

# Gender Differences in Financial Literacy: Evidence and Implications

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## Changing financial landscape

### Changes in demographics

- Longer life expectancy

### Changes in pension systems

- More individual and private accounts

### Changes in financial markets

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

### Changes in labor markets and education

- Workers change job often, gig economy
- Rising cost of education

### Changes in technology

- Rise of fintech



## Women and financial decisions

- Unique challenges for women relative to men
  - Longer life expectancies
  - Lower lifetime income
  - Career interruptions due to child rearing
- Specific needs
  - Greater need to plan for old age
  - Different savings needs
- Other characteristics
  - Multiplier effect because women care for others



## Some questions

- 1. How well equipped are women to make financial decisions: How financially literate are they?**
- 2. What explains the gender differences in financial literacy**
- 3. What are the implications for policy and programs?**

# Measuring financial literacy around the world

### 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.*"

- More than \$102
  - 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
  - False
  - Don't know
  - Refuse to answer

## Financial Literacy around the World (FLat World)

Evidence from 15 countries (and more):

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



These 3 questions are now in the 2016 US Survey of Consumer Finances (SCF) and the 2017 Federal Reserve's Survey of Household Economics and Decisionmaking (SHED)

## How much do Americans know?

Distribution of responses across the U.S. population  
(2009 National Financial Capability Study)

**Distribution of Responses to Financial Literacy Questions (%)**

	Responses			
	<i>Correct</i>	<i>Incorrect</i>	<i>DK</i>	<i>Refuse</i>
Interest rate	65%	21%	13%	1%
Inflation	64%	20%	14%	2%
Risk diversif.	52%	13%	34%	1%

NB: Only 30% correctly answer all 3 questions; less than half (46%) got the first two questions right.

## How much do the Dutch know?

Distribution of responses across the Dutch population  
(2010 Dutch Central Bank Household Survey)

**Distribution of Responses to Financial Literacy Questions (%)**

	Responses		
	<i>Correct</i>	<i>Incorrect</i>	<i>DK</i>
Interest rate	85%	5%	9%
Inflation	77%	8%	14%
Risk diversif.	52%	13%	33%

NB: Only 45% correctly answer all 3 questions; more than half (73%) got the first two questions right.

## How much do Canadians know?

Distribution of responses across the Canadian population  
(2012 CSA Investor Index Survey)

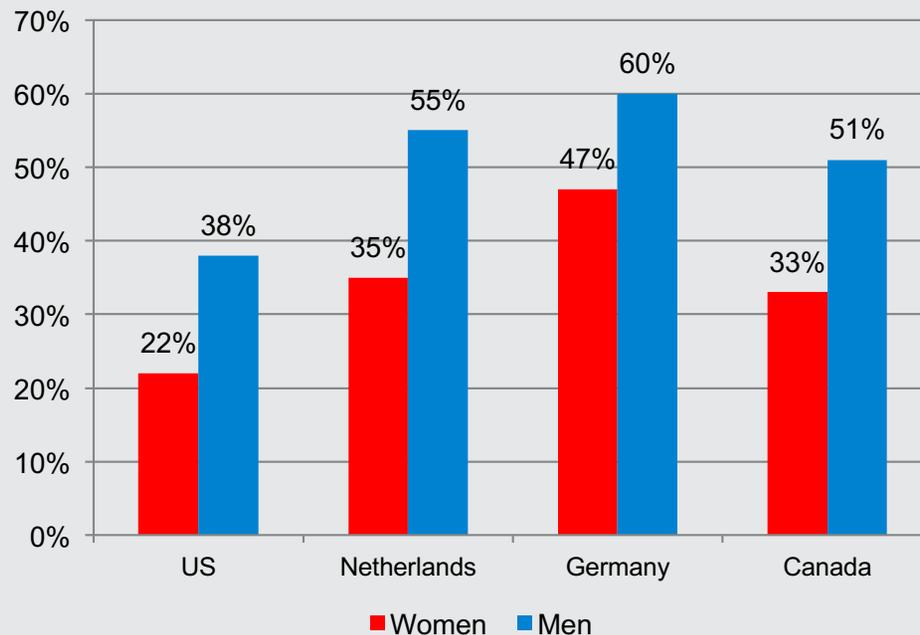
**Distribution of Responses to Financial Literacy Questions (%)**

	Responses		
	<i>Correct</i>	<i>Incorrect</i>	<i>DK</i>
Interest rate	78%	13%	9%
Inflation	66%	18%	16%
Risk diversif.	59%	10%	31%

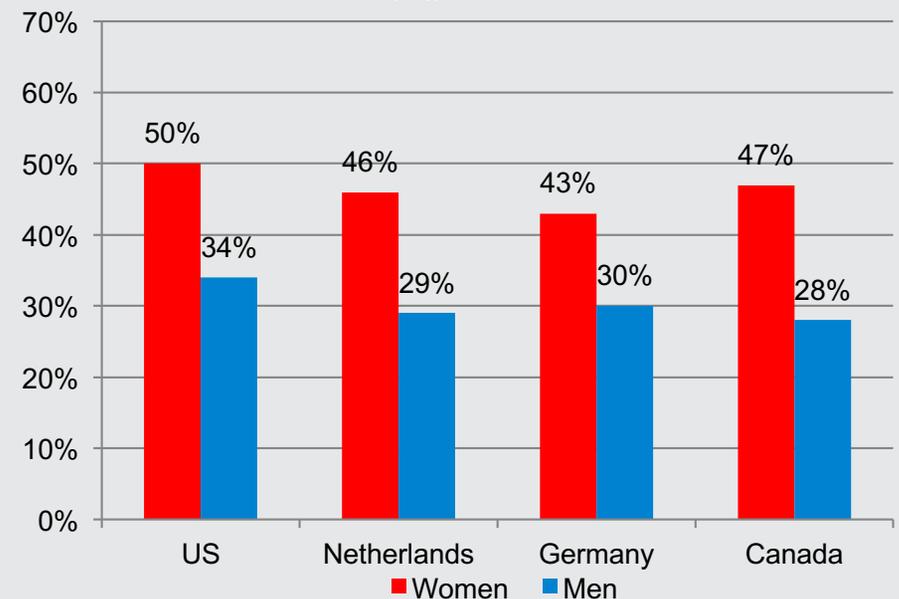
NB: Only 42% correctly answer all 3 questions; A little more than half (58%) got the first two questions right.

## Gender differences in financial literacy

**Financial knowledge by gender  
(% answering 3 Qs correctly)**



**At least one "don't know" answer  
by gender**



- Very robust findings of large gender differences in financial knowledge
- Women are much more likely to say "I do not know"

## The S&P Global Finlit Survey

- *The S&P Global Financial Literacy Survey* is the largest, most comprehensive measure of financial literacy
- Interviewed more than 150,000 adults age 15+ in 143 countries in 2014
- The survey provides key information to policy makers, regulators, the private sector, and academics



## The S&P Global Finlit Survey



The survey covers four topics:

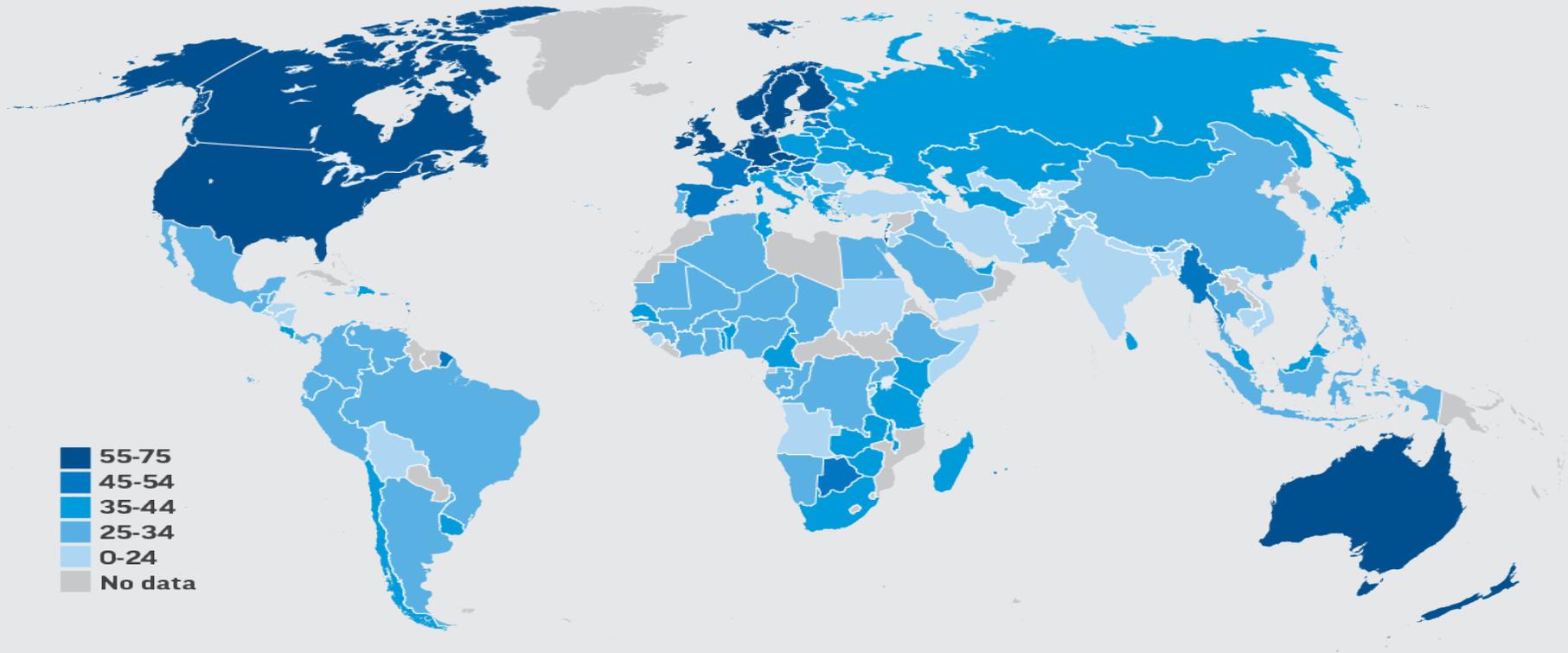
- Numeracy
- Interest compounding
- Inflation
- Risk diversification

*Being financially literate:*

How many can answer 3 out of these 4 topics correctly (a passing grade)

# Financial literacy globally

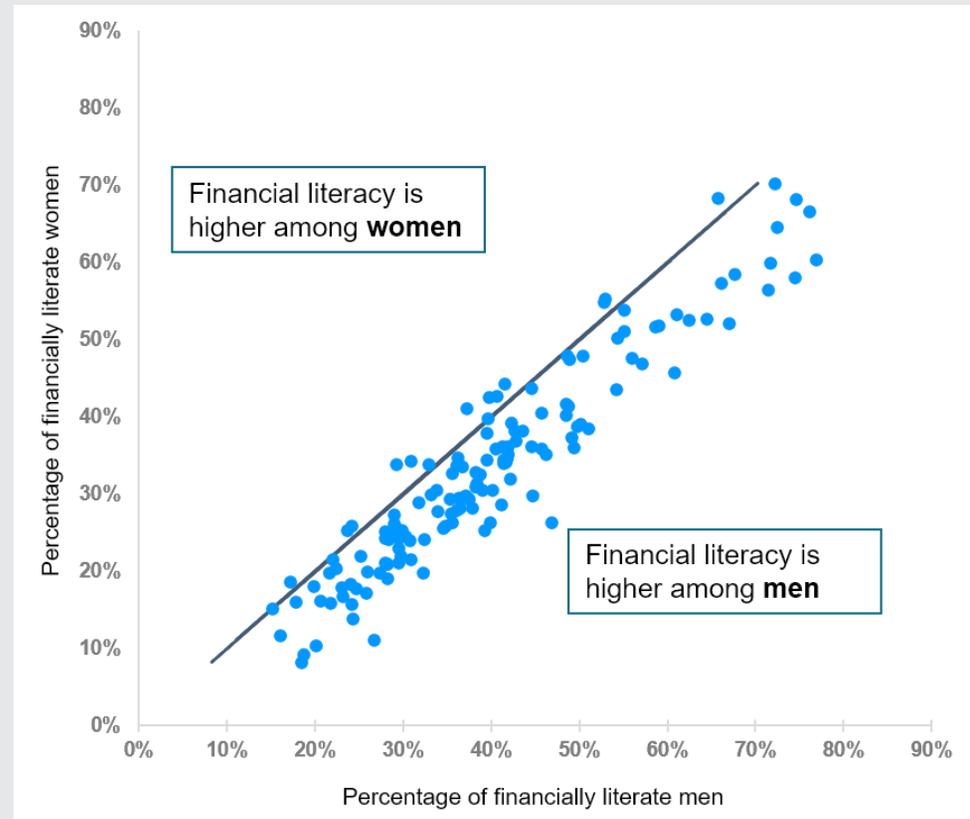
## % of adults who are financially literate



Only 1 in 3 adults worldwide responded correctly to three out of four topics.

## Gender gap in financial literacy around the world

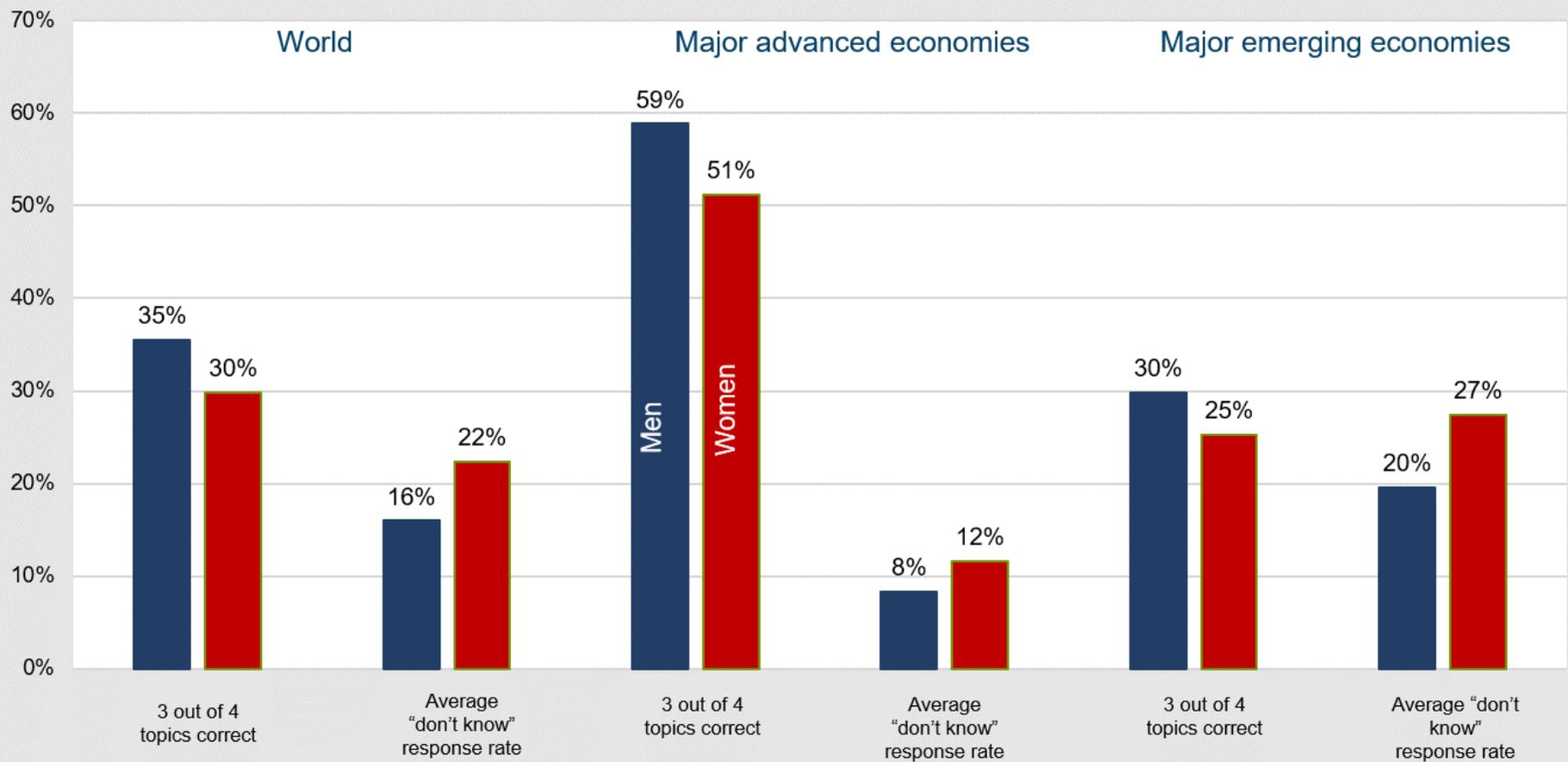
In most economies around the world, men have a better understanding of basic financial concepts than women



Source: Global FinLit Survey

# Financial literacy around the world, by gender

**Women are disproportionately more likely than men to respond to a question with “I do not know.”**



**What explains the gender differences?**

## Gender gap distribution by country income levels

The gender gap in financial literacy is large and persistent across countries, and there is no evidence that income helps explain it.



Source: S&P Global FinLit Survey

## Other determinants

- Education system does not seem to explain it
  - There is a gender difference even in countries with strong education systems and more equal societies (ex: Finland)
- In some countries gender differences are present very early in life
  - According to PISA data, gender differences are present among 15 year old students in Italy
- How about confidence?
  - Looking closer at the “do not know” responses



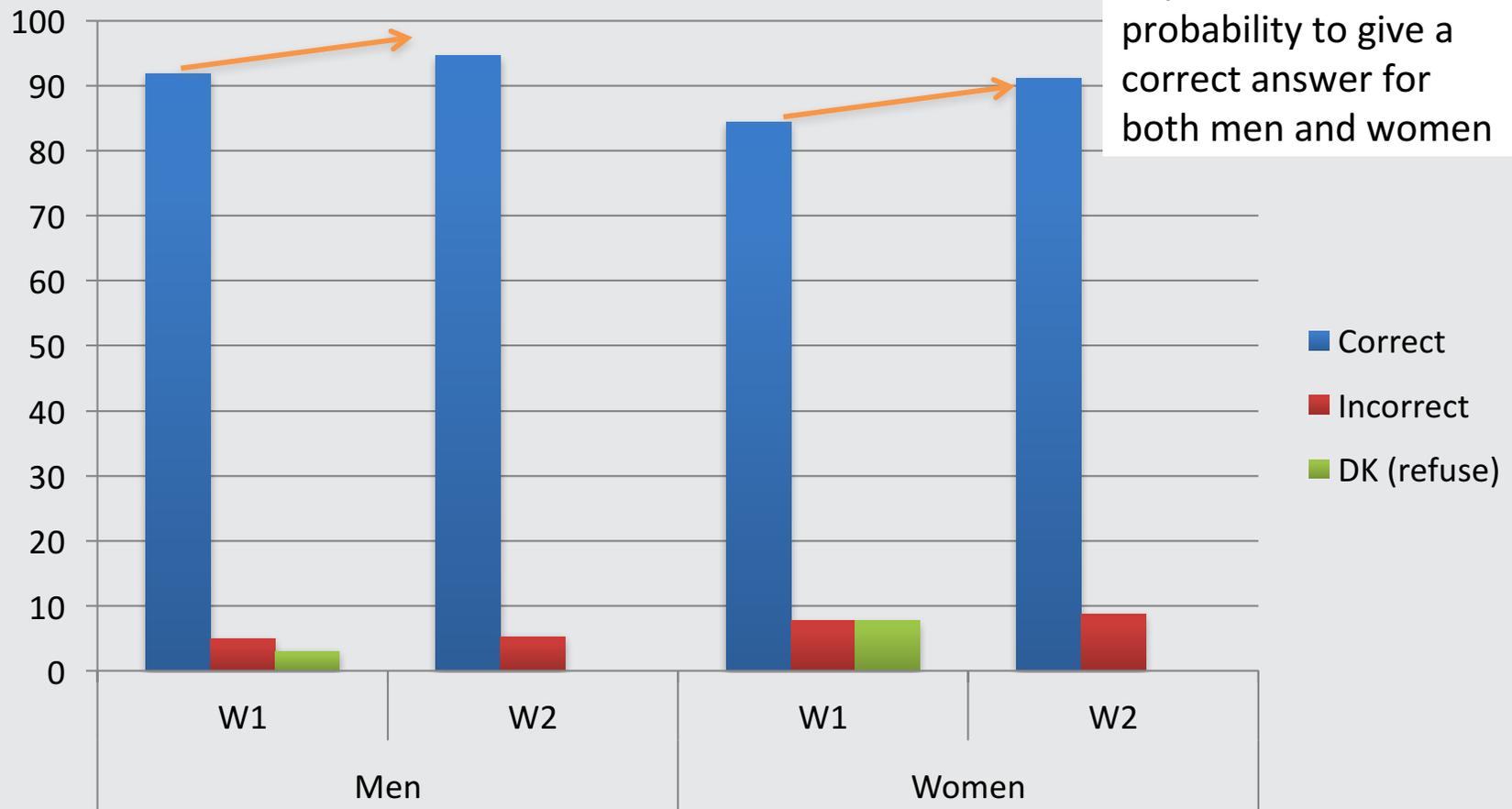
## Other determinants: Confidence

- Work with data from the Dutch Central Bank Household Survey
- Ask the Big Three questions in 2 waves (w1 and w2) with and without the “do not know” option
- We also asked how confident respondents were about their answer
- We find that responses are a mix of knowledge and confidence



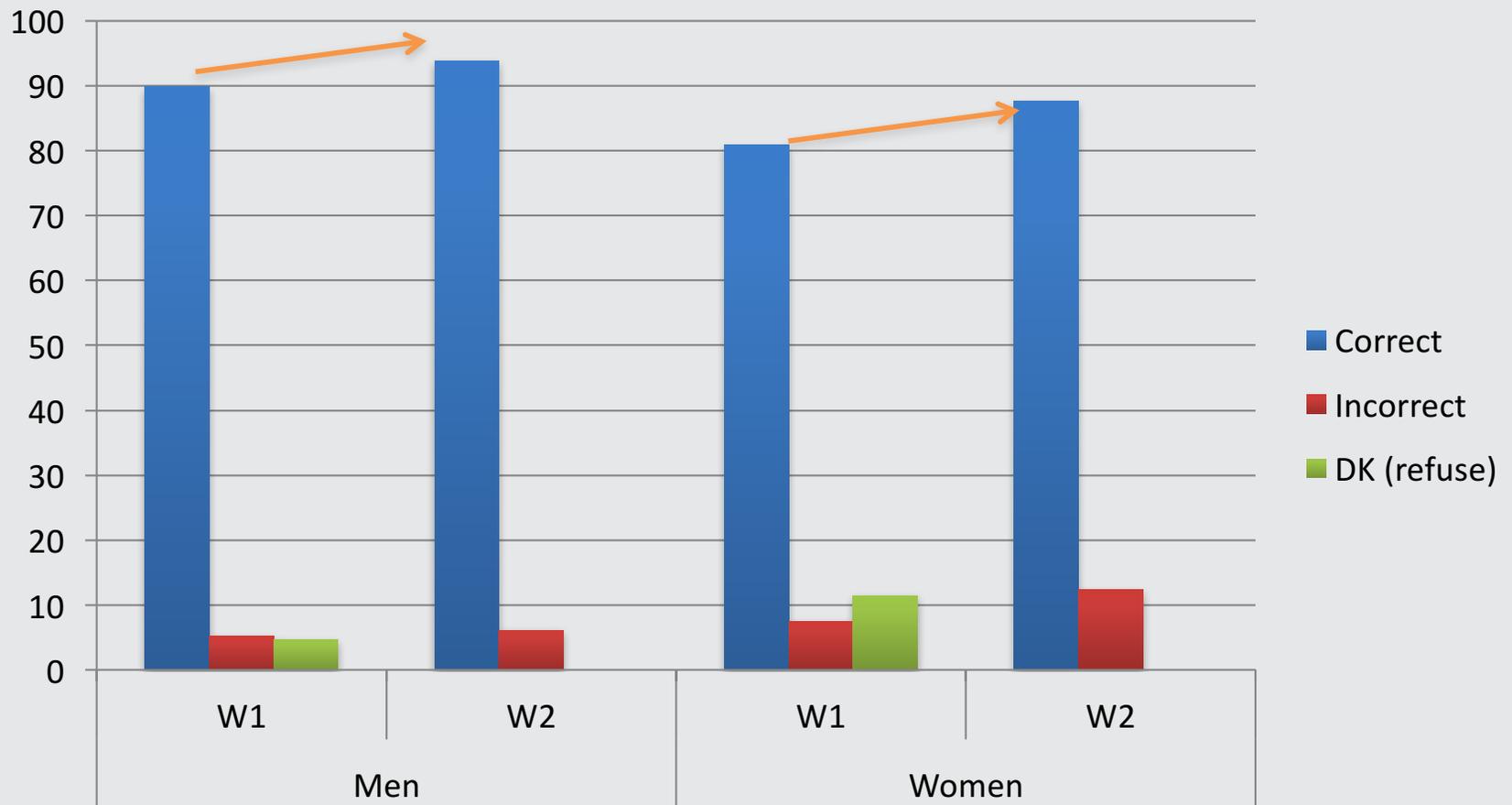
# Taking away the “do not know” option

## Interest rate question



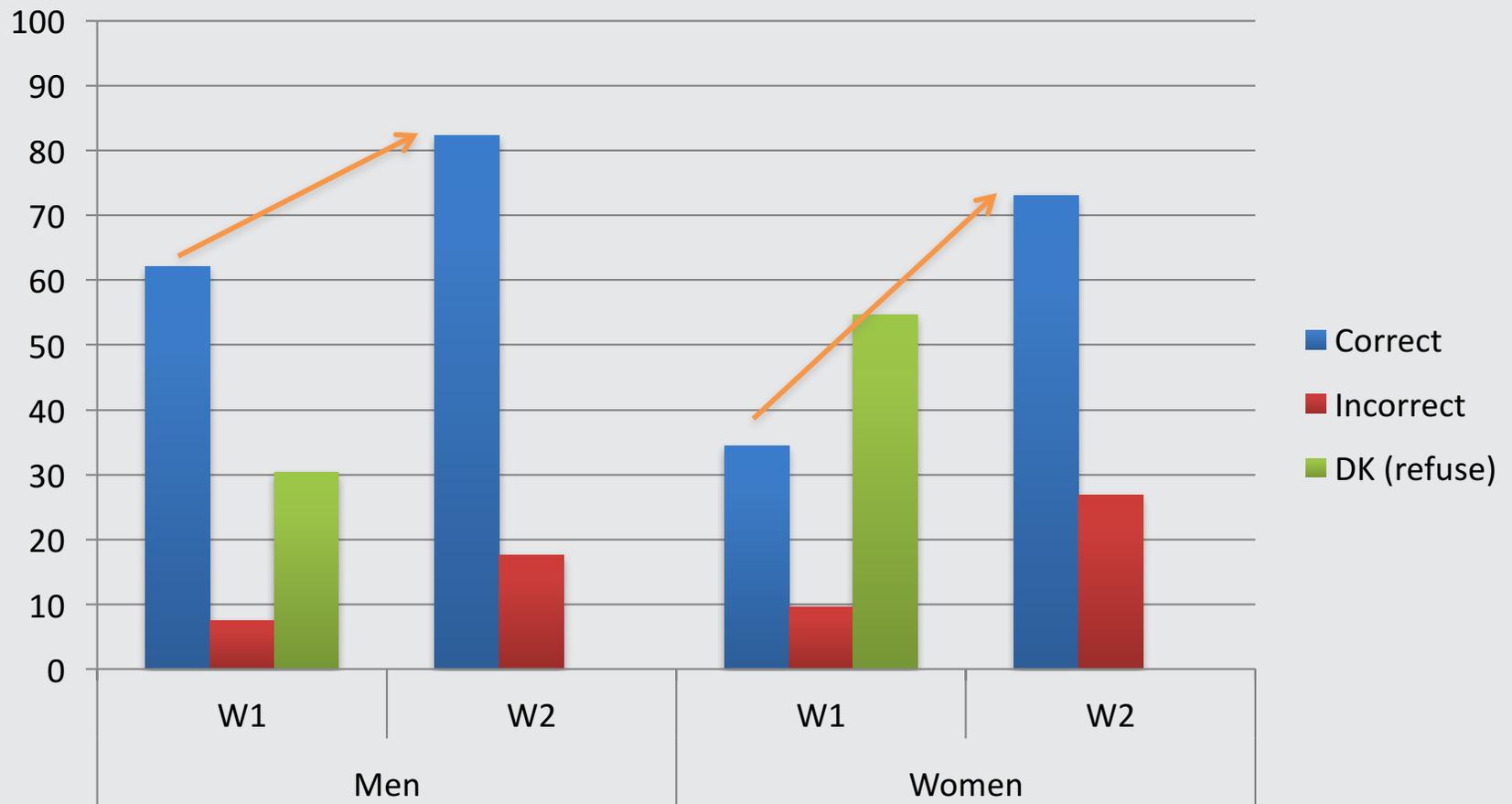
## Taking away the “do not know” option

### Inflation question



## Taking away the “do not know” option

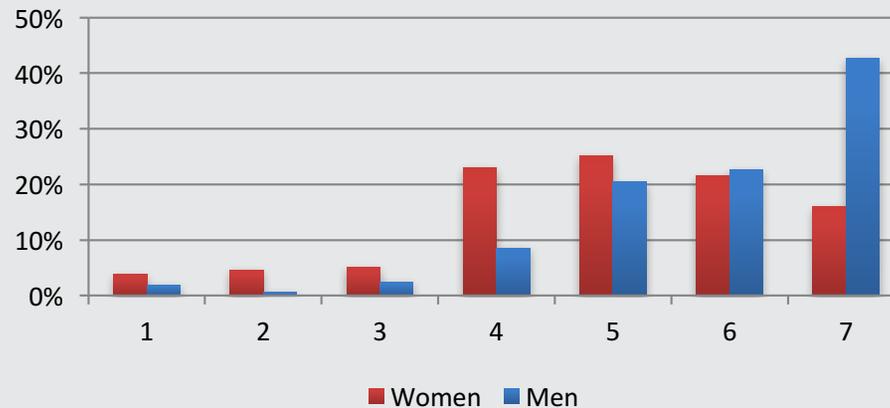
### Risk diversification question



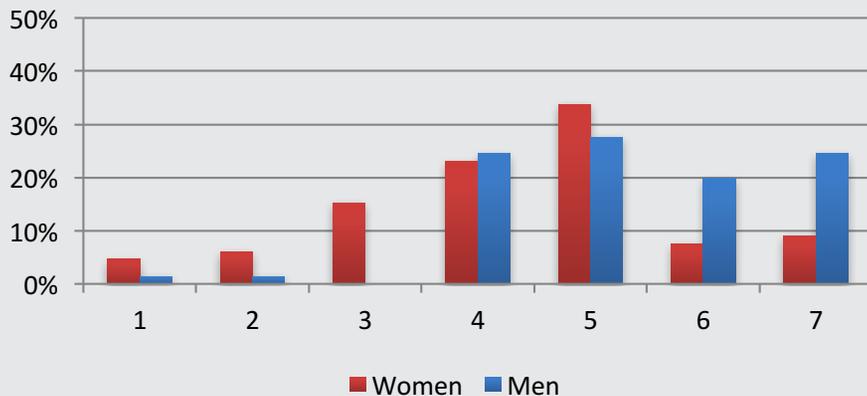
## Gender differences and confidence

Confidence conditional on being correct, incorrect, and “do not know.” Risk diversification question

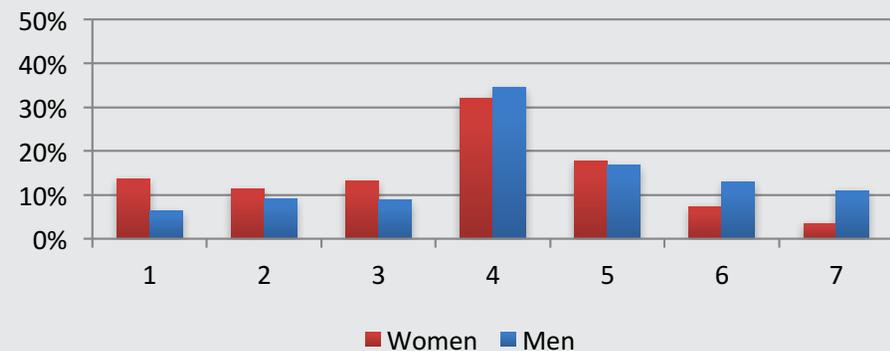
### Confidence cond. Correct



### Confidence cond. Incorrect



### Confidence cond. Do not know





# **Fearless Girl!**

## **Women, confidence, and financial literacy**

**Tabea Bucher-Koenen (MEA)**

**Rob Alessie (Groningen)**

**Annamaria Lusardi (GWSB and GFLEC)**

**Maarten van Rooij (DNB)**

## Financial literacy and personal finance outcomes

Individuals/women who are financially literate are also more likely to:

- Cope with emergency expenses/less likely to be financially fragile
  - Can come up with \$2,000 in 30 days
- Manage their debt well
  - Less likely to have “too much debt.”
- Have long-term savings:
  - More likely to plan for retirement
  - More likely to have financial investments, aside from retirement accounts.



## Financial fragility – GFLEC’s latest research

New research released in April 2018

### Measuring financial fragility:

**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





# Implications for policies and programs

## What we learn from the data

- **Need to improve levels of financial literacy**
  - Levels of knowledge are critically low globally
  - Even in countries with high income and well developed markets
- **Gender difference in finlit in most countries**
  - Need programs targeted to women
  - Role of confidence
- **Some topics are particularly hard**
  - Risk and risk diversification



## Given widespread financial illiteracy

### Need for 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)



## **Personal finance courses for college students**

- Use a rigorous quantitative approach
- Cover the basics, in particular risk and risk diversification
- Cover personal finance topics, such as saving and investing, retirement planning, insurance, etc.
- Material available for free on our website
- Pay attention to gender differences



## Financial education in the workplace: The Dartmouth project

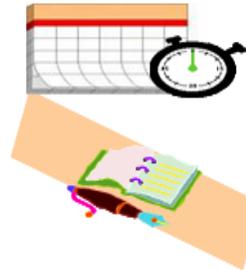
- We designed a program that targeted individuals who wanted to save but were limited by a lack of knowledge
- The aim of the program was to
  - Simplify financial decisions
  - Provide information when needed by individuals
  - Target specific groups: women and low income workers



## Planning Aid

We have outlined 7 simple steps to help you complete the application.

1. **Select a 30 minute time slot** right now to complete the online contribution to your Supplemental Retirement Account (SRA) during the next week.
2. **3 minutes. Check to see if you have the following materials:** a) worksheet in your benefits packet , and b) the name and social security number of a beneficiary .
3. **Select the amount you want to invest for 2006** (minimum: \$16/month, maximum: \$1,666.67/month), even if you don't know your take-home pay in your first month. If you want, you can change this amount at a later date. This voluntary contribution is tax-deferred, you will not pay taxes on it until you withdraw the funds.
4. **5 minutes. Select a carrier.** If you do not select a carrier, Dartmouth will invest the non-voluntary portion of your college funds in a Fidelity Freedom Fund, a fund that automatically changes asset allocation as people age.
5. **5 minutes. Now you are ready to complete your worksheet.** Complete the worksheet even though you may be unsure of some options. You can change the options in the future.
6. **Take your completed worksheet to a computer** that is available for 20 minutes. If you like, you can use the one in the Human Resources office at 7 Lebanon Street, Suite 203.
7. **15-20 minutes. Log on to Flex Online and complete your online SRA registration** within the 20 assigned minutes. Be sure to click on the investment company (TIAA-CREF, Fidelity, or Calvert) to complete the application. You need to set up your account – otherwise your savings will not reach the carrier.



**Fidelity.com**

**TIAA CREF** **Calvert**



**FlexOnline**  
With Smart People's Endorsement

Development of a comprehensive, cost-effective planning aid to improve participation in and contribution to Supplementary Retirement Accounts (SRAs)

## In their own words: four videos



### **Topics discussed:**

Hopes for retirement

Why they save

How they save

Planning for the future

Their recommendations

## Results from the Dartmouth project

- There was a large increase in savings enrollment within 30 and 60 days of hiring among participants who received the brochure.

	30 days After Hire	60 days After Hire	Number of Observation s
Control Group	7.3%	28.9%	210
Planning aid	21.7%	44.7%	166

- Videos generated an increase in enrollment of 56%.

## These statistics are not our destiny



### *Annamaria Lusardi Appointed Director of Italy's New Financial Education Committee*

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This appointment supports GFLEC's vision of promoting the development of a financially literate world.

In July 2017, I was appointed by Italy's Minister of Economy and Finance as director of the new Financial Education Committee

The Committee designed a national strategy for financial literacy

First initiative: a portal of financial education

More initiatives and targeted to women

## Concluding remarks

Financial literacy is like reading and writing

- It is an essential skill for the 21st century
- We need to empower women so they can be financially secure

**Thank you!**

Questions? Contact us at [gfilec@gwu.edu](mailto:gfilec@gwu.edu)

# GFLEC

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GLOBAL FINANCIAL LITERACY  
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