



**BeFi**

BeFi Web Seminar for June 25, 2008  
Collaborative Research Opportunities

*by Alessandro Previtero, UCLA*  
*Martin Weber, Mannheim University*

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# Behavioral Finance and Retirement Income Solutions

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**Alessandro Previtero**

**Shlomo Benartzi**

UCLA Anderson School of Management

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# Outline

- Why should we care about retirement income decisions?
- Our research agenda on retirement income
- What are the next steps?

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## Why should we care about retirement income decisions?

- Managing wealth *after* retirement is a topic less scrutinized than saving for retirement.
- However, retirement income decisions:
  - Carry serious welfare implications,
  - Are challenging, and
  - Are made by employees at a later stage in life.

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## Our approach

- We plan to investigate how retirees can hedge longevity risk and achieve a guaranteed income for life.
- Annuities – the traditional solution – have the ability to ensure against the uncertainty in consumption that arises from longevity risk.
- Annuities represent only one of the possible retirement income solutions.

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## “What’s in it for you?”

- A deeper understanding of the psychology behind the decision to (not) annuitize can:
  - Help plan sponsors provide more effective retirement income solutions for their employees.
  - Provide useful insights to the financial industry to design more suitable retirement income solutions.
- Are there fiduciary or liability issues in not providing effective retirement income solutions?

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- Why should we care about retirement income decisions?
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## Our questions

1. What types of employees choose an annuity?
2. What role do defaults play in retirement income decisions?
3. How do defaults and complexity influence retirement income decisions?

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# Default effects

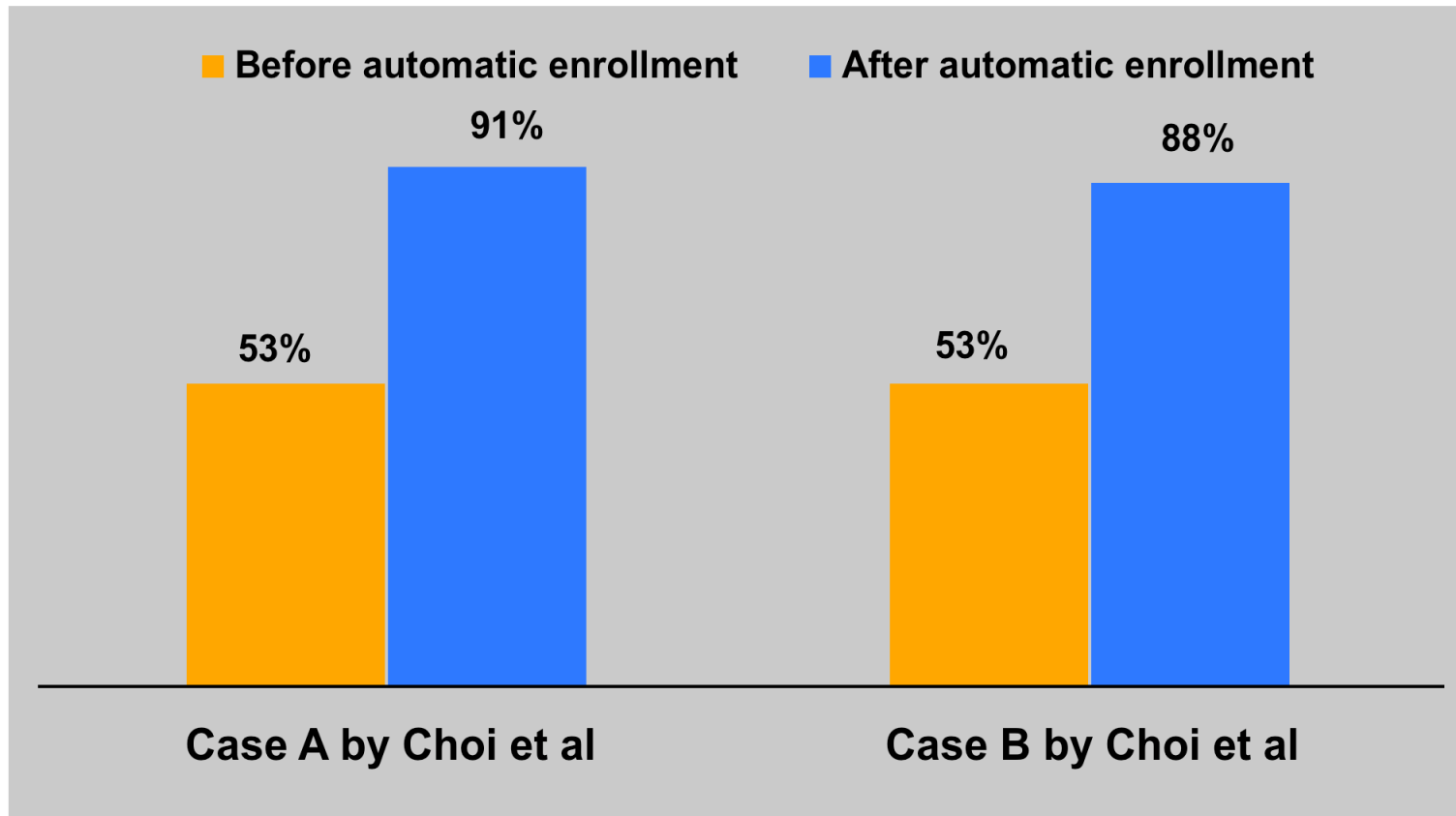
- Default effects represent “one of the most robust results in the applied economics literature of the last 10 years.”
- Default effects have been documented in a plethora of different settings:
  - Organ donations
  - Car option selections
  - Car insurance coverage
  - Internet privacy settings
  - **Saving for retirement**

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# Default effects in saving for retirement

- **Defaults:** Employees are required to express their decision, only if it is different from the default.
  - Call a toll-free number before a deadline.
  - Default is made salient.

# Default effects in participation rates



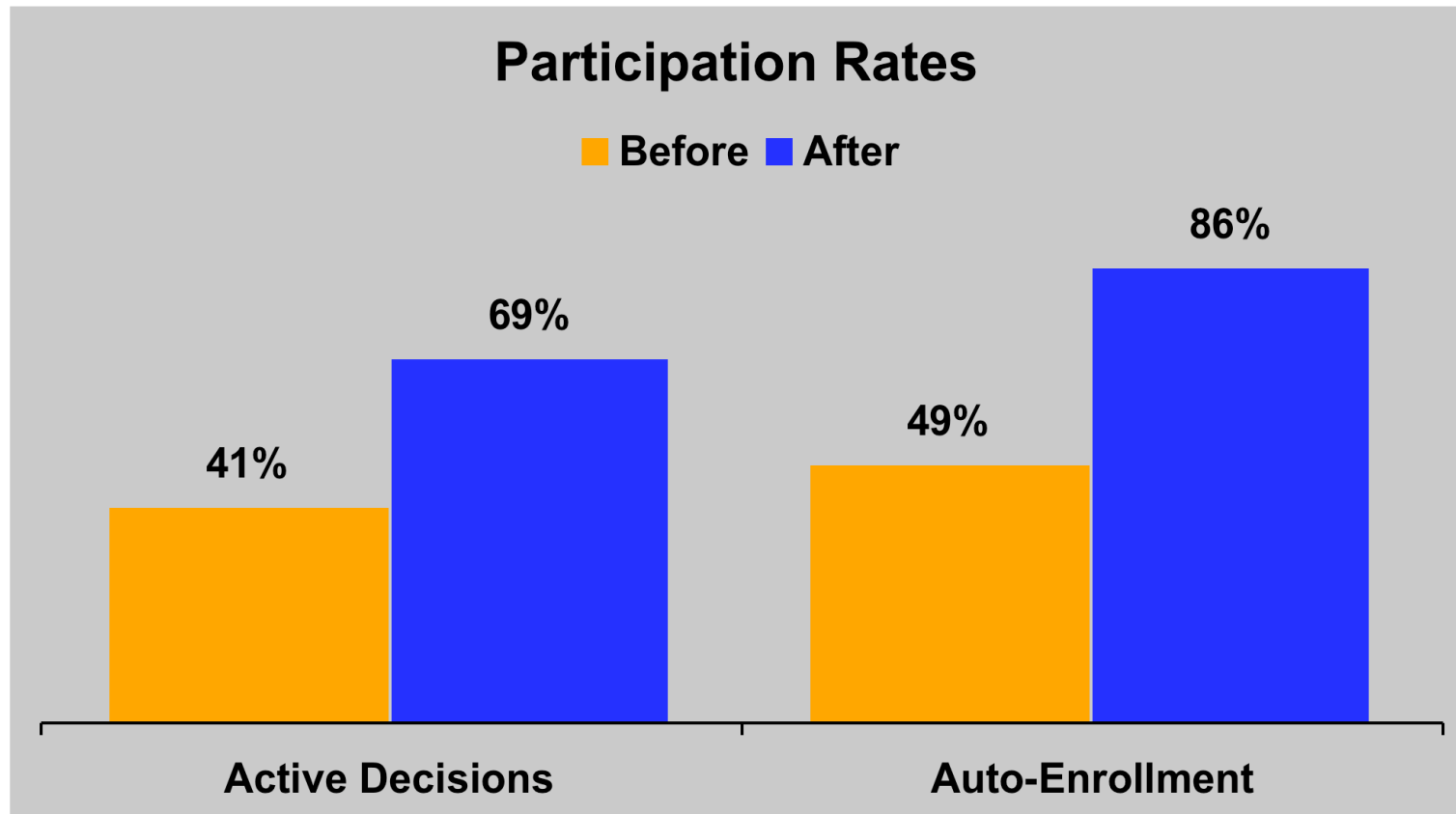
Sources: Choi et al (2004, 2002)

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## Active decisions in saving for retirement

- **Active Decisions:** Employees are explicitly required to express their payout preferences.
  - Turn in a form (usually jointly with others).
  - 90-95% of the employees actually express their preferences.
  - The default might exist, but it is obscured.

# Active decisions in participation rates



Sources: Choi et al (2005); Madrian and Shea (2001)

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## Our questions

1. What types of employees choose an annuity?
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## Data request for question #1

- Archival data from plan sponsors that offer either DB or DC plans *with annuitization as a payout option*.
  - Demographic information (age, gender, marital status, tenure)
  - Plan information (default option, number of payout options, partial or total annuitization)
- Data from different plans covering five years or more.

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## Our questions

1. What types of employees choose an annuity?
2. What role do defaults play in retirement income decisions?
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## Data request for question #2

### ■ Ideal setting:

- Data from a DB plan that moved from an Active Decision to a Default regime or vice versa

### ■ Useful settings:

- Data from two different plans (for example, Cash Balance and DB) from the same company
- Data from two different plans of two different companies

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## Our questions

1. What types of employees choose an annuity?
2. What role do defaults play in retirement income decisions?
3. How do defaults and complexity influence retirement income decisions?

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## Data request for question #3

### ■ Ideal setting:

- Data from a DB or Cash Balance plan that increased the number of payout options

### ■ Useful setting:

- Data from two different plans (for example, Cash Balance vs. DB) from the same company
- Data from two different plans of two different companies

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# Outline

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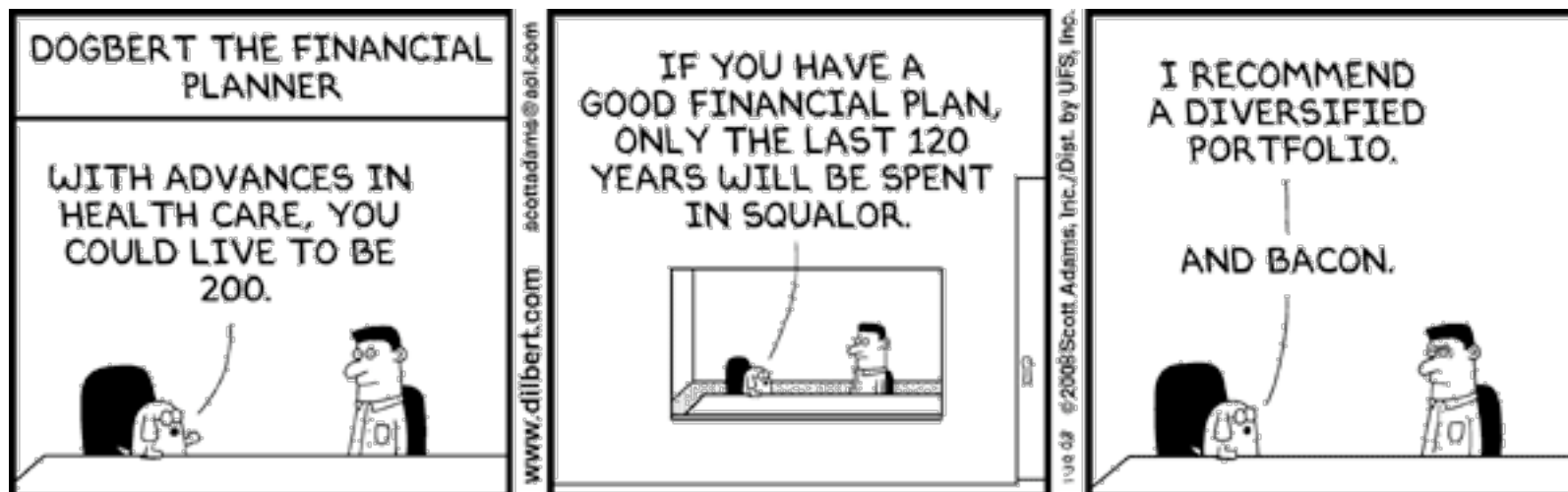
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## A broader agenda on retirement income

1. What drives the decision to annuitize and how effective are defaults?
2. What are the major behavioral obstacles to annuitization and how can we overcome them?
3. What unique psychological traits characterize retirees that decide to annuitize? How do they fare after retirement?

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# Is it wise to leave retirees on their own, when so much is at stake?



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## If you are a plan sponsor that...

- Offers a DB, Cash Balance or DC plan with annuities as a payout option
- Wants to better understand employees' retirement income needs
- Wants to be part of groundbreaking research, with the potential to affect public policy
- Is willing to provide (directly or not) better retirement income solutions for employees

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...Please let us know

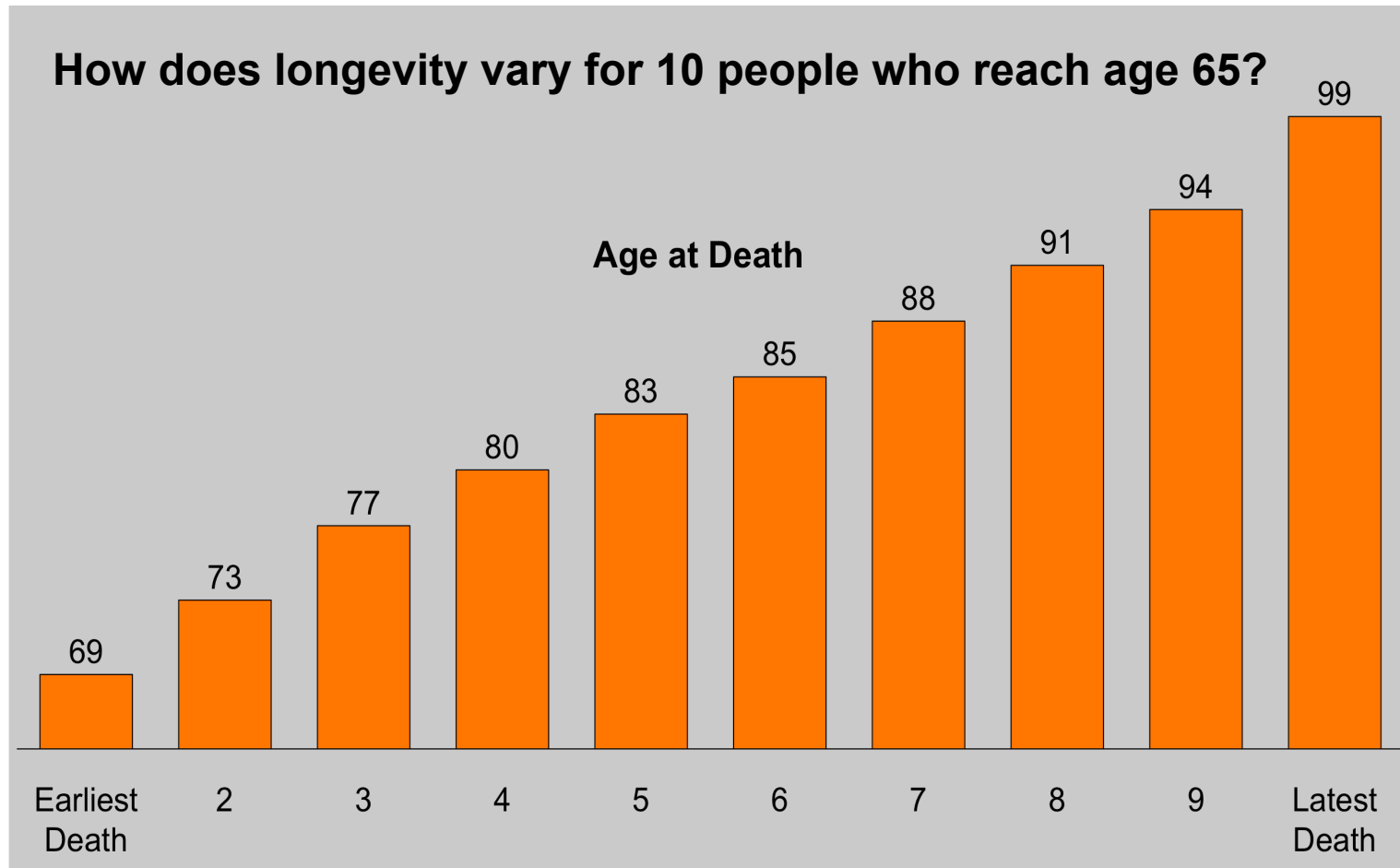
**Alessandro Previtero**

**[alessandro.previtero@anderson.ucla.edu](mailto:alessandro.previtero@anderson.ucla.edu)**

**Shlomo Benartzi**

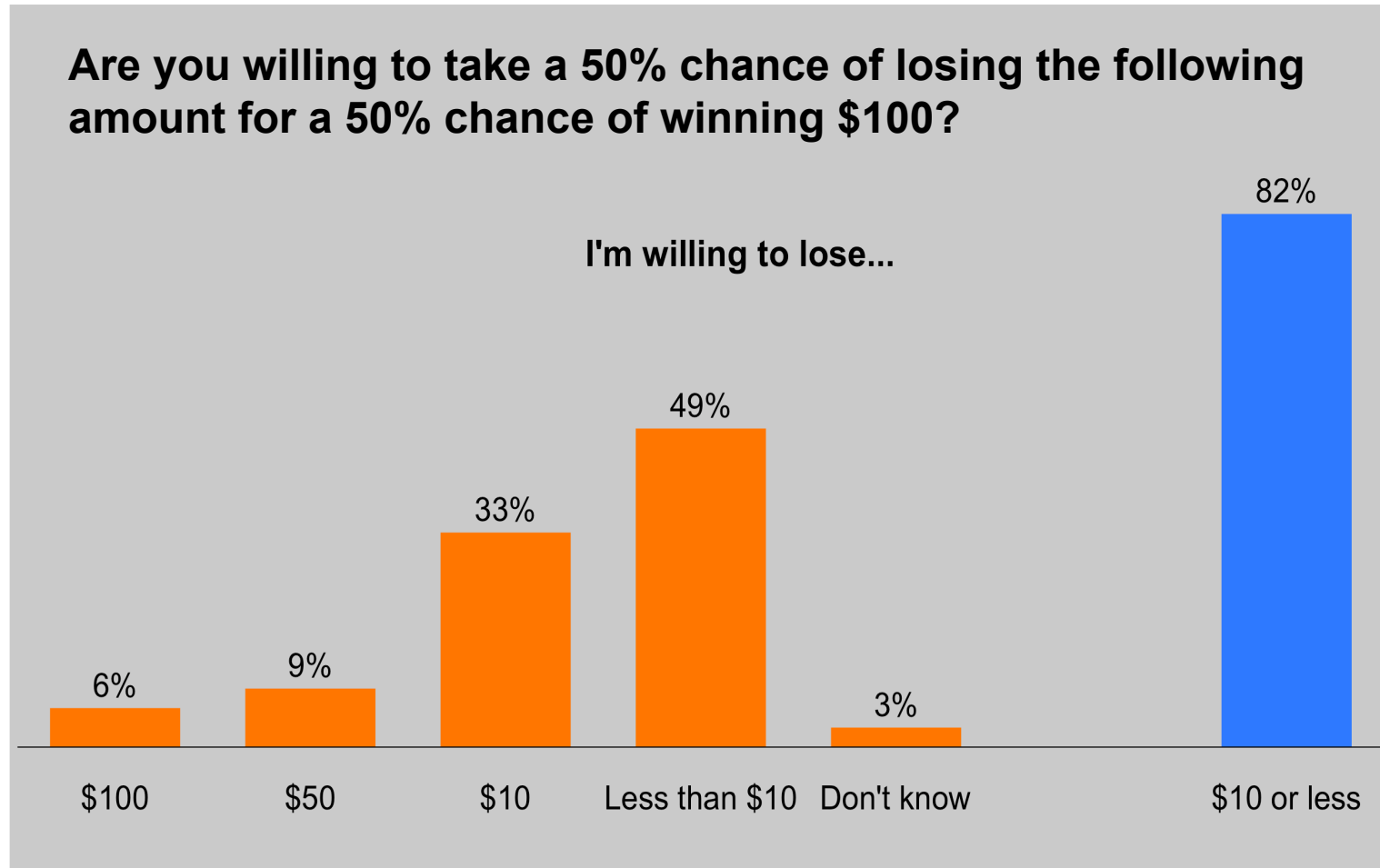
**[benartzi@ucla.edu](mailto:benartzi@ucla.edu)**

# Hedging the longevity risk by itself is a daunting task



Source: US Census Bureau (2007)

# Retirees tend to be highly loss averse



Source: AARP and ACLI (2007)

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Furthermore, older people are not good with numbers and calculations

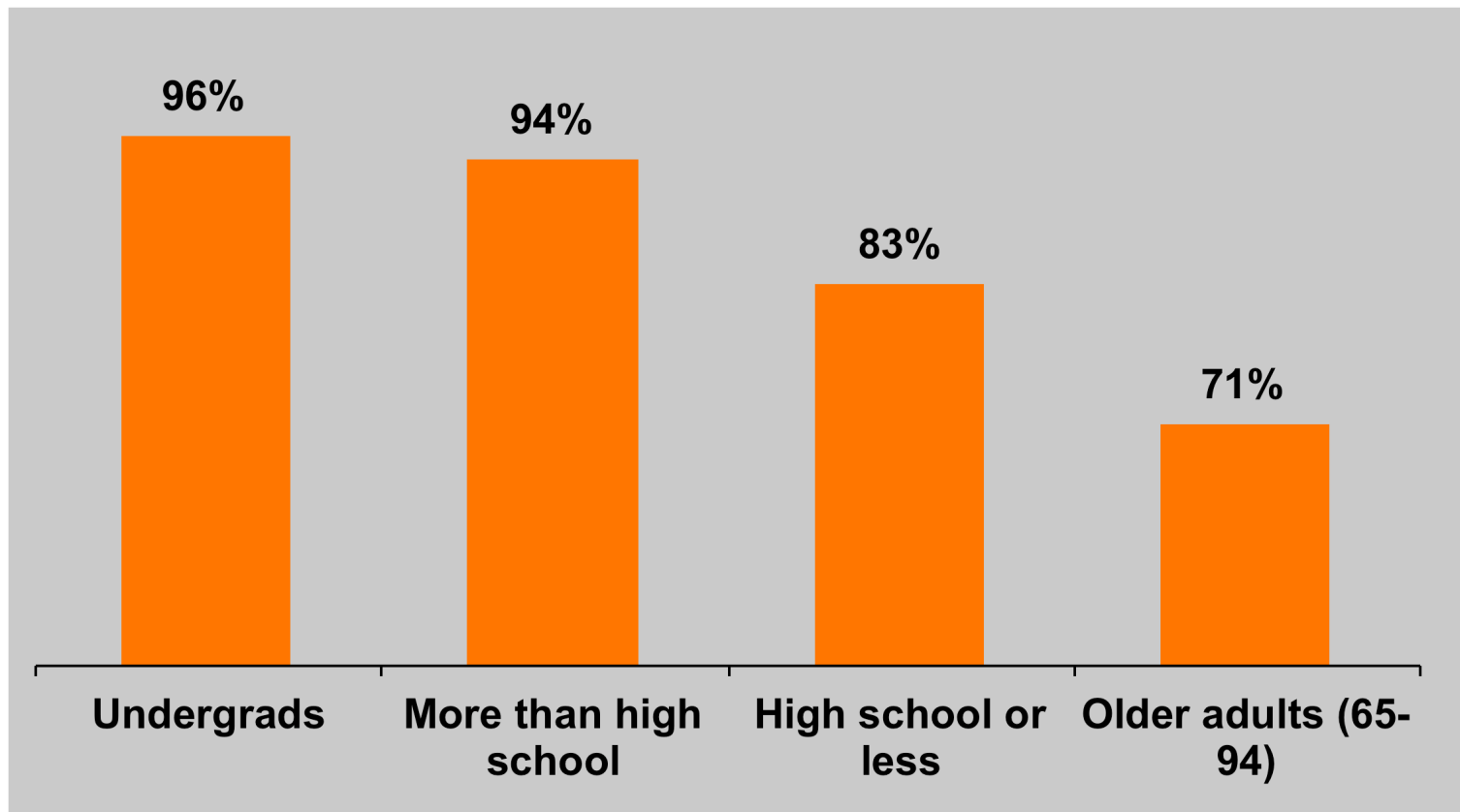
Consider the following question, posed to people of different age groups and educational backgrounds:

Which of the following numbers represents the biggest risk of getting a disease?

- A. 1 in 100
- B. 1 in 1,000
- C. 1 in 10

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## Percentage of people answering the question correctly



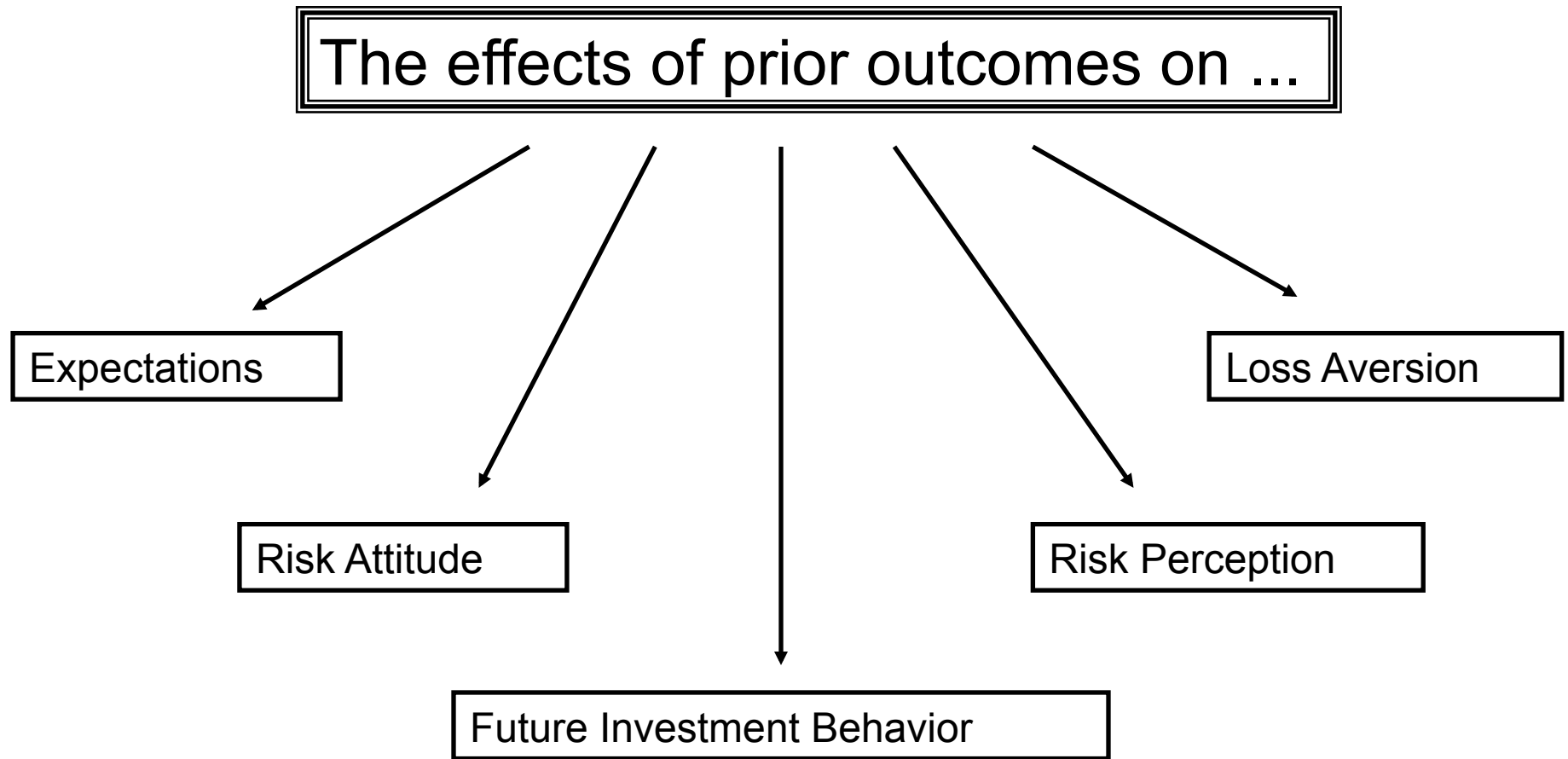
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Source: Slovic (2006)

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# Effects of Financial Market Downturns

Martin Weber (University of Mannheim)

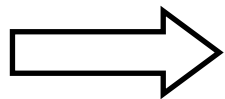


September 11 and Stock Return Expectations of Individual Investors  
Glaser/Weber, Review of Finance, 2005

Group 1: August 2<sup>nd</sup>, 2001  
(Stockbroker customers)

Group 2: September 20<sup>th</sup>,  
2001  
(Stockbroker customers)

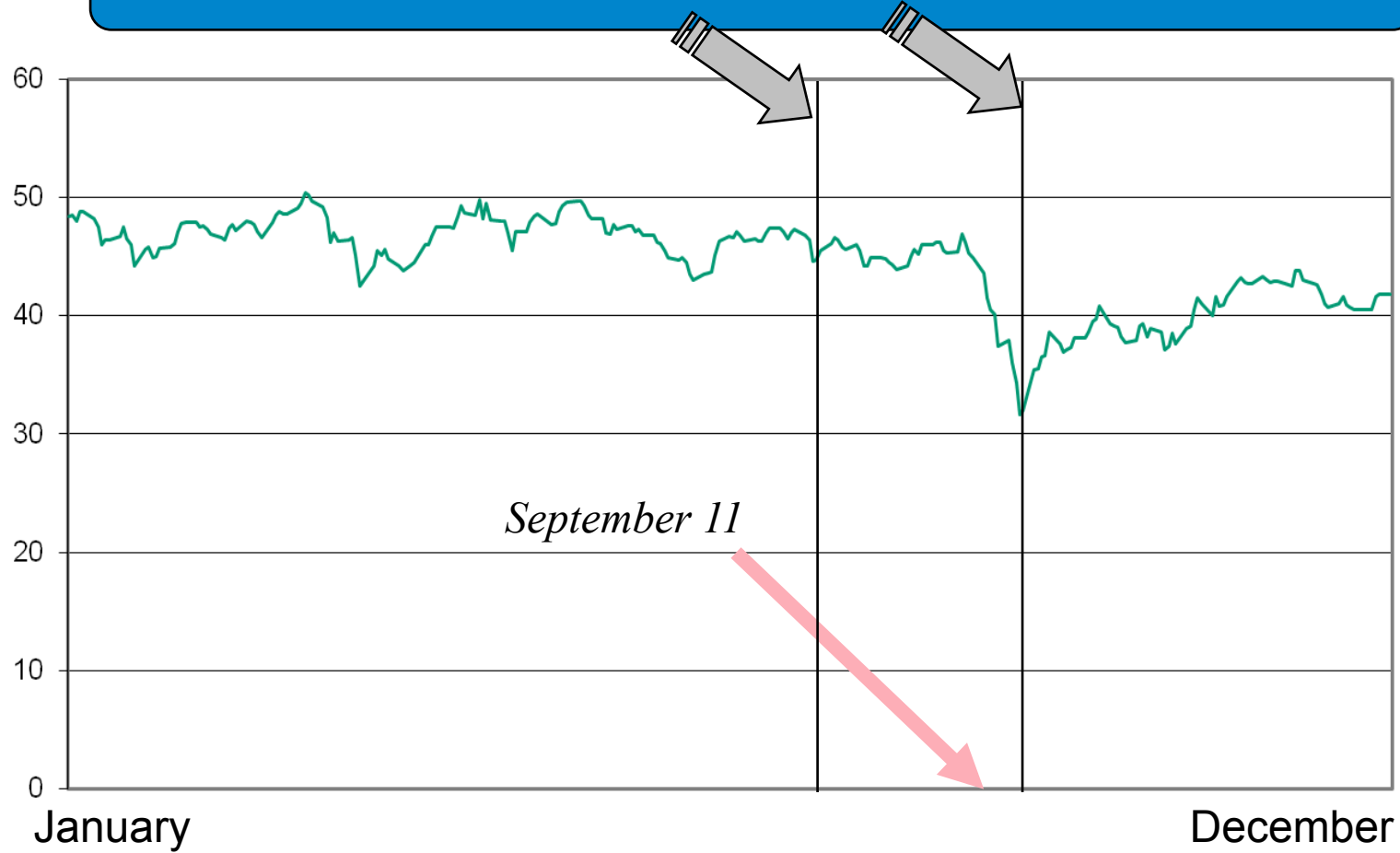
Expected returns  
and volatility  
forecasts



Why are these two groups so interesting?

## Previous Findings: Expectations

**Chart of BASF in 2001: What was your prediction?**



### Main findings:

#### ➤ Return expectations

- Significantly higher after September 11 (Group 2)
- Investors expect mean reversion
- Drop in stock prices regarded as temporary rather than permanent

#### ➤ Volatility forecasts

- Volatility estimates higher after September 11 (Group 2)
- General overconfidence before September 11 but not after

#### ➤ Differences of opinion

- Differences of opinion lower after September 11 (Group 2)

## Previous Findings: Expectations

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### Further Findings:

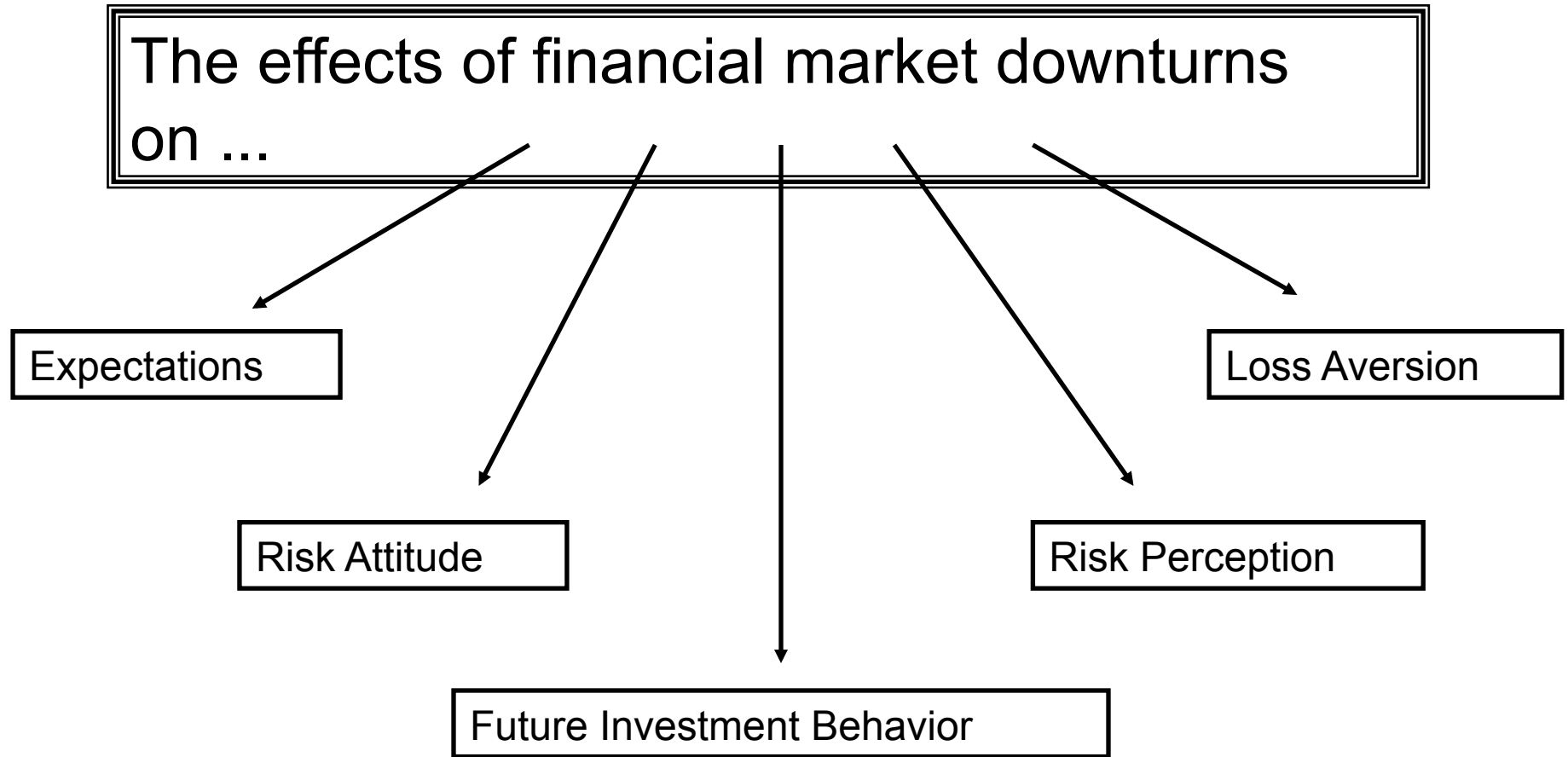
➤ Investment Behavior

- More/less risk taking after losses
- House money effect vs. disposition effect

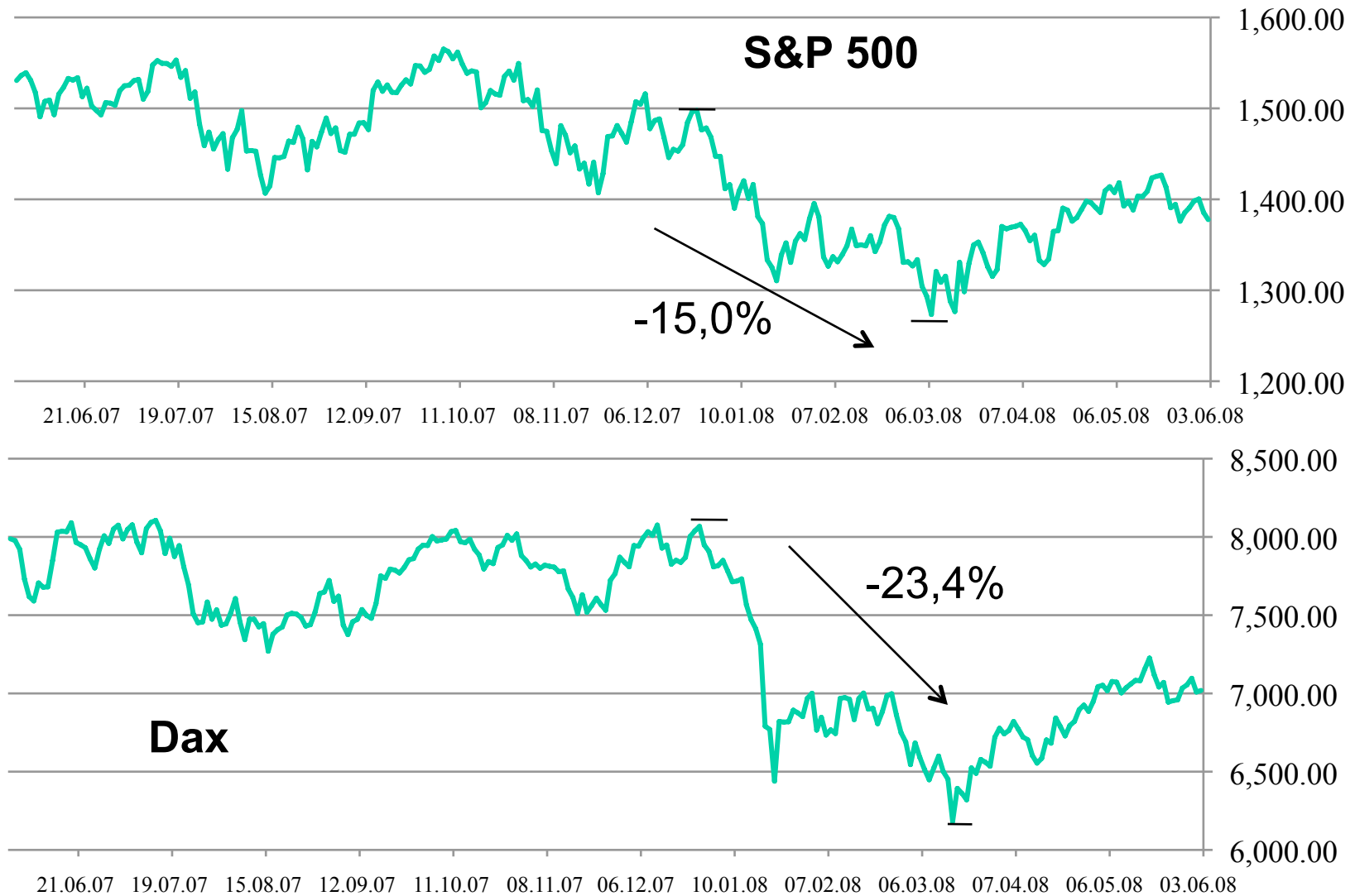
➤ Changes in risk perception or risk attitude

- Changes in risk perception determine changes in risk taking
- Perceived risk attitude stable

Literature: Shefrin/Statman, Journal of Finance, 1985, Thaler/Johnson, Management Science, 1990, Weber/Zuchel, Decision Analysis, 2005 and E. Weber/Milliman, Management Science, 1997



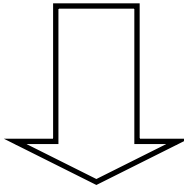
# Motivation



The effects of financial market downturns  
on ...

All market participants

A specific group of market  
participants



Segment market participants

## Segmentation of market participants according to...

- Their investing behavior in the course of the downturn
  - Portfolio shifts (e.g. from equity to fixed income)
  - Selling/buying of individual shares (e.g. stocks of banks)

- The performance they experienced
  - In total percentage or monetary terms
  - Risk-adjusted, relative to the market

## Data Requirements

- Trading data of individual investors (also reveal expectations)
  - Past Investment Behavior/Performance
  - Future Investment Behavior/Performance

- Elicitation of other decision relevant variables (also elicit expectations)
    - Risk Attitude
    - Risk Perception
    - Expectations
    - Loss Aversion
- } general market vs. own investments

## Interesting Aspects

➤ Decision making in a crisis:

What are common reactions and how successful are they?

➤ Segmentation of investors:

Which influence does past performance/behavior exert on expectations, perceptions, and attitudes?

Will it also impact future performance/behavior?

➤ Difference of opinion:

An event (like September 11) may align opinions, what happens

without?



BeFi

[befi-forum.com](http://befi-forum.com)

PRESENTED BY

Shlomo Benartzi

*Co-Founder, BeFi*

*Associate Professor Co-chair of the  
Behavioral Decision Making Group  
The Anderson School at UCLA*

Warren Cormier

*Co-Founder, BeFi*

*President, Boston Research Group*