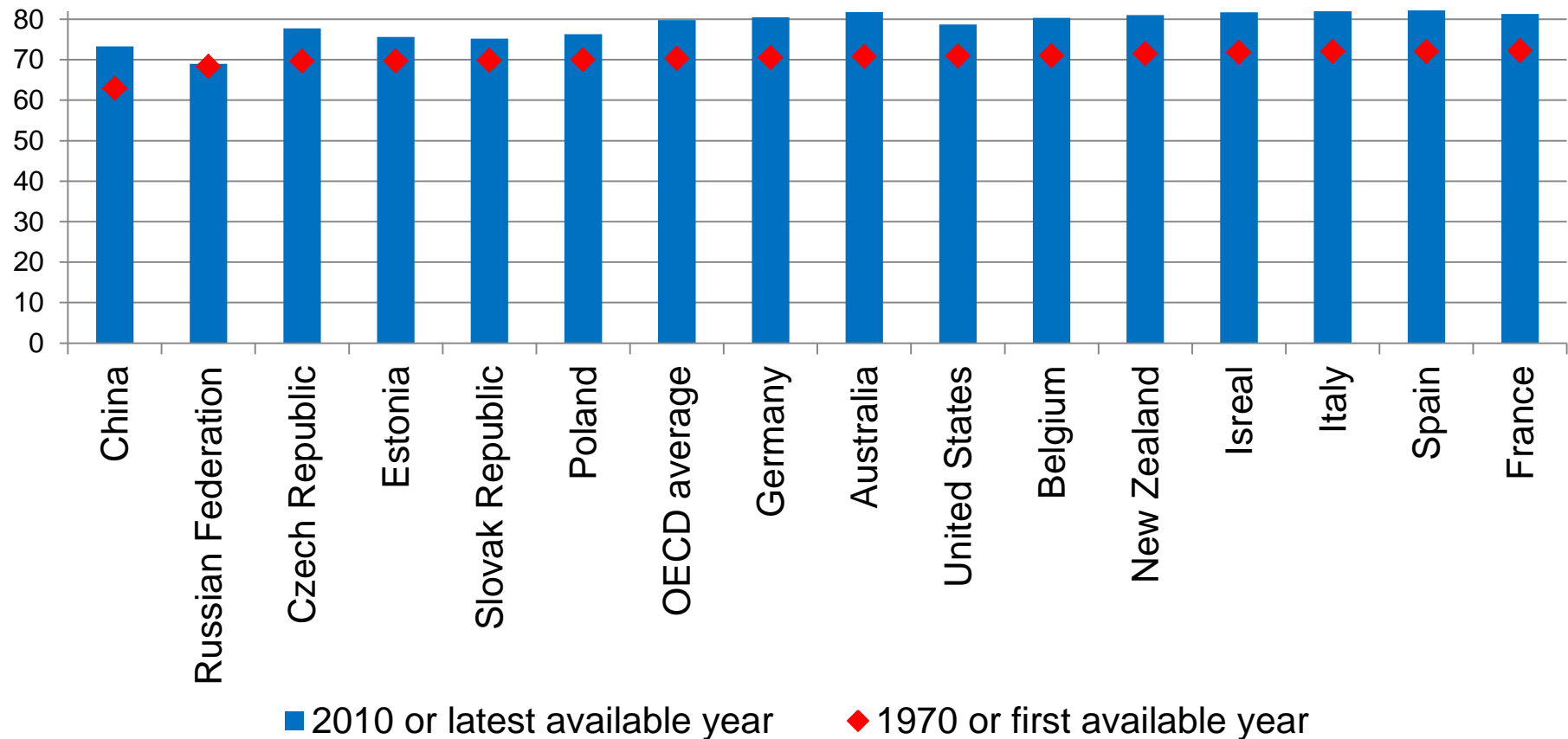
- Divergence in wages – skills are critical

#### ➤ Changes in financial markets

- Greater complexity
- More opportunities to borrow & in large amounts



# Increase in life expectancy changes everything



Source: OECD Factbook 2013: Economic, Environmental and Social Statistics © OECD 2012

- Life expectancy is high, and has kept growing.
- Young people today will need to be able to support themselves for many years.
- These changes are happening globally

# The growing importance of financial literacy, cont.

## Finance is what we do every day

Financial decisions happen frequently, are part of what we do every day

- **Methods of payment, managing liquidity**
  - Buying on cash or credit?
  - Having basic financial instruments, such as a bank account
- **Having/making a budget**
  - Making spending decisions
- **Short-term planning**
  - Making ends meet

**These decisions are consequential**

# Many questions

## **Given these changes:**

1. How well-equipped are people to deal with this new economic environment?
2. Are there vulnerable groups?
3. Is there a link between financial literacy and use of financial products?

# Measuring financial literacy across countries

## How well-equipped are people?

Earlier initiatives:

1. OECD-INFE surveys to measure financial literacy across countries
  - among the population (18 and older)
  - among the young (PISA financial literacy assessment)
2. World Bank's Financial Capability Surveys
3. Financial Literacy around the World (FLat World) project



# PISA 2012 Results: Students and Money

FINANCIAL LITERACY SKILLS  
FOR THE 21ST CENTURY

VOLUME VI





# Financial Literacy around the World

## (FLat World)

Evidence from 14 countries:

- ❖ USA
- ❖ The Netherlands
- ❖ Germany
- ❖ Italy
- ❖ Russia
- ❖ Sweden
- ❖ New Zealand
- ❖ Japan
- ❖ Australia
- ❖ France
- ❖ Switzerland
- ❖ Romania
- ❖ Canada
- ❖ Finland



# New data on financial literacy around the world



GALLUP



**The data will be released on November 18, 2015**

# The Global Financial Literacy Survey (GFLS)



**In 2014, Gallup interviewed adults (age 15 and older) in more than 140 countries around the world about their level of financial literacy.**

**The survey covers four topics:**

- **Numeracy**
- **Interest compounding**
- **Inflation**
- **Risk diversification**

# Measuring financial literacy

- How to measure financial literacy?
- Theory: Saving (borrowing) and investing
  - Life-cycle model of saving
  - Portfolio choice

## ***Concepts:***

*Numeracy and interest compounding*

*Inflation*

*Risk diversification*

***These theories/concepts apply everywhere (work of Nobel Prize Winner Angus Deaton)***

# Measuring financial literacy

## **Big Three (three financial literacy questions)**

1. Numeracy/interest compounding
2. Inflation
3. Risk diversification

The Big Three are used in the FLaT World project

*Being financially literate:* How many can answer these 3 questions correctly, and how many can correctly answer 2 out of the 3 questions

# Measuring financial literacy globally (GFLS)

## Five questions and four topics

1. Simple interest/numeracy
2. Interest compounding
  - Asked in two questions
3. Inflation
4. Risk diversification

*Being financially literate:*

- How many can answer 3 out of these 4 topics correctly

# Measuring financial literacy

Multiple-answer questions with the option of “don’t know” and “refuse to answer”

## Risk Diversification

Suppose you have some money. Is it safer to put your money into one business or investment, or to put your money into multiple businesses or investments? *[one business or investment; multiple businesses or investments; don't know; refuse to answer]*

## Inflation

Suppose over the next 10 years the prices of things you buy double. If your income also doubles, will you be able to buy less than you buy today, the same as you can buy today, or more than you can buy today? *[less; the same; more; don't know; refuse]*

# Measuring financial literacy, cont.

## Numeracy/ simple Interest

Suppose you need to borrow \$100. Which is the lower amount to pay back: \$105 or \$100 plus three percent? [*105 US dollars; 105 US dollars plus three percent; don't know; refuse*]

## Compound Interest

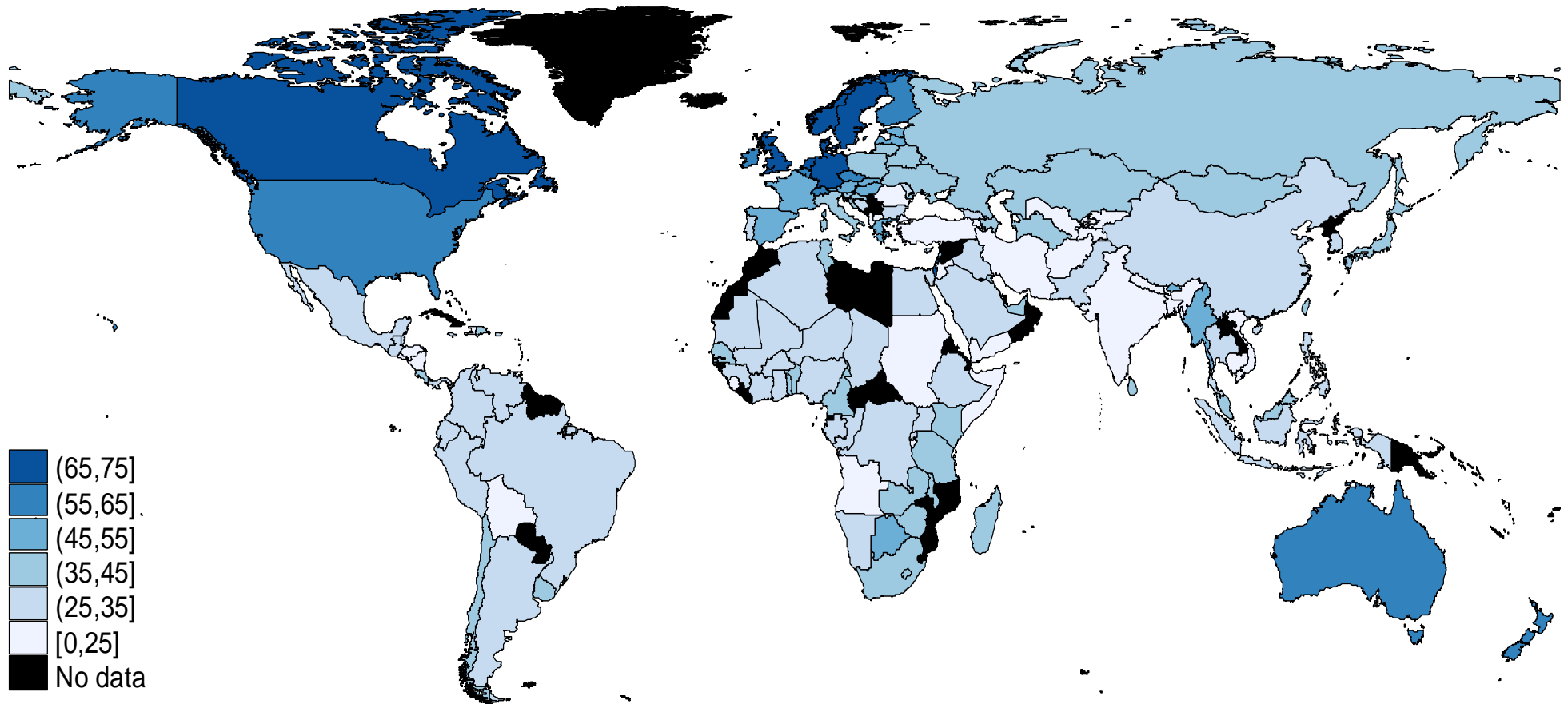
Suppose you put money in the bank for two years and the bank agrees to add 15 percent per year to your account. Will the bank add more money to your account in the second year than it did in the first year, or will it add the same amount of money in both years? [*more; the same; don't know; refuse*]

Suppose you had \$100 in a savings account and the bank adds 10 percent per year to the account. How much money would you have in the account after five years if you did not remove any money from the account? [*more than 150 US dollars; exactly 150 US dollars; less than 150 US dollars; don't know; refused*]



# Financial literacy globally

% of adults who are financially literate



- 1 in 3 adults worldwide responded correctly to 3 topics out of 4 topics
- Middle East at 26% and South Asia at 23% are very low financial literacy areas

# Global Ranking

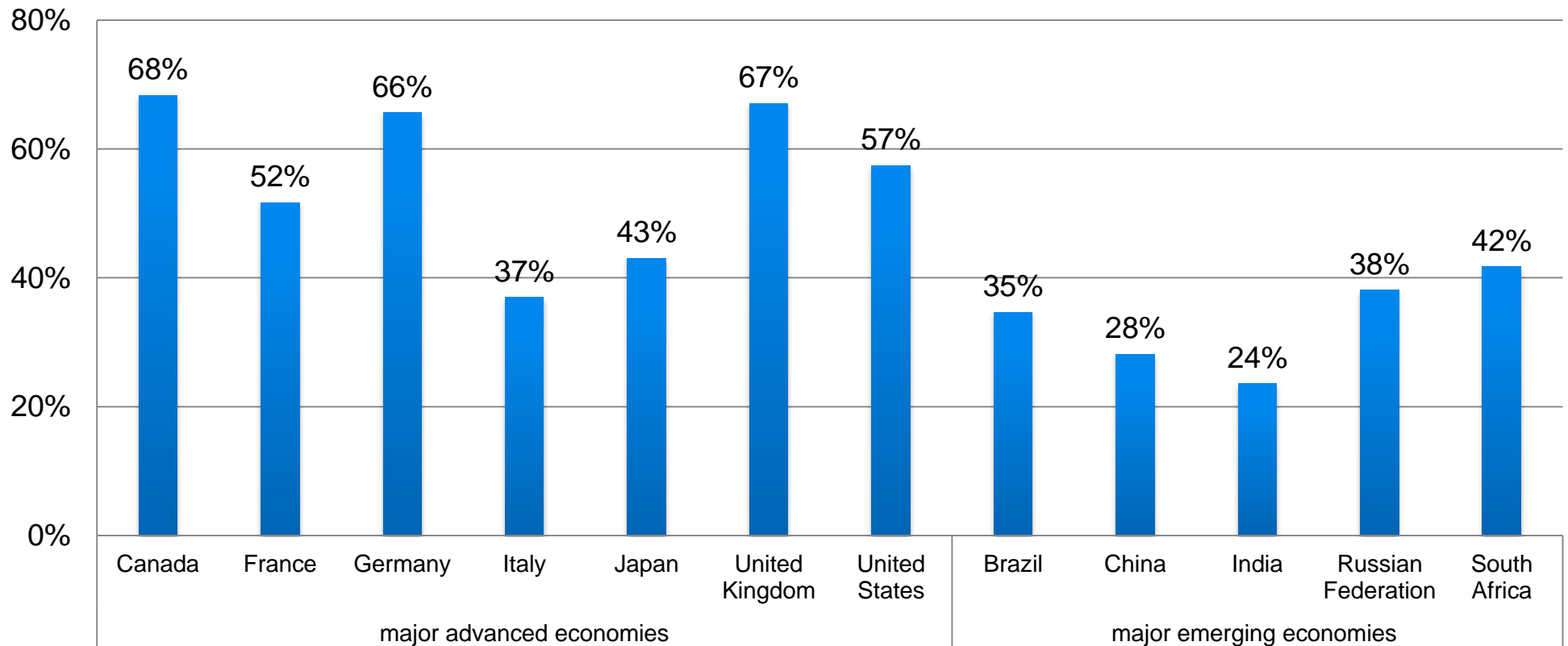
*Norway, Denmark, and Sweden lead the world with 71% of adults answering three out of four topics correctly.*

*In the US, 57% answer three out of four topics correctly. Twelve countries have higher rates.*

GFLS Ranking	Country	at least 3 out of 4 topics answered correctly (%)
1	Norway	71%
2	Denmark	71%
3	Sweden	71%
4	Israel	68%
5	Canada	68%
71	Gabon	35%
72 (Median)	Bulgaria	35%
73	Côte d'Ivoire	35%
140	Angola	15%
141	Somalia	15%
142	Afghanistan	14%
143	Albania	14%
144	Yemen	13%

# Financial literacy in advanced countries and in emerging economies

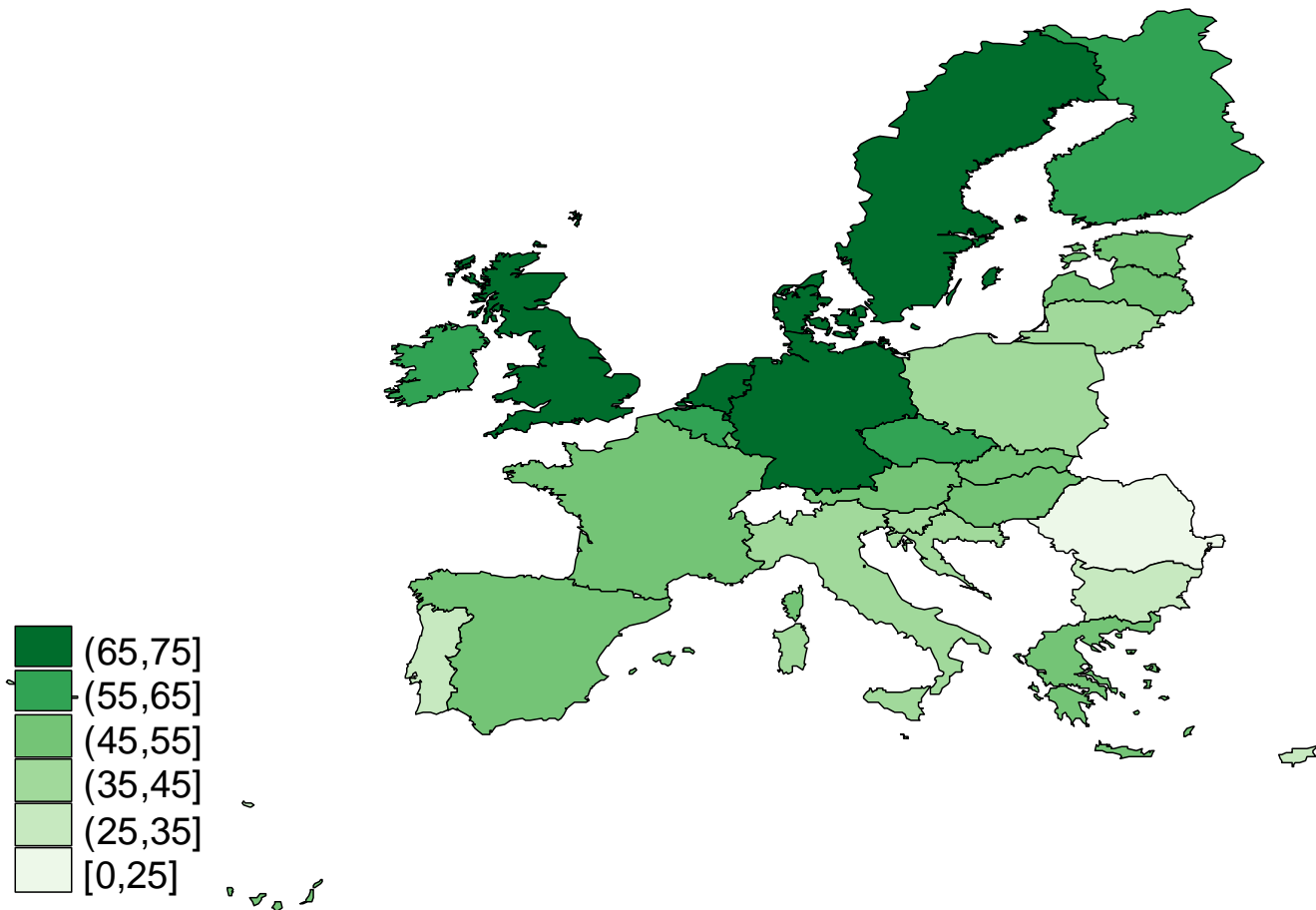
**% of adults who are financially literate**



- Financial literacy is low even in advanced countries
- Financial literacy is low in most BRIC countries
- Findings are consistent with the FLat World Project and other surveys

# Financial literacy in Northern and Southern Europe

% of adults who are financially literate



- Financial literacy varies a lot between Northern and Southern Europe
- Spain is at 49%, Portugal at 26% versus Germany (66%) and UK (67%)

# Financial literacy around the world (summary)

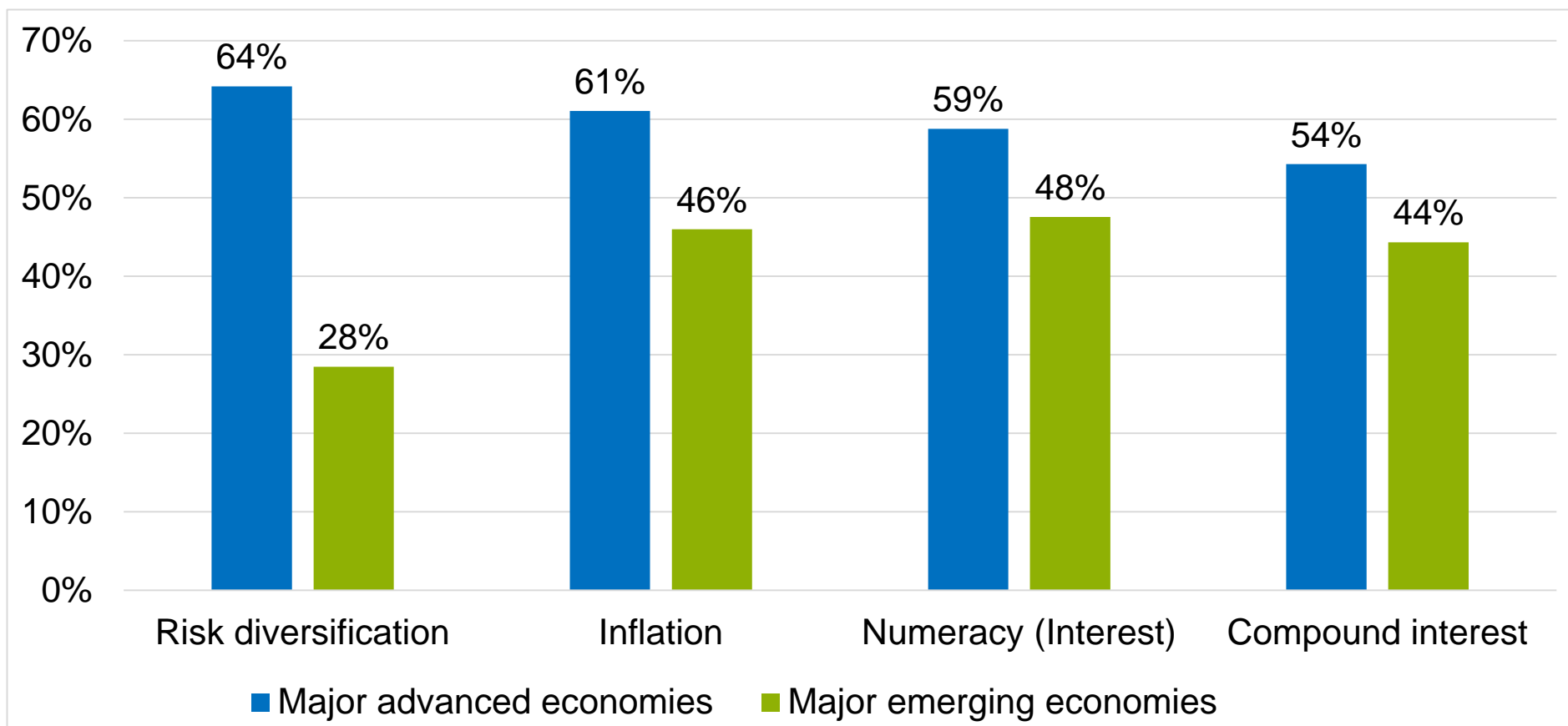
## Very rich data

- 33% of adults worldwide are financially literate
  - Around 3.5 billion adults globally lack an understanding of basic financial concepts, most of them living in developing economies
- Global figures conceal deep disparities across countries around the world
  - Differences between advanced and emerging economies
  - Differences are sharp even within Europe
- Emerging countries have a long way to go

**These findings are consistent with data from other surveys**

# Financial literacy globally: What do people know?

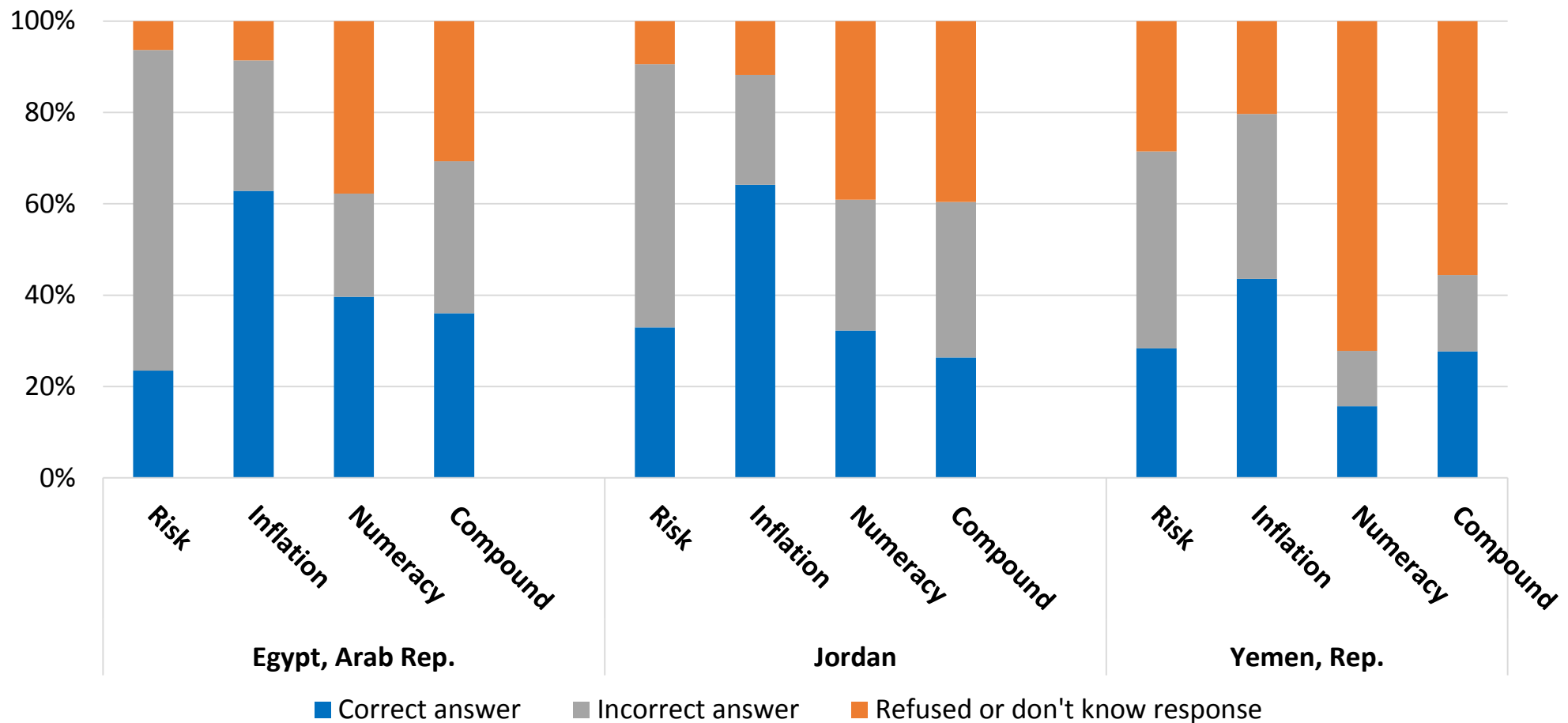
**% of adults who answer the financial literacy questions correctly**



- Inflation and simple interest/numeracy is what people know the most
- Risk diversification is what people know the least and where differences are largest

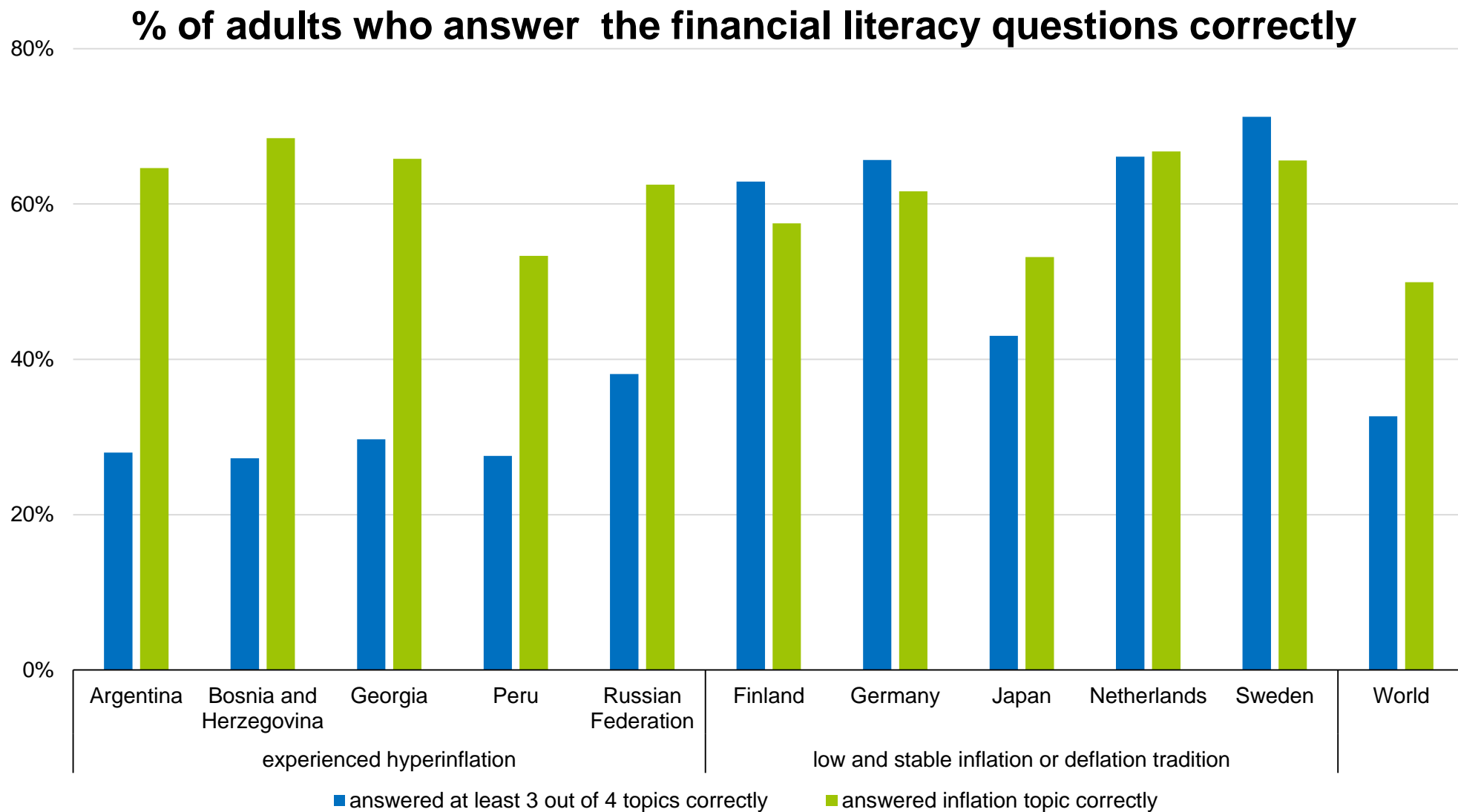
# Financial literacy globally: Knowledge of compound and simple interest

**% of adults who answer the financial literacy questions correctly**



- **Knowledge of compound and simple interest is normally high, but not in Muslim countries (prevalence of ‘do not know’ answers)**

# Financial literacy globally: Knowledge of inflation



Respondents in countries that experienced high inflation are more likely to know about it



# Financial literacy around the world: Which topics do people know?

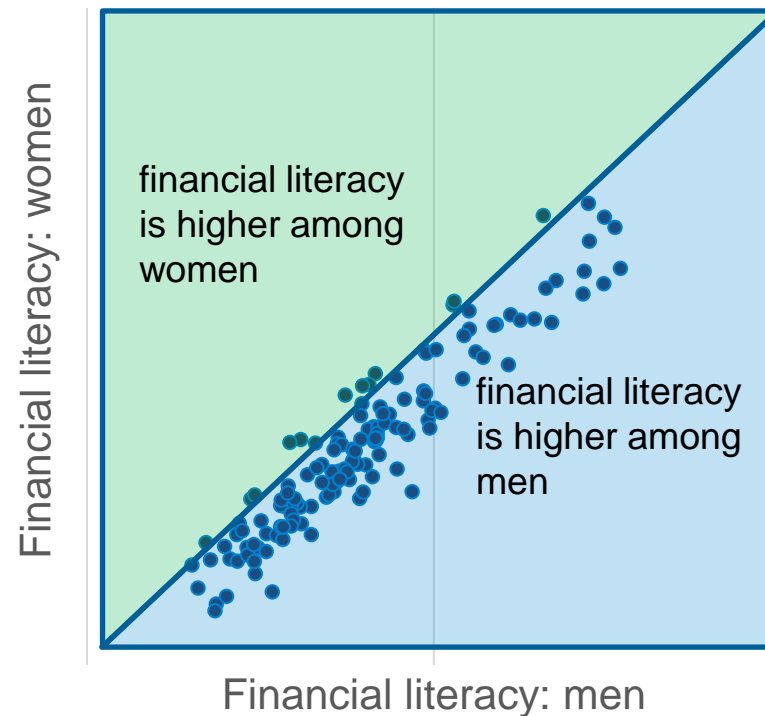
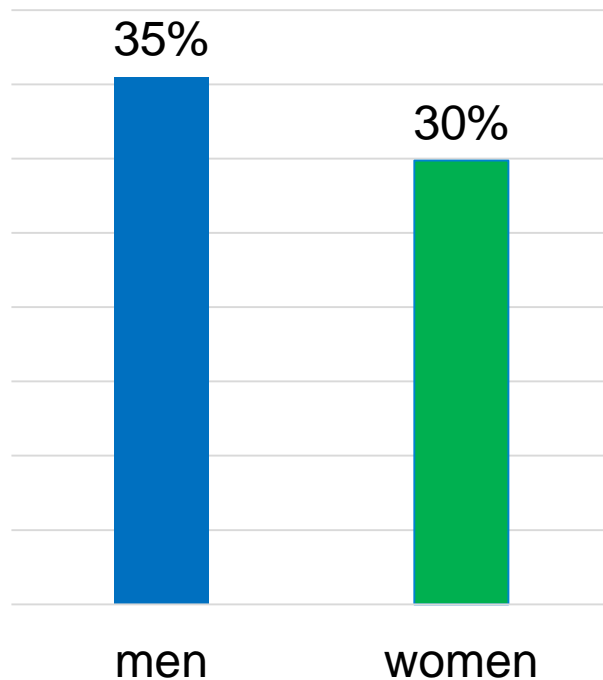
## Digging deeper in the financial literacy measure

- Inflation and simple interest/numeracy is what people know most across countries
  - There are differences across countries
- Evidence of learning by experience
  - Respondents in countries that experience hyperinflation know more about inflation
- Risk diversification is what people know the least
  - Large differences across countries

**These findings are consistent with data from other surveys**

# The gender gap in financial literacy

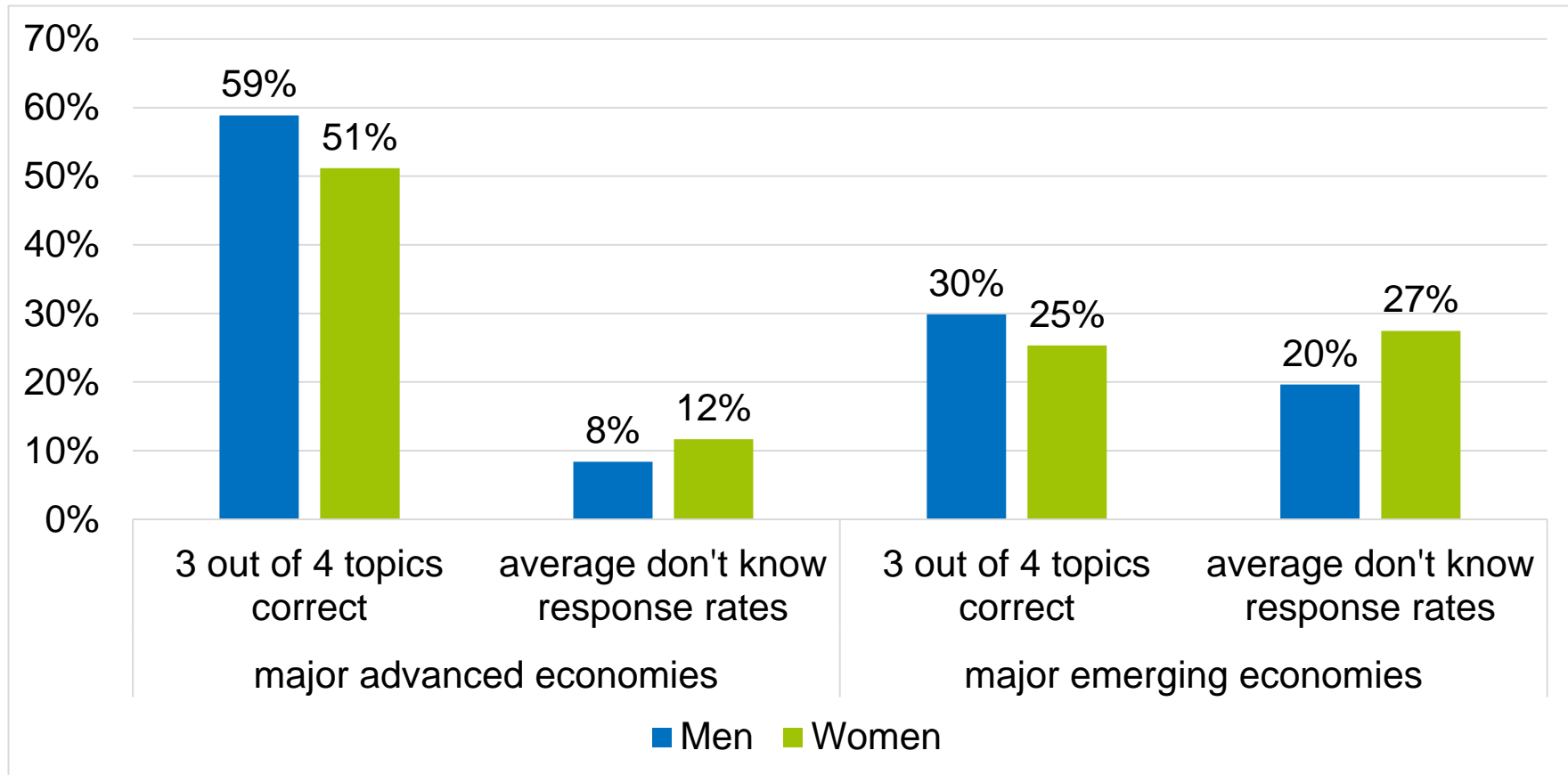
**% of adults who are financially literate**



- **The average gender gap in financial literacy is 5 percentage points**
- **The gender gap in financial literacy is present in most countries**

# Gender differences in financial literacy are everywhere

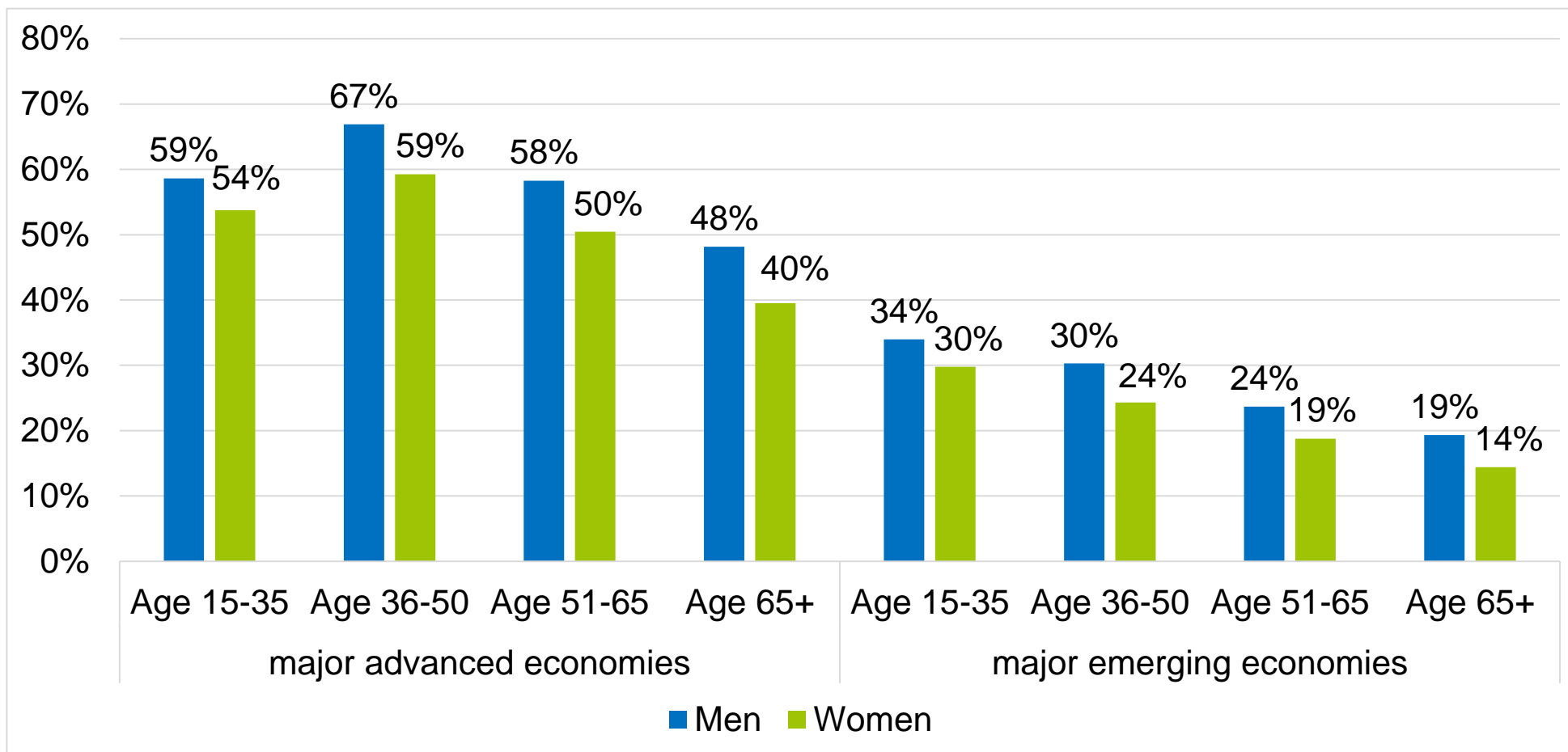
**% of adults who are financially literate**



- **Women are more likely to answer “I do not know”**

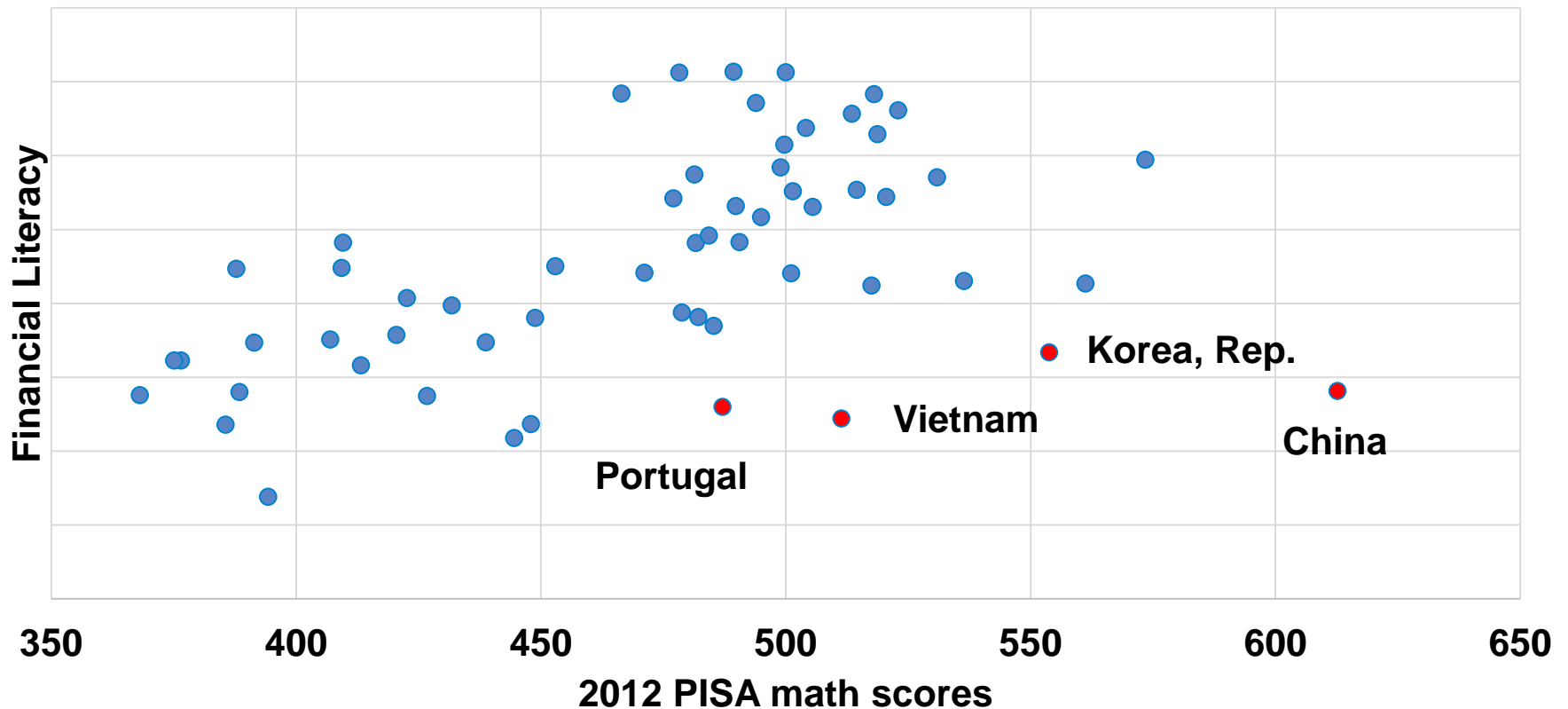
# Financial literacy over the life cycle: By gender

**% of adults who are financially literate**



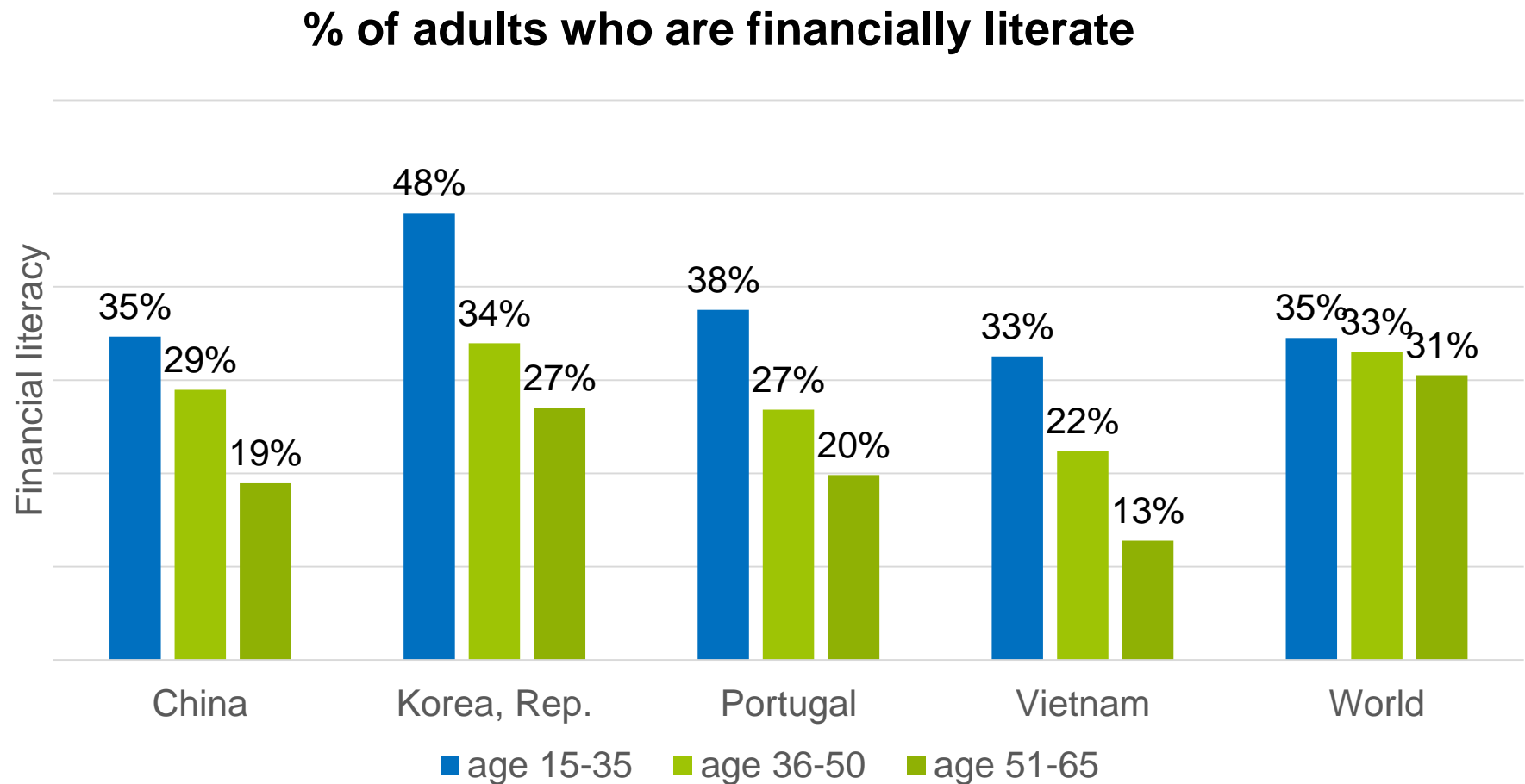
- **Knowledge of women is low across the life cycle & across countries**
- **Different life cycle profiles of financial literacy across countries**

# Combining data from PISA (math) and Gallup Survey



- Positive relationship between knowledge of the young and the general population
- The young are doing well in some countries

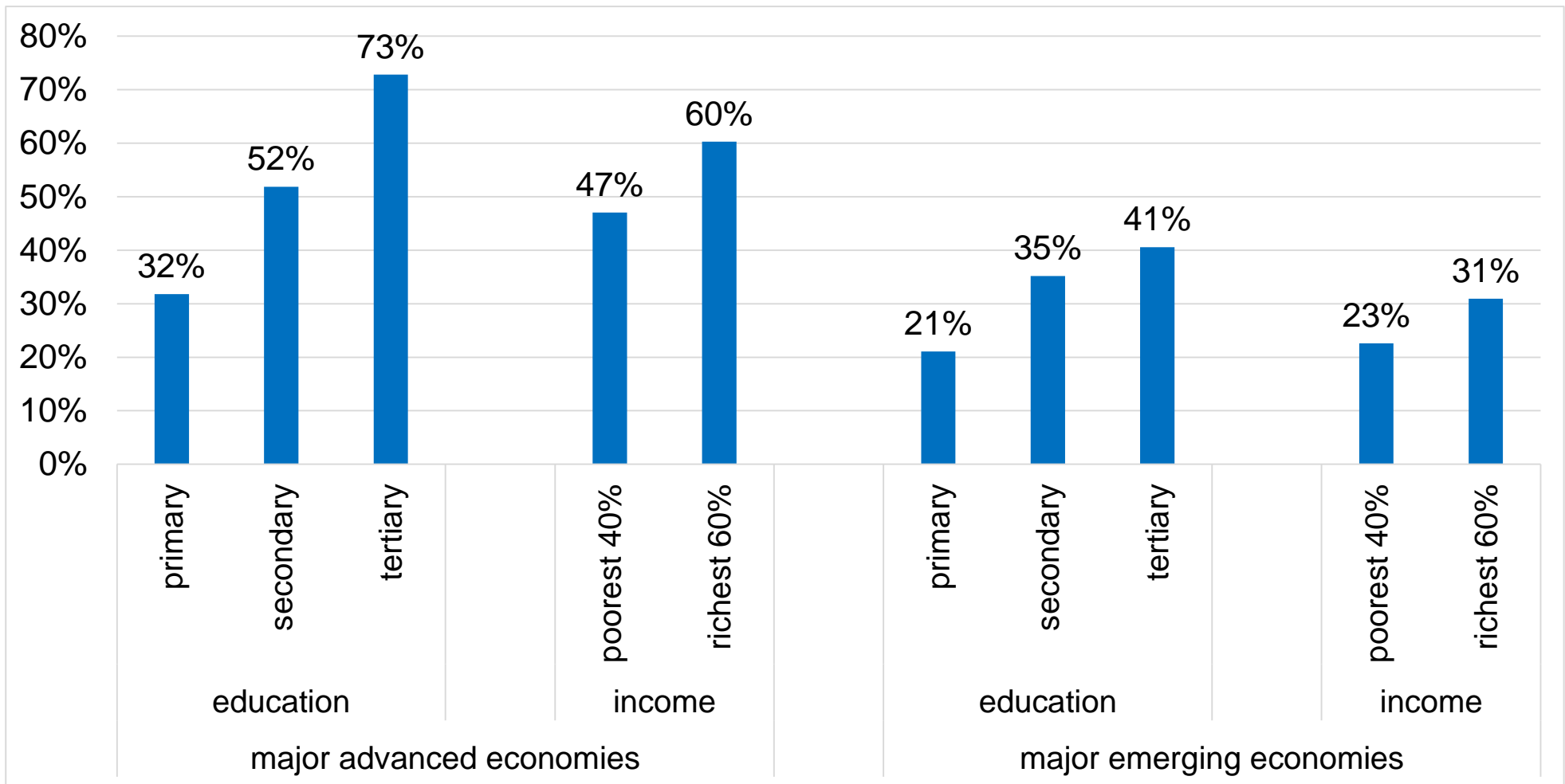
# Financial literacy among the young in selected countries



- **Financial literacy is relatively high among the young in these countries**
- **GFLS can be used to identify success stories; link with policy initiatives**

# Financial literacy by income and education

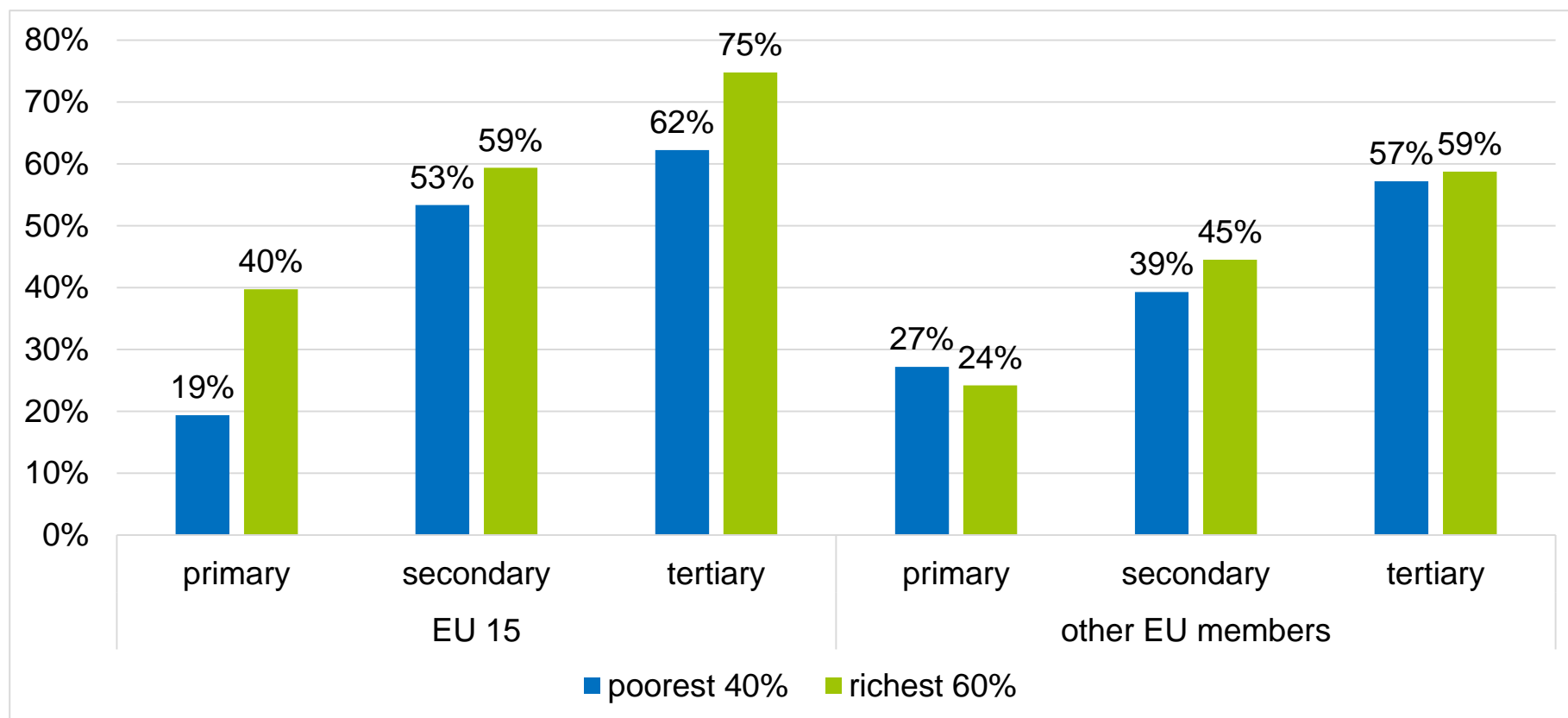
**% of adults who are financially literate**



- **Similar findings in other surveys**

# Financial literacy by income and education in EU

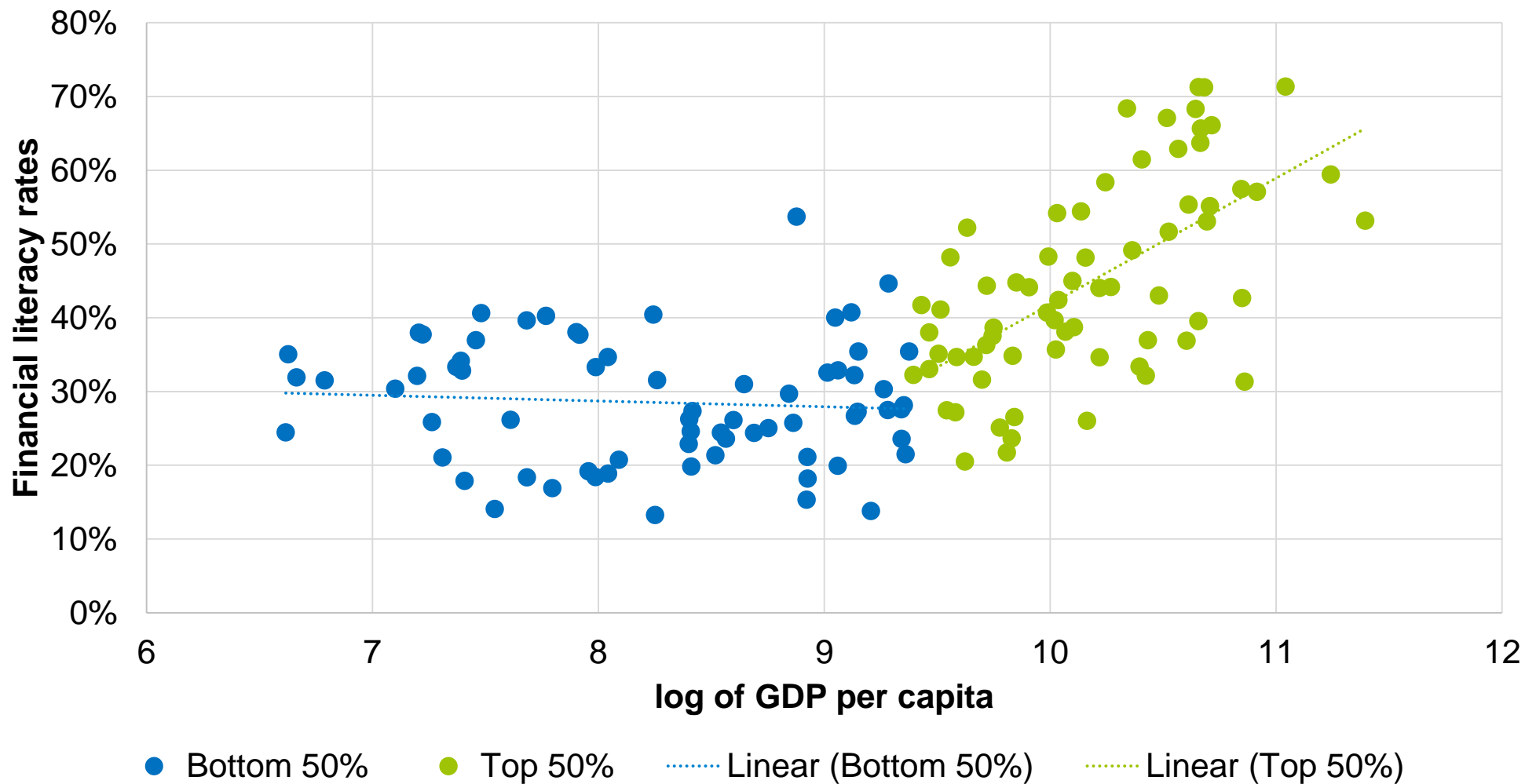
**% of adults who are financially literate**



- **Strong correlation of financial literacy with education and income in most countries**

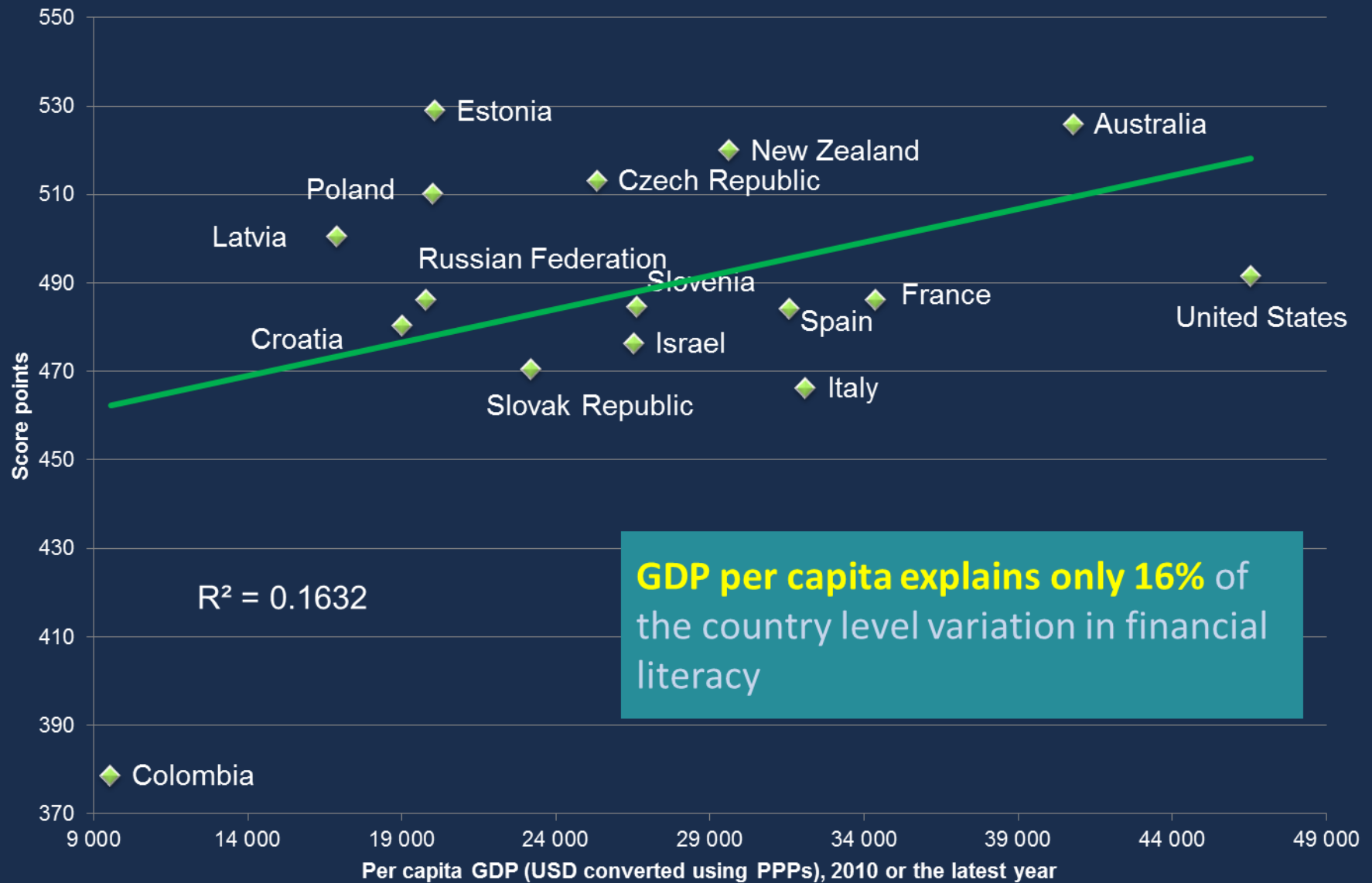


# Financial literacy and log of GDP per capita



- **Positive relationship in higher income countries**

# Financial literacy and GDP per capita in PISA



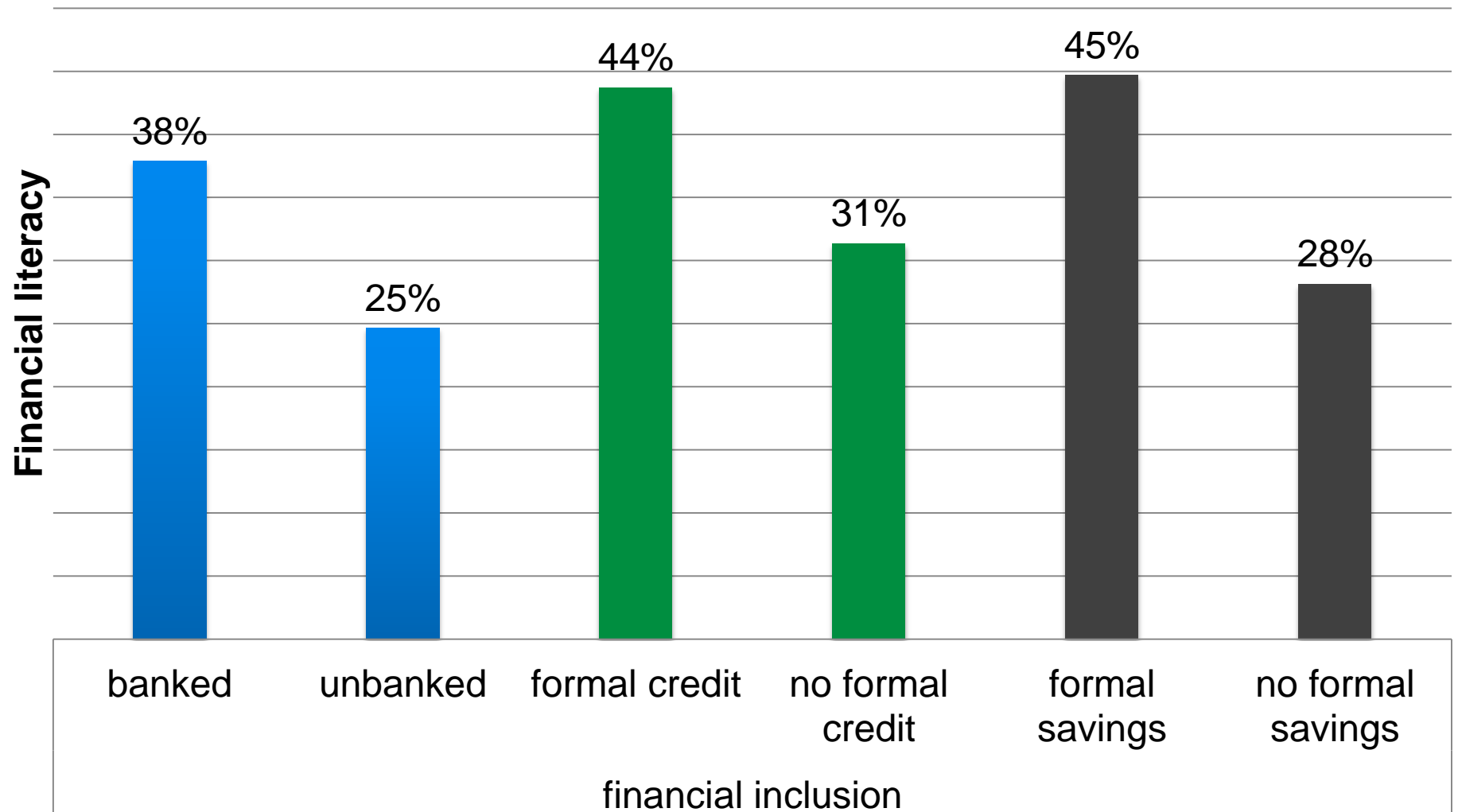
# Differences in financial literacy around the world

## Very rich data to understand differences in finlit

- Differences in financial literacy are large across countries and within countries
- Gender differences in financial literacy in all countries
  - Women are more likely to know that they lack knowledge!
- The young are a vulnerable group, but not in all countries
- Differences across education and income

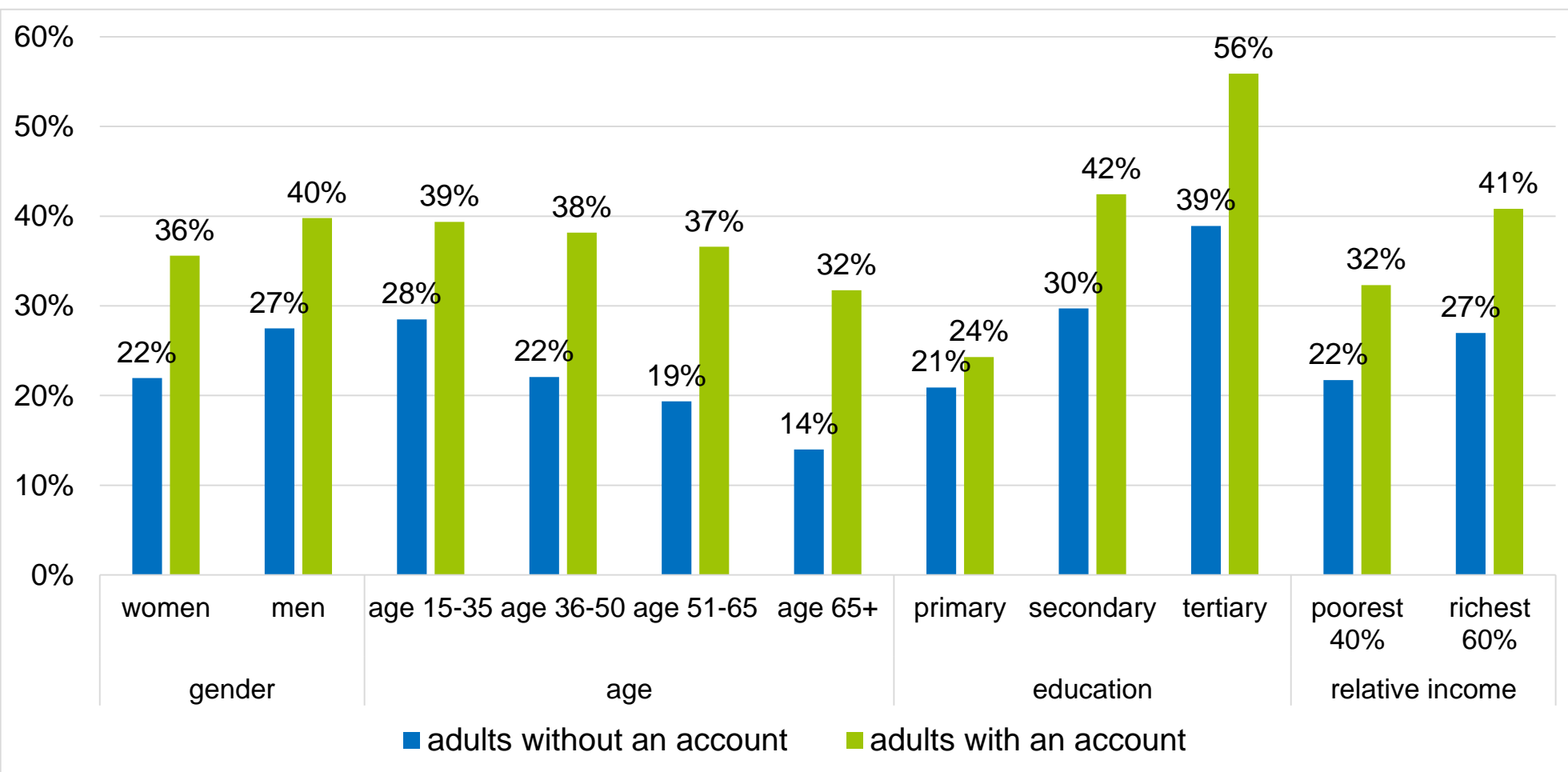
# Financial literacy and financial inclusion

**% of adults who are financially literate**



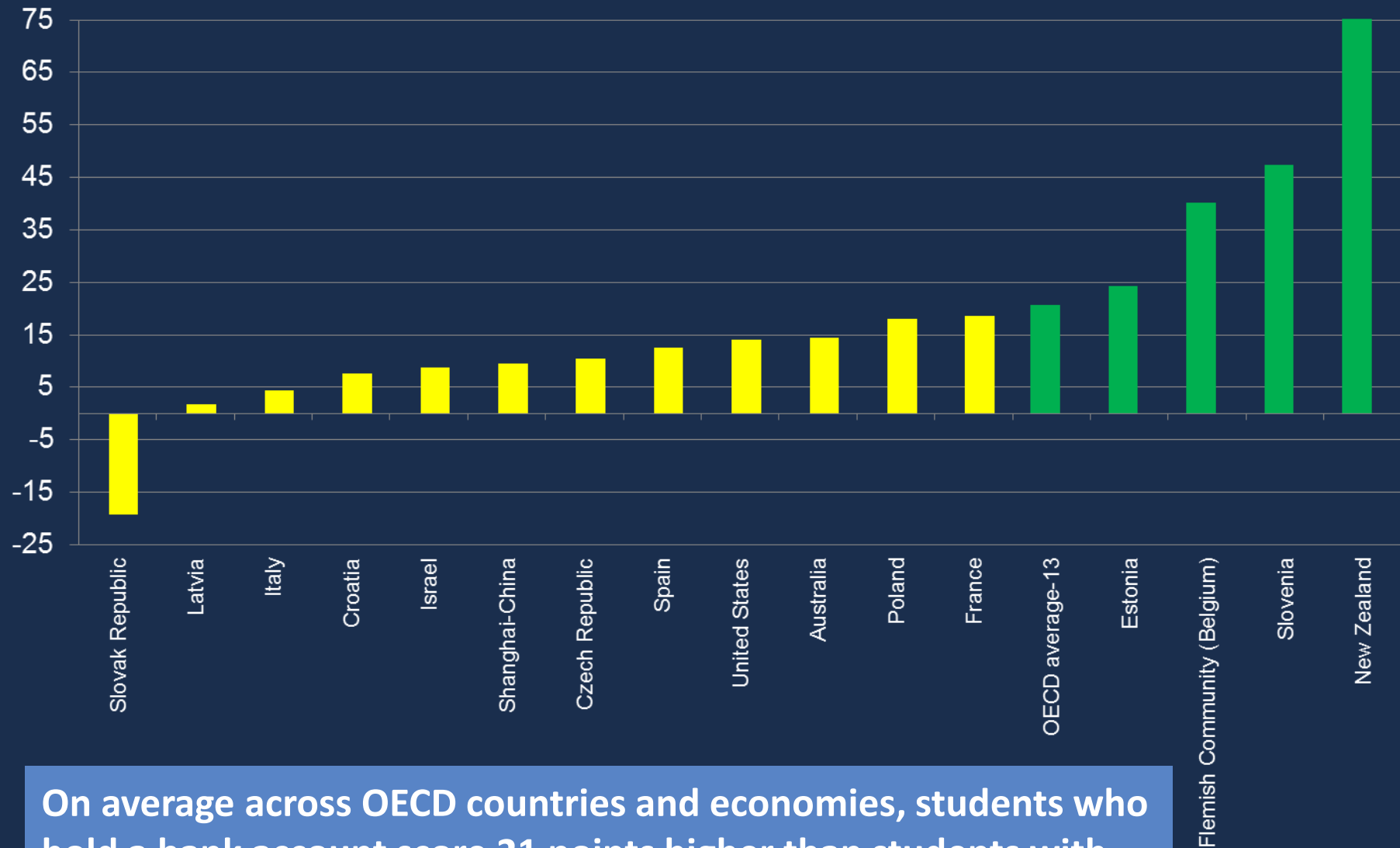
# Financial literacy and bank accounts

## % of adults who are financially literate



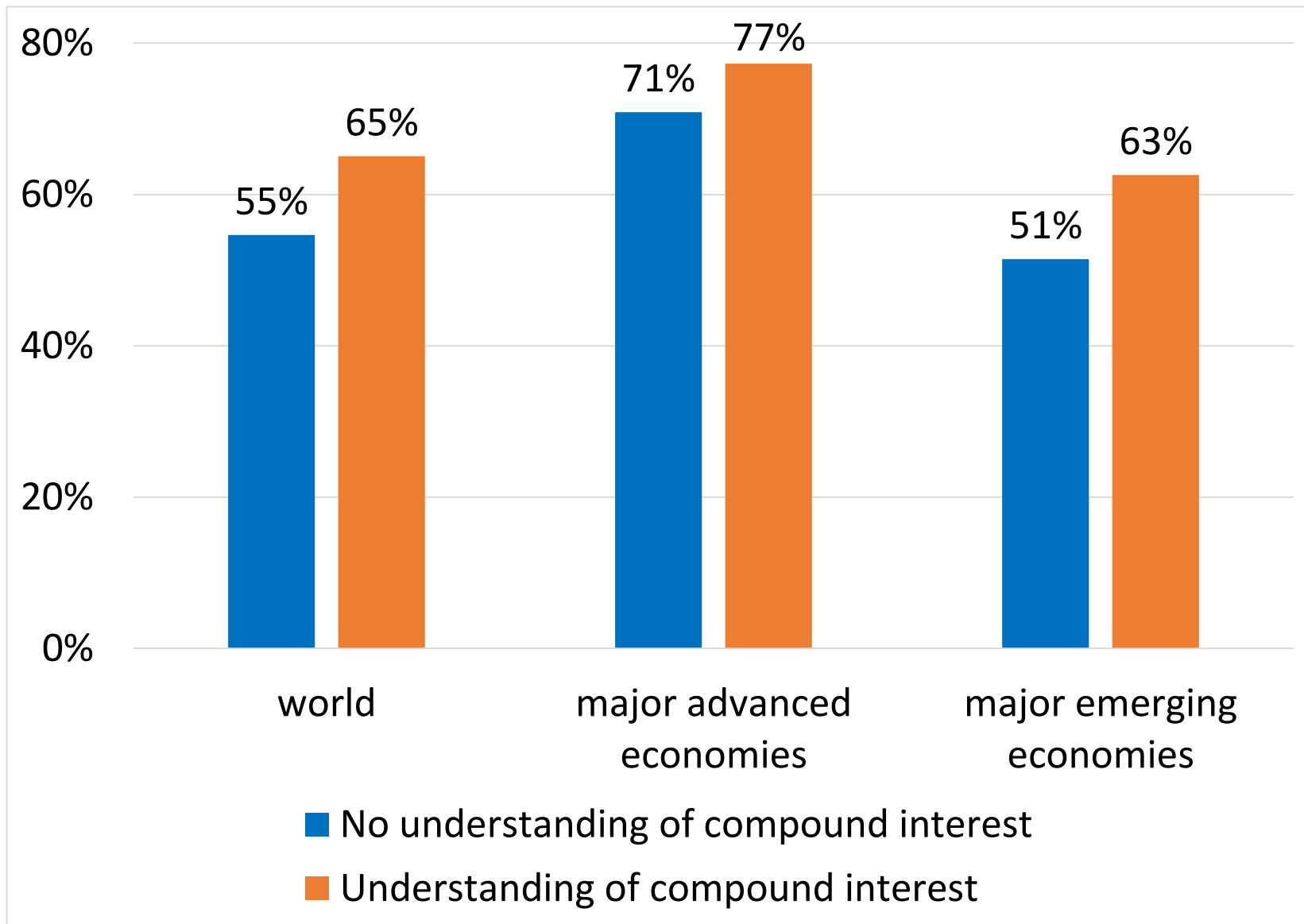
- **Positive links between financial literacy and financial inclusion**

# Financial literacy and bank account holding (accounting for socio-demographics) in PISA data



**On average across OECD countries and economies, students who hold a bank account score 21 points higher than students with similar socio-economic status who do not.**

# Account use among account holders who save



# Several findings

## Summary and take-aways

- Financial illiteracy is widespread in the population
- Risk diversification is most difficult concept to grasp
- Differences in financial literacy are very large across demographic groups
- There is a link between financial literacy and financial inclusion



# Implications for investor education

## How these data can inform policy and programs

- **Financial illiteracy is widespread**
  - We are at a crisis level
- **One size does not fit all**
  - Need for more targeted programs, particularly for vulnerable groups
- **Women are ideal targets for financial educ programs**
- **Limited (one-time) financial education programs are not going to be effective**
  - Widespread financial illiteracy requires robust interventions

# Implications for investor education (cont.)

## How these data can inform policy and programs

- **Communication should be done in simple ways**
  - Little knowledge of basic finance jargon
- **We need large and scalable programs**
  - Financial education in school
  - Financial education in the workplace
  - Financial education in the community (libraries, museums, other places where people go to learn)

# Final thoughts

## Shifting paradigm

### ➤ **Financial literacy is like reading and writing**

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

### ➤ **Building human capital for the 21<sup>st</sup> century**

- Everyone deals with finance and finance is sufficiently complex that we cannot leave it to the individual to learn by himself/herself

# Quote

**“Knowledge is in every country  
the surest basis of public  
happiness.”**

***George Washington, First President of the  
United States (1789–97)***

# Quote

**“(Financial) knowledge is in every country the surest basis of public happiness.”**

*George Washington, First President of the United States (1789–97)*

# Final quote

**“If you think education is expensive, try ignorance”**

***Derek Bok, Former President of Harvard  
(1971-1991)***

# Contact and further information

## **Annamaria Lusardi**

Global Financial Literacy Excellence Center (GFLEC)

E-mail: [alusardi@gwu.edu](mailto:alusardi@gwu.edu)

Webpage: [www.gflec.org](http://www.gflec.org)

Blog: <http://annalusardi.blogspot.com/>

Twitter: [@A\\_Lusardi](https://twitter.com/A_Lusardi)

