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Financial Literacy and Financial Decision-Making

Financial Literacy: Implications for Retirement Security and the Financial Marketplace

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*The views expressed are my own and do not necessarily reflect the views of the Investment Company Institute or its members.

Overview

Discussion & Thoughts on Two Papers

- Financial Literacy and Stock Ownership in the United States (Yoong)
 - Looks into lack of stock market participation
 - Using an instrumental variable analysis, finds that lack of stock market investment knowledge significantly reduces that the propensity to hold stocks
- Changes in Stock Ownership Over Time
- Role of Employer-Sponsored Plans or Advisers
- Future Directions

Overview

Discussion & Thoughts on Two Papers

- Financial Literacy and Disposition of Employer-Sponsored Pension Accumulations at Retirement (Clark, Morrill, and Allen)
 - Looks into the role of financial education in pension distribution decisions; also discusses “framing”
 - Finds higher financial literacy associated with lump-sum disposition of pension accumulations
- Decisions in DB and DC Plans
- Degree of Annuitization
- Future Directions

Financial Literacy, Ignorance and Stock Market Participation: Evidence from the RAND American Life Panel

Joanne Yoong

Lack of Stock Ownership

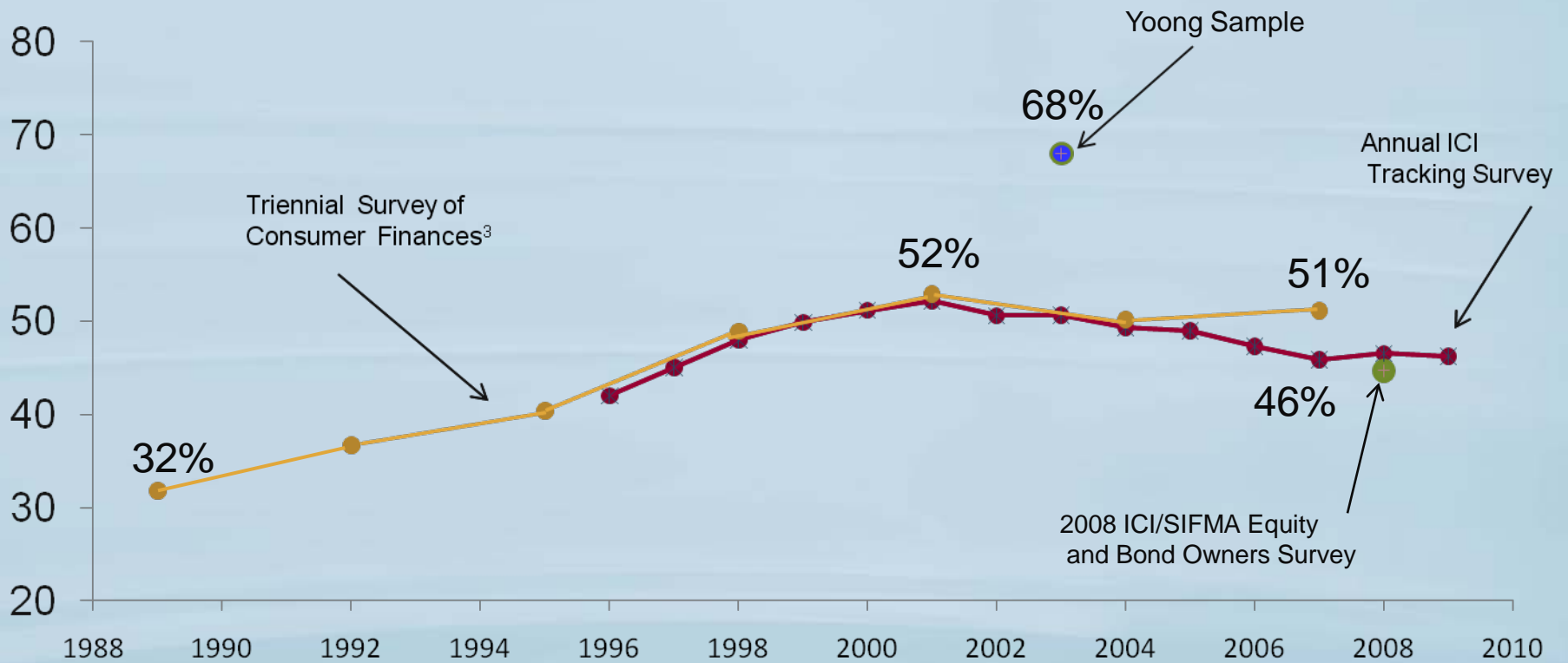
- Financially unsophisticated consumers who consistently make sub-optimal financial decisions may suffer lasting consequences for long-term wealth accumulation and welfare
- Sub-optimal behavior: lack of stock market participation
- Does financial literacy lead to equity ownership? Or, does equity ownership lead to financial literacy?
- Instrumental variable analysis
- Used a sample drawn from the RAND ALP

RAND American Life Panel (ALP)

- Panel of respondents 18 or older (10% using the Web TV)
- 500 (or 1/5th) were recruited through a snowball sample
- Currently has about 2,500 panel members
 - Size and composition of sample changes over time
 - Yoong's sample: 533 respondents
- Financial variables very limited:
 - 2002 household income
 - No total financial assets or net worth
- Stock question: Do you have any shares of stock or stock mutual funds?

Stock Ownership Rates Higher Than Two Decades Ago

Ownership of equities¹ across three surveys; percentage of U.S. households



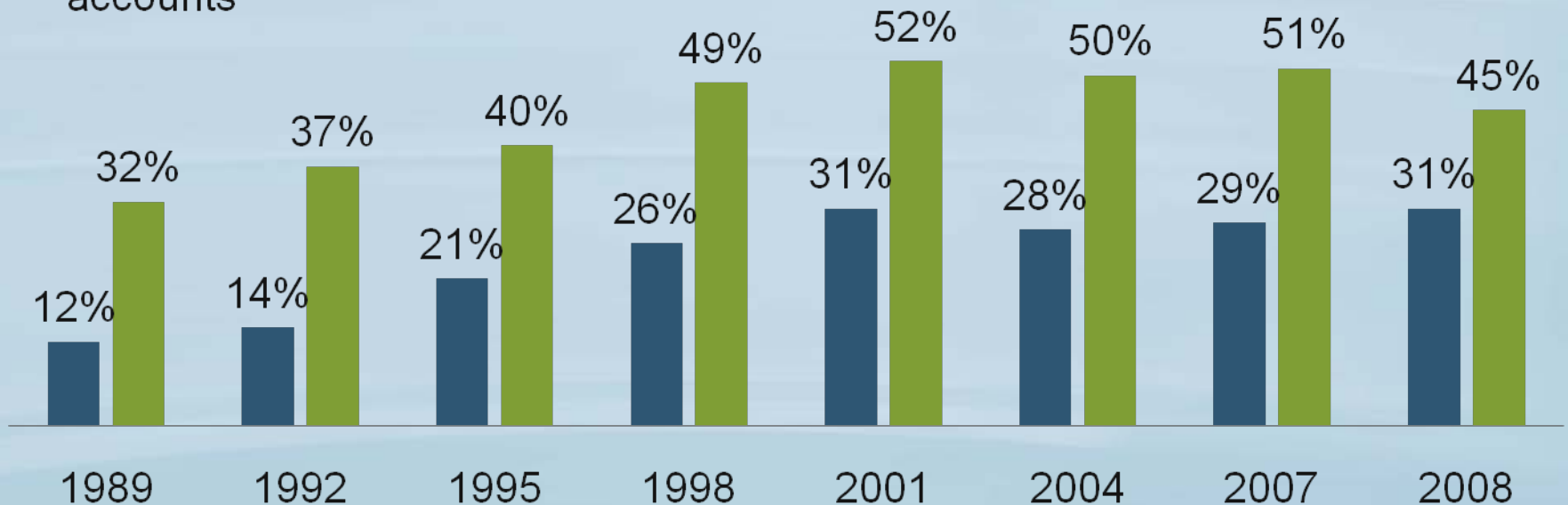
¹Equities include individual stocks, stock mutual funds, hybrid mutual funds, ETFs, and variable annuities.

Sources: Investment Company Institute Annual Mutual Fund Shareholder Tracking Surveys, 2008 ICI/SIFMA Equity and Bond Owners Survey, and Federal Reserve Board Survey of Consumer Finances (See Sabelhaus, Bogdan, and Schrass (2008))

Equity* Ownership Through Retirement Accounts Fueled Overall Growth Between 1989 and 2008

Ownership of equities*; percentage of U.S. households

- Any equities inside employer-sponsored retirement plan accounts
- Any equities, including inside employer-sponsored retirement plan accounts



* Equities include individual stocks, stock mutual funds, hybrid mutual funds, ETFs, and variable annuities.

Some Households Without Equities Don't Have Financial Assets

Percentage of U.S. households without equities¹

■ Do not have any financial assets at all

■ Only have bank accounts²



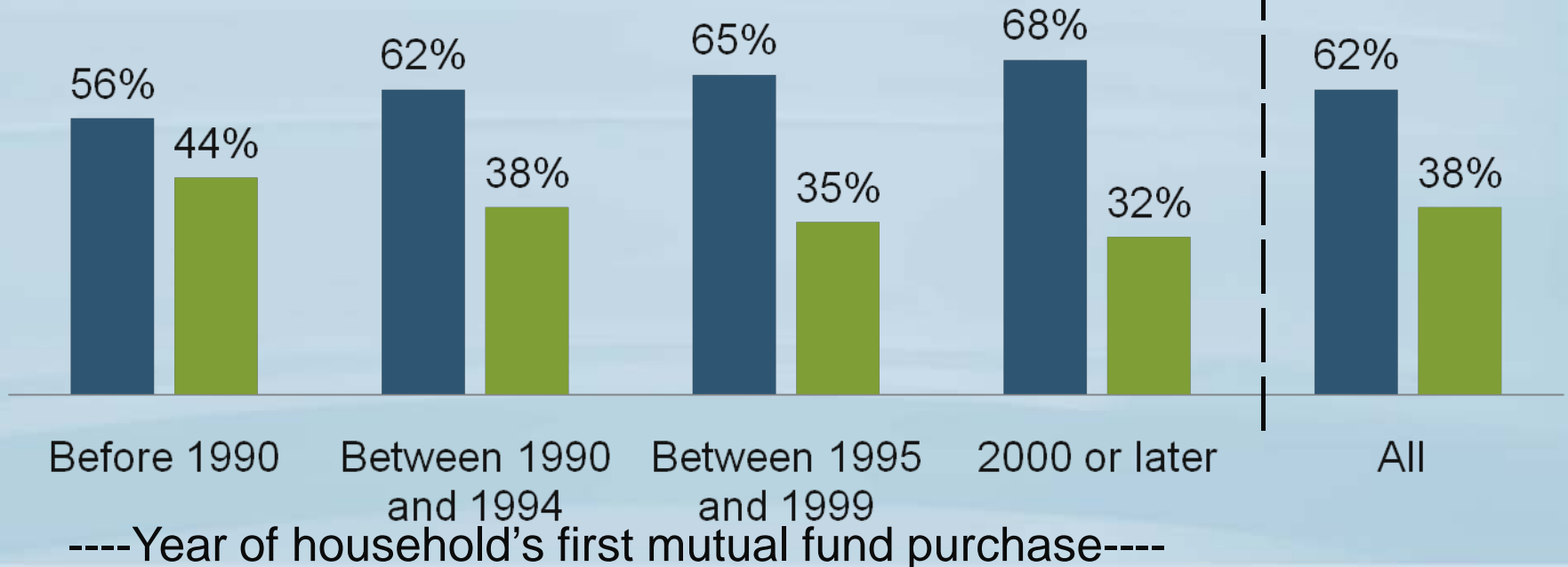
¹ Equities include individual stocks, stock mutual funds, hybrid mutual funds, ETFs, and variable annuities.

² Bank accounts include checking, savings, and money market accounts.

Employer-Sponsored Retirement Plans Are Increasingly Source of First Mutual Fund Purchase

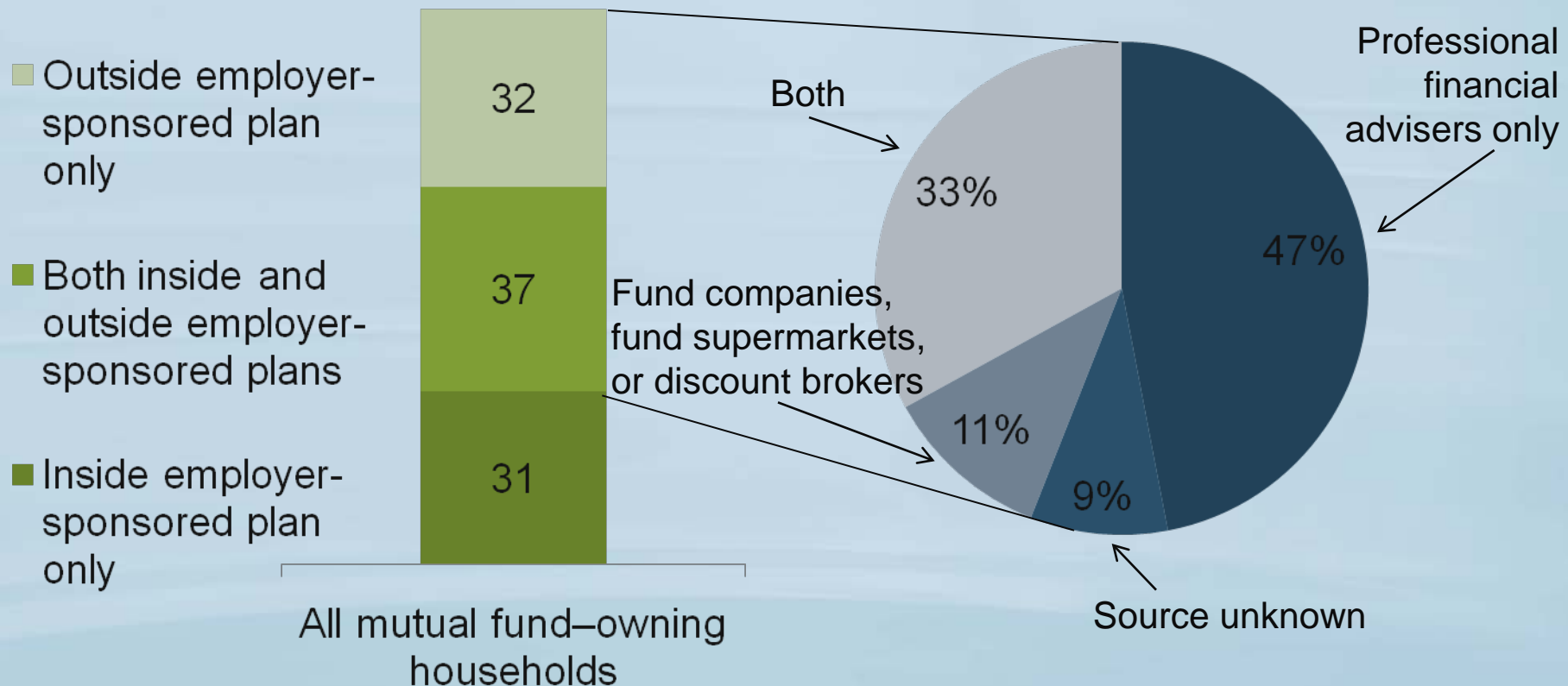
Percentage of U.S. households owning mutual funds, May 2009

- First fund purchase was inside employer-sponsored retirement plan
- First fund purchase was outside employer-sponsored retirement plan

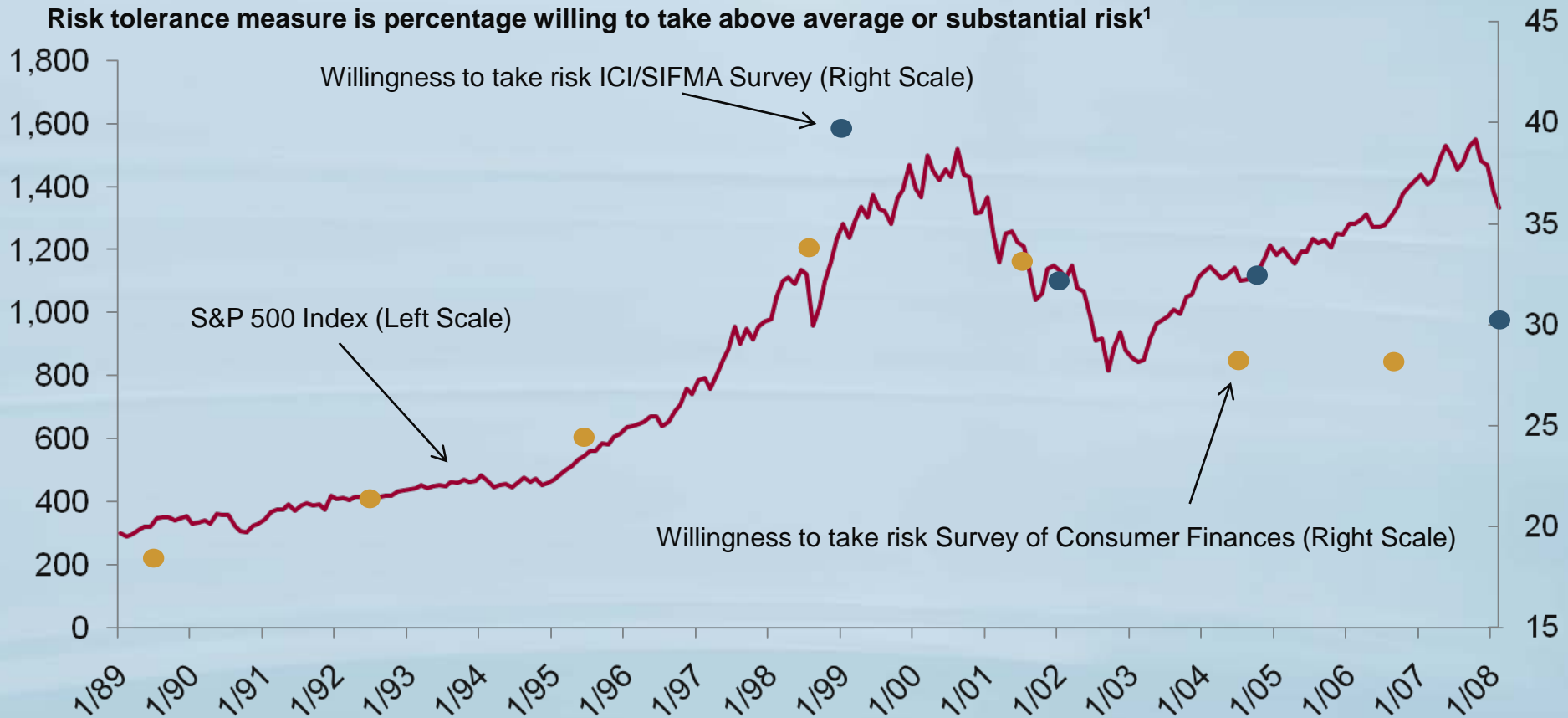


Mutual Fund Investments Outside Retirement Plans Are Often Guided by Financial Advisers

Percentage of U.S. households owning mutual funds, May 2009



Equity Owners' Willingness to Take Risk Tends to Move with the S&P 500 Stock Index



¹Percentage reported is percentage of survey respondents indicating they are usually willing to take above average or substantial risk.
 Source: ICI/SIFMA Equity and Bond Owners Survey, Federal Reserve Board Survey of Consumer Finances, and Standard & Poor's

Future Directions – for the Statistical Analysis

- Are the “don’t know” respondents, really “don’t know’s” or are they “don’t care’s”? Would that change your analysis or interpretation of the analysis?
- Is there a way to deal with the fact that the sample looks very different from U.S. households generally?
- Would additional financial variables impact the analysis?
 - Amount invested in stocks, bank accounts, etc. (RAND ALP has dollar amounts for some assets)
- Should time frame of survey answers be considered?

Future Directions – for the RAND ALP

- Questions to add to RAND ALP:
 - Balanced/hybrid/target date fund holdings
 - Access point for stock (directly, stock mutual funds, balanced/hybrid/target date funds)
 - Use of advisers
 - Role of employer-sponsored retirement plans
 - Education and advice offered in plans
 - Automatic enrollment
 - Comprehensive wealth/financial assets measure
 - Repeat the household income question

Pension Plan Distributions: The Importance of Financial Literacy

Robert L. Clark, Melinda S. Morrill & Steven G. Allen

The Options Available

	DB Plan	DC Plan
Progress Energy	Cash balance plan: <ul style="list-style-type: none"> •Default annuity •Lump-sum distribution option •Phased withdrawal option 	401(k) plan <ul style="list-style-type: none"> •Default lump-sum distribution •{Leave money in the plan?} •No in-plan annuity—but participants did choose to annuitize
BD	Traditional DB plan: <ul style="list-style-type: none"> •Default annuity •Lump-sum distribution option 	401(k) plan <ul style="list-style-type: none"> •Default lump-sum distribution •{Leave money in the plan?} •In-plan annuity option

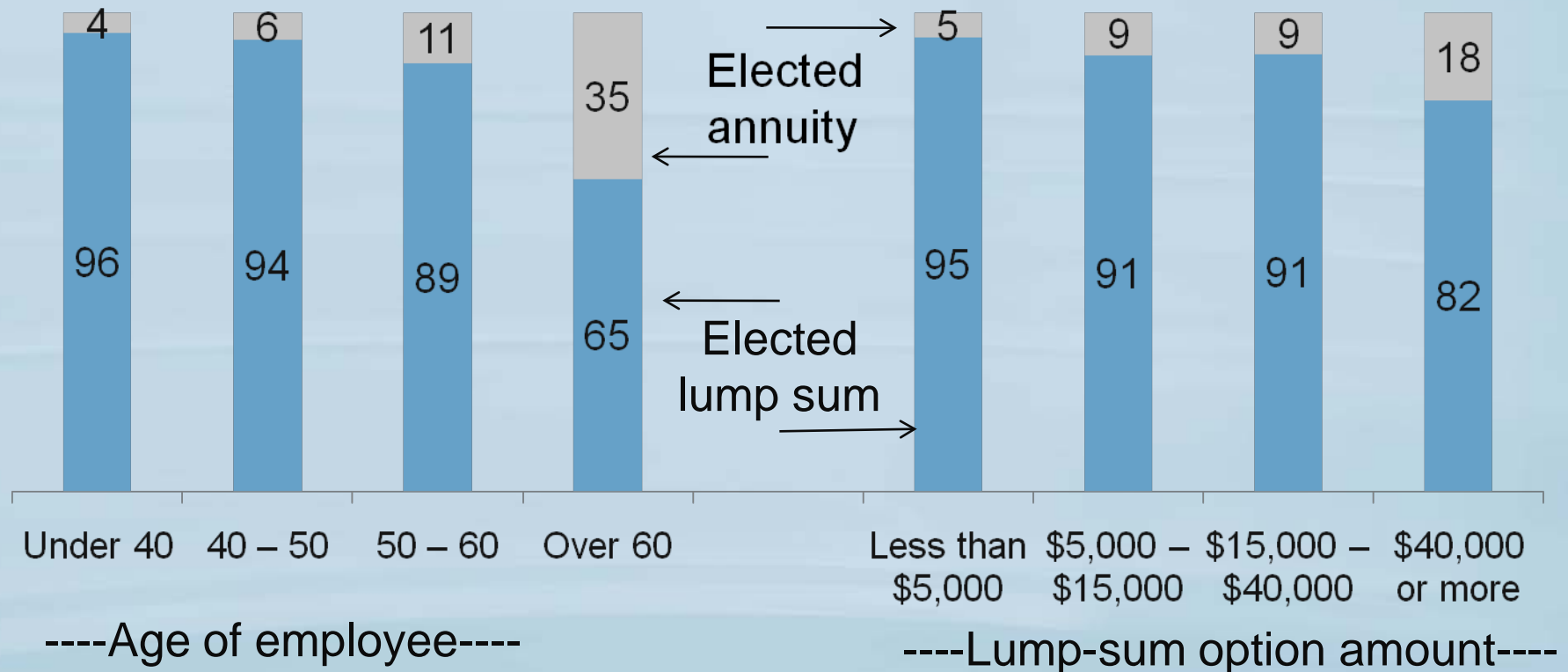
Participant Choices

DB plan

		Lump-sum distribution	Annuitize
DC plan	Lump-sum distribution	21.8% - All 13.1% - PE 27.1% - BD	56.1% - All 61.9% - PE 52.6% - BD
	Annuitize	7.7% - All 5.9% - PE 8.9% - BD	14.4% - All 19.1% - PE 11.5% - BD

Bigger Accounts Closer to Retirement More Likely to Choose to Annuitize

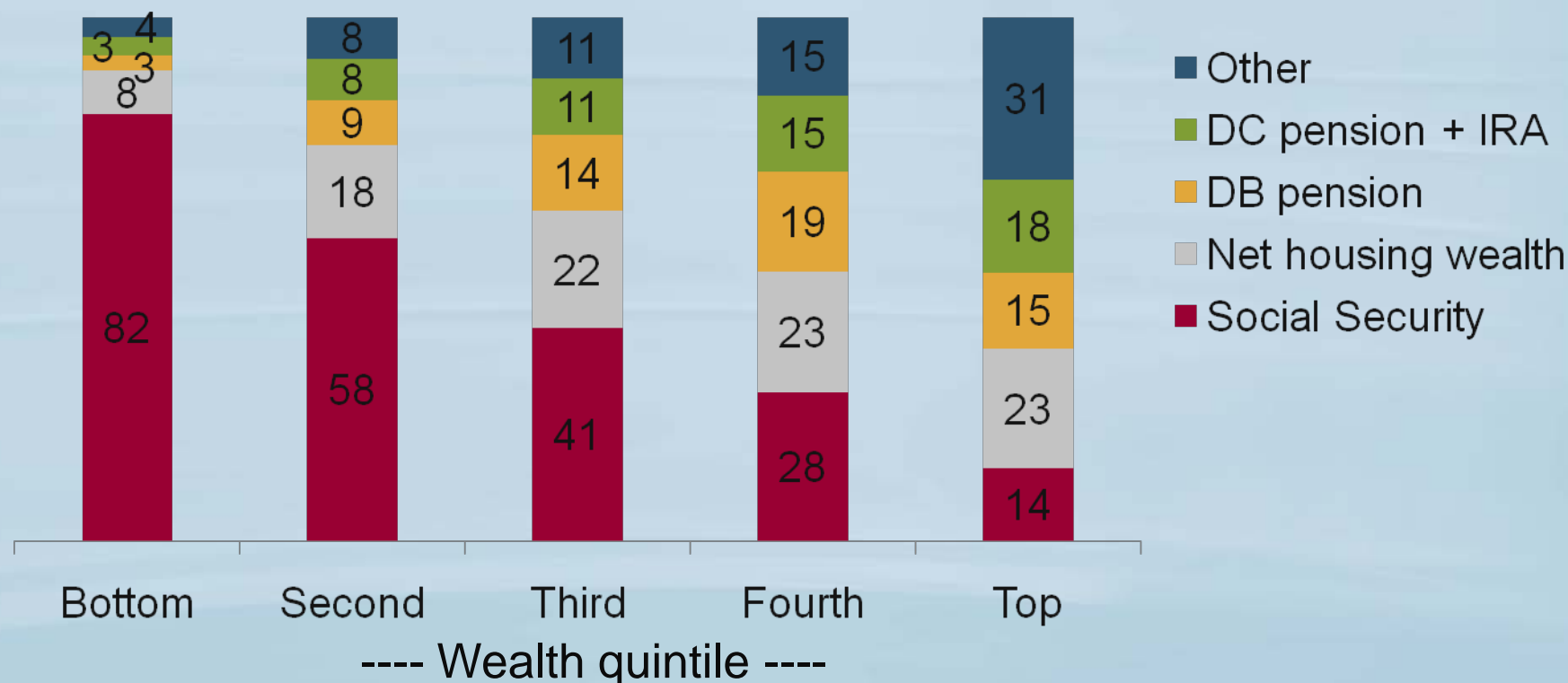
Percentage of terminating employees



Source: Watson Wyatt Worldwide, sample of 1,500 terminating employees (See Watson Wyatt Worldwide 1998)

Many Households Are Highly Annuitized

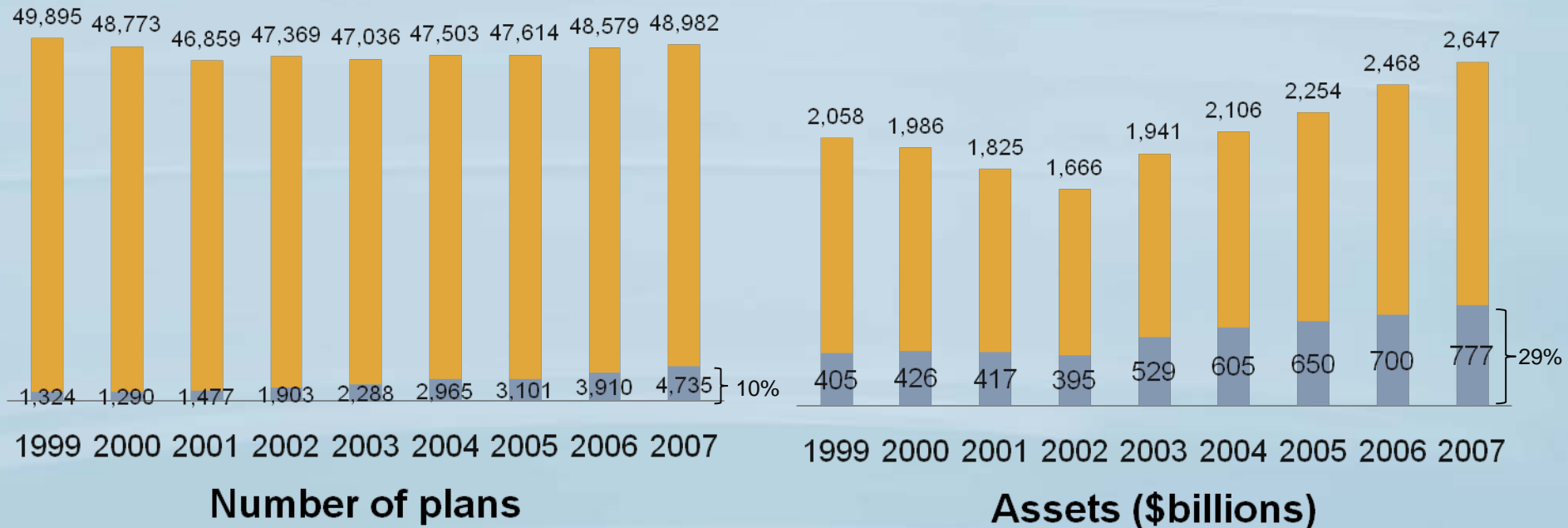
Percentage of wealth by wealth quintile for households with at least one member born between 1948 and 1953, 2006



Note: Households with top and bottom 1 percent of wealth were excluded.

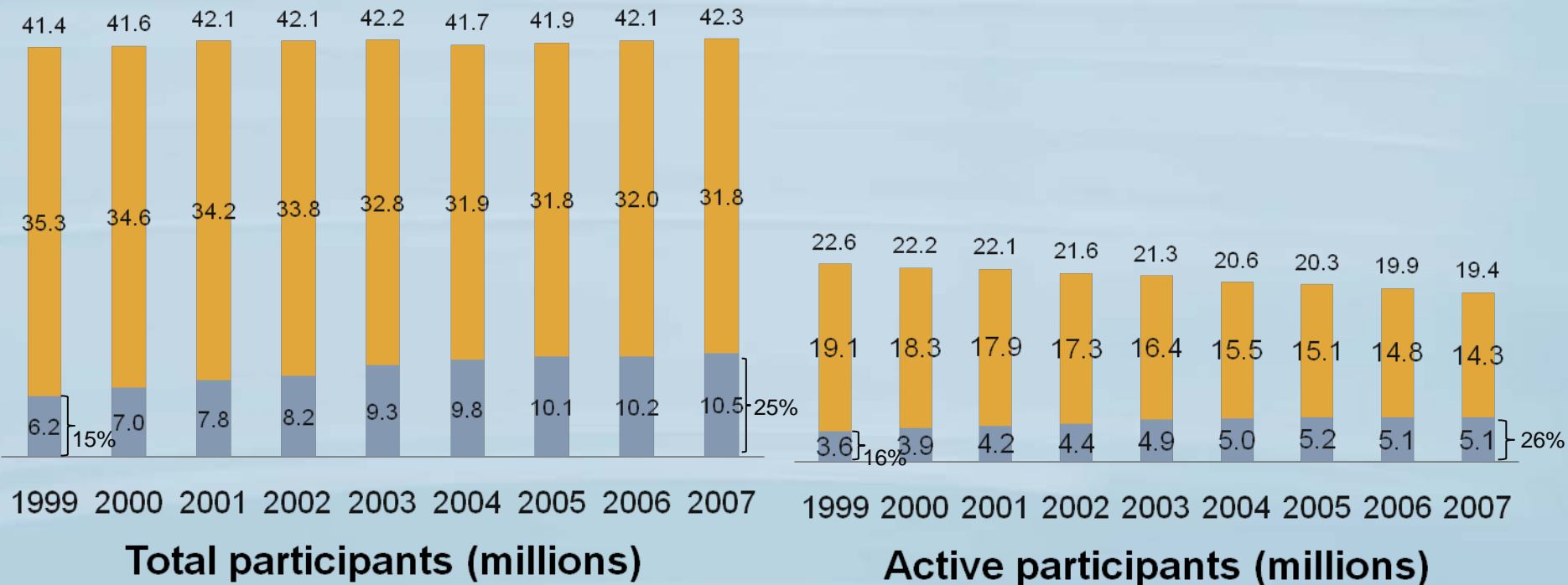
Cash Balance Plans Rising Share of Traditional DB Plans

■ Cash balance ■ Other defined benefit



Millions of Participants in Cash Balance and Traditional DB Plans

■ Cash balance ■ Other defined benefit



Note: There is a change in the reporting of participants starting in 2005.

Future Directions – for the Employer Data

- Paper suggests information presented in statements (e.g. cash balance versus traditional DB) or in the seminar is important (e.g. the DB plan participants learned they also had a lump-sum option— most of the changers from non-lump-sum distribution to lump-sum distribution in the DB didn't know they could take a lump sum prior to the seminar)
- Note, there is a trend in 401(k) area, increasingly for participant statements to show both the account balance and a (future) draw-down amount that might be expected in retirement
 - Goal is to help people see if their savings are on track
 - Will this additional information change the way that 401(k) participants focus on their accounts?
 - Find out what participant statements include at your firms

Future Directions — for the Statistical Analysis

- Focus on the “changers”
- As the sample grows, would segment by age
 - Learning about what options are and focusing on retirement will be greater in the older end of the age group
- Develop an analysis that teases out what share of household wealth is already annuitized or what share of income is already replaced
 - If possible with data have, impute an income replacement rate from Social Security and the various pension buckets; may relate to how much more annuity income participant (household) wants versus keeping assets for emergencies, lumpy expenditures, other needs.

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