
Insights on the Importance of Financial Literacy for Better Financial Decisions

**Connecting Financial Education to
Consumers: A Symposium for Financial
Institutions, Advisors and Educators
Federal Reserve Bank of Chicago
October 7, 2008**

Annamaria Lusardi
Dartmouth College & NBER

Aims of the presentation

- Show that financial illiteracy is widespread
 - Don't assume that people have economic/financial knowledge
 - Show the need to segment the population according to financial knowledge
 - Wide differences among population groups
 - Show that financial literacy matters
 - Financial literacy affects financial decision-making
 - Discuss implications for financial education programs
 - How to increase the effectiveness of financial education
-

Existing financial literacy surveys

- Jump\$tart Coalition for Personal Financial Literacy Surveys
 - National Council on Economic Education Survey
 - Federal Reserve Board sponsored literacy questions in the Survey of Consumers
 - Many other surveys, often on specific sub-groups (Consumer Federation of America, Washington State Department of Financial Institutions)
-

A new financial literacy survey

Together with Olivia Mitchell (Wharton), I devised a module on *Financial Literacy* for the 2004 Health and Retirement Study (HRS).

➤ Financial Literacy

Do people understand basic economic concepts?

- Interest compounding
 - Inflation
 - Risk diversification
-

Assessing Literacy: Numeracy

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.
-

Assessing Literacy: Inflation

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 with the money in this account:”

- i) More than today;
 - ii) Exactly the same;
 - iii) Less than today;
 - iv) DK;
 - v) Refuse to answer.
-

Assessing Literacy: Risk Diversification

Risk Diversification

“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 to answer.
-

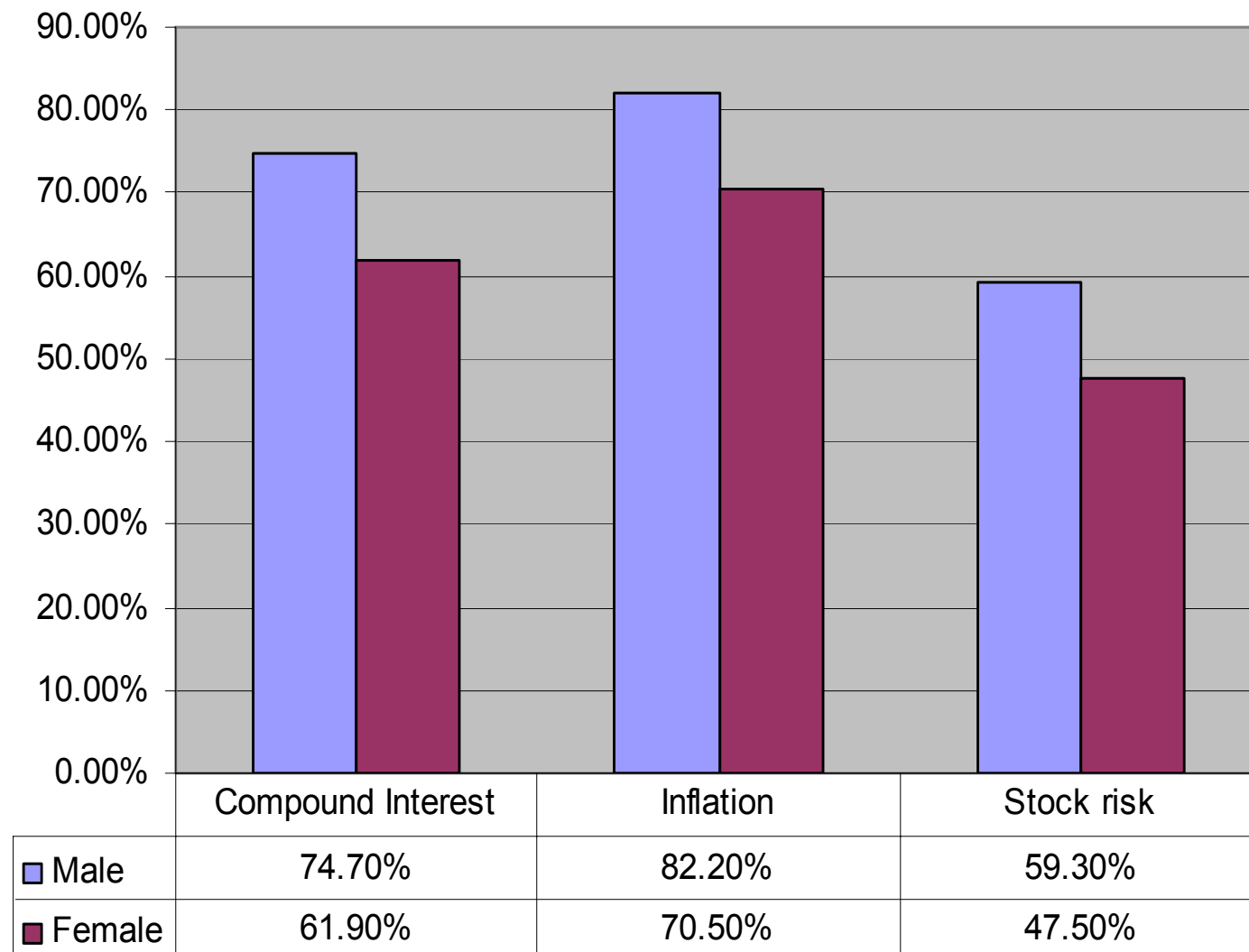
How much do older people (ages 50+) know?

Panel A: Distribution of Responses to Financial Literacy Questions

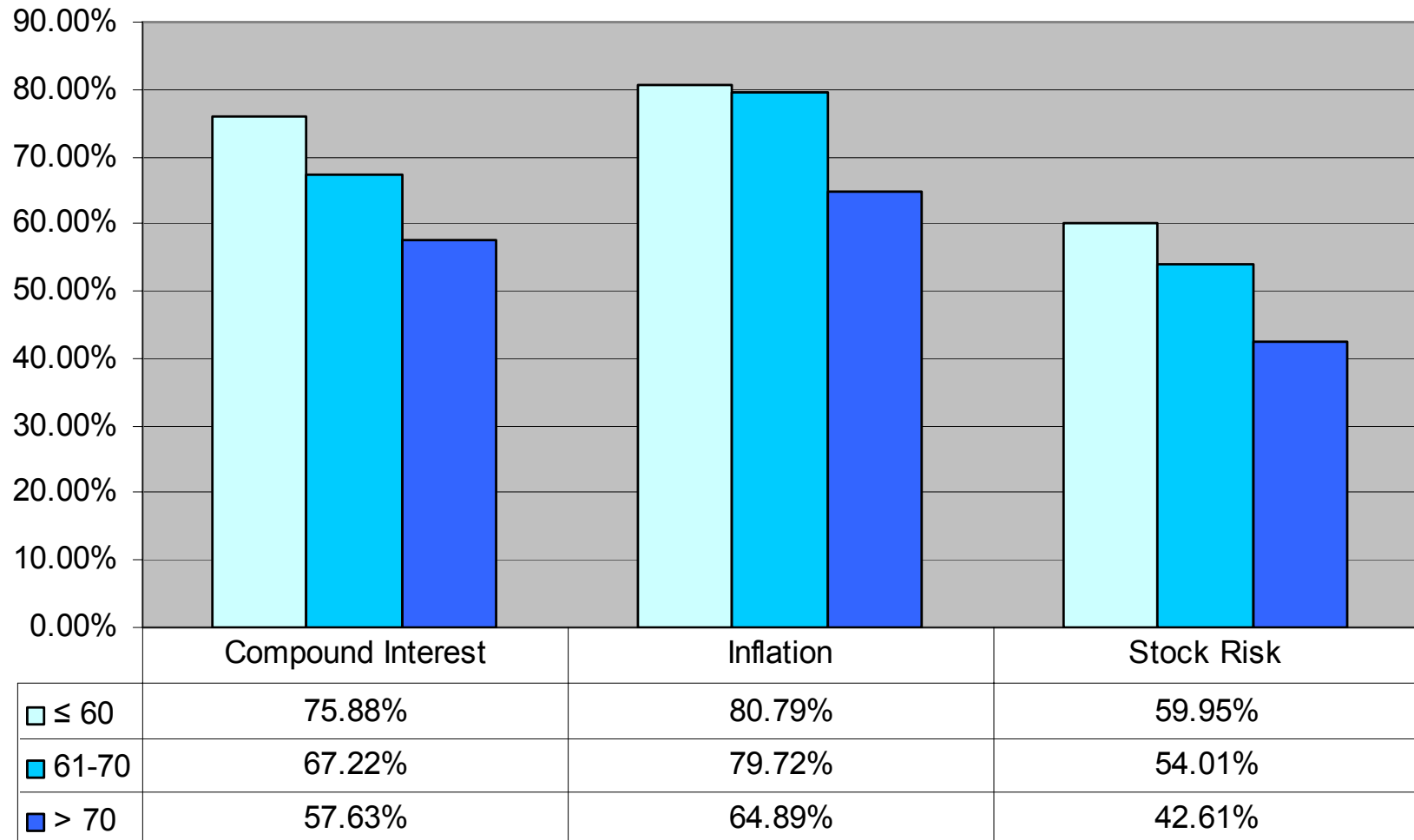
	<i>Responses</i>			
	<i>Correct</i>	<i>Incorrect</i>	<i>DK</i>	<i>Refuse</i>
Compound Interest	67.1%	22.2%	9.4%	1.3%
Inflation	75.2%	13.4%	9.9%	1.5%
Stock Risk	52.3%	13.2%	33.7%	0.9%

NB: Only **ONE THIRD (34%)** correctly answer all 3 questions; only around **HALF (56%)** correctly answer Inflation & Compound Interest.

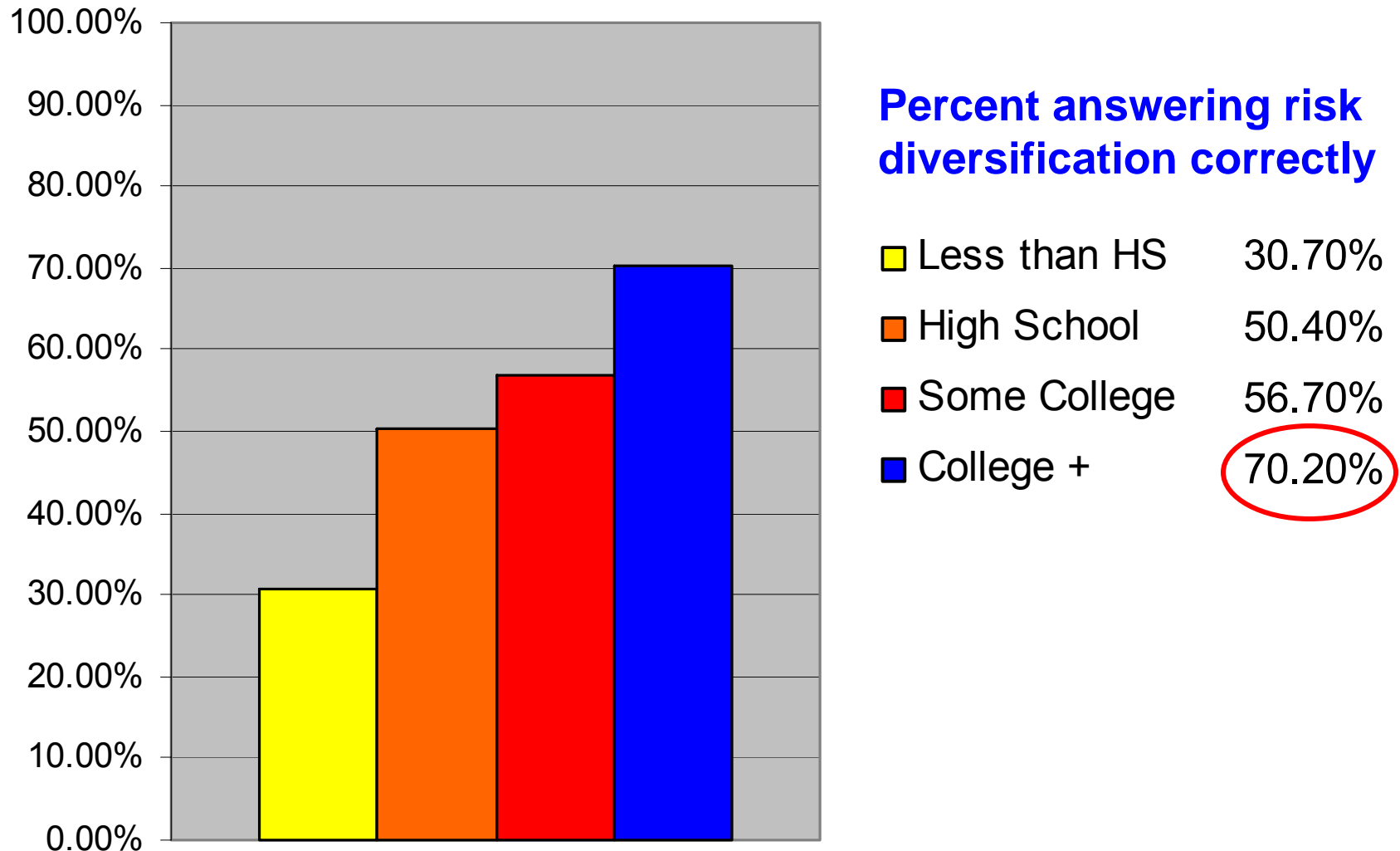
Financial Literacy and Gender



Financial Literacy and Age



Financial Literacy and Education



Source: Health and Retirement Study, 2004

Two Takeway Points

- Financial literacy should not be taken for granted
 - Illiteracy is widespread
 - Financial literacy varies a lot among demographic groups
-

Financial literacy matters

- Financial literacy affects saving/investment decisions
 - Those with low literacy are less likely to plan for retirement (Lusardi and Mitchell (2006, 2007))
 - Those with low literacy are less likely to participate in the stock market (many papers)
 - Those with low literacy are more likely to borrow at high costs (Lusardi and Tufano, 2008)
 - Those with low literacy are more likely to rely on family and friends for financial information (van Rooij, Lusardi and Alessie, 2007)
-

Retirement planning

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

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	
	I	II	I	II	I	II
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 ²	.048	.056	.060	.069	.060	.069

More on the power of interest compounding (TNS)

Suppose you owe \$1,000 on your credit card and the interest rate you are charged is 20% per year compounded annually. If you didn't pay anything off, at this interest rate, how many years would it take for the amount you owe to double?

- 2 years
- Under 5 years
- 5 to 10 years
- More than 10 years
- Do not know
- Prefer not to answer

Interest compounding	Percent
2 years	9.6
Less than 5 years (correct)	35.9
5 to 10 years	18.8
More than 10 years	13.1
Do not know	18.2
No answer	4.3

Payment options: Loaning money to the retailer (TNS)

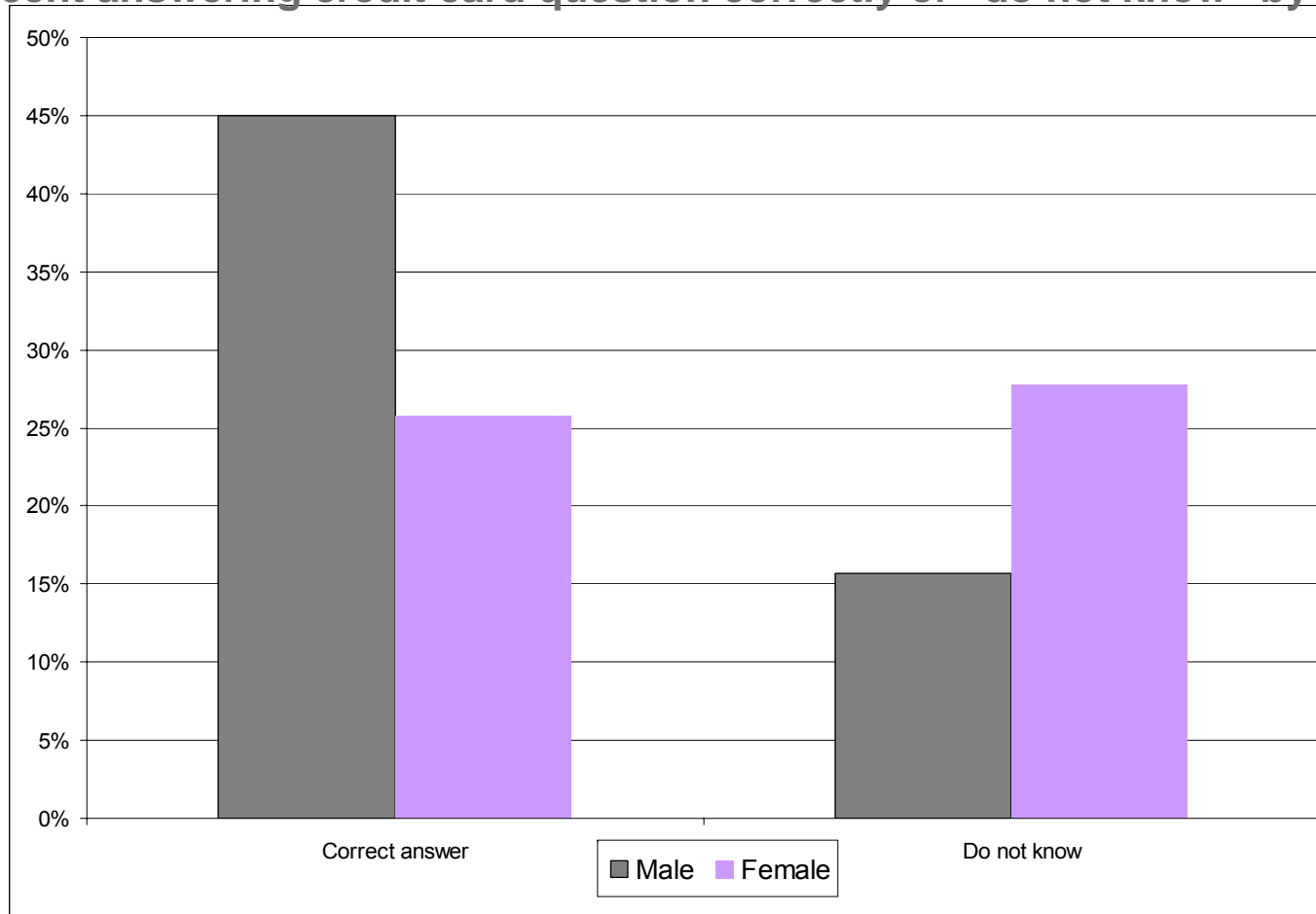
You purchase an appliance which costs \$1,000. To pay for this appliance, you are given the following two options: a) Pay 12 monthly installments of \$100 each; b) Borrow at a 20% annual interest rate and pay back \$1,200 a year from now. Which is the more advantageous offer?

- Option (a)
- Option (b)
- They are the same
- Do not know
- Prefer not to answer

Appliance payment	Percent
Option a	40.6
Option b (correct)	6.9
They are the same	38.8
Do not know	9.2
No answer	4.5

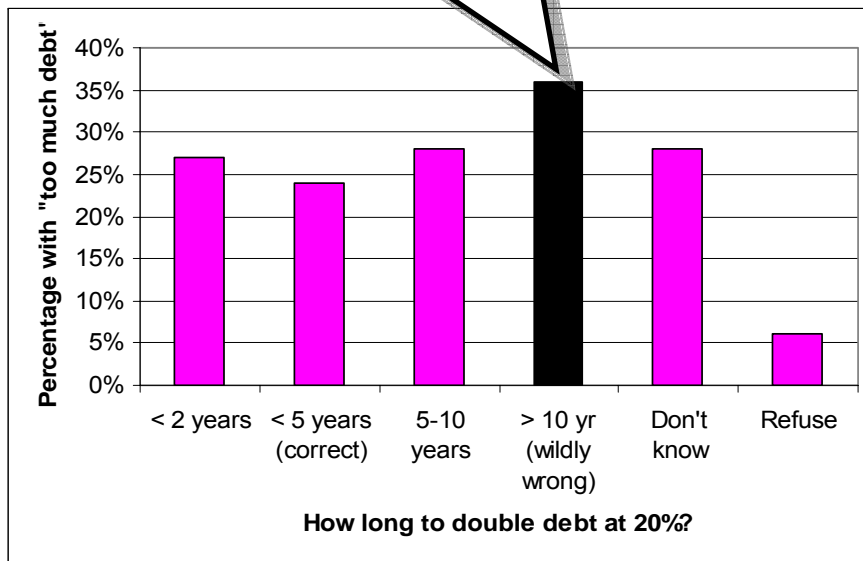
Who has lower *debt literacy*? Differences between men and women

Percent answering credit card question correctly or “do not know” by gender

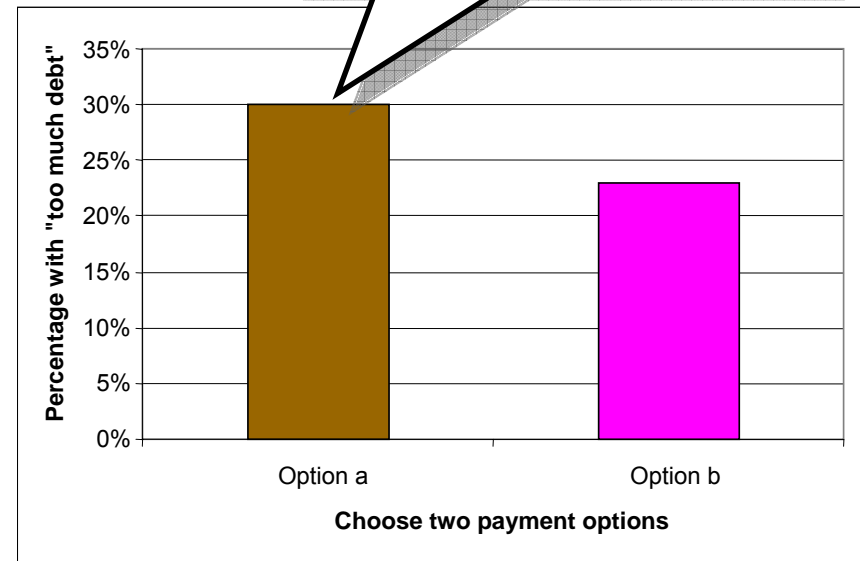


People who make errors have “difficulties paying off debt.”

Grossly underestimate compounding



Gives free loan to retailer



Financial Literacy and Sources of Advice

	Levels of Financial literacy			
	1 st (low)	2nd	3rd	4 th (high)
Parents, friends, acquaintances	40.7	37.4	19.9	17.9
Information from newspapers	1.1	6.0	10.6	13.7
Financial magazines, books	2.1	7.6	9.7	17.0
Brochures from my bank	6.6	6.7	11.3	6.2
Advertisement on TV	4.0	3.6	5.0	1.4
Professional advisers	19.4	23.6	27.5	24.1
Fin. Computer programs	0.2	0.3	1.1	0.5
Fin. Information on Internet	6.3	6.6	7.6	12.4
Other	19.7	8.2	7.3	6.9

Why we need financial literacy

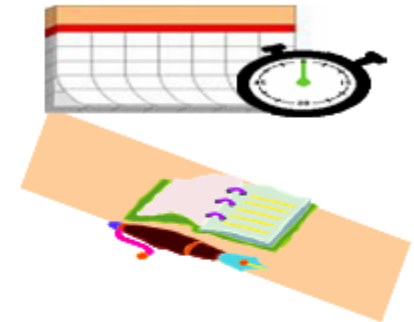
- People make many financial decisions and these decisions are inter-related
 - Workers can be automatically enrolled in pensions and borrowing on credit cards
 - Mistakes can be costly
 - Micro level
 - Macro level
 - New financial environment
 - New pension landscape
 - Global financial markets
-

How to increase the effectiveness of fin education

- A 1 hour retirement seminar will not work!
 - Need intervention adequate to the size of problem
 - Simplification is very important
 - Ex: a planning aid
 - Elaborate information for consumers
 - Use charts, colors, stories for communication
-

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.
- 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.
- 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 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.



Don't give up! Contact the Benefits Office (6-3588) if for any reason you could not complete the online application.



It takes no time to prepare for your lifetime!

Most people plan on electing a supplemental retirement account, but feel they don't have the time or information right now. We have outlined 7 simple steps to help you complete the election process. It will take between 15 – 30 minutes, from start to finish. It will take less time for you to start to insure your future than it takes you to unload your dishwasher!

***Avoid
too good deals***

***Make your money last
a lifetime***

Rely on reliable information

Monitor Investment & Savings

***Take time to choose
the right investment for you***

Plan for your future

Diversify your investments

Invest in low fees index funds

Avoid high interest rate debt

Exploit the power of interest compounding

Take advantage of tax incentives and employers' matches

If you want to read more on these topics

- Other papers I have written on this topic are available on my web pages:
 - <http://www.dartmouth.edu/~alusardi>
 - I edited a book “*Overcoming the saving slump: How to increase the effectiveness of financial education and saving programs*” for the University of Chicago Press that discusses these topics at length.
 - I write a blog on financial literacy:
<http://annalusardi.blogspot.com/>
-