How Can Financial Literacy Improve Retirement Planning?

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A new economic landscape

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
The growing importance of financial literacy

Decisions about pensions are complex and consequential

- How much do people know?
  - Financial literacy and other knowledge

- How large are differences in knowledge?
  - Look also at differences in behavior

- Are people on a path to retirement security?
  - From some simple indicators, such as retirement planning

- What can be done to promote retirement security?
  - Some scalable initiatives
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.**”
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

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

- Interest Rate: 4% (Male), 8% (Female)
- Inflation: 11% (Male), 20% (Female)
- Risk Diversification: 29% (Male), 47% (Female)
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?
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


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

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<tbody>
<tr>
<td>Total debt/Total assets &gt; 0.5</td>
<td>9.6%</td>
<td>16.0%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Home loans/home value &gt; 0.5</td>
<td>17.0%</td>
<td>26.4%</td>
<td>29.3%</td>
</tr>
<tr>
<td>Respondents with &lt; $25,000 in savings (in $2012)</td>
<td>18.0%</td>
<td>16.4%</td>
<td>24.3%</td>
</tr>
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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?
- Yes, 46%
- No, 50%
- DK, 3%
- Refused, 1%

Have you set aside an emergency or rainy day fund?
- Yes, 41%
- No, 56%
- DK, 2%
- Refused, 1%

Are you setting aside any money for your children's college education?
- Yes, 40%
- No, 57%
- DK, 1%
- Refused, 2%

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

- Millennials: 39%
- Mid-career: 34%
- Pre-retirees: 27%

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 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

Need to prepare the new generations
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
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 21st 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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