

Evaluation of Financial Education Programs

Annamaria Lusardi
(Dartmouth College and NBER)

G8 International Conference on
Financial Literacy
Moscow, November 29-30, 2006

Motivation

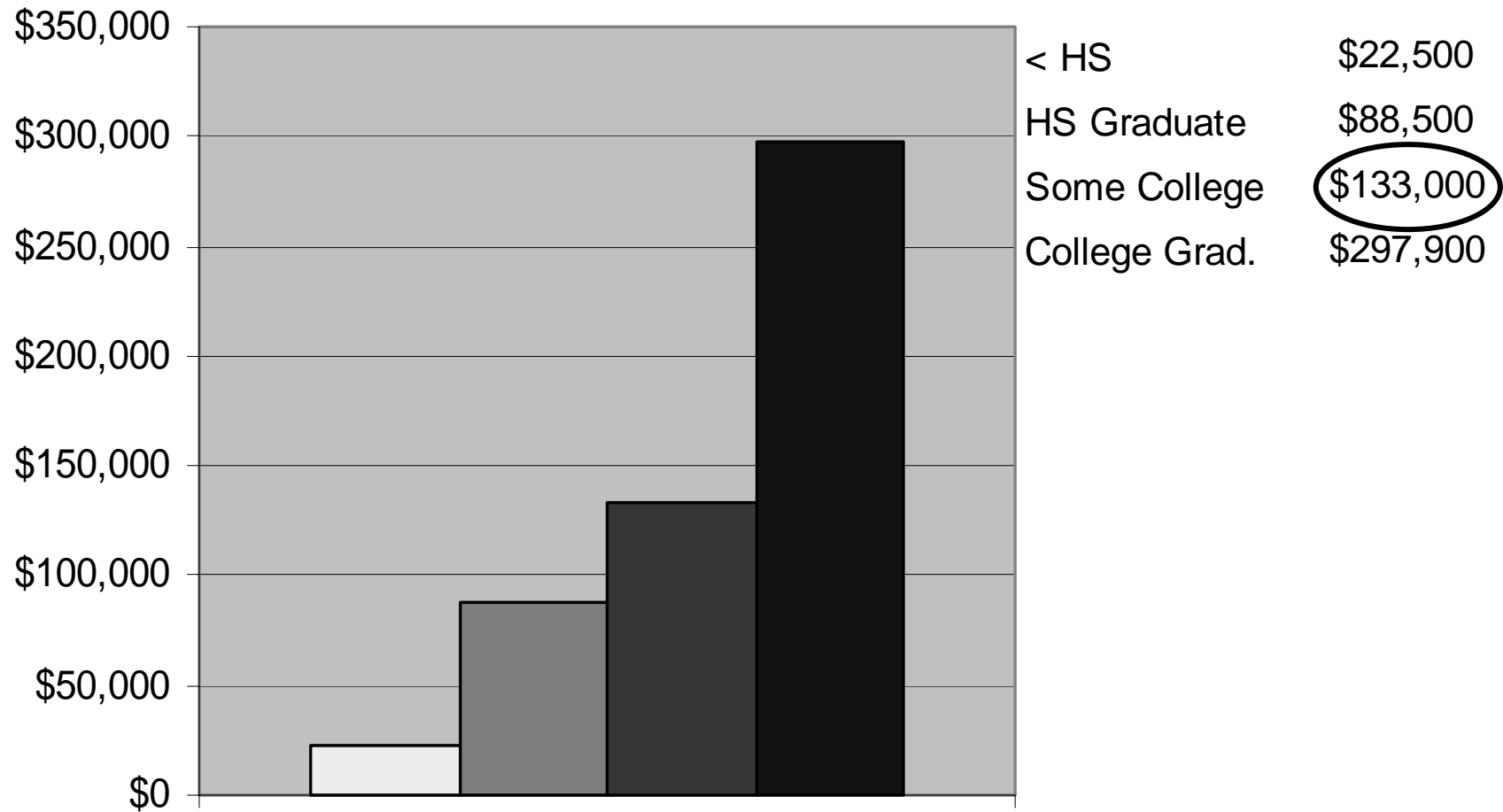
- In the US, workers are increasingly responsible for saving & investing to prepare for retirement.
 - What influences these decisions?
 - Are workers well-equipped to make the decisions?
- To help workers, US employers have undertaken financial education programs, such as retirement seminars.

Why are seminars important?

- Many workers approach retirement with little or no wealth.
 - Can they afford to retire?
- Many workers get information and financial advice in the workplace.
 - Colleagues and friends are a common source of financial advice.

Baby Boomer Wealth: By Education

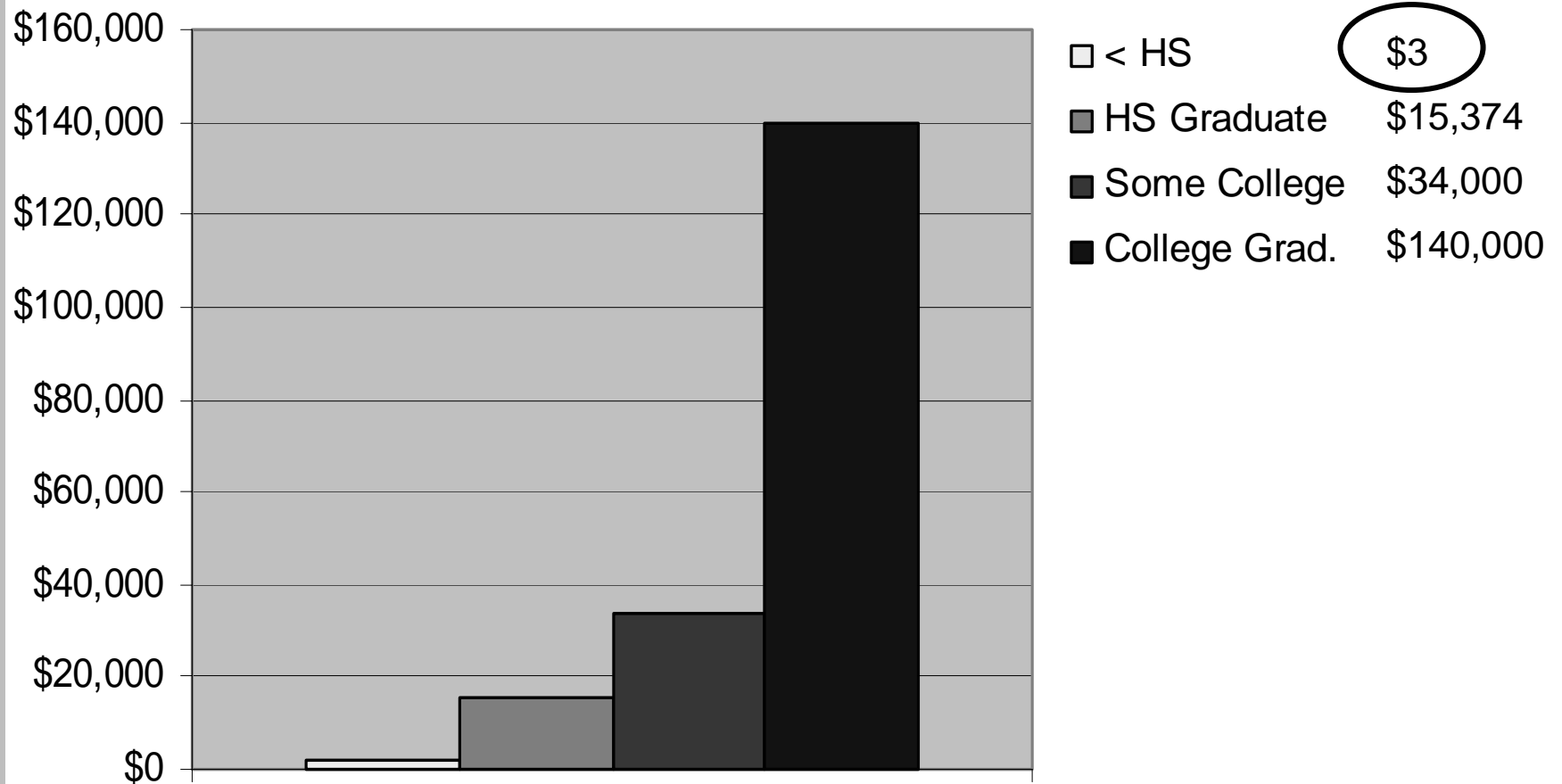
Median Net Worth



Source: Health and Retirement Study, 2004 . Age range: 51-56

Baby Boomer Wealth: By Education

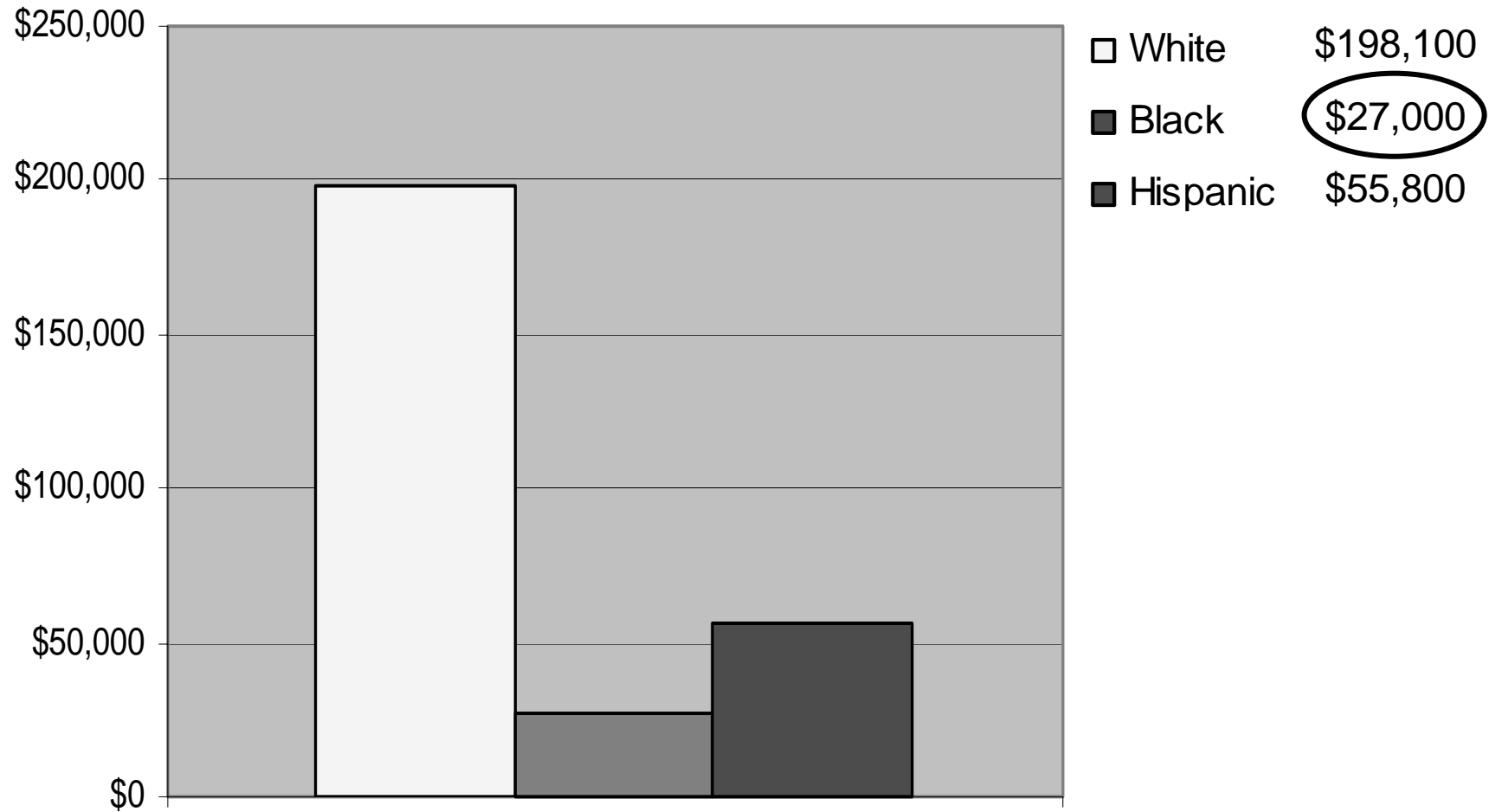
25th Percentile: Net Worth



Source: Health and Retirement Study, 2004. Age range: 51-56.

Baby Boomer Wealth: By Race

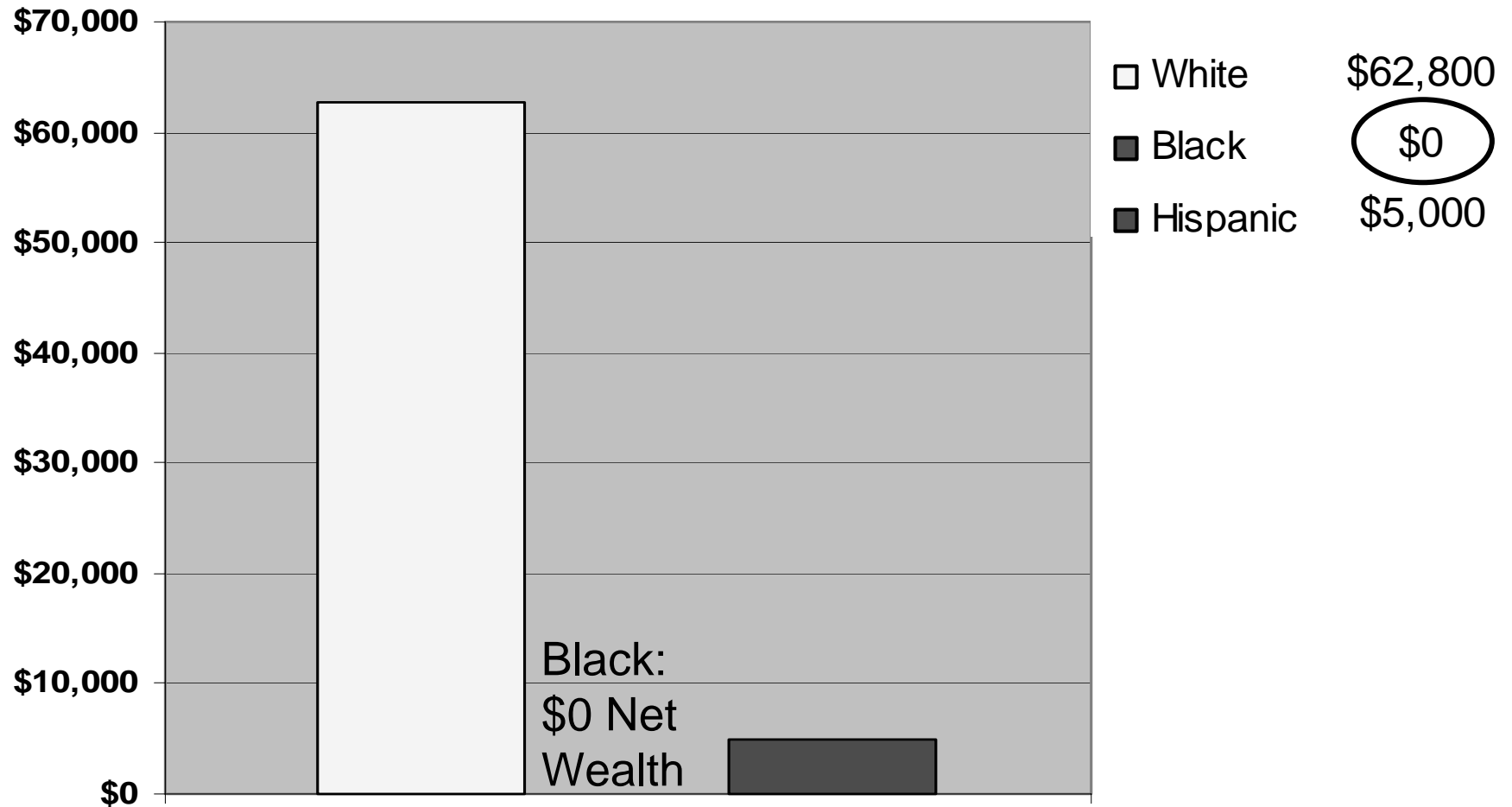
Median Net Worth



Source: Health and Retirement Study, 2004. Age range: 51-56.

Baby Boomer Wealth: By Race

25th Percentile: Net Worth



Source: Health and Retirement Study, 2004. Age range: 51-56

Which tools do workers use for planning?

| <i>Tools</i> | <i>Simple Planners</i> n = 397 | <i>Successful Planners</i> n = 235 |
|---------------------------|---------------------------------------|---|
| 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) |

Source: Module on financial literacy and planning, HRS 2004.

The effects of retirement seminars

- Do seminars and employers' programs change household behavior?
 - The evidence so far is mixed:
 - Clark and Schieber (1998)
 - Bernheim and Garrett (2003)
 - Clark and D'Ambrosio (2003)
 - Duflo and Saez (2003)
 - Other papers summarized by Lusardi (2004)

Challenges in evaluating seminar effects

- Little is known about the content of various seminars.
- It may take time for seminars to influence saving behavior—when should researchers measure the effect?
- Those who attend seminars may already be inclined to save (a self-selected group).

My work using the Health and Retirement Study (HRS)

Advantages of using the HRS:

- Comprehensive and accurate measure of wealth (private, pension, and Social Security)
- Provides a rich set of controls to account for household differences:
 - Preferences
 - Past shocks
 - Expectations about the future
- Information on planning costs and supply of financial education

Approach

- I examine the effects of seminars across education and the wealth distribution
- I examine different outcomes: savings and portfolio choice
- I rely on variables measuring the supply of seminars rather than the attendance to seminars.

Empirical findings

- Retirement seminars affect wealth holdings:
 - For those who save little
 - For those with low education
- Retirement seminars affect stock holdings:
 - For those with low education
 - For those with low wealth
- Retirement seminars affect the accumulation of both private and pension wealth

Effect of Retirement Seminars on Wealth Accumulation

| | <i>Total sample</i> | <i>1st quartile</i> | <i>Median</i> | <i>3rd quartile</i> |
|---|---------------------|---------------------|---------------|---------------------|
| <i>a. Financial net worth</i> | | | | |
| Total sample | 17.6 %** | 78.7%** | 32.8%** | 10.00% |
| Low education | 19.50% | 95.2%** | 30.0%** | 8.80% |
| High education | 13.10% | 70.0%** | 19.4%** | 10.20% |
| | | | | |
| <i>b. Total net worth</i> | | | | |
| Total sample | 5.70% | 29.2%** | 8.70% | 0.50% |
| Low education | 3.40% | 27.0%** | 7.10% | 4.00% |
| High education | 7.30% | 26.5%** | 6.50% | 3.60% |
| | | | | |
| <i>c. Total net worth + Pensions</i> | | | | |
| Total sample | 20.5%** | 32.7%** | 26.8%** | 19.5%** |
| Low education | 20.7%** | 31.4%** | 14.6%* | 18.2%** |
| High education | 19.4%** | 39.3%** | 31.2%** | 17.6%** |

Discussion

- Many workers are left untouched by retirement seminars: Only 13% of workers in the HRS attend seminars
 - Many do not take advantage of seminars
 - Some workers work at firms that do not offer seminars (ex: small firms)
- Retirement seminars are insufficient programs

Some important facts about workers

- Many workers display little or no financial literacy.
- Many workers are not knowledgeable about their pension and pension wealth.
- Workers differ widely in their saving behavior; needs, preferences, economic circumstances are very different.

Assessing Financial Literacy

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.

Assessing Financial Literacy

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.

Assessing Financial Literacy

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.

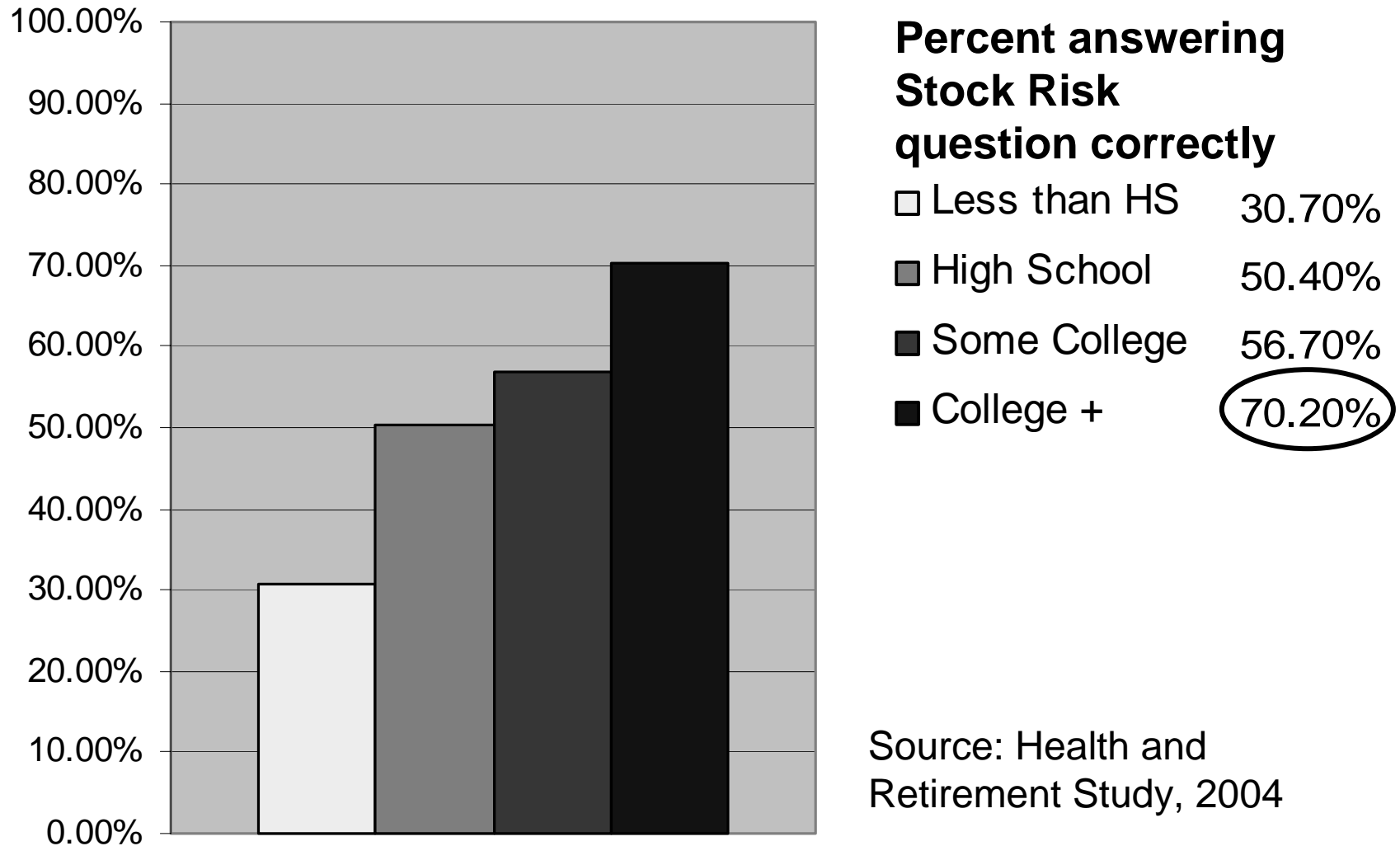
How much do people (50 and older) know?

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% |

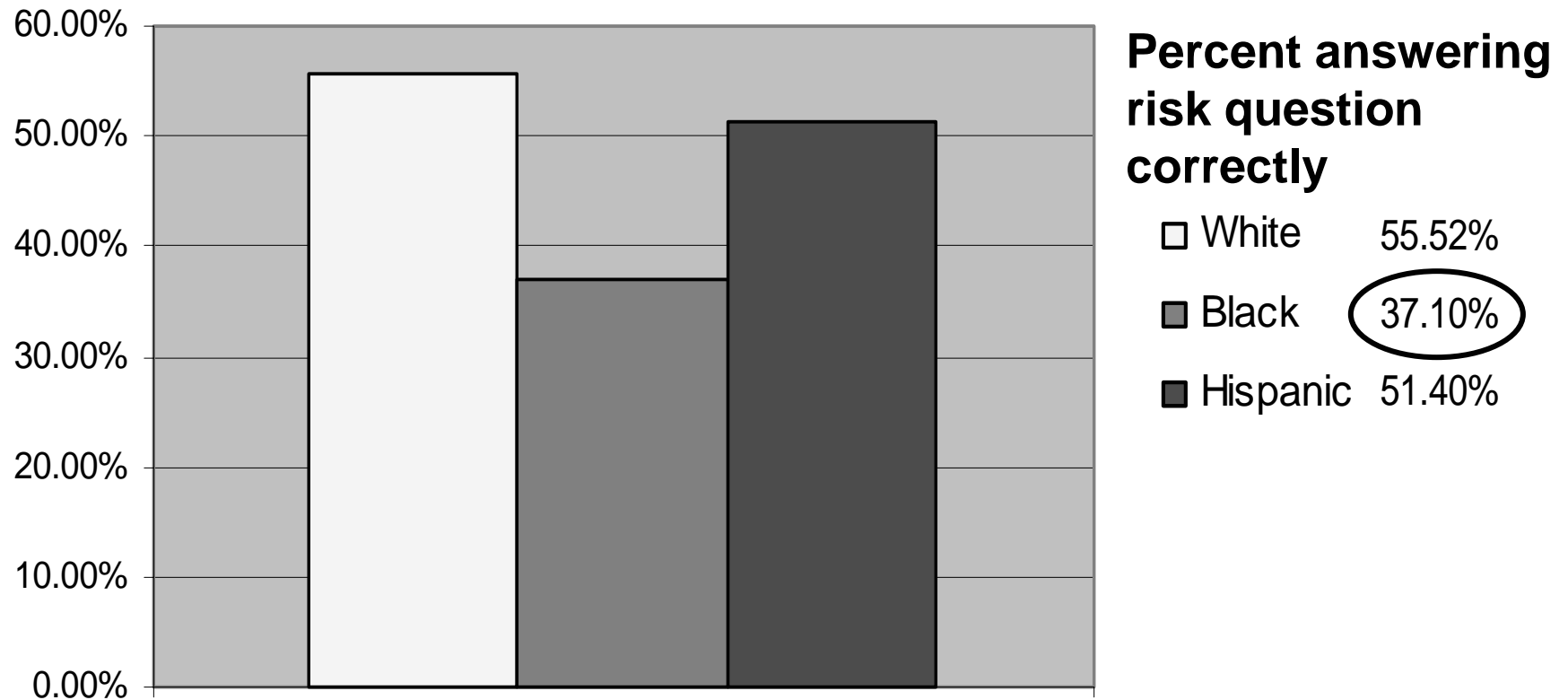
NB: Only ONE-THIRD (34%) answered all 3 questions correctly; only around HALF (56%) correctly answered Inflation & Compound Interest.

Financial Literacy and Education



Source: Health and Retirement Study, 2004

Financial Literacy and Race



Source: Health and Retirement Study, 2004

The “cure must be adequate to the disease”

- A one-time seminar can do little to address financial illiteracy.
- A “one-size-fits-all” seminar can hardly address differences in saving.
- Seminars tend to preach to the converted: Workers may be unaware of the need and opportunities to save.

Improving the effectiveness of financial education programs

- Conference at Dartmouth College last year:
www.dartmouth.edu/~lusardiworkshop
- Important to take a multi-disciplinary approach
 - Legal restrictions
 - Cognition biases
 - Importance of norms and peer effects
- Early financial education is crucial: Offer education in school

How to make employees save

- Joint project with Dartmouth's VP for Finance and Administration and Punam Keller (Professor of Marketing, Tuck School of Business).
- We combine *marketing* and *finance* to devise new programs aimed at increasing employees' savings and contribution to supplementary pensions.

Final thoughts for discussion

- National standard/guidelines for financial literacy?
 - To drive, we need a manual and a license. But there is no such requirement for driving financial investment.
- Market for financial advise?
- Need more data and collaborative work (among economists, legal scholars, psychologists, sociologists, etc.)