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## **How Can Financial Literacy Improve Retirement Planning?**

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# A new economic landscape

## Changes in many sectors of the economy

### Increased individual responsibility for financial well-being

#### ➤ Changes in the labor market

- Investment in education and skills
- People change jobs often

#### ➤ Changes in financial markets

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

#### ➤ Changes in pensions

- DC pensions and individual accounts



# Changes in the pension landscape

## Individuals make many decisions

- **How much to save for retirement**
  - Incentivized by employer matches and tax benefits of pensions
- **How to invest retirement wealth**
  - Returns and fees matter a great deal over a long horizon
- **Whether and how much to borrow from pension accounts**
  - It is possible to tap into pension wealth
- **How to transfer pensions from job to job**
  - Labor mobility; people change jobs often



# Changes in the pension landscape (cont.)

## Individuals make many decisions

### ➤ How and when to withdraw retirement wealth

- Including when to withdraw Social Security
- Make sure wealth lasts a lifetime

### ➤ How to meet other needs

- Saving for emergencies
- Saving for children's education
- Repay student loans and other debt





# How much do people know?

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?”

  - More than \$102
  - Exactly \$102
  - Less than \$102
  - Don't know
  - Refuse to answer
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...”

  - More than today
  - Exactly the same as today
  - Less than today
  - Don't know
  - Refuse to answer
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.*”

  - True
  - False
  - Don't know
  - Refuse to answer

# Financial Literacy around the World

## (FLat World)

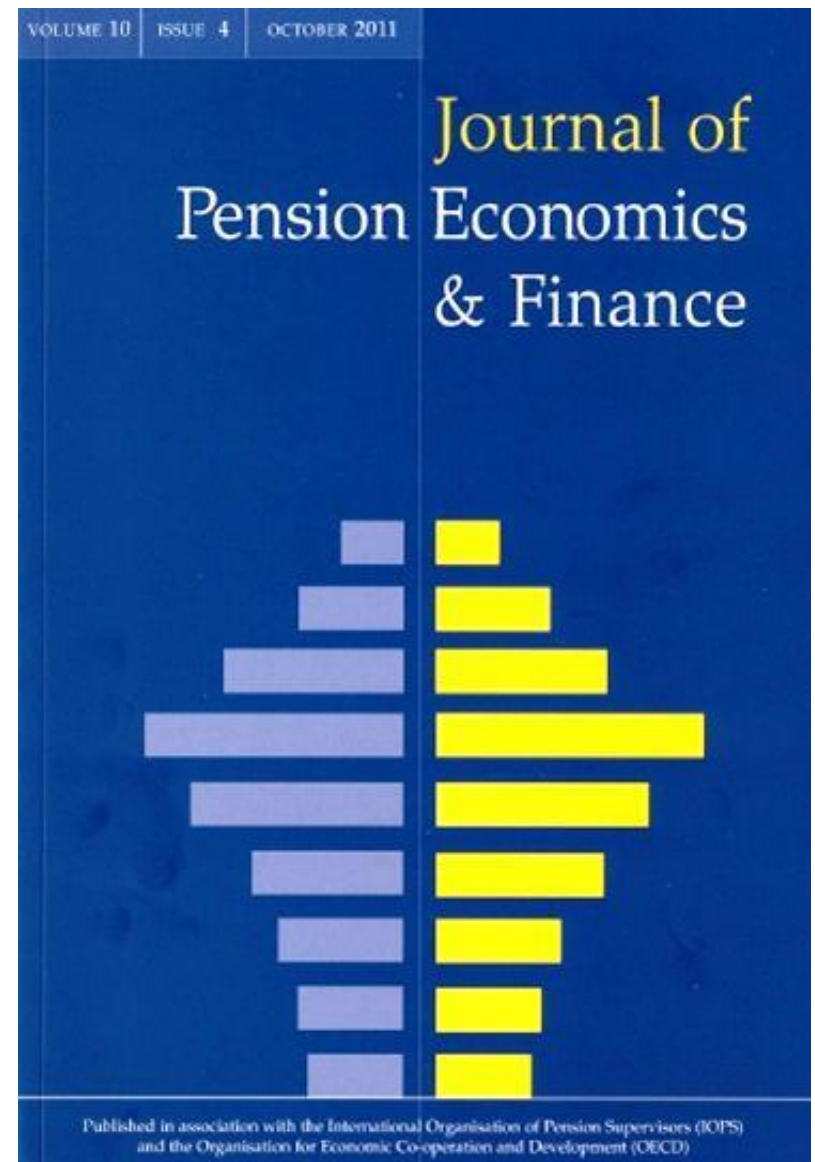
Evidence from 13 countries:

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



# Special issue of JPEF, project ongoing

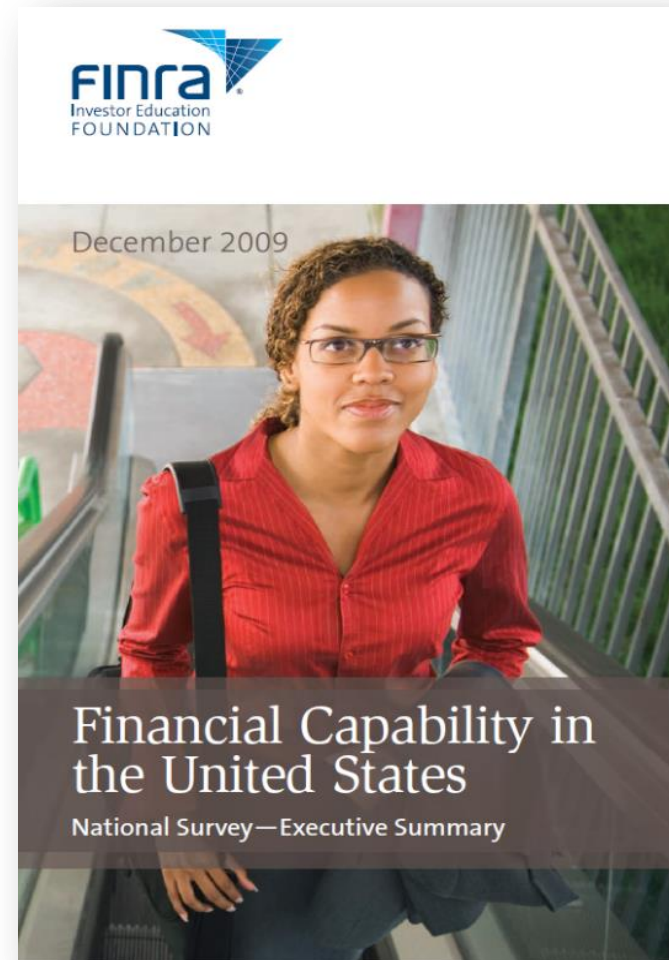
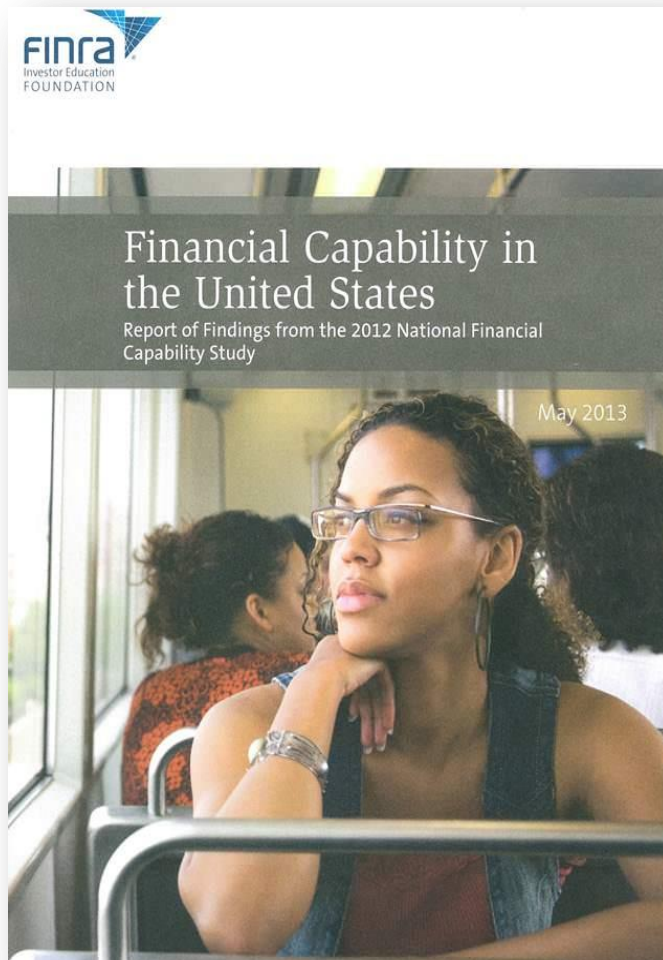
- ***Financial Literacy and Retirement Planning***
- **We published a paper for each participating country**





# Data for the United States

## The 2009 & 2012 National Financial Capability Study (NFCS)



# Supplemented by other data

- **Large survey on financial literacy in the American Life Panel**
  - Many questions
- **TNS survey on specific financial knowledge**
  - Debt literacy
  - Risk literacy
- **Targeting specific age groups**
  - Older population (HRS) and young adults (NLSY)
- **Surveys done at big employers**
  - Knowledge of pensions

# Four important findings

- 1. Levels of financial literacy are very low**
  - ◆ Only 1/3 of Americans can answer these 3 questions
- 2. Knowledge of risk and risk diversification is lowest**
  - ◆ Very low levels of risk literacy
- 3. Differences in financial literacy are very large**
  - ◆ Women
  - ◆ Young people
- 4. Disconnect between self-assessed and actual knowledge**
  - ◆ Not aware of lack of knowledge

# Financial literacy across age groups (2012 NFCS)

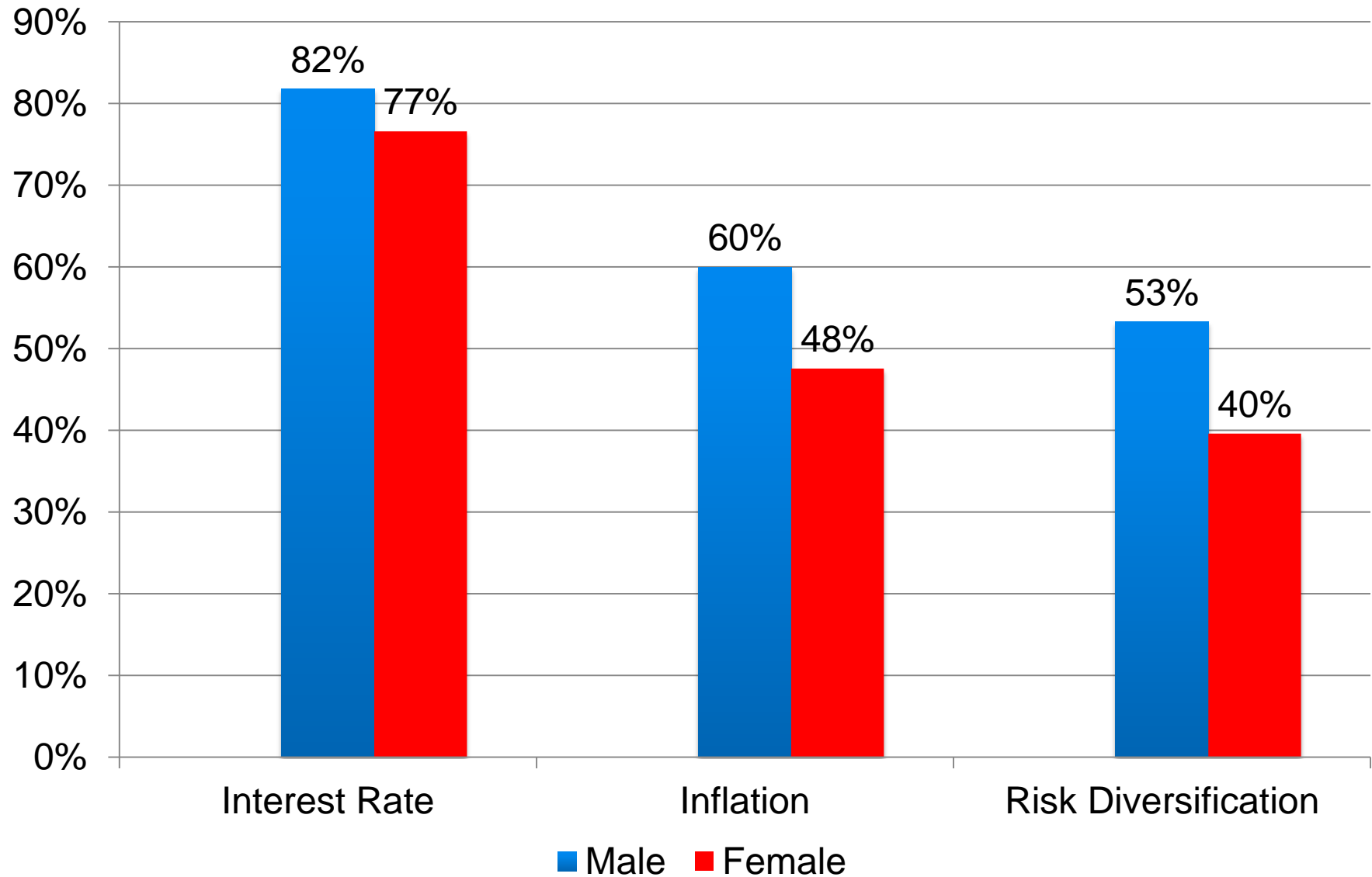
## The widespread lack of financial literacy

	Total sample (age 23-61)	Millennials (age 23-35)	Mid-career (age 35-50)	Pre-retirees (age 51-61)
Interest Q correct	80%	75%	81%	83%
Inflation Q correct	65%	50%	68%	79%
Risk Q correct	54%	44%	56%	62%
<b>All 3 Qs correct</b>	<b>41%</b>	<b>28%</b>	<b>43%</b>	<b>51%</b>

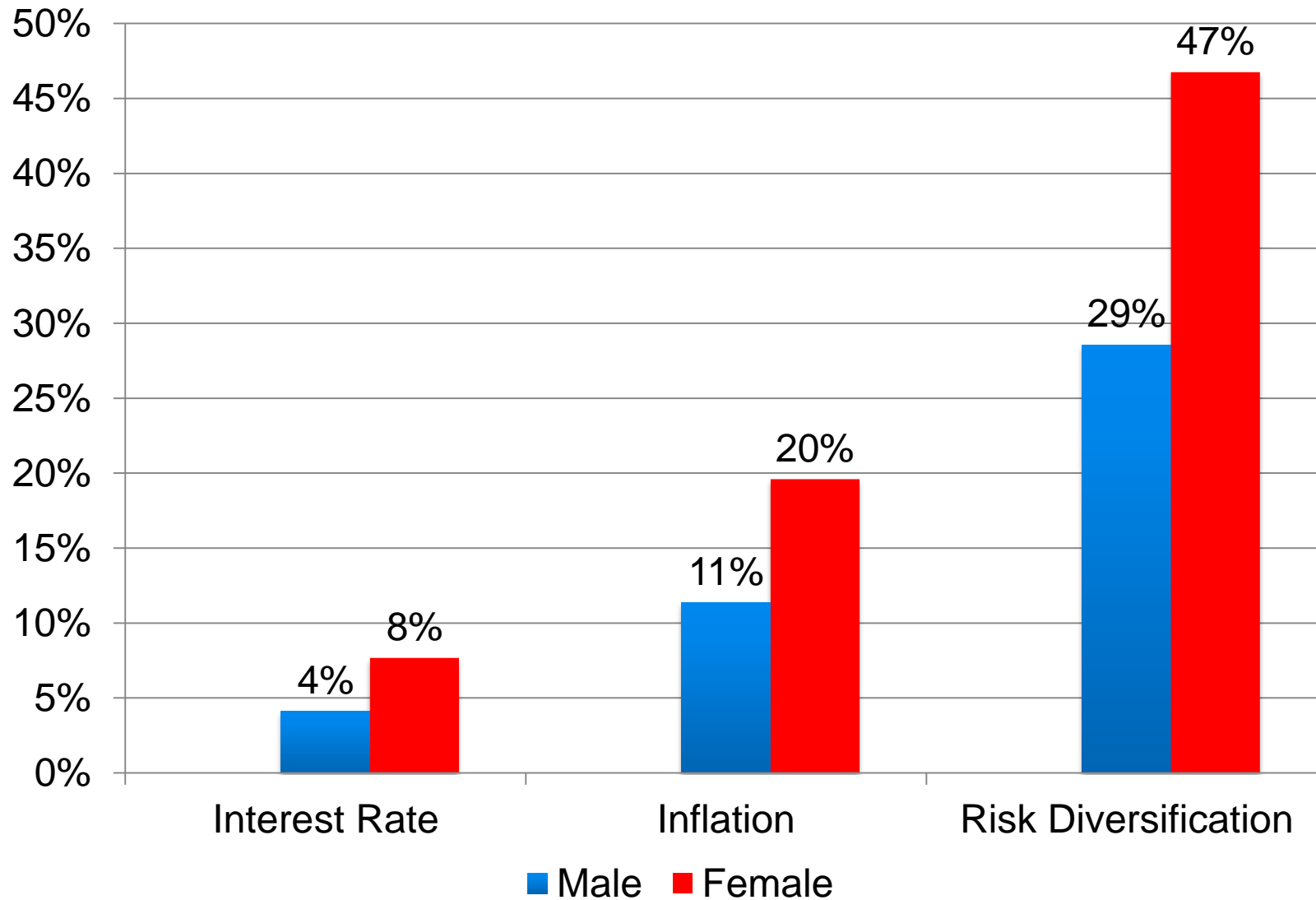
**Note:** Respondents **age 23 to 61 and employed** at the time of the survey.

**Young people know the least.**

# Financial literacy and gender (age: 23-28, NLSY)



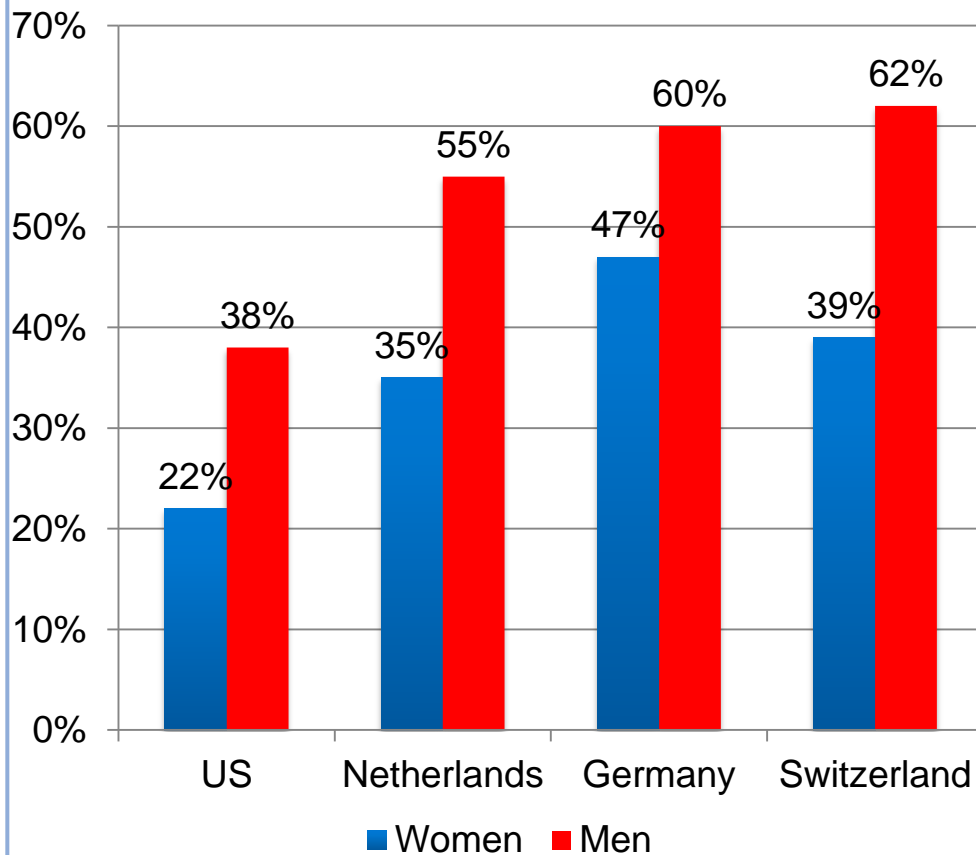
# “Do not know” responses by gender (age 23-28, NLSY). Same finding in all 13 countries



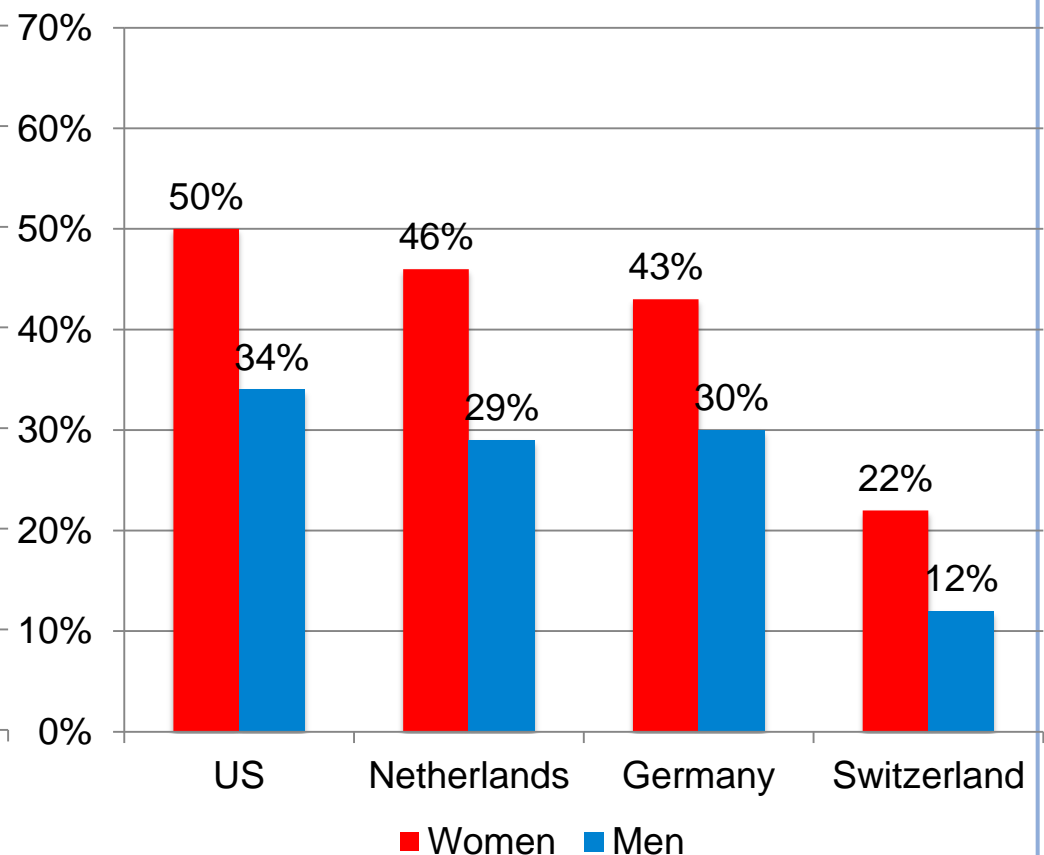
# Gender differences are similar across countries

- Women are much more likely to say “I do not know”

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

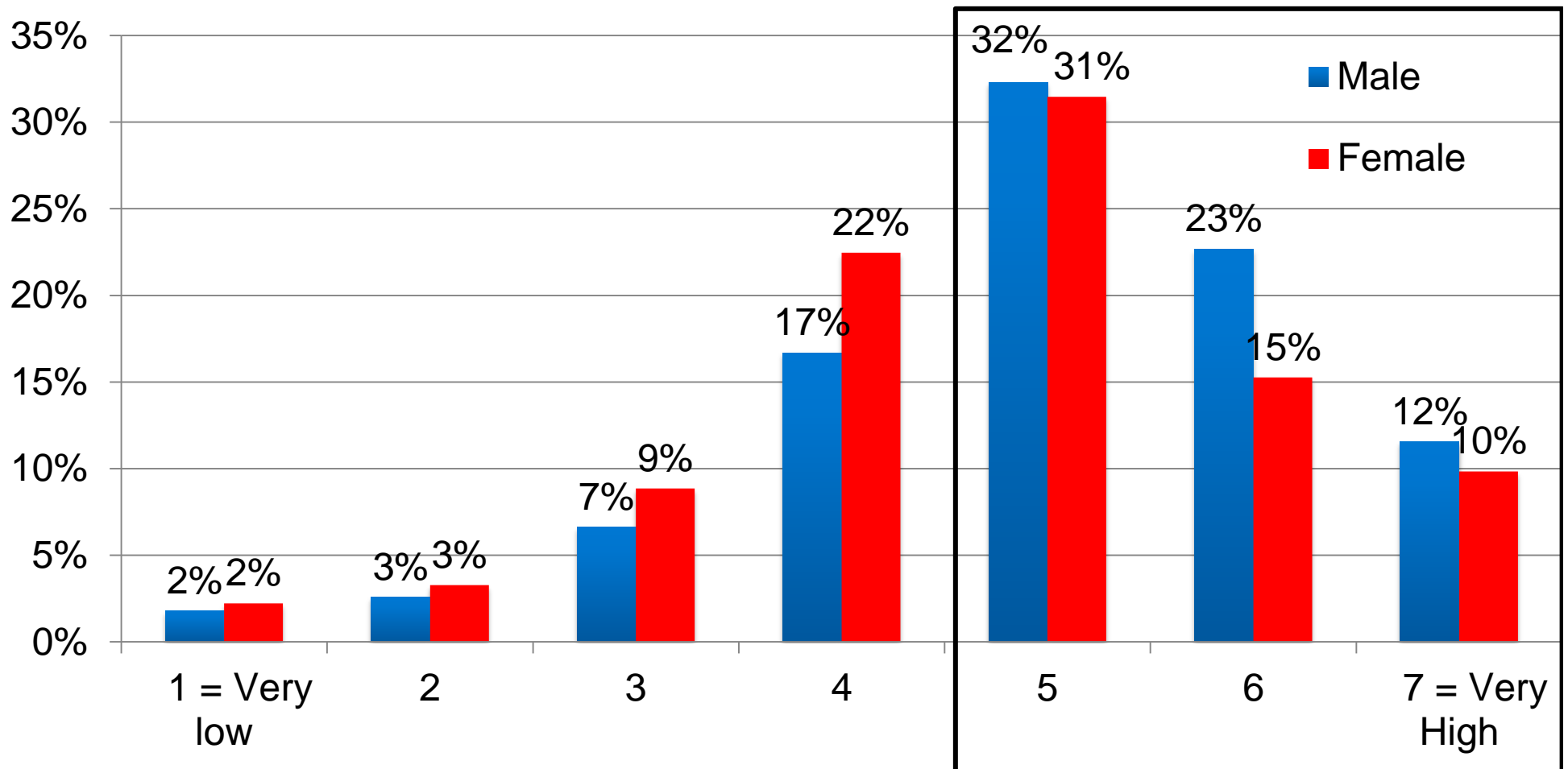


**At least one "don't know" answer, by gender**



# Gender differences in self-reported literacy (TNS data - 2009)

On a scale of 1 (very low) to 7 (very high), how would you assess your overall financial knowledge?





# Questions related to pensions

## Asked to employees of a large financial institution

- 1. Tax Offset:** Assume you were in the 25 percent tax bracket (you pay \$0.25 in tax for each dollar earned) and you contributed \$100 pretax to an employer's 401(k) plan. Your take-home pay (what's in your paycheck after all taxes and other payments are taken out) will then:
  - Decline by \$100
  - Decline by \$75
  - Decline by \$50
  - Remain the same
  - Don't Know
- 2. Match:** Assume that an employer matched employee contributions dollar for dollar. If the employee contributed \$100 to the 401(k) plan, his account balance in the plan including his contribution would:
  - Increase by \$50
  - Increase by \$100
  - Increase by \$200
  - Remain the same
  - Don't Know

# Findings on pension knowledge

- **Low level of pension knowledge**
  - Levels of knowledge are low
    - Tax offset: 45% correct
    - Match: 78% correct
- **Large differences across employees**
  - One size does not fit all

# Implications: What the research suggests

- **Need to improve levels of financial literacy**
  - Levels of knowledge are low
- **Need for more targeted programs**
  - One size does not fit all
- **Women are an ideal group for fin education programs**
  - They know what they do not know
- **Many employees are unlikely to participate in financial education programs**
  - Unaware that they need it

# Linking financial literacy to behavior

## We have looked at several outcomes

### ➤ Retirement planning

- An important determinant of wealth

### ➤ Investing

- Returns on investment, accounting for risk

### ➤ Borrowing

- Many types of debt

**Main message: Financial literacy matters!**

# A quick look at debt close to retirement

## ➤ **Data**

- Health and Retirement Study (HRS): 3 cohorts (age 56-61) at three different time periods: 1992, 2002, and 2008.
- National Financial Capability Study, 2009 & 2012

## ➤ **Empirical analysis**

- Evaluate if/why patterns changed over time.
- Evaluate factors associated with debt/debt management for those on verge of retirement

# The increase in debt across cohorts

## **Total debt/Total assets > 0.5**

First HRS cohort (1992)

9.6%

War Babies (2002)

16.0%

Baby Boomers (2008)

22.9%

## **Home loans/home value > 0.5**

First HRS cohort (1992)

17.0%

War Babies (2002)

26.4%

Baby Boomers (2008)

29.3%

## **Respondents with < \$25,000 in savings (in \$2012)**

First HRS cohort (1992)

18.0%

War Babies (2002)

16.4%

Baby Boomers (2008)

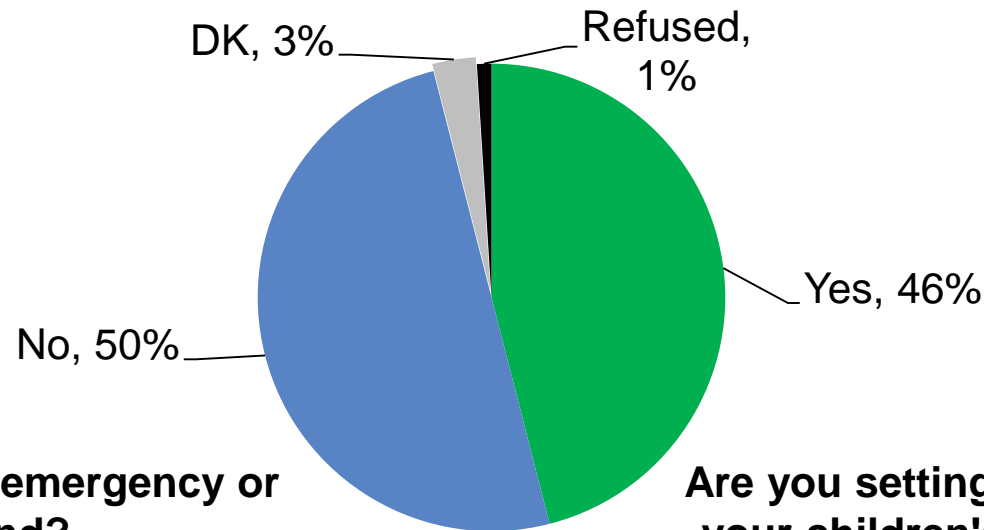
24.3%

# What the research suggests

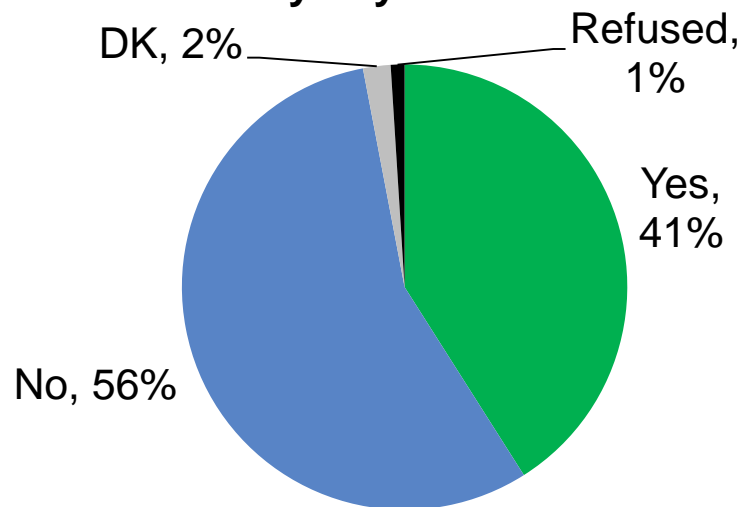
- **Baby Boomers carry debt close to retirement**
  - Recent old cohorts have borrowed more
  - They will have to manage debt into retirement
- **Debt and financial literacy are closely linked**
  - Using NFCS data, we confirm results from HRS about borrowing and can link borrowing to financial literacy
  - Financial literacy has an effect above and beyond income, education, and other demographics
- **The link between debt and financial literacy holds true for other forms of debt and age groups**
  - High cost borrowing and borrowing on retirement accounts

# Planning ahead: Most workers don't

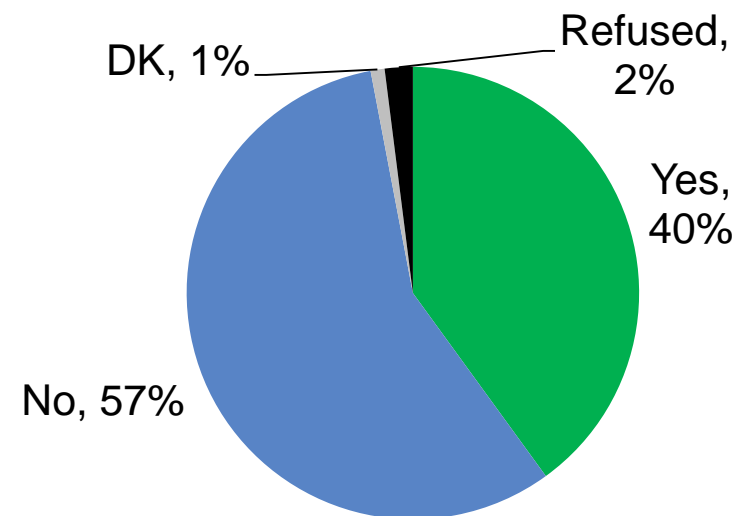
**Have you ever tried to figure out how much you need to save for retirement?**



**Have you set aside an emergency or rainy day fund?**



**Are you setting aside any money for your children's college education?**



Note: Respondents age 23 to 61 and employed at the time of the survey.



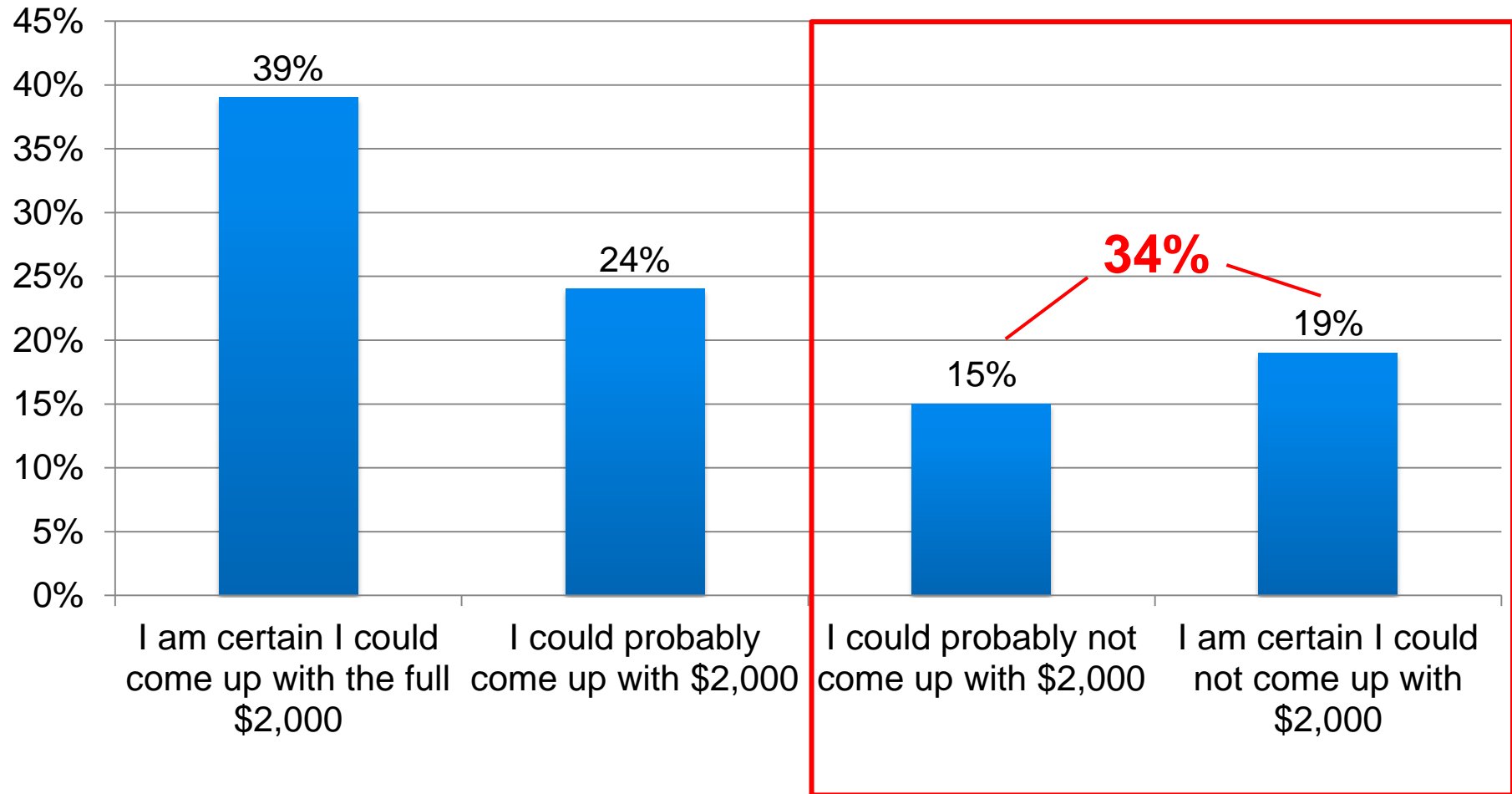
# Why no long-run vision? Dealing with short run

## **A simple measure of financial fragility developed by Lusardi, Schneider, and Tufano (2011):**

- *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

# Financial fragility: Evidence from 2012 NFCS

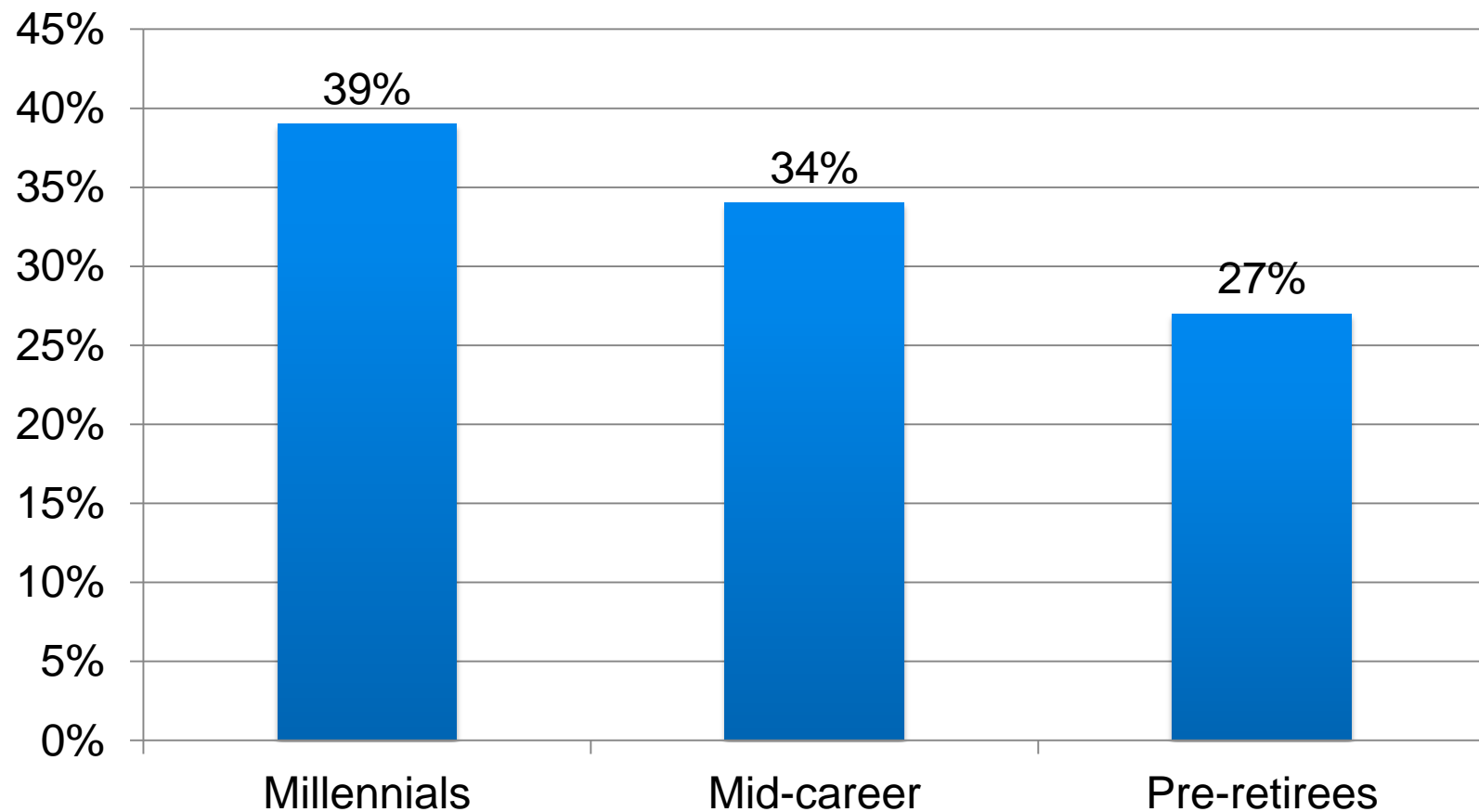
## Age: 23-61 and employed



Note: Respondents age 23 to 61 and employed at the time of the survey.

# Financial fragility by career stage

*% of respondents certainly or probably unable to come up with \$2,000 in case of unexpected emergency*



Note: Respondents age 23 to 61 and employed at the time of the survey.

# Financial literacy and retirement planning

## **Financial literacy is an important determinant of retirement planning**

- Financial literacy affects retirement planning
  - Those who are financially literate are 9 percentage points more likely to plan
  - Causality goes from financial literacy to planning
- Knowledge of risk diversification is most important for retirement planning
- Findings hold true across different measures of planning and across countries
- Financial literacy also linked to financial fragility

# Scalability: Reaching the population

## Venues for financial education

### ➤ In schools

- Easier to reach the young



### ➤ In the workplace

- Easier to reach the adults



### ➤ In libraries, local communities, museums

- Where people go to learn



# Financial education in school

## Need to prepare the new generations

### Financial education in school is critically important:

- More rigorous learning than provided by family or friends or experience
- Need to be financially literate *before* engaging in financial decisions
- Provide an equal opportunity to learn

# Financial literacy in college

## *New Personal Finance course at GW*

- **Cover personal finance with a rigorous approach**
  - A quantitative approach to personal finance
  - Teaching takes into consideration gender differences in financial literacy
  
- **It incorporates macro, accounting, and risk management**
  
- **Writing a textbook on personal finance**
  - Joint with a mathematician and a professional writer

# A program to promote financial planning

## Five steps to planning success

- Designed using findings from research
- Used videos
- Kept the message free of economic/finance jargon
- Covered concepts, such as risk diversification, with a simple story
- Other concepts are interest compounding, inflation, employer matches, and tax benefits of retirement accounts





# We measured whether it worked

- Tested interventions using an Internet panel
- Baseline questions on 5 concepts
- Randomly assigned
  - Intervention group
    - ◆ Video only, narrative only, video & narrative
  - Control group
    - ◆ No intervention
- Repeated 5 concepts questions

# Findings

- After being exposed to videos, the performance on financial literacy questions and hypothetical choices improved substantially
- While young were targeted, the videos affected all age groups

# Thinking outside the box: A saving museum



The image shows a website for a game called 'Il gioco della Formica' (The Game of the Ant) by MdR (Museo del Risparmio). The page features a cartoon ant character on the left, a central text box with a welcome message, and a 'Premi per iniziare' (Prizes to start) button. The background is a colorful illustration of a town with buildings, trees, and a winding path.

**Il gioco della Formica**

**MdR**  
MUSEO DEL RISPARMIO

Regole del gioco

Regolamento del concorso

**MdR**  
MUSEO DEL RISPARMIO

Ciao!

Giochiamo insieme? Metti alla prova le tue conoscenze sul risparmio e l'economia con il trivial quiz e non perderti le caselle bonus per incrementare il punteggio.

Occhio alle formiche da collezione: raccogliane 3 e partecipa al concorso!

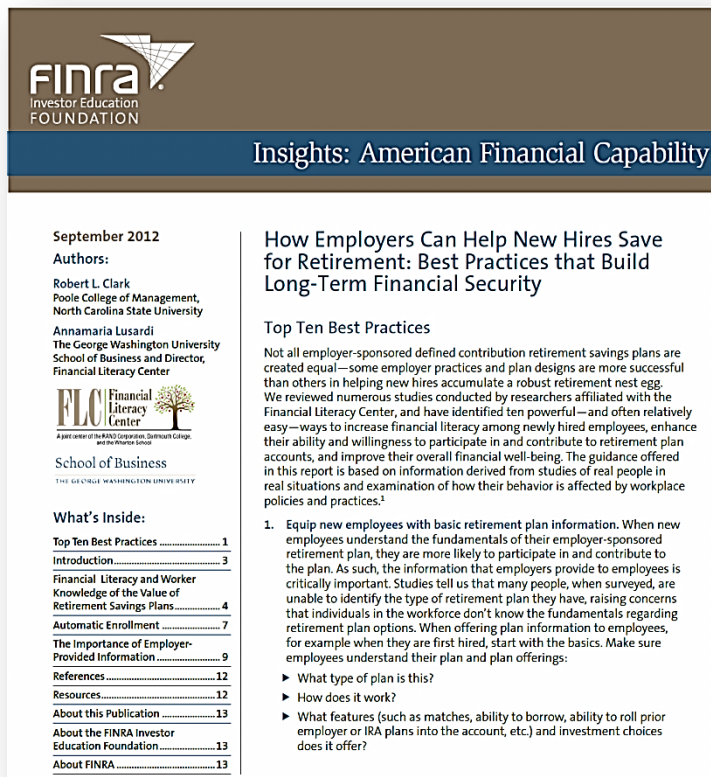
Buon divertimento!

**Premi per iniziare**

# Building long-term financial security

## Best practices

### How employers can help new hires save for retirement: *Best practices that build long-term financial security*



We prepared a report documenting best practices for improving financial decision making in the workplace.

- Based on studies of many employer-provided financial education programs
- Goal of the report is to help employers improve retirement saving choices of newly hired workers

# *FinLab*: A Financial Innovation Lab

## ➤ **Addressing current needs**

- Advance understanding of what works in financial education
- Integrate financial education and technology
- Improve financial education programs' effectiveness
- Customize financial education: one size does not fit all

➤ **Our Aim:** Drive change in financial education by identifying and fostering the strategies and innovations that promise to transform the financial education landscape

**We have set up a Financial Education Innovation Fund**

# Concluding remarks

## Shifting paradigm

- **Equipping people to make saving and retirement decisions**
  - Financial literacy is an essential skill for the 21<sup>st</sup> century
- **Need to start early**
  - The importance of financial literacy in school. These are not separate topics. Pension providers should speak to the Department of Education
- **Need targeted approach**
  - Workers are very different
- **Cannot focus on retirement savings only**
  - Other decisions are important and affect retirement security

# Contact and further information

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