An Inevitable Grassroots Change

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The Challenge

The Huge Baby Boom Generation Faces an Incredibly Expensive and Financially Complex Retirement

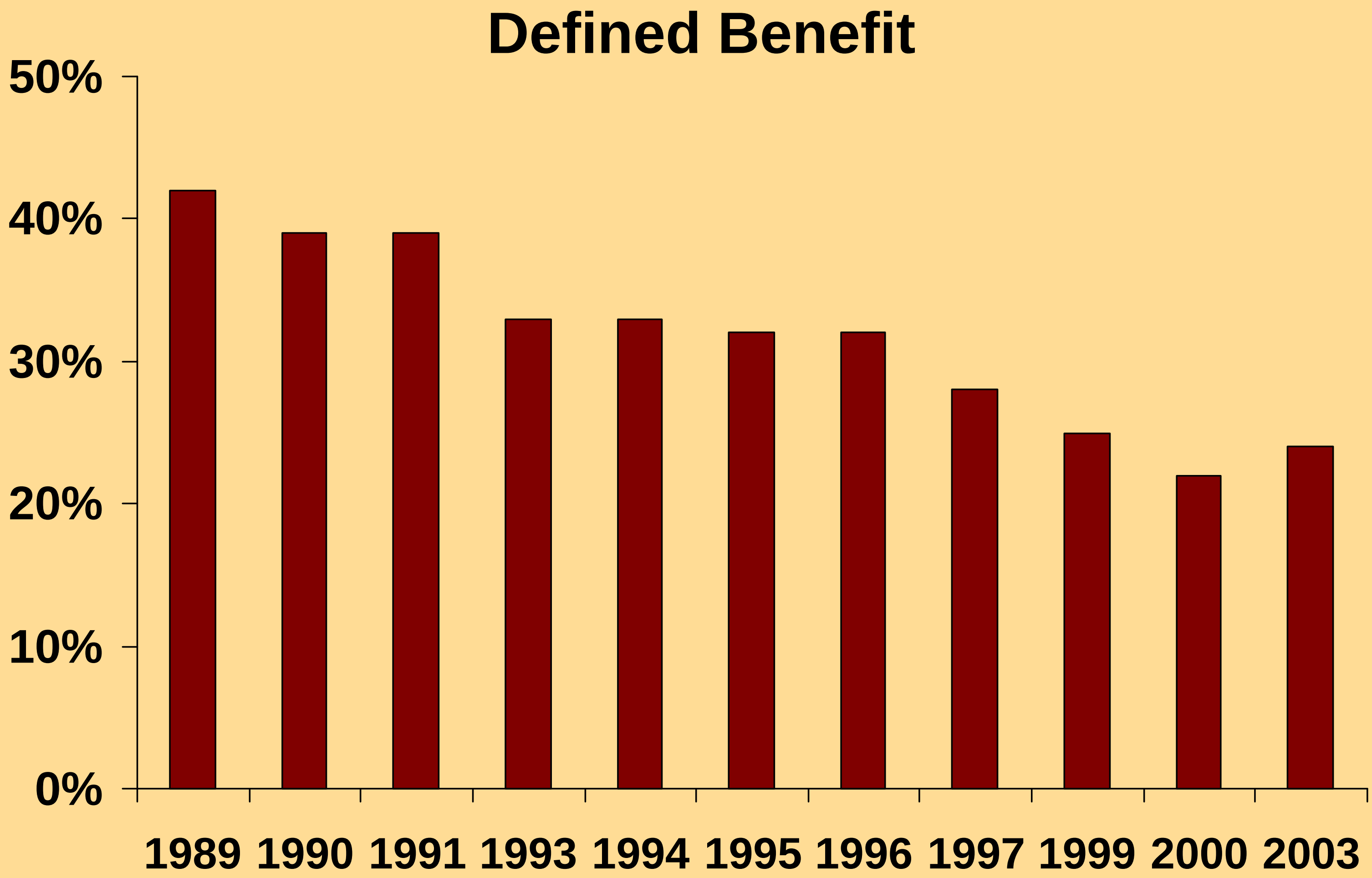
- De-Annuitization
  - Falling entitlement programs
  - Fewer defined benefit plans and retiree health insurance plans
- Higher health care costs
- Longer Life
- Higher lifestyle needs

The Decline in Social Security Support for the Average Worker (Replacement Rate in 2030)

	Age 65 %
In 2004, After Deduction for Medicare Part B Premium	39
In 2030, After Extension of Normal Retirement Age to 67	36
After Medicare Part B Premium	32
After Personal Income Tax (not adjusted for inflation)	29

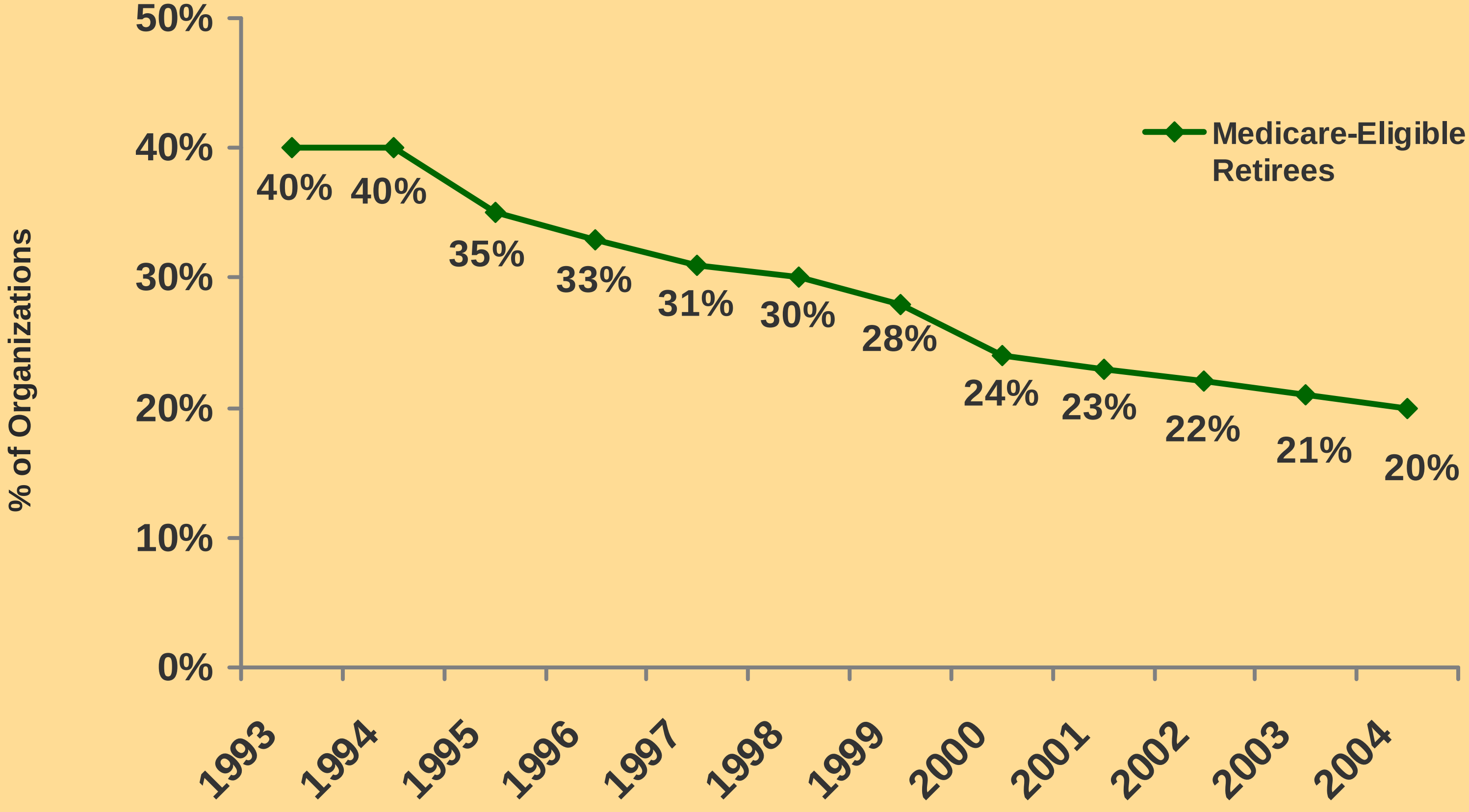
Source: Alicia Munnell, “A Bird’s Eye View of the Social Security Debate” Boston College

DB on the Decline:
Percent of Workers Participating in a Plan



***Interpolated**
Figures represent private industry only. Source: U.S. Department Of Labor, Bureau of Labor Statistics

Employer-Sponsored Retiree Health Coverage Among Organizations with 500+ Employees



Source: Employee Benefit Research Institute, 2003

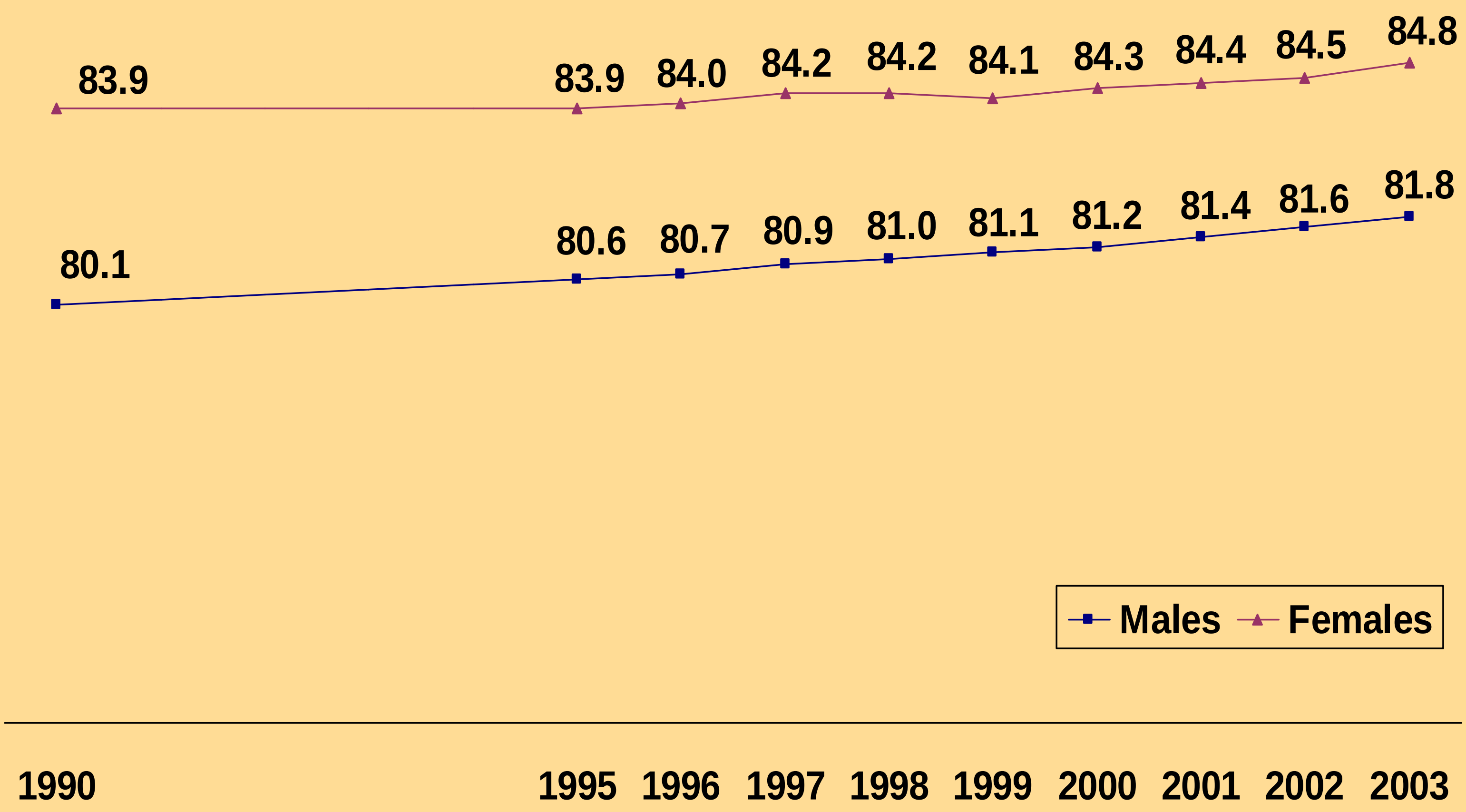
Accumulation Needed by Age 65 for Medigap Policy (Average Plan), Medicare Part B, Medicare Part D and Prescription Drug Spending *(in 2016)*

(Assumes 7% premium growth and 4% after tax rate of return on investments)

Age at Death	Median Drug Spending	90th Percentile Drug Spending
80	$112,000	$215,000
85	$156,000	$298,000
90	$207,000	$390,000
95	$265,000	$491,000
100	$332,000	$601,000

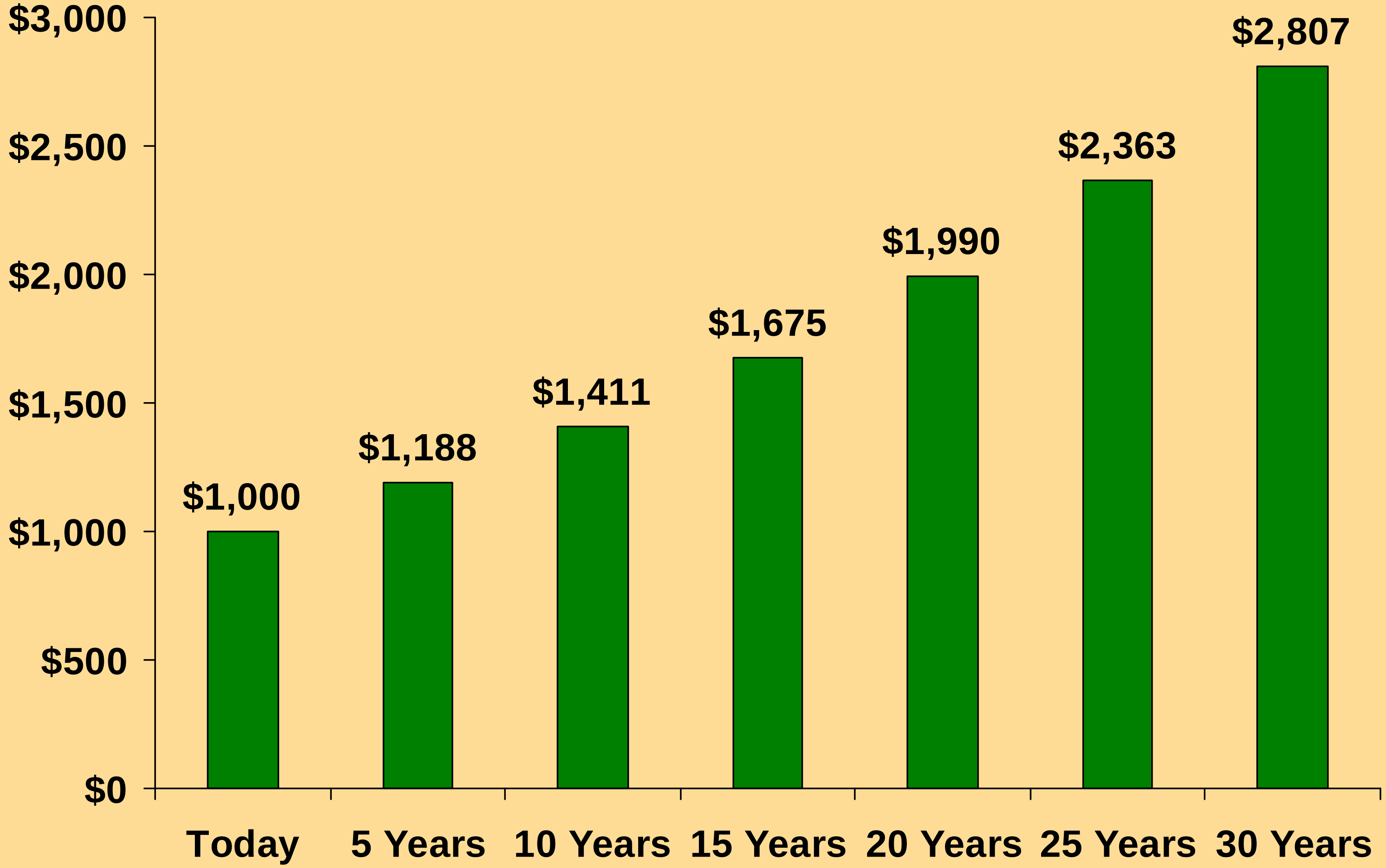
Source: Employee Benefit Research Institute, 2006

Life Expectancy at Age 65



Source: National Center for Health Statistics, Health, United States, 2005

Income Required to Keep Pace With Inflation



Based on a 3.5% rate

Under-Funding Retirement

Income of Families Headed by 55- to 64-year olds

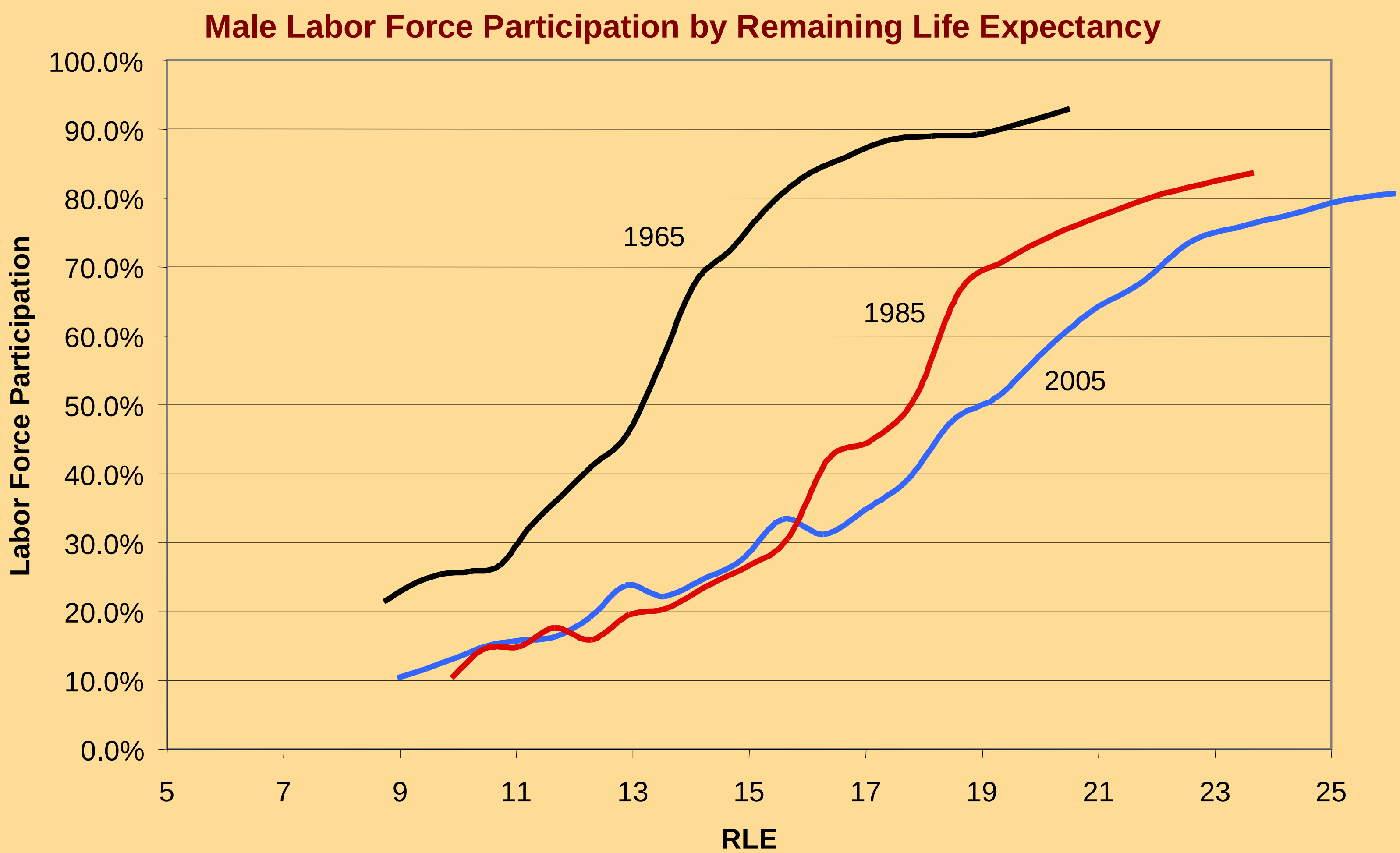
Financial Assets

	Under $75,000 %	$75,000 to $100,000 %	$100,000 to $150,000 %	$150,000 to $200,000 %	$200,000 to $250,000 %	$250,000 and over %
Under $200,000	84	64	45	42	14	5
$200,000 to $300,000	6	4	14	12	4	2
$300,000 to $500,000	5	17	11	18	5	11
$500,000 to $750,000	3	5	11	8	43	9
$750,000 to $1 million	2	3	12	6	10	5
$1 million to $2 million	*	6	3	14	17	28
$2 million to $5 million	*	1	3	1	4	23
$5 million and over	0	*	*	*	3	17

Source: Employee Benefit Research Institute estimates from the 2004 Survey of Consumer Finances

* Less than 0.5%

For Past 20 Years Males Have Utilized Life Expectancy Gains for Leisure, Not Work



John Shoven, "Increased Saving: Does One Generation Need to Save Twice'
Presented to Americans for Generational Equity, 2007

The Last Generation to Retire Was Unable to Maintain Their Lifestyles Past Average Life Expectancy

The Current Generation of Old-Old is Economically Deprived

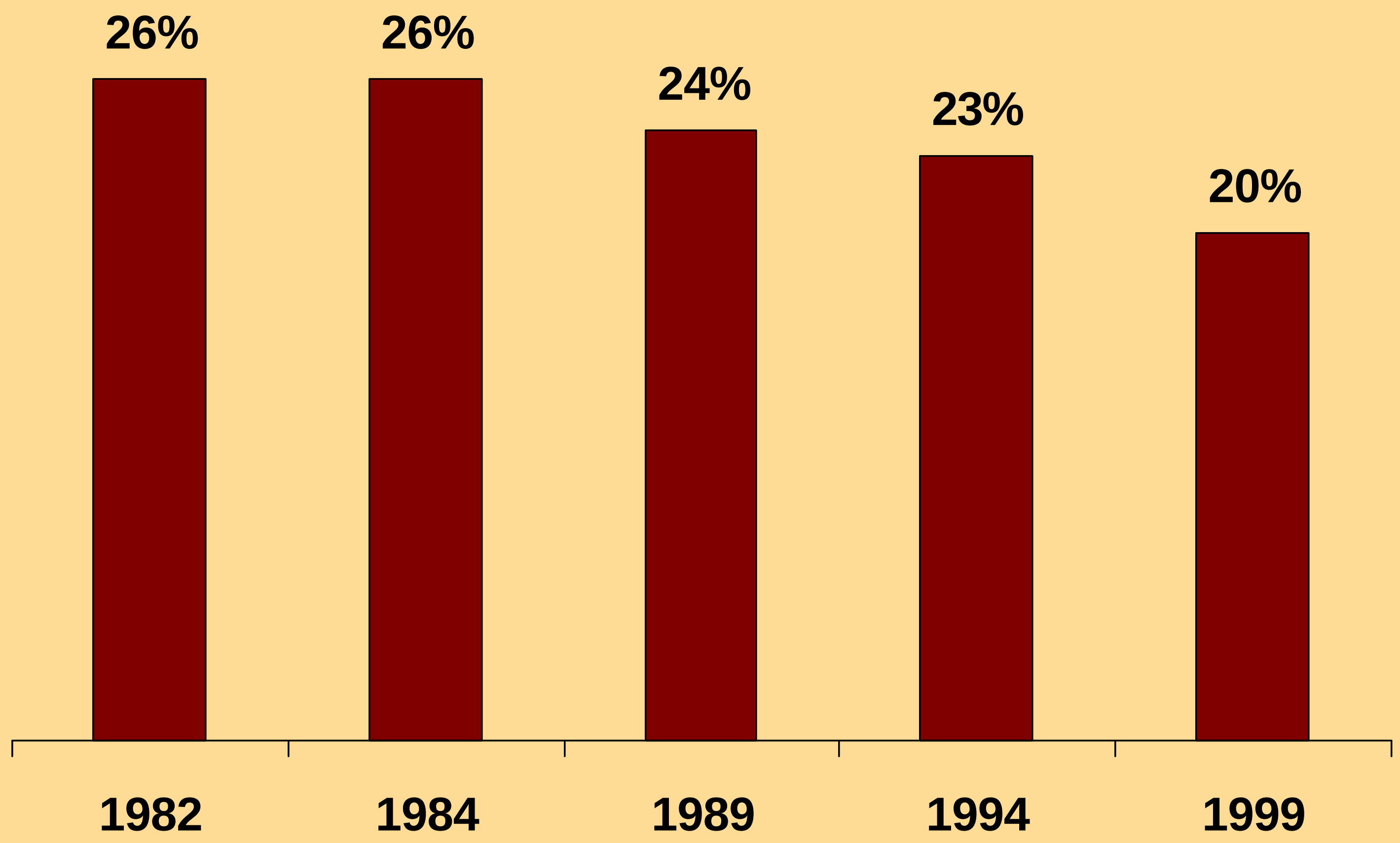
Non-Housing Assets of Families Headed by Someone Ages 85 and Over

	%
Less than $2,000	20
$2,000 - $24,999	25
$25,000 - $99,999	13
$100,000 - $199,999	19
$200,000 and over	23

Source: Federal Reserve 2004 Survey of Consumer Finances and Employee Benefit Research Institute

Chronic Disability Among Americans Age 65+

Among Medicare enrollees age 65 and older, standardized to 1999 population



Source: U.S. Census Bureau, Current Population Reports, P23-209, 65+ in the United States: 2005

We Are In a Time of Substantially Rising Expectations

Example

	Average New Home Size	Average Household Size
1970	**1,500 square feet**	**3.14**
2005	**2,434 square feet**	**2.57**

Source: U.s. Census Bureau, 2005, U.S. News and World Report, 2004

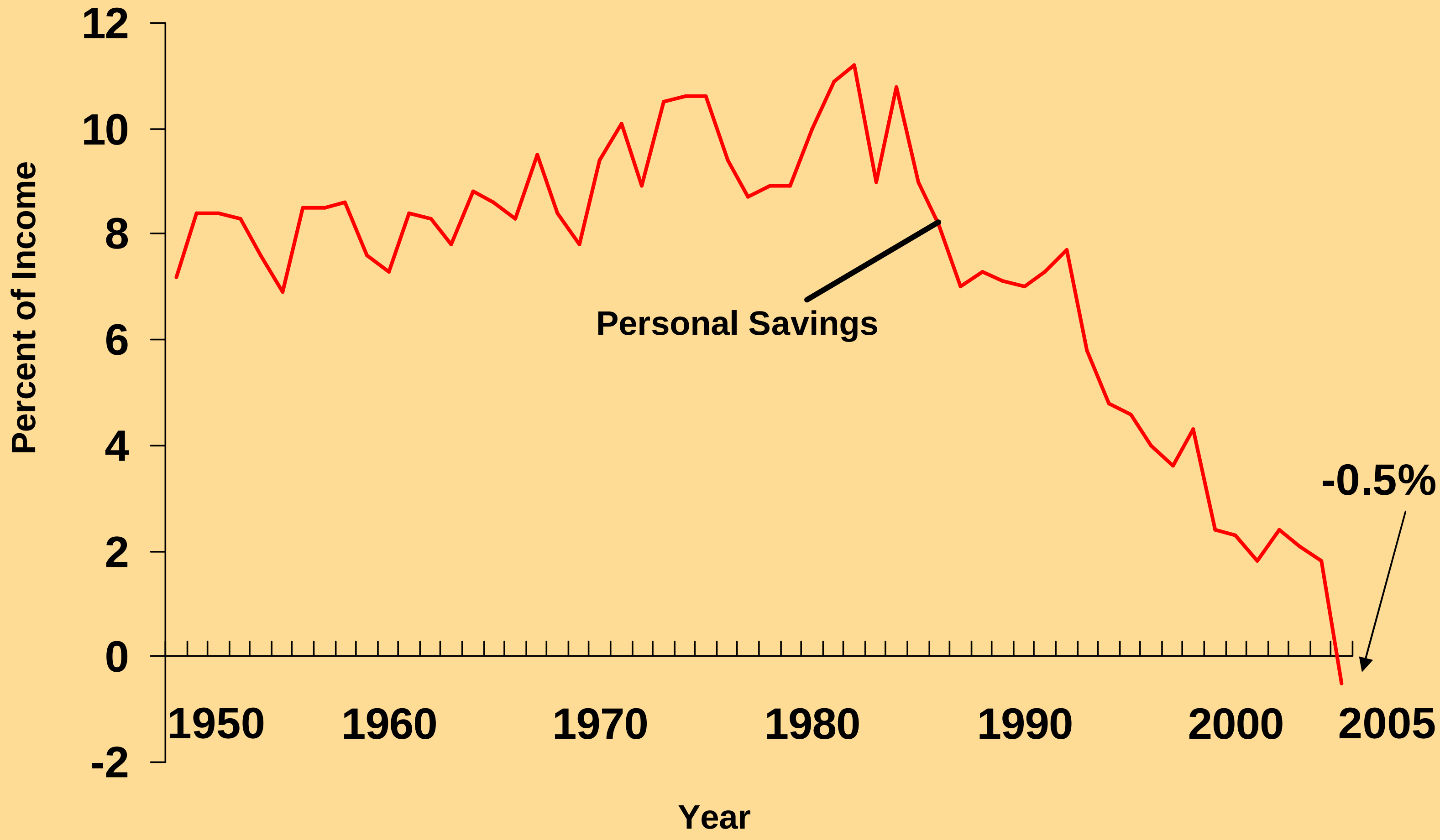
"Thirty years ago a family in America, enjoying growth in its real earnings, borrowed money to buy a house or a car or to finance a college education."

Joseph Medoff and Andrew Harless
<u>The Indebted Society, 1996</u>

"Families now owe money for their children's education, the new TV, the refrigerator, the lawn mower and the very shirts on their backs."

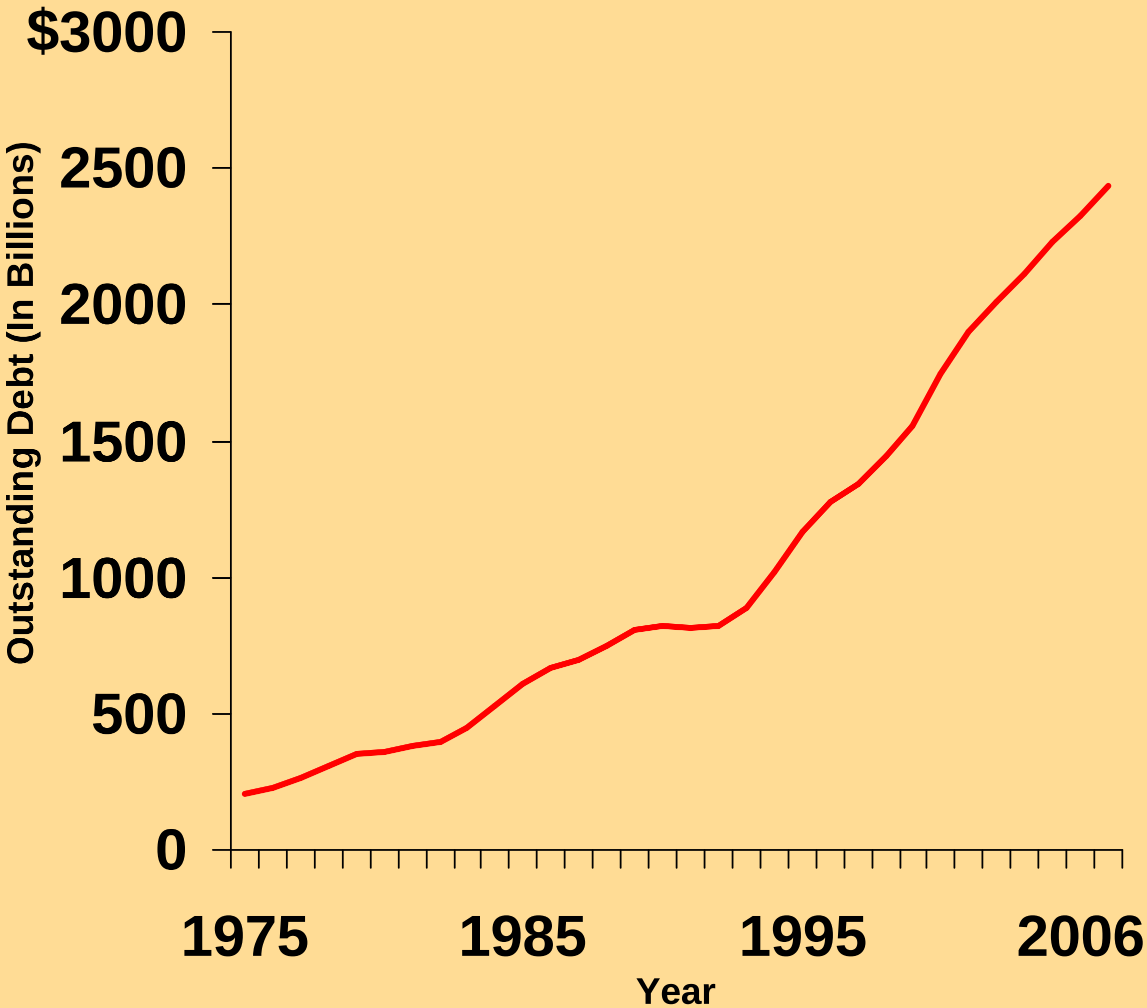
Joseph Medoff and Andrew Harless
<u>The Indebted Society, 1996</u>

The Decline in Saving



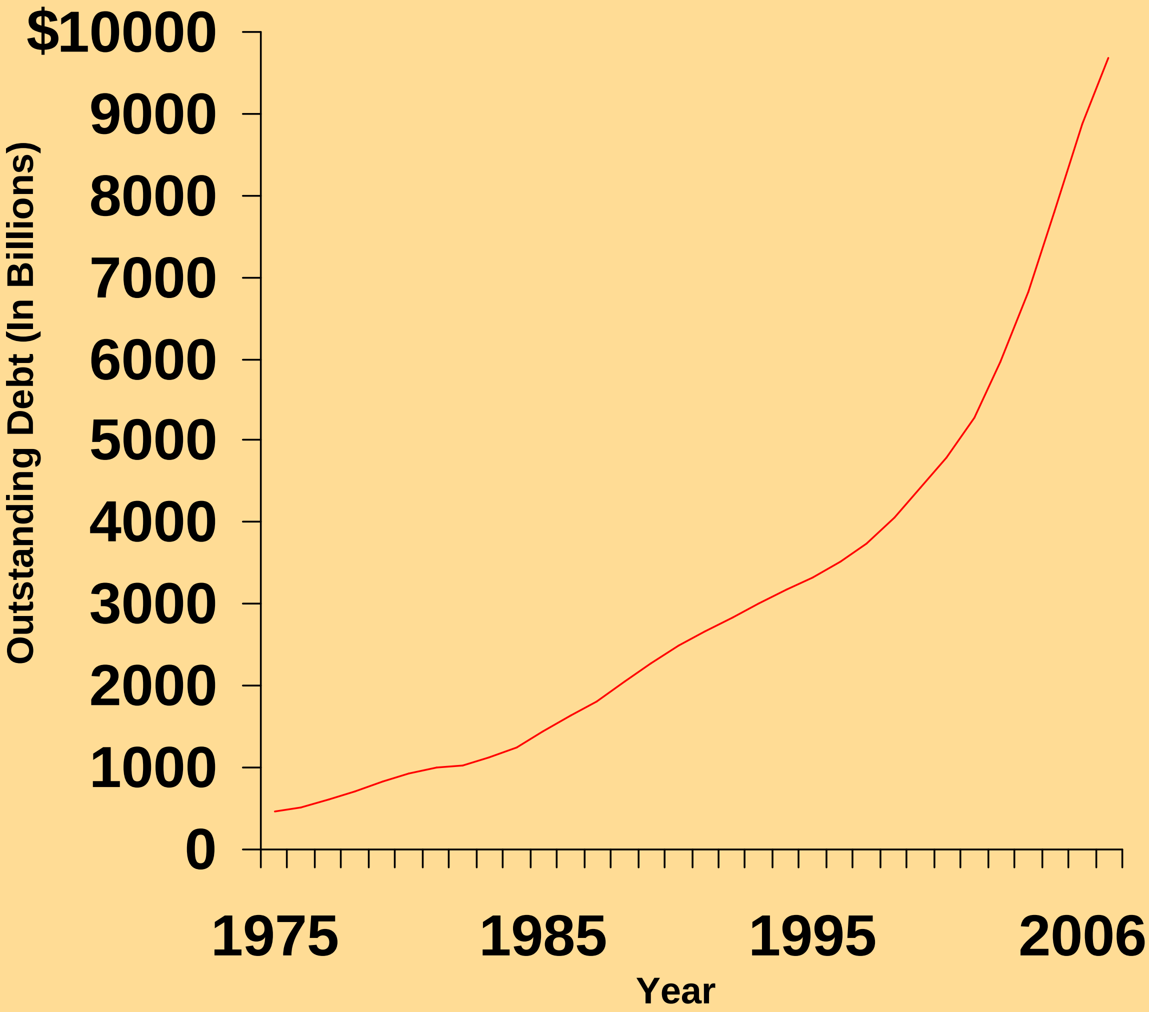
Source: Bureau of Economic Analysis2005

Consumer Credit Debt



Source: Federal Reserve (Released March 8, 2007)

Mortgage Debt



Source: Federal Reserve (Released March 8, 2007)

Habit Theory

People resist a downward change in consumption.

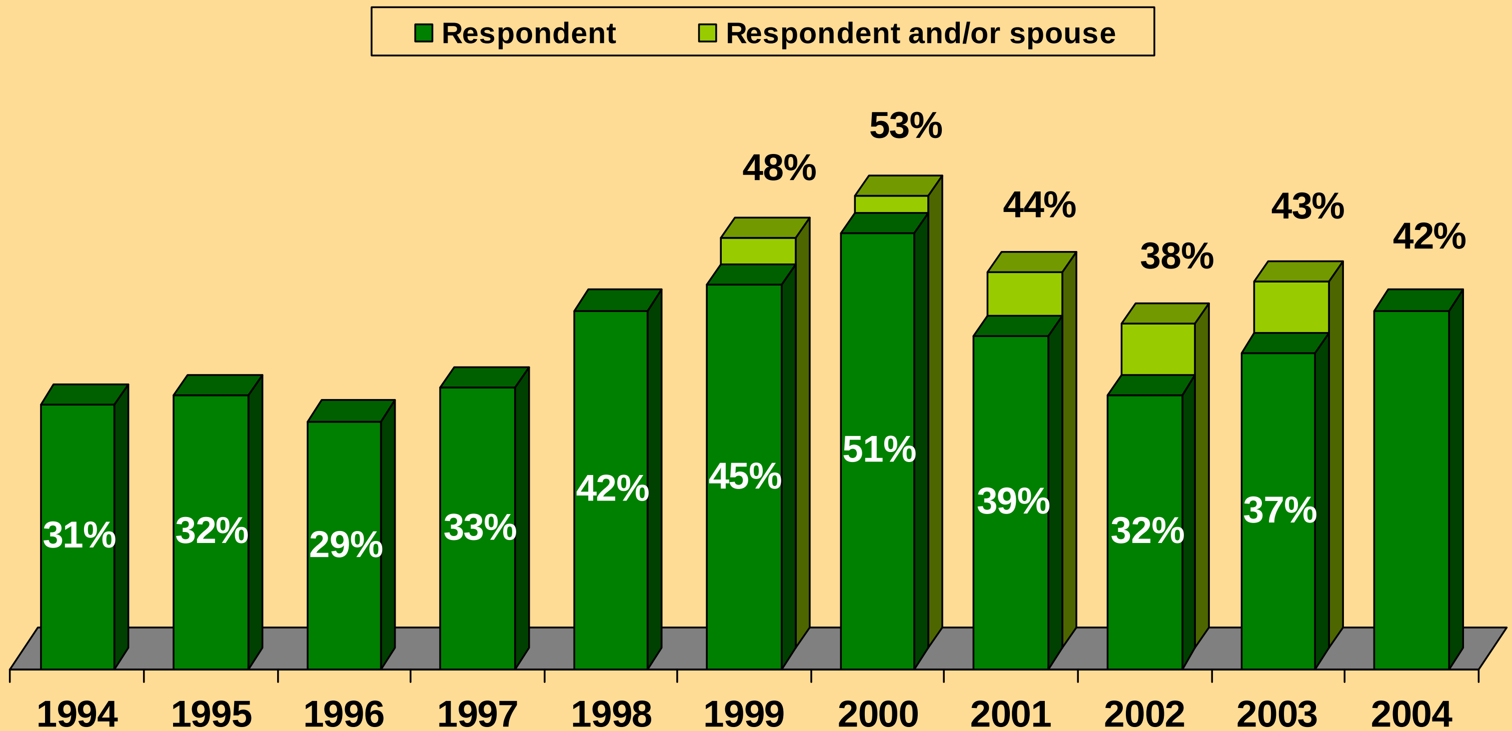
Habit forms over time and is difficult to change.

New and Expensive Products and Services are Being Developed for Older People

- Assisted living facilities
- Expensive health care procedures
- Gated communities
- Travel programs
- Exercise and wellness programs

3 in 5 Workers Have Not Attempted to Do a Retirement Savings Needs Calculation

Have you (and/or your spouse) tried to figure out how much money you will need to have saved by the time you retire so that you can live comfortably in retirement? (2004 Workers n=785)



Source: 2004 Retirement Confidence Survey

Perceived Asset to Income Ratio

Age 50 and Over, Employed Full-Time

	Monthly Income Needed			
	$2,500-$3,999		$4,000 and over	
	%		%	
Savings Needed	F	M	F	M
Under $100,000	33	35	11	20
$100,000-$249,999	33	12	33	27
$250,000-$500,000	17	29	43	7
Over $500,000	--	18	11	31
Don't know	17	6	11	13

Source: WISER

The Decision of When to Retire is One of the Most Important Financial Decisions A Person Makes

- Many do no financial calculation at all
- Some just focus on their ability to be retired in the first year
- A relatively small proportion try any long term projections of all: and most only project investment return

The Typical Approach Ignores All Risks

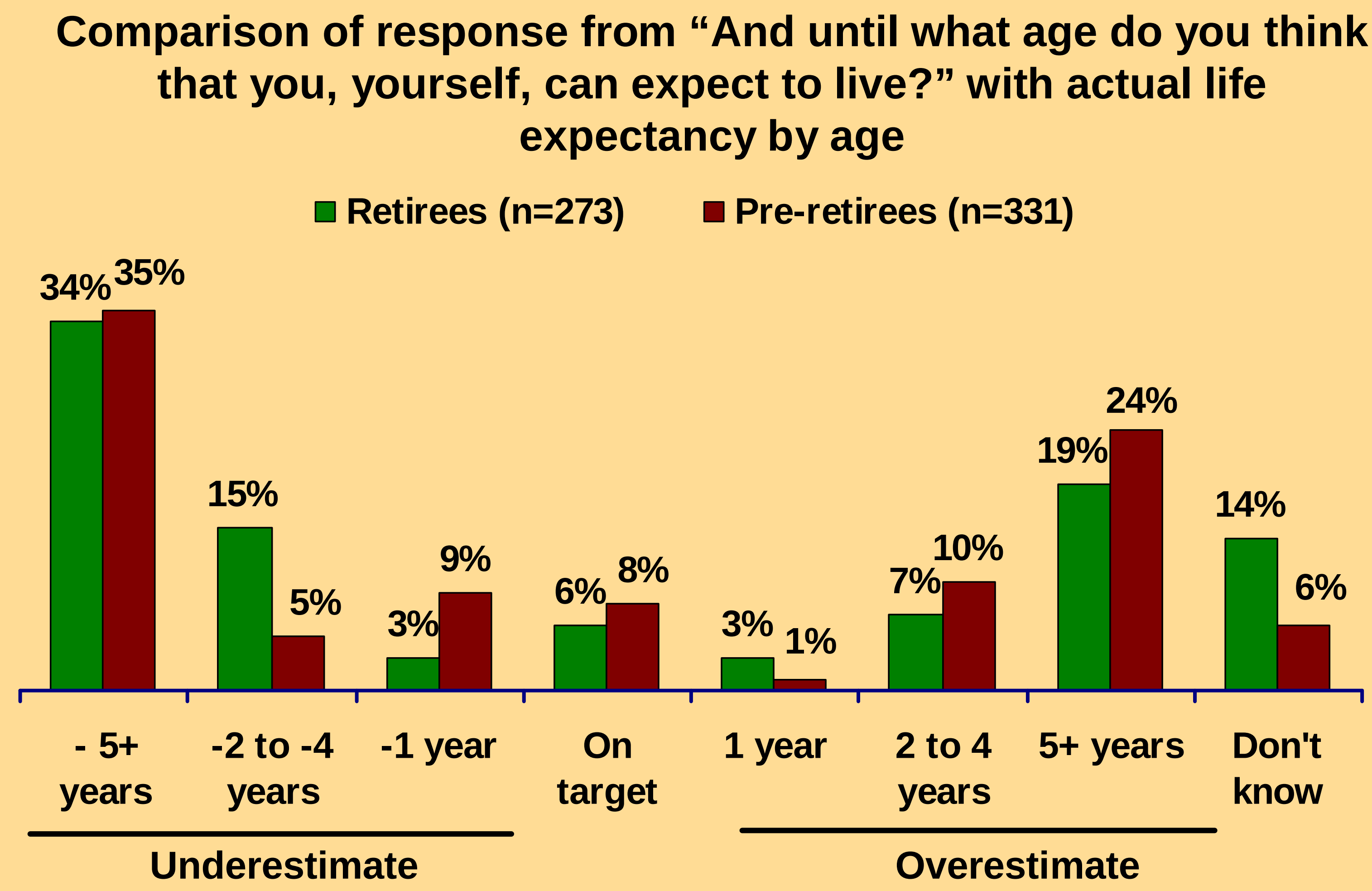
- **Inflation**
- **Market Volatility**
- **Health Care**
- **Long Term Care**
- **Longevity**

Presuming a Riskless Retirement Is Reckless

There are Four Key Reasons Why Most Retirees (And Their Advisors) Do Not Do an Effective Job of Managing Longevity Risk

- Lack of knowledge of life expectancy
- Fallacious thinking about retirement income management
- Psychological impediments to long term planning
- Misunderstanding the crucial difference between accumulation and de-cummulation

Half Underestimate Personal Life Expectancy



Source: SOA, 2003 Risks and Process of Retirement Survey

Fallacious Thinking Impairs Ability to Plan a Financially Secure Retirement

- Planning for the central tendency
- The average return
- The “first year” replacement ratio
- Planning for a date certain death
- The uninformed spend down “approach”
- The individual (as opposed to risk sharing) solution

“A lot of us will live to be 100”
- page 7

“I suggest that you think of your second half [which starts at age 50] as lasting 40 years”
- page 49

Charles R. Schwab “You’re Fifty - Now What? Investing for the Second Half of Your Life”

There are Psychological Impediments to Proper Planning for Long Retirement

- **Might not live**
- **Might be infirm or have poor quality of life**
- **Saving for long retirement might not be deferred gratification, it might be lost gratification**
- **Uncertainty hard to cope with**
- **Hard to give up current consumption when you cannot quantify the consequences of your act**
- **Hard to give up current consumption when there may not be <u>any</u> consequences of your act**

The Desire for Instant Gratification

Choose among 24 movie videos

- **Some are “low brow”: *Four Weddings and a Funeral***
- **Some are “high brow”: *Schindler’s List***

- **Picking for tonight: 66% of subjects choose low brow.**
- **Picking for next Thursday: 37% choose low brow.**
- **Picking for second Thursday: 29% choose low brow.**

**Tonight I want sugar-coated entertainment…
next week I want things that are good for me.**

Source: David Laibson, “The Psychology and Economics of Undersaving,” AARP Conference, June 2007.

Misunderstanding of Difference Between Accumulation for Retirement and Managing Income in Retirement

- The foundation for planning financially for retirement is two numbers, only investment risk must be managed
- There is no firm foundation for managing income in retirement
- Six risks must be managed

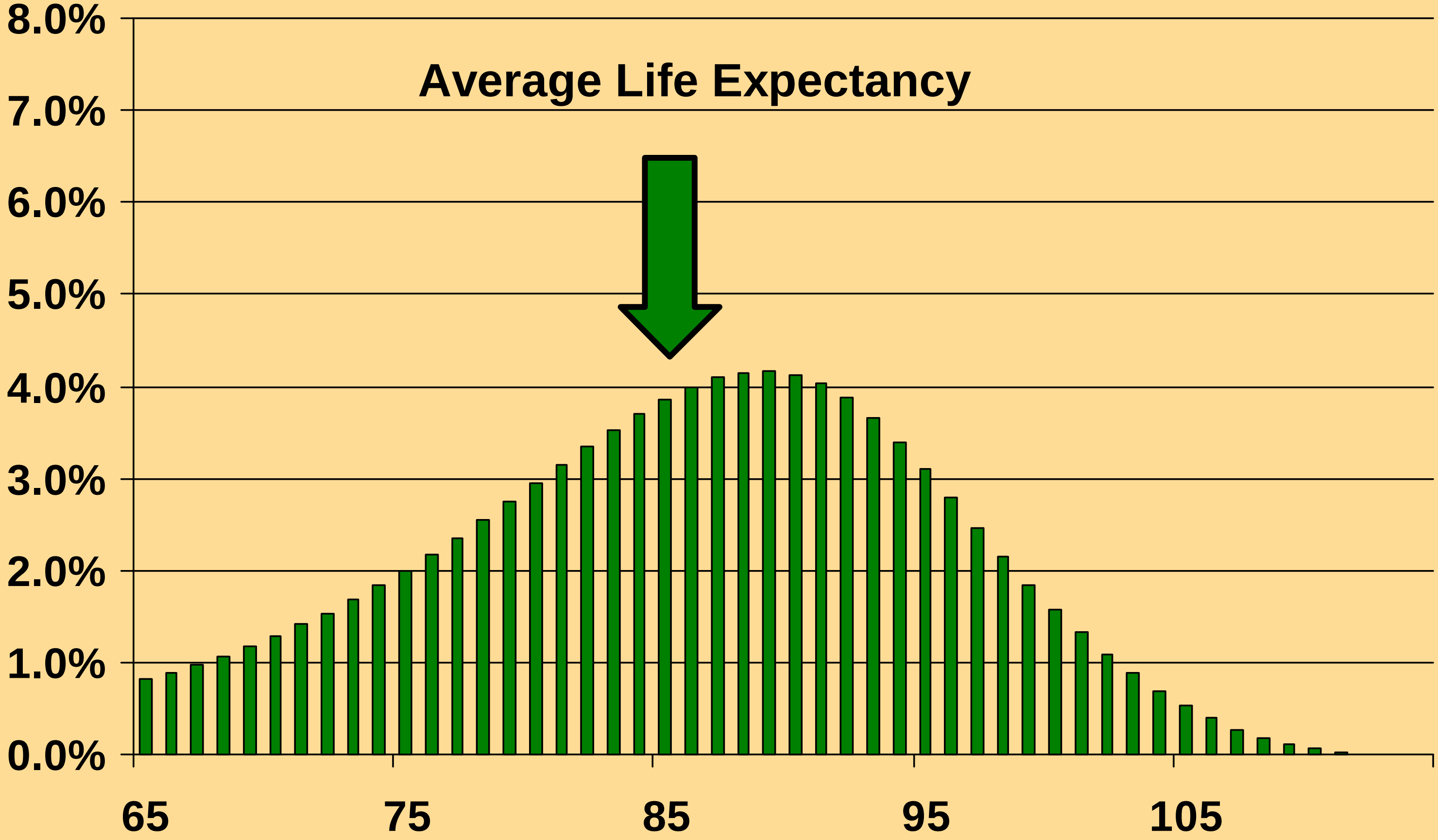
Retirement Is a Time of Possible Long Exposure To Significant Financial Risk

Risk	Workers	Retirees
Uncertain Timing of Death	Life insurance	Life annuity
Disability	Disability insurance, workers' compensation	Long-term care insurance
Inflation	Pay increases	–
Market Volatility	Wait for market recovery	Must take income
Health Care	Subsidized health insurance	Gaps in Medicare
Overspending	Live on Paycheck	All Assets Available

Key Differences Between Accumulation and Decumulation

Accumulation	Decumulation
Time ally	Time enemy
Volatility ally	Volatility enemy
Focus should be on equities	Focus should be on income
Health and long term care costs generally predictable	Health and long term care costs unpredictable

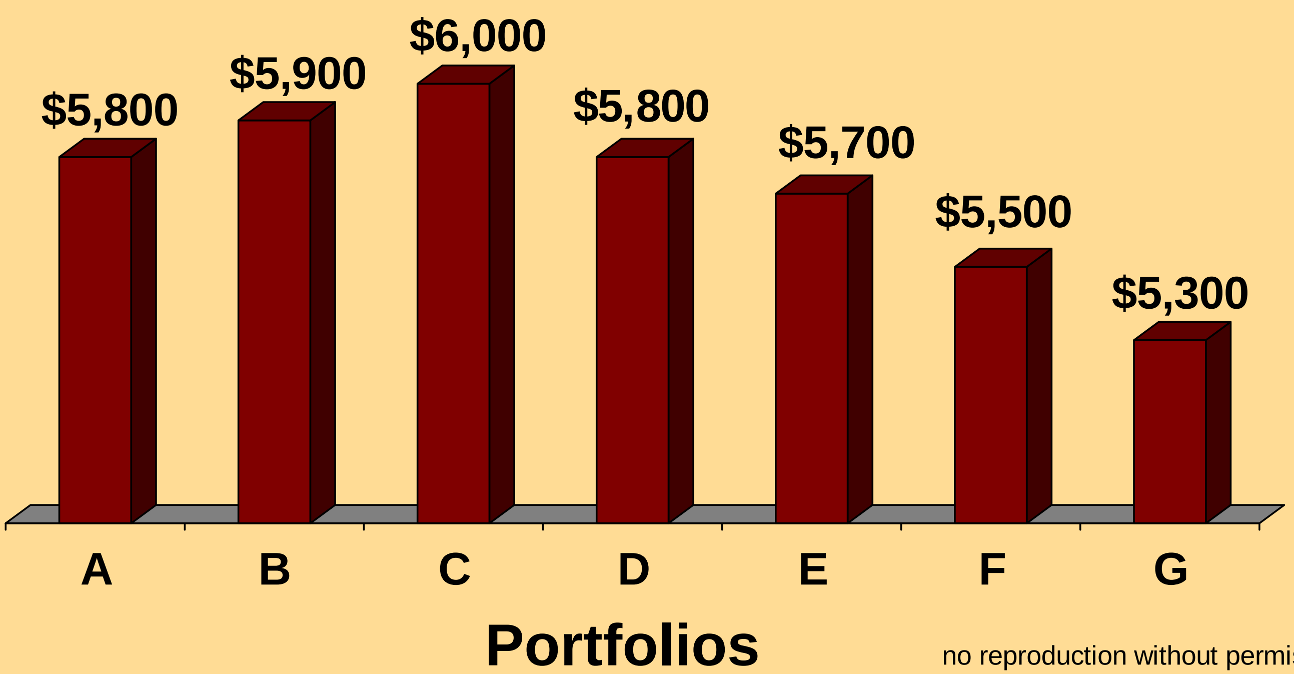
Annual Percentage of Deaths Population of Healthy 65 Year Olds



Source: 2000 Individual Annuity Mortality table

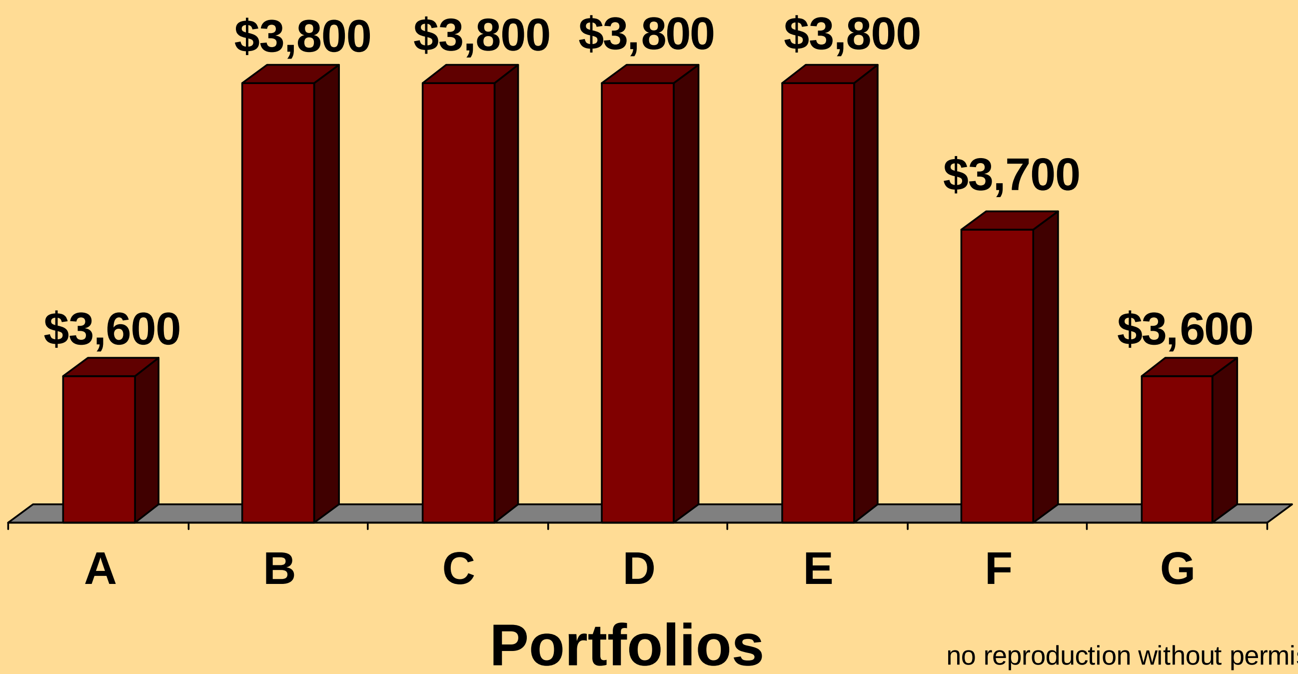
The Importance of Longevity
T. Rowe Price Calculations

1. Start Age — 65 years
2. Retirement Length — 15 years
3. Retirement Assets — $1,000,000
4. Simulated Success Rate — 90%



The Importance of Longevity
T. Rowe Price Calculations

1. Start Age	65 years
2. Retirement Length	25 years
3. Retirement Assets	$1,000,000
4. Simulated Success Rate	90%



Frequent Retirement Income Plan Approach: Four Key Factors Assumed as Constants

- Inflation at constant level
- Medicare and Social Security remain unchanged
- Death at date certain
- Spending level, including on health care and long term care, (adjusted for inflation)

The Focus of Many Financial Advisors in Retirement Planning is Typically on the Most Easily Managed Risk People Face

- **Investment risk can be changed quickly as conditions change**
- **There is evidence that very different reasonable asset allocations get fairly similar results**

Common Approaches to Retirement Income Management Do Not Help Clients:

- **Assess finance-related risks, such as longevity**
- **Understand the trade-offs in reducing risks**
- **Manage risks**
- **Maximize efficiency of their, usually insufficient, accumulations**

The Combined Pressures of De-annuitization, Higher Costs and Higher Expectations Will Lead to an Inevitable Grassroots Change

- **A New Paradigm will develop**
- **Better systems for using mortality risk pooling will be employed**
- **Outmoded ideas will be replaced**

Mortality Risk Pooling

- Provides more cash flow with same dollars
- Leads to more appropriate spending for many
- The most efficient portfolios for the preponderance of retirees includes mortality risk pooling

Fixed Investments That Pay Out $5,000 a Year (at age 70)

- **$100,000 invested in a Certificate of Deposit (paying 5%)**
- **$54,000 invested in an income annuity**

We are at the Start of the Greatest Opportunity Facing This Business in Six Decades

- The next generation to retire does not want a retired life of increased lifestyle cutbacks, burdens placed on children and deprivation
- Only significantly new tools and approaches will save many, including the affluent, from that fate

"Americans always do what is right, but only after trying everything else."

Winston Churchill