

# Financial Literacy & Planning: Implications for Retirement Wellbeing

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# Significance:

- Workers are increasingly responsible for saving & investing retirement assets.
    - What influences these decisions?
    - Are they well-equipped to make the decisions?
    - What happens when they do a poor job?
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# Life-cycle model of retirement saving:

Posits that consumers:

- Save and work given anticipated intertemporal budget constraints.
  - Look ahead & plan for the future.
  - Understand basic economics (e.g. interest rates, inflation, risk).
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# To evaluate the workings of such models:

We devised a module on *Financial Literacy & Planning* for the 2004 Health and Retirement Study (HRS)

## ➤ Financial Literacy:

- Do people understand the basic working of interest rates, inflation, and risk diversification?

## ➤ Planning

- Do people calculate how much to save for retirement? How well do they plan?
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# 3 questions on Financial Literacy: (I)

## Compound Interest

“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?”

- i) more than \$102;
- ii) exactly \$102;
- iii) less than \$102;
- iv) don't know (DK);
- v) refuse to answer.

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# Financial Literacy (II)

## Inflation

“Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy:”

- i) more than today with the money in this account;
  - ii) exactly the same as;
  - iii) less than today
  - iv) DK;
  - v) refuse.
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# Financial Literacy (III)

## Stock Risk

“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.”

- i) True;
  - ii) False;
  - iii) DK;
  - iv) Refuse.
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# Financial Literacy Results

**Panel A: Distribution of Responses to Financial Literacy Questions**

	<i>Responses</i>			
	<i>Correct</i>	<i>Incorrect</i>	<i>DK</i>	<i>Refuse</i>
Compound Interest	67.1%	22.2%	9.4%	1.3%
Inflation	75.2%	13.4%	9.9%	1.5%
Stock Risk	52.3%	13.2%	33.7%	0.9%

**See Table 1**

**NB: only 34% correctly answer all 3 questions; & only 56% correctly answer Inflation & Compound Interest.**



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# 3 questions on Retirement Planning

## Trying to plan

“Have you ever tried to figure out how much your household would need to save for retirement?”

## Developing a plan

“Have you developed a plan for retirement saving?”

## Sticking to the plan

“How often have you been able to stick to this plan? Would you say:”

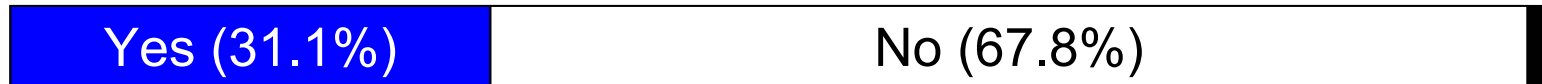
i) always; ii) mostly; iii) rarely; or iv) never?

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# What we find:

## Tried

Have you ever tried to figure out how much your household would need to save for retirement?



## Developed a plan

Have you developed a plan for retirement saving?



## Stuck to the plan

How often have you been able to stick to the plan?



# Prevalence of retirement planners

<i>Question</i>	<i>Proportion of Sample</i>
<b>Simple Planners</b> Yes to “tried to figure out how much to save for retirement”	31.3%
<b>Serious Planners</b> Replied Yes/More or less to “developed a plan”	21.1%
<b>Successful Planners</b> Replied Always/Mostly to “able to stick to the plan”	18.5%

**See Table 2 Panel B**

# Which tools do people use for planning?

<i>Tools</i>	<i>Simple Planners n = 397</i>	<i>Successful Planners n = 235</i>
Talk to family/friends	21.1% (.409)	17.4% (.380)
Talk to coworkers/friends	24.7% (.432)	21.3% (.410)
Attend retirement seminar	35.3% (.479)	40.4% (.492)
Use calculator/worksheet	37.8% (.485)	43.4% (.497)
Consult financial planner	39.0% (.488)	49.4% (.501)

**See Table 4**

**NB: ¼ of planners have not used any of these tools.**

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# The effects of financial literacy

Are the more financially literate

- more likely to plan?
- more likely to succeed in planning?



# Financial literacy & retirement planning (I)

<b>Compound Interest</b>	<i>Overall</i> n = 1269	<i>Simple Planners</i> n = 397	<i>Serious Planners</i> n = 268	<i>Successful Planners</i> n = 235
• Correct	67.1%	75.3%	78.0%	78.7%
• Incorrect	22.2%	21.7%	20.5%	20.0%
• DK	9.4%	2.5%	1.5%	1.3%

See Table 3

# Financial literacy & retirement planning (II)

<b>Inflation</b>	<i>Overall</i>	<i>Simple Planners</i>	<i>Serious Planners</i>	<i>Successful Planners</i>
• Correct	75.2%	84.4%	85.8%	86.8%
• Incorrect	13.4%	11.3%	11.2%	10.2%
• DK	9.9%	3.8%	3.0%	3.0%

See Table 3

# Financial literacy & retirement planning (III)

<b>Stock Risk</b>	<i>Overall</i>	<i>Simple Planners</i>	<i>Serious Planners</i>	<i>Successful Planners</i>
• Correct	52.2%	67.5%	73.1%	73.6%
• Incorrect	13.2%	11.6%	11.2%	11.1%
• DK	33.6%	19.9%	15.3%	14.9%

See Table 3



## Probit Analysis of Simple, Serious, and Successful Planners

	<i>Simple Planners</i> n = 1269		<i>Serious Planners</i> n = 1269		<i>Successful Planners</i> n = 1269	
	<b>I</b>	<b>II</b>	<b>I</b>	<b>II</b>	<b>I</b>	<b>II</b>
Correct on Compound Interest	.068**	.032	.064**	.037	.061**	.037
Correct on Inflation	.104***	.079**	.073***	.057*	.072***	.062**
Correct on Stock Risk	.165***	.109***	.155***	.101***	.137***	.088***
DK Compound Interest		-.171**		-.138**		-.130**
DK Inflation		.025		.036		.057
DK Stock Risk		-.071*		-.070*		-.064*
Pseudo R <sup>2</sup>	.048	.056	.060	.069	.060	.069

See Table 5

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# Summary of findings

- Only 1/3 of respondents have basic knowledge of key economic variables: interest rates, inflation, and risk diversification.
  - Fewer than 1/3 have attempted to calculate how much they need to save for retirement. Even fewer (19%) follow through.
  - People use a variety of tools to plan for retirement, including informal means such as talking to family and friends.
  - Financial literacy is strongly correlated with planning. Those most financially knowledgeable are more likely to plan and be successful planners.
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## These questions in other surveys

- We have inserted these (and many more) questions on financial literacy and planning in the Dutch CentERdata and we will soon be able to do international comparisons.
  - We are planning to insert these (and more) questions in the Rand Internet Panel that surveys younger respondents than the HRS.
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# Other related work

- Many (even those  $> 50$  and the highly educated) do not plan for retirement. Most importantly, planners accumulate more wealth and are more likely to invest in stocks.
    - Lusardi (1999, 2002, 2003); and Ameriks, Caplin, and Leahy (2003)
  - Most workers have not attempted to calculate how much to save for retirement. Many of those who tried could not state results.
    - Retirement Confidence Surveys (1990-2005)
  - Workers have little knowledge of their Social Security and pensions.
    - Bernheim (1995, 1998), Gustman and Steinmeier (2004), Mitchell (1988).
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## Implications:

- Financial knowledge among workers cannot be taken for granted.
  - Workers need help to make sound saving and portfolio choice decisions.
  - A “one-time/one-size-fits-all” retirement seminar is likely to be ineffective in stimulating saving and retirement financial security.
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## Qualifications and questions:

- Is financial knowledge necessary to make saving decisions?
  - How much should people know?
  - How much are saving and portfolio choice influenced by financial literacy?
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