



**SEMINAR ON CHILD AND YOUTH FINANCIAL EDUCATION
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Financial Literacy: A Global Perspective

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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

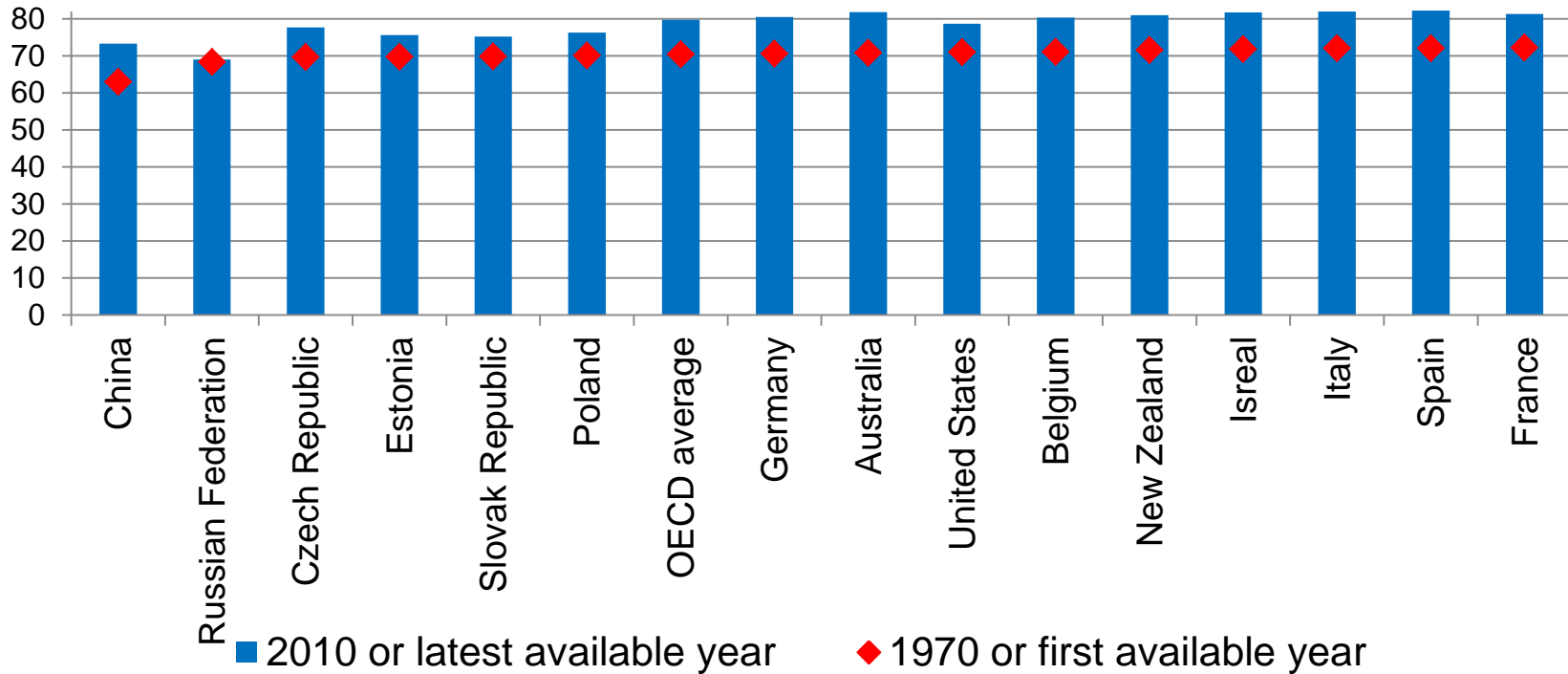
- Divergence in wages – skills are critical

➤ 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

Many questions

Given these changes:

- 1. How well-equipped are people to deal with this new economic environment?**
- 2. How does Brazil compare with other countries?**
- 3. Are there vulnerable groups?**
- 4. What can be done to improve financial literacy?**

Measuring financial literacy across countries

How well-equipped are people?

- 1. Financial Literacy around the World (FLAT World) project**
- 2. OECD' Programme for International Student Assessment (PISA)**
 - Financial literacy among the young (15 year olds)
- 3. S&P Global Financial Literacy Survey**

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



PISA?

What is PISA



Programme for International Student Assessment (PISA)

Measuring financial literacy among the young

- This is the first large-scale international study to assess the financial literacy of 15-year-old students
- 18 countries-economies participated in the 2012 Financial Literacy Assessment
- The countries-economies are: Australia, **Belgium (Flemish Community)**, **Shanghai-China**, Colombia, Croatia, Czech Republic, Estonia, France, Israel, Italy, Latvia, New Zealand, Poland, Russia, Slovak Republic, Slovenia, Spain, and the United States



PISA 2012 Results: Students and Money

FINANCIAL LITERACY SKILLS
FOR THE 21ST CENTURY

VOLUME VI



New data on financial literacy around the world

- *The S&P Global FinLit Survey* is the largest, most comprehensive measure of financial literacy.
- Interviewed more than 150,000 adults age 15+ in over 140 countries
- The survey provides key information to policy makers, regulators, the private sector, and academics



GALLUP



Measuring financial literacy

What questions to ask

- **Theory: Saving (borrowing) and investing**
 - **Life-cycle model of saving**
 - **Portfolio choice**

Concepts:

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

The S&P Global FinLit Survey



The survey covers four topics:

- Numeracy
- Interest compounding
- Inflation
- Risk diversification

Being financially literate:

How many can answer 3 out of these 4 topics correctly

Measuring financial literacy

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; 100 US dollars plus three percent; don't know; refuse*]

Interest Compounding

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*]

Measuring financial literacy

Inflation

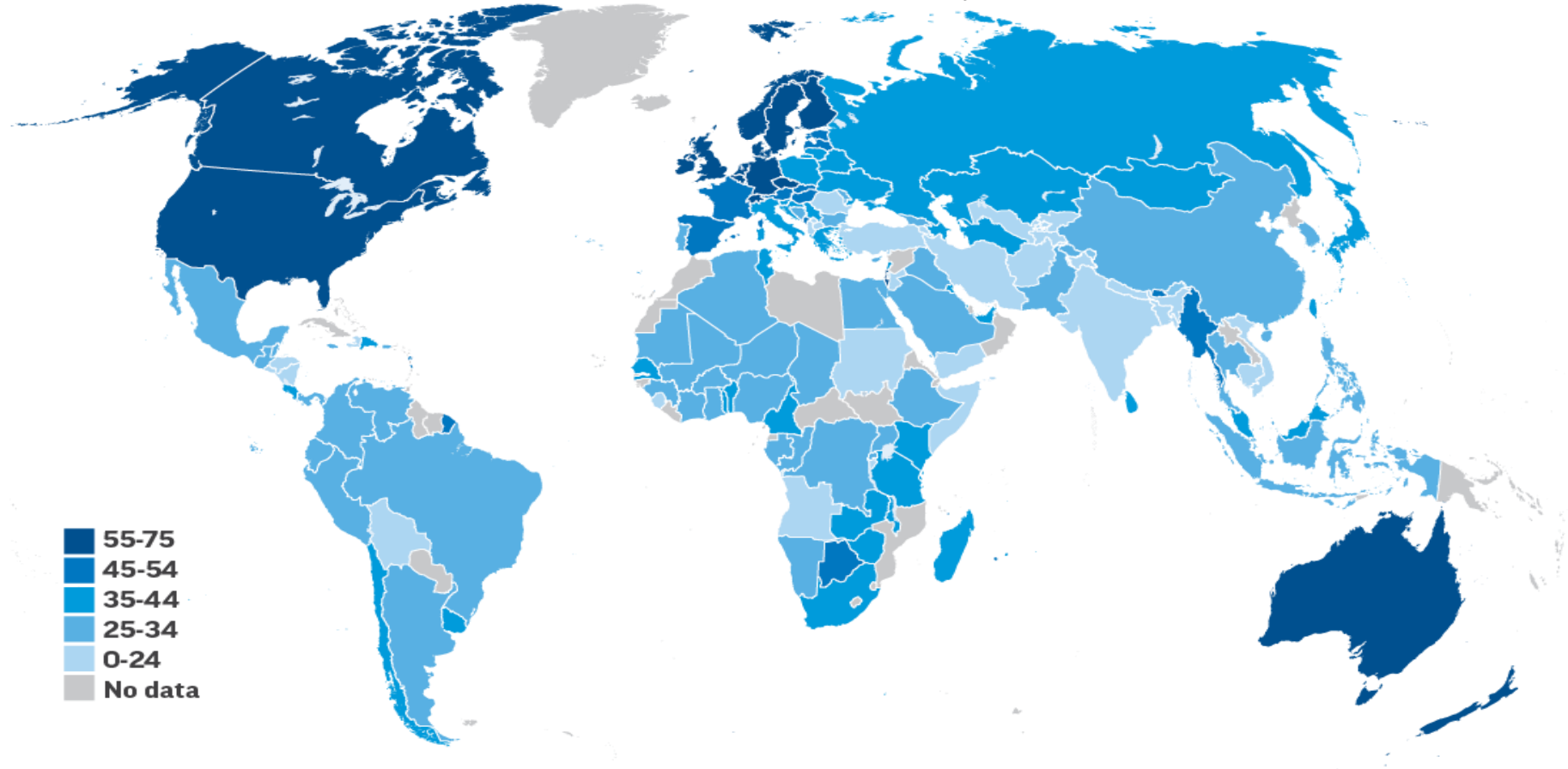
Suppose over the next 10 years the prices of things you buy double. If your income also doubles, will you be able to buy less than you buy today, the same as you can buy today, or more than you can buy today?
*[less; **the same**; more; don't know; refuse]*

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]*

Financial literacy globally

% of adults who are financially literate



- Only 1 in 3 adults worldwide responded correctly to three out of four topics. In Brazil, 35% are financially literate

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. US ranks 14th in the world

Findings consistent with FLAT World

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%
6	UK	67%
72 (Median)	Bulgaria	35%
73	Côte d'Ivoire	35%
140	Angola	15%
141	Somalia	15%
142	Afghanistan	14%
143	Albania	14%
144	Yemen	13%

Mean score

605
595
585
575
565
555
545
535
525
515
505
495
485
475
465
455
445
435
425
415
405
395
385
375

Strong performance in
financial literacy

Shanghai-China

Average performance
of 15-year-olds in
financial literacy

Flemish
Community
(Belgium)

Australia

Estonia

New Zealand

Czech Republic

Poland

Latvia

United States

Slovenia

Spain

France

Russian
Federation

Croatia

Israel

Slovak Republic

Italy

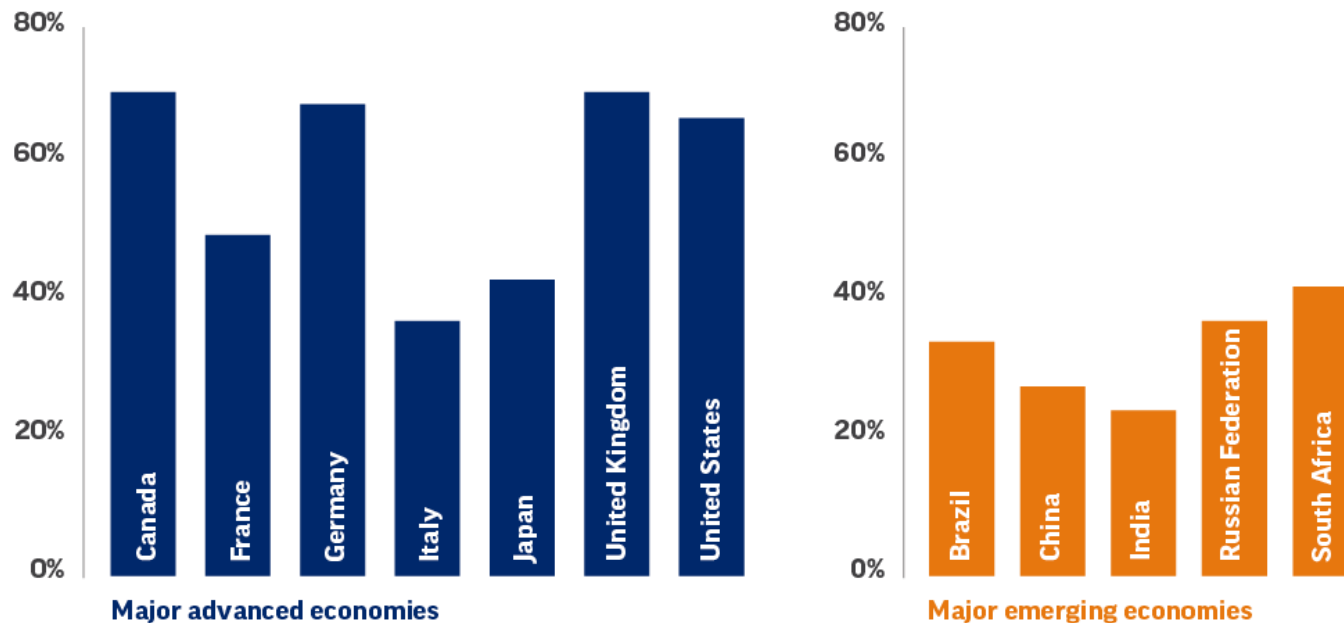
Colombia

Low performance in financial literacy



Financial literacy in advanced countries and in emerging economies

% of adults who are financially literate

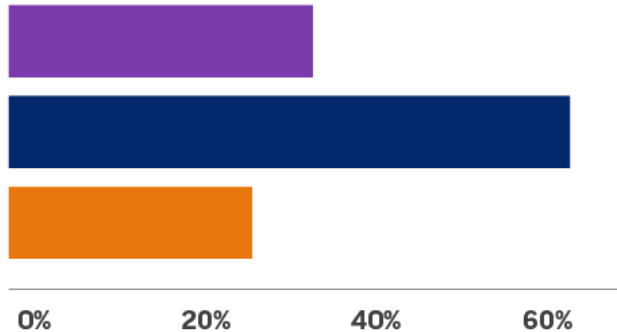


- Financial literacy is low even in advanced countries (e.g. Italy)
- Financial literacy is low among BRICS countries

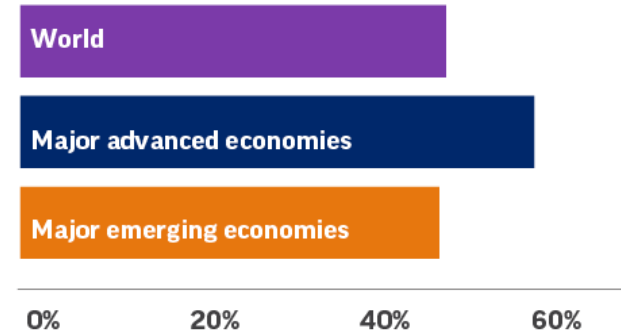
Financial literacy around the world: Which topics do people know?

% of adults who are financially literate

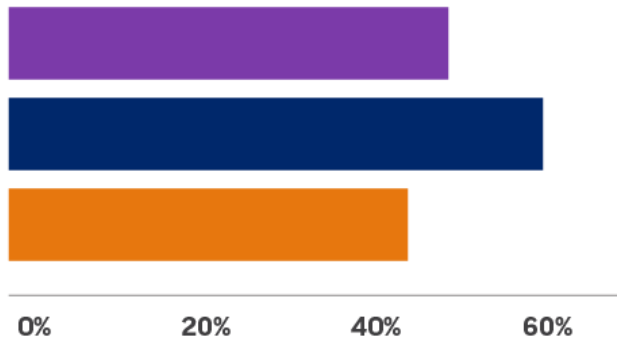
RISK DIVERSIFICATION



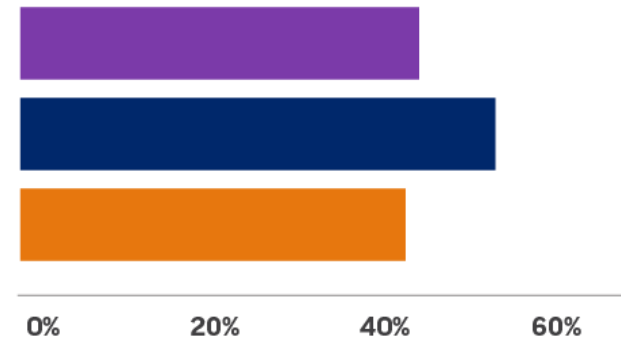
NUMERACY (INTEREST)



INFLATION

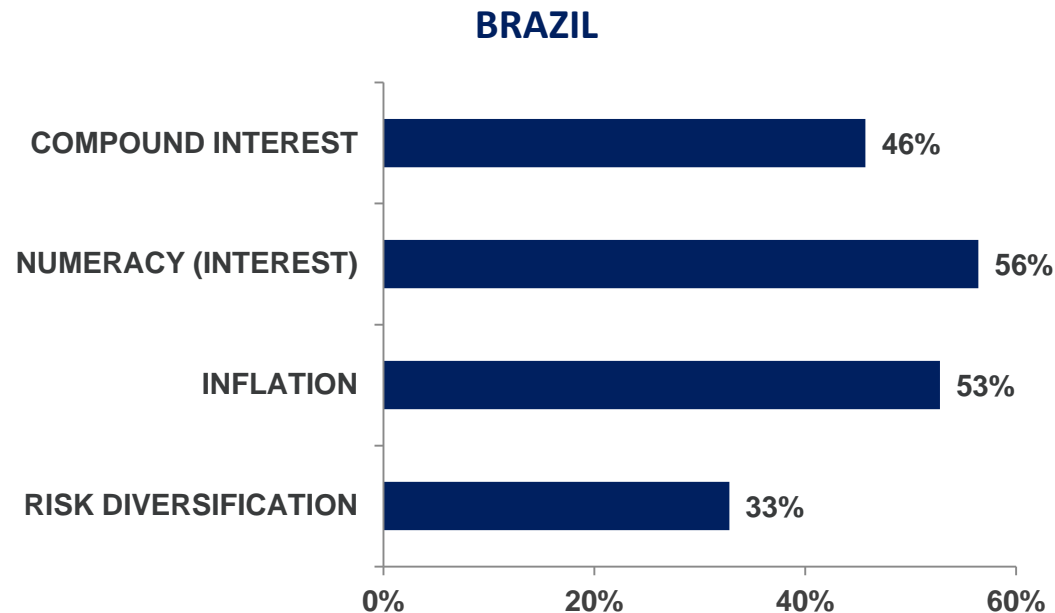


COMPOUND INTEREST



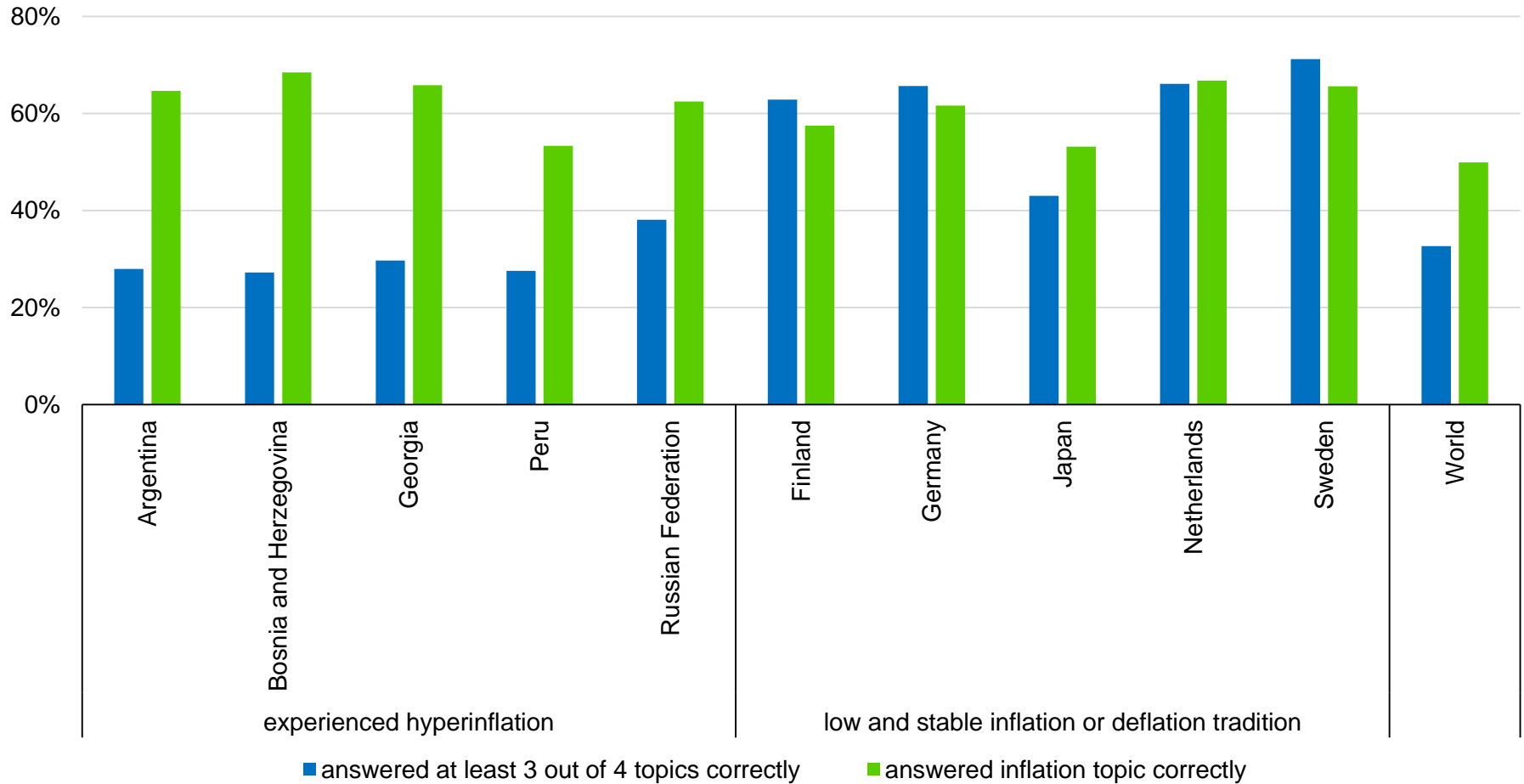
Financial literacy in Brazil: Which topics do people know?

% of adults who are financially literate



Financial literacy globally: knowledge of inflation

% of adults who answer the financial literacy questions correctly



Digging deeper in the financial literacy measure

➤ Inflation and simple interest/numeracy is what people know most across countries

- There are differences across countries

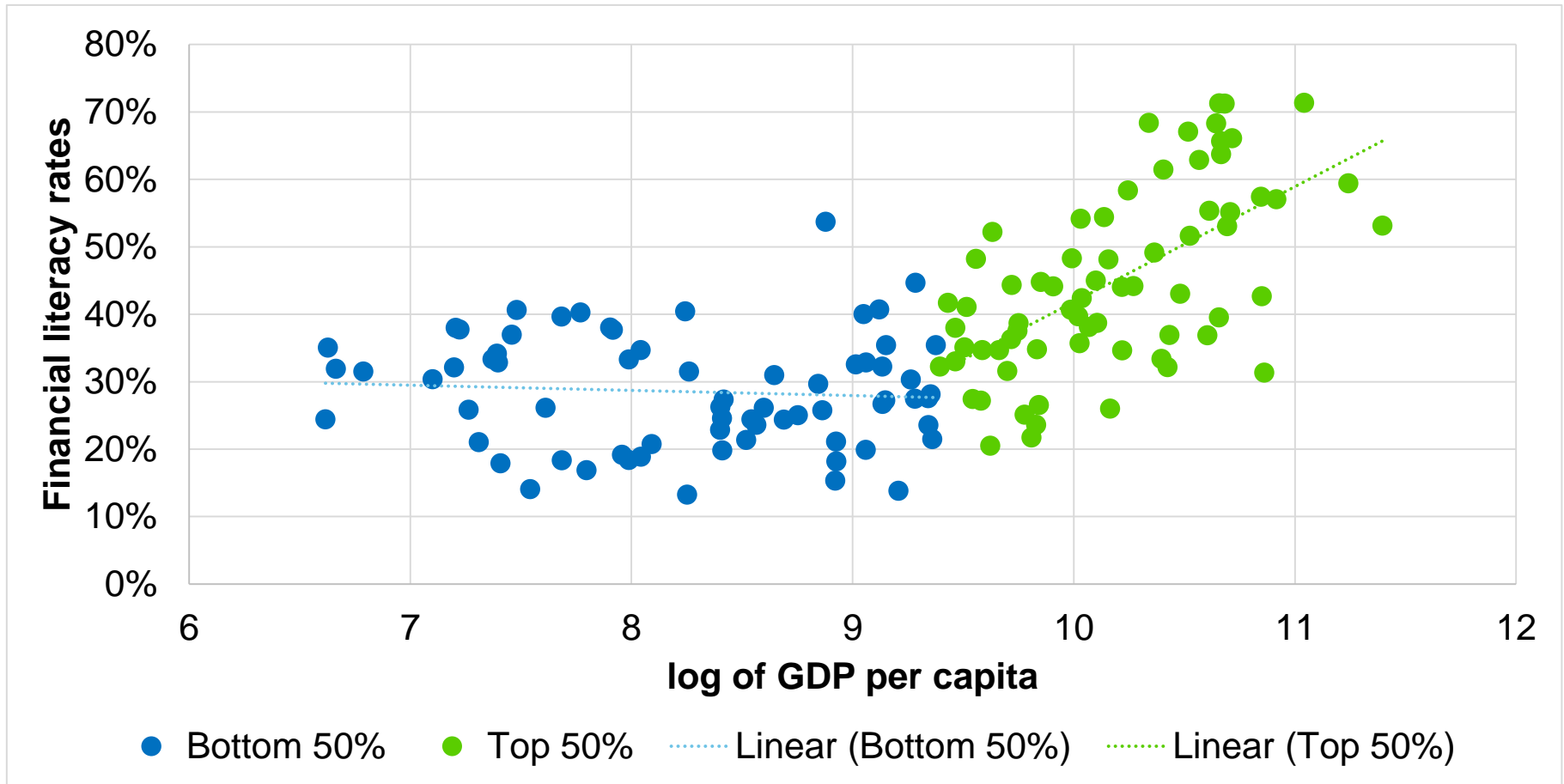
➤ Risk diversification is what people know the least

- Largest differences across countries

➤ Evidence of learning by experience

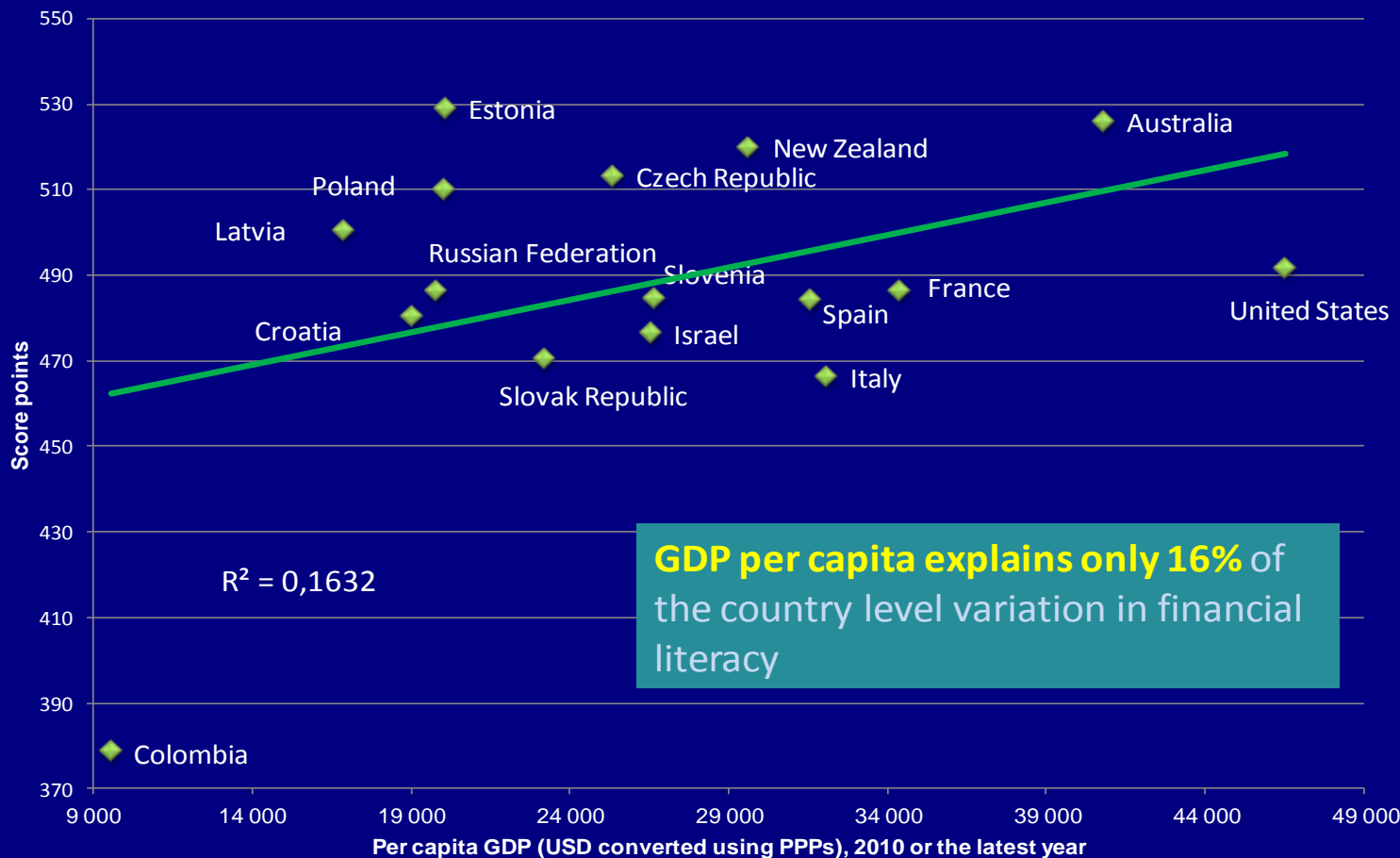
- Respondents in countries that experience hyperinflation know more about inflation

Financial literacy and log of GDP per capita



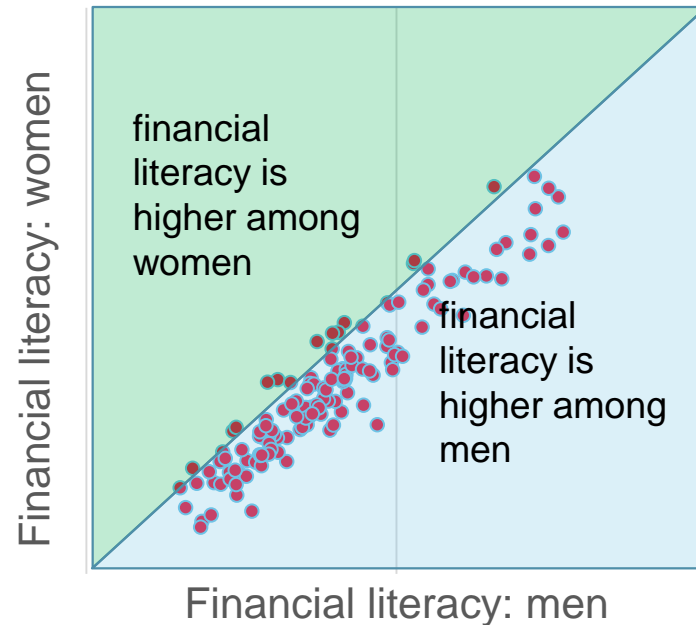
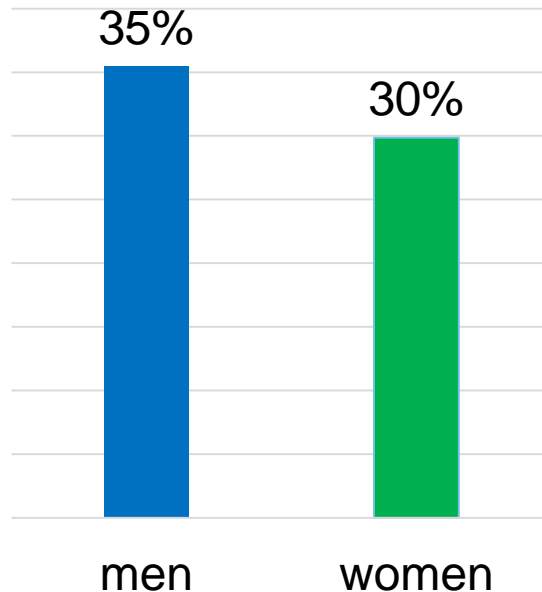
- Positive relationship in higher income countries

Financial literacy and GDP per capita in PISA



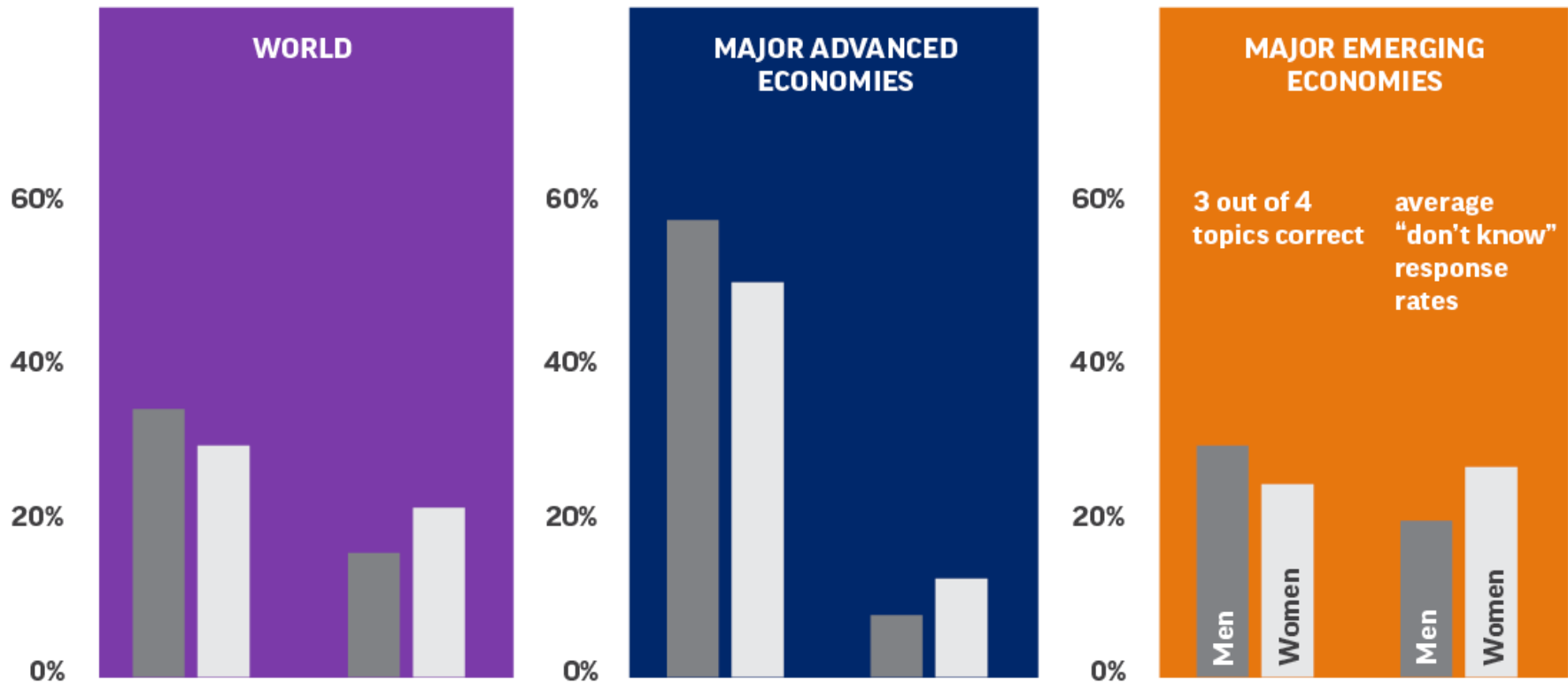
The gender gap in financial literacy

% of adults who are financially literate



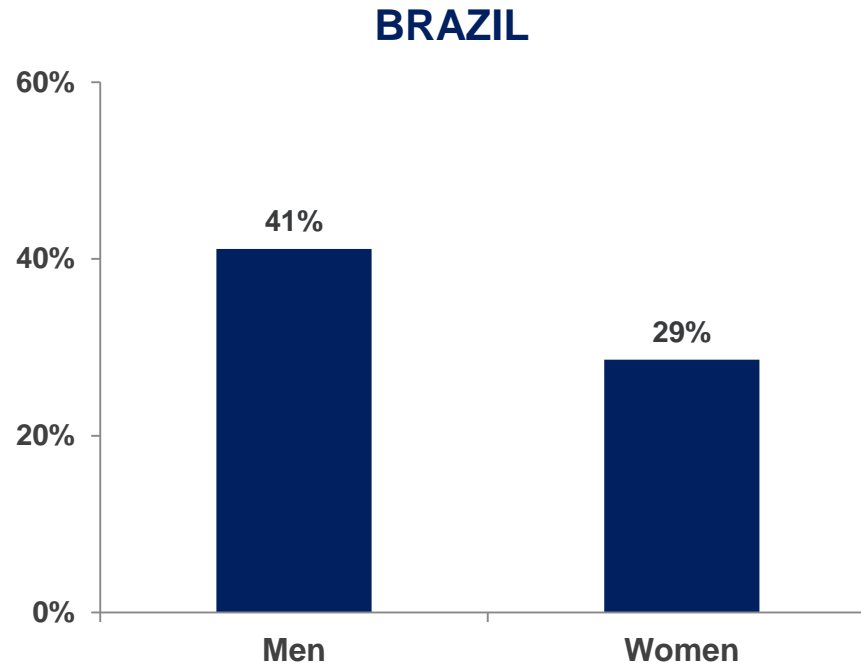
- The average gender gap in financial literacy is 5 percentage points
- The gender gap in financial literacy is present in most countries

The gender gap in financial literacy



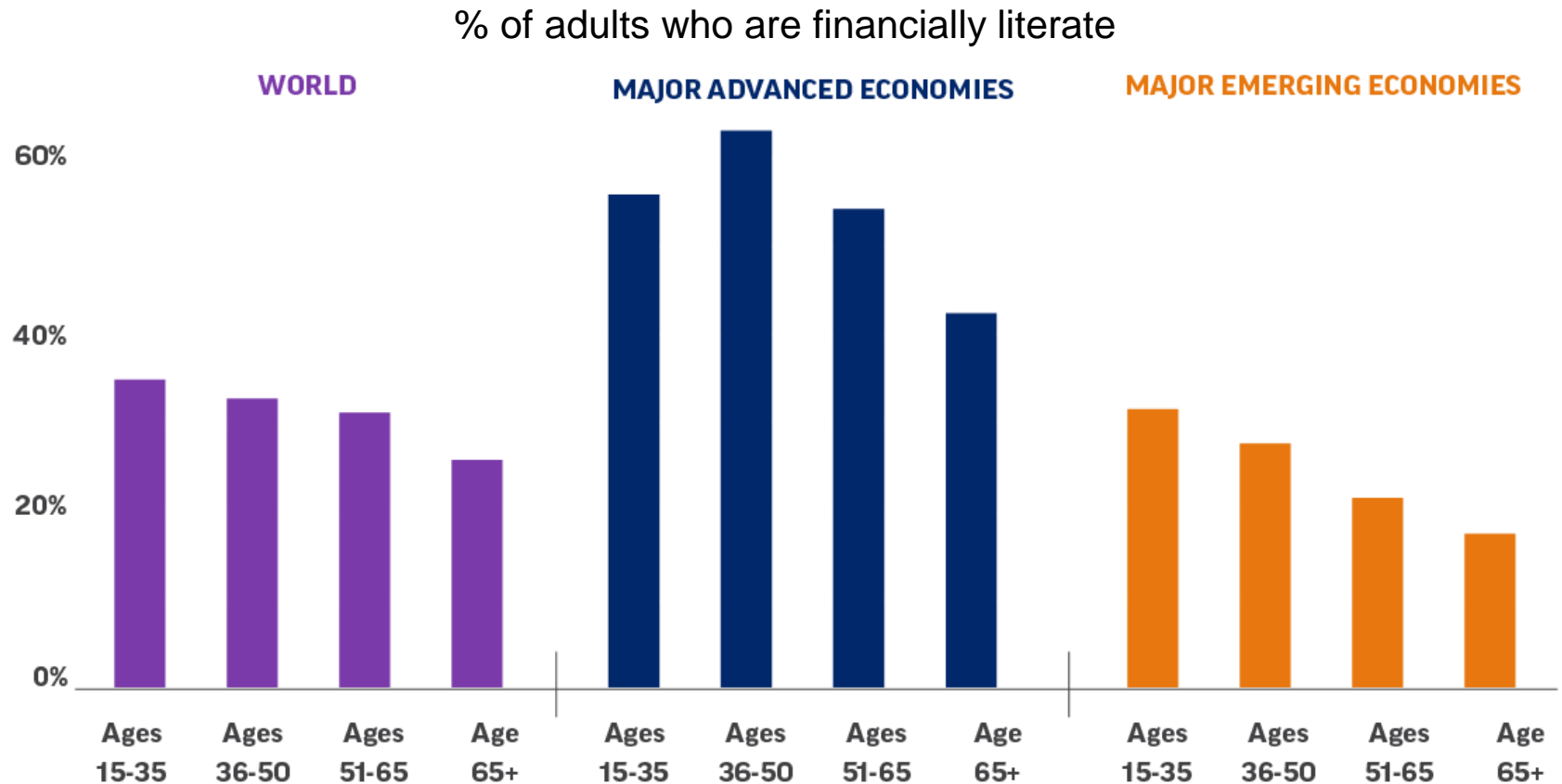
- The gender gap is present in both advanced and emerging economies
- Women are more likely to answer “I do not know”

The gender gap in financial literacy



- The gender gap in financial literacy in Brazil is 13pps, much higher than the average gap in the world

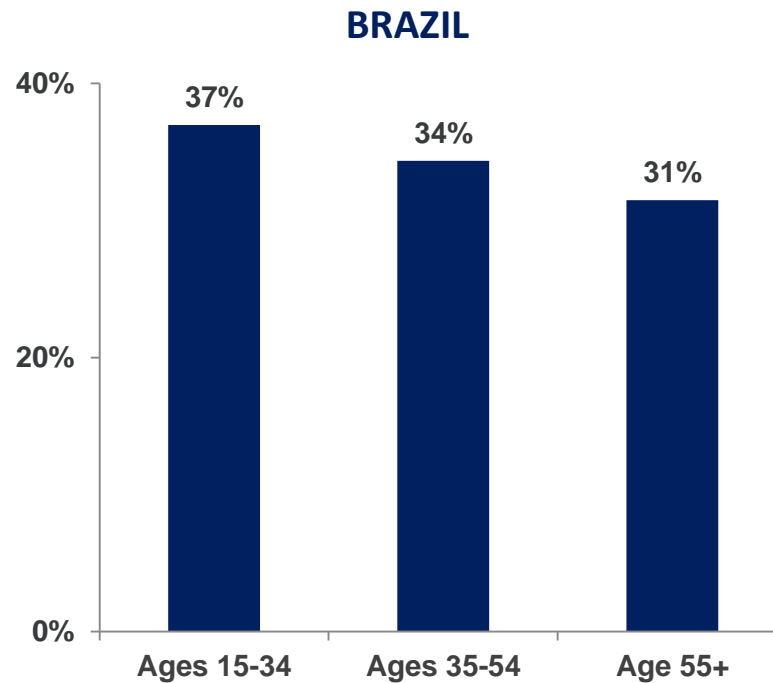
Financial literacy over the life cycle



- Different life cycle profiles of financial literacy across countries
- Young adults in major emerging countries are more financially literate than older respondents

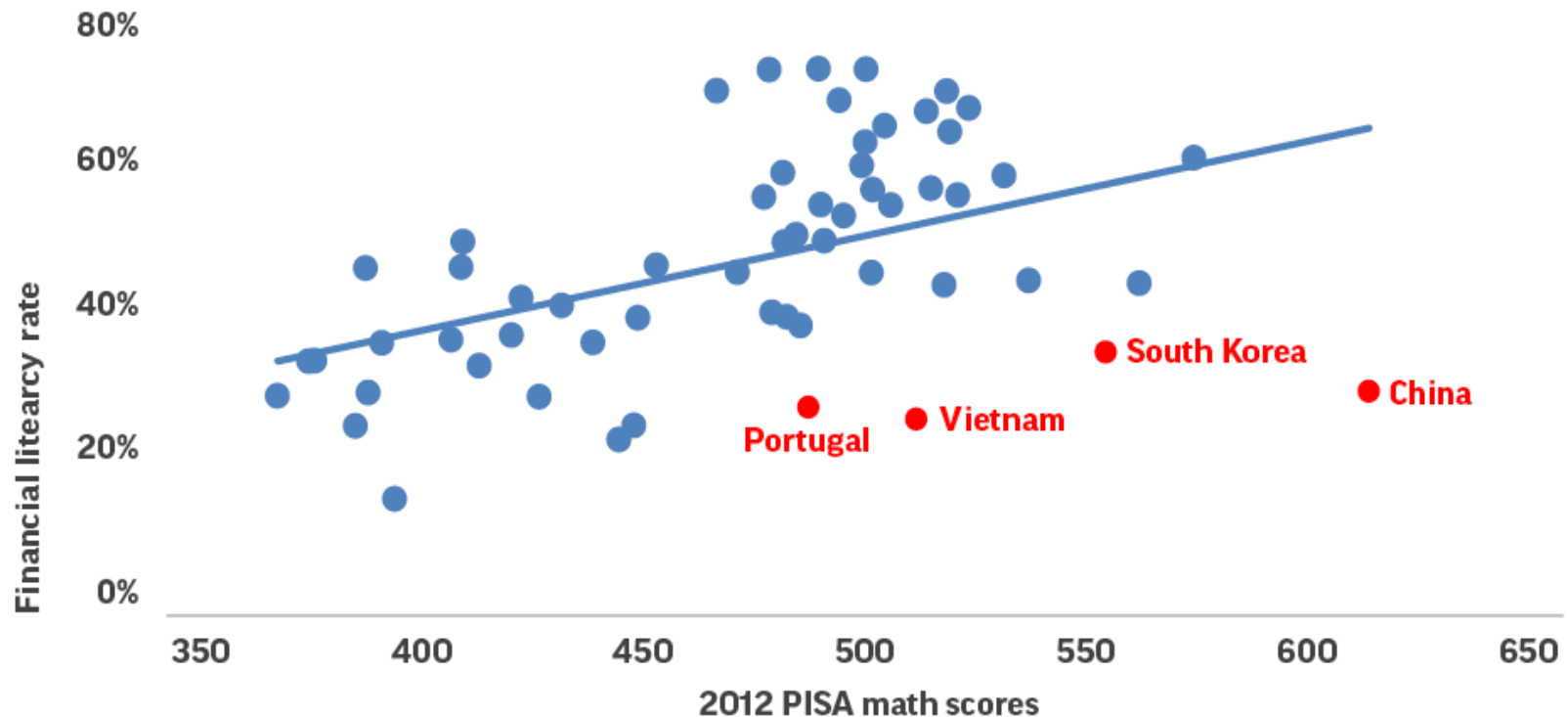
Financial literacy over the life cycle

% of adults who are financially literate



- Young adults in Brazil are more financially literate than older respondents. But the level of financial literacy is overall low.

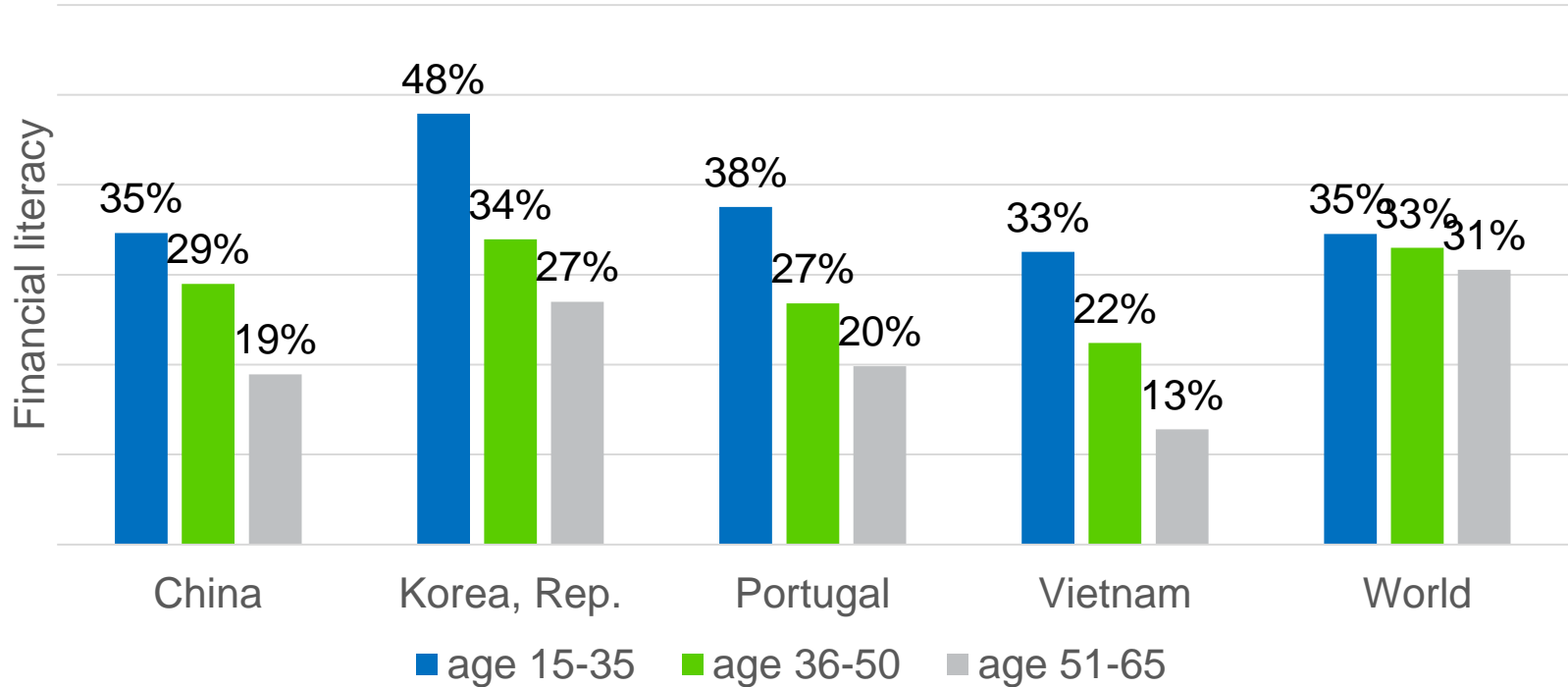
Combining data from PISA (math) & Global Survey



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

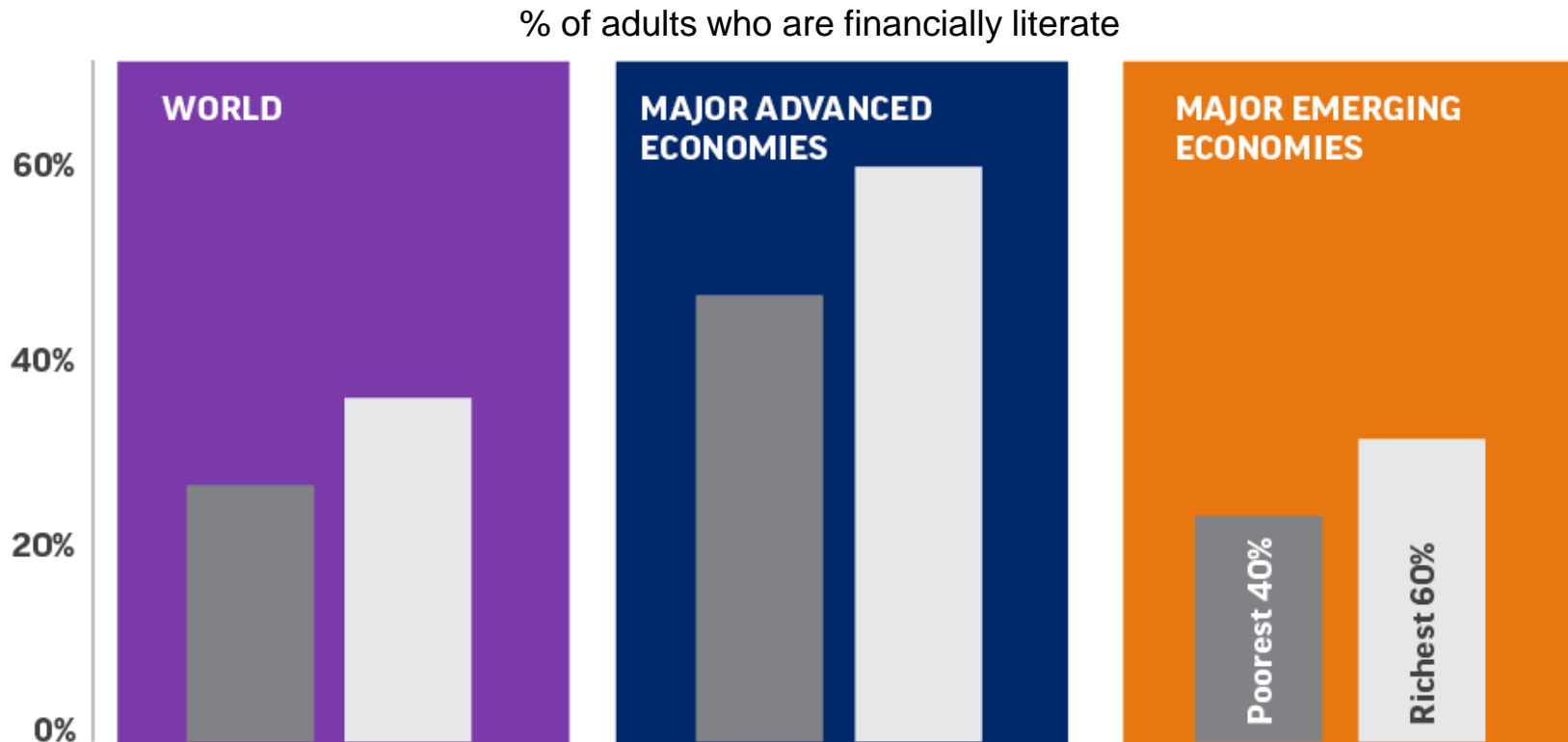
Financial literacy among the young in selected countries

% of adults who are financially literate



- Financial literacy is relatively high among the young in these countries

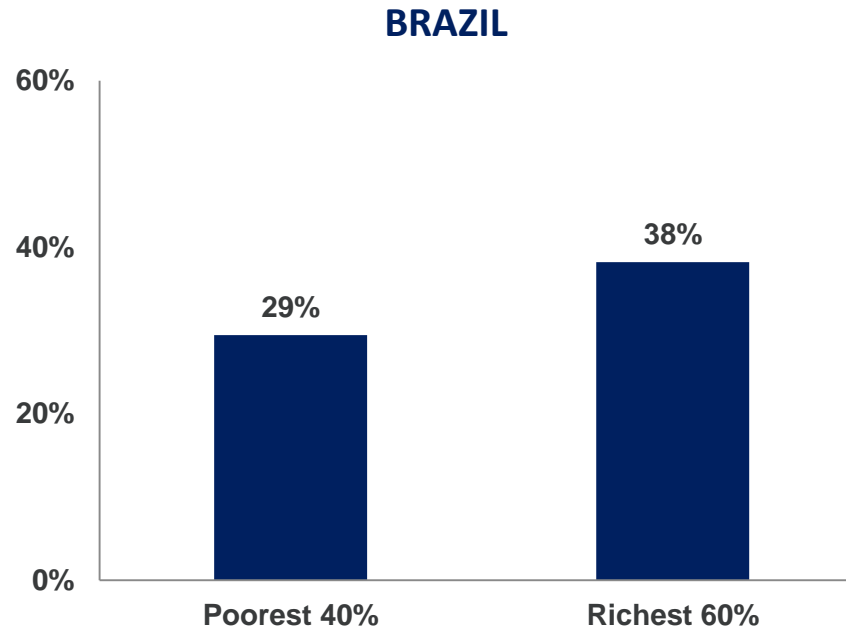
Financial literacy and income inequality



- Of adults in the richest 60% of households in the major emerging economies, 31% are financially literate, against 23% of adults in the poorest 40% of households.

Financial literacy and income inequality

% of adults who are financially literate



- Of adults in the richest 60% of households in Brazil, 38% are financially literate, against 29% of adults in the poorest 40% of households.

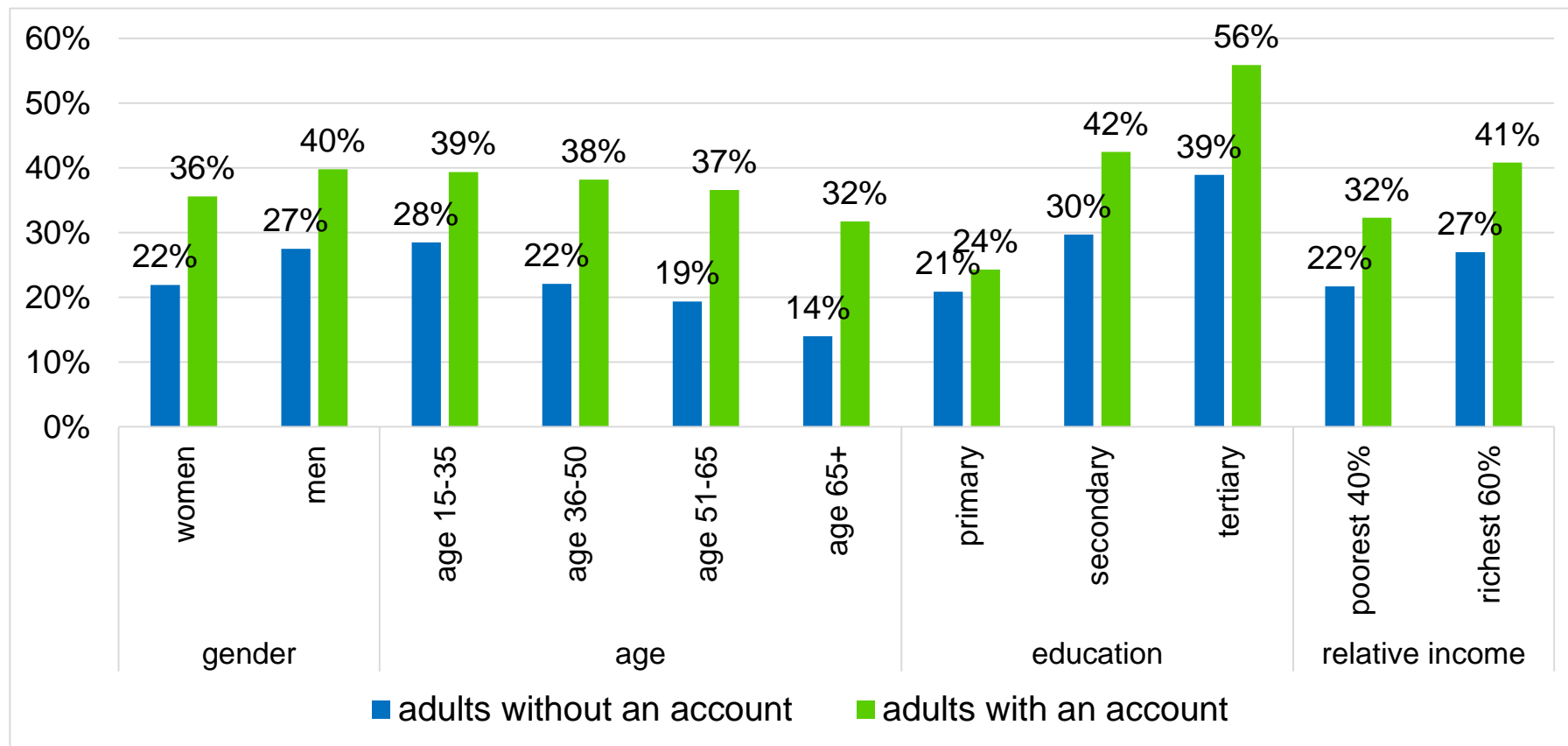
Differences in financial literacy around the world

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**
- **Differences across income groups**

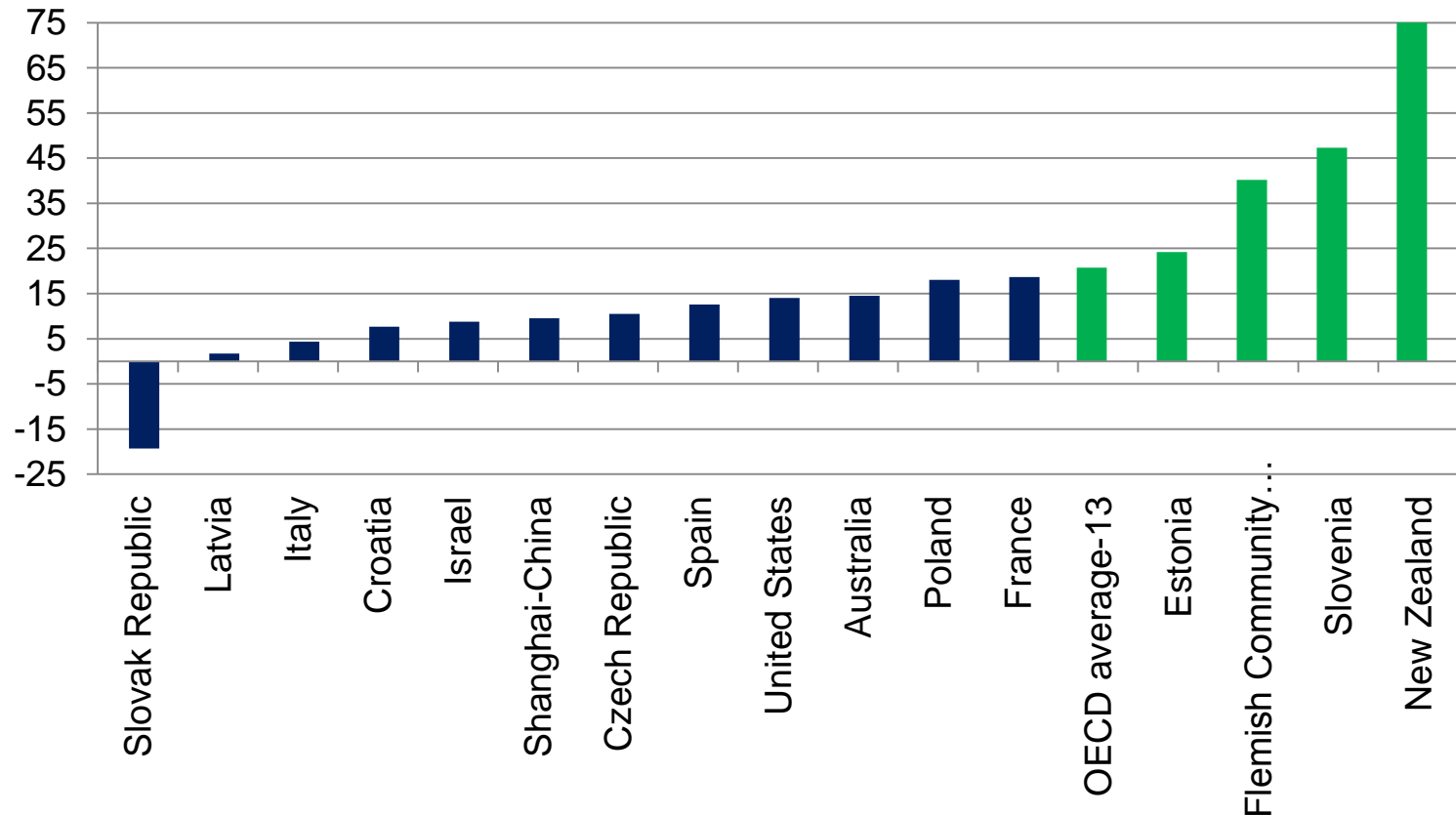
Financial literacy and bank accounts

% of adults who are financially literate



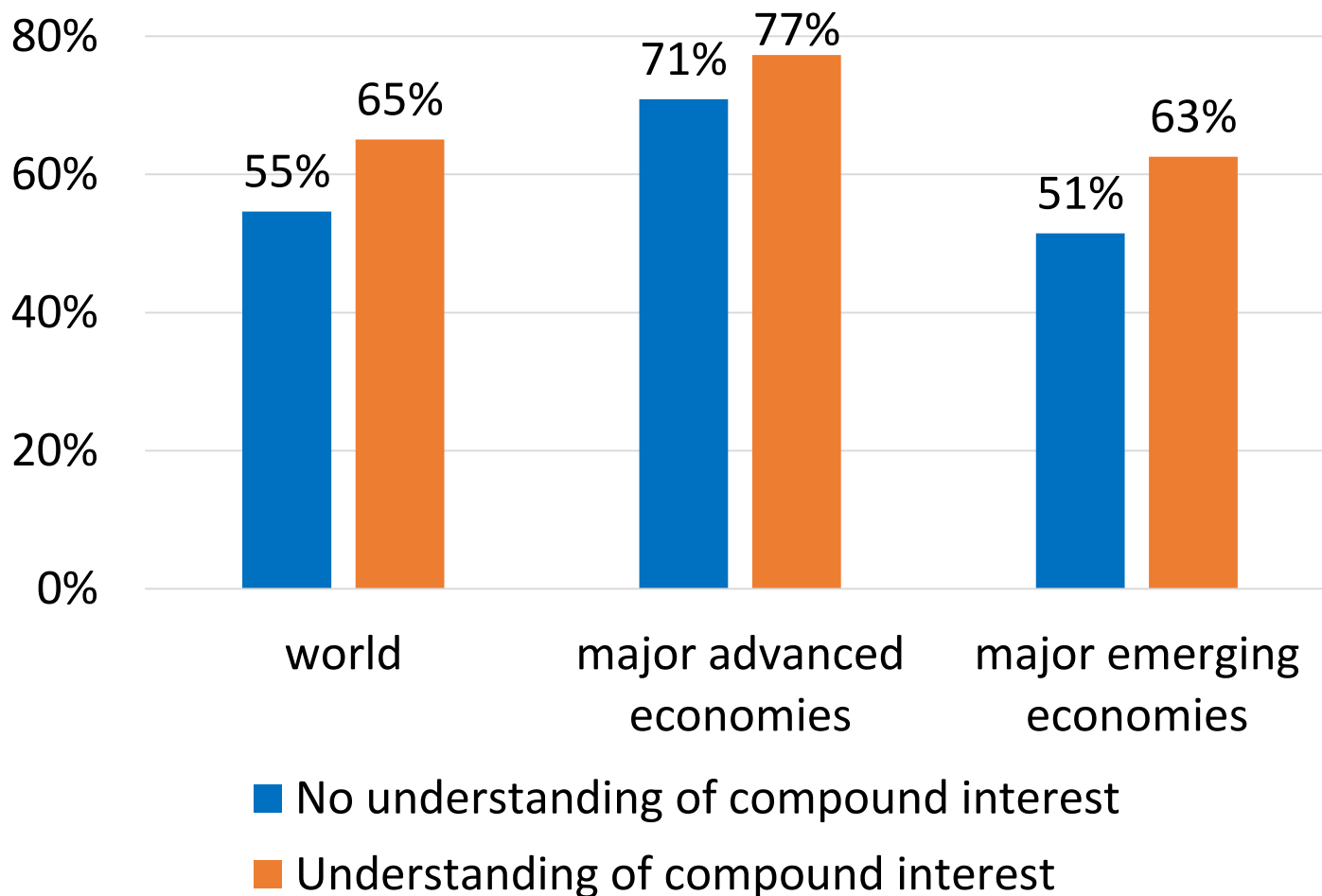
- Positive links between financial literacy and financial inclusion

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



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



Source: GFLS & Global Findex database

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

What can be done to improve finlit

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 education programs**
- **Limited (one-time) financial education programs are not going to be effective**
 - Widespread financial illiteracy requires robust interventions

What can be done to improve finlit, cont.

How these data can inform policy and programs

- **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)

There is evidence that fin. education works

Financial education in school

- Brown, Collins, Schmeiser, and Urban (2014). *State Mandated Financial Education and the Credit Behavior of Young Adults*
 - When exposed to rigorous programs and trained teachers, students do well and are less likely to have problems with debt
- Walstad, Rebeck, and MacDonald (2010) . *The Effects of Financial Education on the Financial knowledge of High School Students*
 - Course content, amount of instruction, test measurement all matter
- Tennyson and Nguyen (2001). *State Curriculum Mandates and Student Knowledge of Personal Finance*
 - Students mandated to take a financial education course did better than students not exposed to a financial education course

A saving museum in Turin, Italy







An International Federation of Finance Museums (IFFM)

Members of IFFM



Beijing Financial Literacy Manifesto



“... the International Federation of Finance Museums (IFFM) is committed to promoting financial literacy globally, raising awareness that every individual in every country is in need of financial literacy.”

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 21st century**

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

Quote

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

Derek Bok, Former President of Harvard University

Contact and further information

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